



ACO Building Drainage

Stainless Steel Floor Gullies



ACO Stainless Steel Gullies

Stainless steel gullies come in different varieties to cover a multitude of applications in the Industrial and Commercial segments. Extra attention is given to the development of a range of gullies to comply with hygiene standards set by the Food Industry. Variations in the gully range, such as fixed height, telescopic tops and the use of extensions, ensures there is a solution for most floor constructions. Designs using telescopic gully solutions make it possible to connect membranes on different levels within the floor construction.



Special Gullies

Micro floor, condensate and rodding eyes

Page 15



EG150

Complete range of gullies for lower flow rates in different floor types

Page 20

Gully 157 and 218

Gullies designed compliant to EHEDG principles. Complete range with standard and extended gully bodies

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Gully 315 and 440

High flow gullies with hygienic properties

Page 94



Scan the QR code to visit our gully webshop
www.aco.co.uk/buy-stainless-steel-gullies



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ACO. we care for water

ACO is a Water-Tech company that protects water. Building on our global drainage expertise that protects people from water, we increasingly see our mission as also protecting water from people.

With the ACO WaterCycle, ACO provides systems that collect and channel, clean, retain and ultimately reuse water. In this way, ACO contributes to the preservation of clean groundwater as a vital resource, and makes a contribution to tomorrow's world. In its Agenda 2030, the UN global community set the improvement of water quality as one of 17 sustainable development goals.

Intelligent drainage systems from ACO increasingly use smart technology to ensure that rainwater and wastewater are drained, or temporarily stored. With innovative separation and filter technology, we prevent water contamination by pollutants such as fats and grease, fuels, heavy metals and microplastics.

Today, ACO goes one step further: we accept the challenge of reusing water, and thus establishing a resource-saving cycle. For all products and systems, ACO attaches great importance to durability, reusability and a low carbon footprint. The pursuit of sustainability is an ongoing process that we strive to meet every day.

The ACO Group is a global family business that is one of the world market leaders in the Water-Tech segment. Founded in Schleswig-Holstein in 1946, it operates as a transnational network in over 50 countries. Worldwide, ACO is characterised by a high level of decentralised ownership, and explicit regional market proximity.

www.aco.com



Holder
Iver and Hans-Julius Ahlmann



Headquarters of the ACO Group
in Rendsburg/Büdeltsdorf



5,200

employees in more than 47
countries (Europe, North
and South America, Asia,
Australia, Africa)

1 Billion

Euro Sales in 2021

37

production sites
in 18 countries



ACO Academy
for practical training

Introduction

1

ACO is one of the World's leading drainage specialists with 60 years' experience gained across a wide range of sectors. Our passion for producing high performance products has led us to make major investments in research and development.

We are working in partnership with commercial facility owners, managers and operators. We are continuously developing our products and enhancing our expertise. We understand the critical role that drainage plays in a successful business.

Our product portfolio includes items which are fully compliant with the highest hygienic requirements. We also have a full understanding of the food industry's own standards such as Hazard Analysis Critical Control Point (HACCP) and we work with bodies including the European Hygienic Engineering and Design Group (EHEDG).

ACO drainage is used in applications anywhere where hygienic, corrosion resistant and durable drainage performance is essential such as:

- Commercial kitchens
- Food processing facilities
- Brewing, bottling and canning plants
- Chilled warehouses
- Laboratories
- Chemical
- Pharmaceutical
- Restaurants
- Schools
- Hospitals
- Hotels
- Others



Material

Stainless steel

Stainless steel is the name given to a wide range of steels which have the characteristics of greatly enhanced corrosion resistance over conventional mild and low alloy steels. The enhanced corrosion resistance of stainless steel essentially comes from the addition of at least 11% of chromium, however, most commonly used stainless steels contain around 18% of chromium. Other significant alloying elements include nickel and for superior corrosion resistant properties, molybdenum.

Stainless steel has the following unique advantages:

- High corrosion resistance
- Non-porous, easy to clean and disinfect
- Aesthetically pleasing
- Resistant to extreme temperatures and thermal shock
- Coefficient of linear expansion similar to concrete
- 100% recyclable material

ACO drainage is manufactured from austenitic stainless steel, grades 1.4301 or 1.4404 according to EN 10088 (304 or 316L according to AISI).

It is ideal for applications including food processing, dairy, brewing, pharmaceutical, chemical and leisure industries.

Surface treatment

The process of cutting, forming and welding of stainless steel will introduce impurities into the surface of the material and unless the appropriate action is taken, the material will begin to corrode and ultimately fail in service. Therefore, after fabrication, it is vital that stainless steel is treated with the correct surface treatment to ensure it is fully corrosion resistant. By applying pickle passivation as the primary surface treatment, the corrosion resistance of stainless steel can be fully restored to its original state, ensuring long and reliable life performance together with the required aesthetic appearance.

Finishes used by ACO include:

Pickle passivation (acid treatment)

All ACO drainage is pickle passivated by immersing products in a series of acid baths. This is a fundamental requirement for removing iron embedded particulates introduced in the fabrication process and also for restoring the chromium depleted regions generated by the welding process.

ACO has one of the largest and most advanced pickle passivation installations in Europe which ensures the optimum corrosion resistance of our products.

Electropolishing (electrochemical process)

After pickle passivation, some products are then immersed in an electrolytic fluid in which the products become the anode of a direct current electrical circuit. This process is characterized by a selective attack of the surface of the components whereby upstanding roughness is preferentially dissolved and will yield a progressively smoother, brighter surface. All hygienic box channel grates are electropolished as a standard.

Brushing (mechanical process)

ACO channels have a brushed upper edge for aesthetic reasons.

Standards and certifications

ACO Gullies

ACO gullies are designed, manufactured, tested and certified in accordance with BS EN 1253.

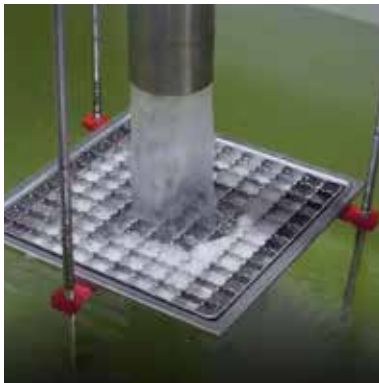
We apply the relevant hygienic design principles reserved for food contact surfaces BS EN 1672, BS EN ISO 14159 and EHEDG documents No. 8, 13, 44 and NSF International.

ACO fire protective kit is tested according to BS EN 1366-2 (Fire resistance tests for service installations) and classified according to BS EN 135011 (Fire classification of construction products and building elements).

Gully flow rates

What drainage capacity and layout is required to match the production equipment layout?

All too often not enough consideration is given to the drainage capacity and flow rate needed to handle current and potential future production requirements. Insufficient drainage capacity leads to flooding which compromises health and safety in the workplace and increases the risk of cross-contamination. It's important to ensure the layout of the drainage matches the layout of the production equipment.



Flow rate is the amount of liquid that comes through drainage in a given time. The default method for measuring flow rates is by EN1253-1.

This European Standard classifies floor gullies, gives guidance for places of installation and specifies requirements for the construction, design, performance and marking of factory-made gullies for use in drainage systems requiring a trap with a water seal depth of at least 50 mm. All ACO Gullies have a flow rate based on EN1253-1.

For the food and beverage industry, this method is not optimal as machinery outlets are often positioned directly above the drain to make the water flow directly into the gully body. This is because drainage here is not designed to act as an outlet for water on the floor, but as an extension of the wastewater outlet which is discharged directly from machinery.

ACO has developed the ACO Direct Methodology to determine drainage flow rate capacity with a foul air trap, when the source of water is positioned directly above the drain.

To select the correct ACO gully, you need to know the maximum amount of water which will be discharged from machinery, e.g., 6,000l / 5 minutes = $6,000/300 = 20$ (l / s). Selecting the right product for use in food and beverage sites according to its flow rate can now be carried out more accurately, especially when drainage is used to take in large amounts of water at once. All wastewater must be directed straight into the drains without spilling on the floor to avoid health and safety risks and interruptions to production. A good drainage design does not use the floor to lead or retain water discharged from machinery.

Why do we use both methods?

This brochure expresses a flow rate for EN1253-1 for all ACO gullies and gives the direct flow rate alongside this for our Gully 157, 218, 315 and 440 models. The choice can be made for each project, if for some reason it is not possible to place the process water outlets from the technology directly above the drain, then it is necessary to use the lower values identified by the using EN1253-1 process.

Learn more about gully sizing at www.aco.co.uk/products/stainless-steel-gullies and watch our video about the two methods of flow measurement.

System overview and benefits

ACO provides solutions which optimise food safety, employee's health & safety and water protection. Every ACO product safely controls the water to ensure that it can be hygienically, economically and ecologically managed in a viable way.



Food safety

- ACO hygienic drainage fulfills hygienic requirements to prevent harmful bacteria contamination. We apply relevant hygienic design principles reserved for food contact surfaces as recommended by EHEDG.
- Our product design ensures minimal build-up of food particles and debris as well as a safe connection with the surrounding floor to minimise any opportunity for bacteria to grow throughout the drainage system.
- Sleek slope function and hygienically designed products ensure our system is fully drainable, eliminating the stagnant odour of waste water.

Cost control

- ACO drainage systems can be easily maintained, reducing associated cleaning costs, thanks to their functional design and cleaning recommendations which have been developed in partnership with premium cleaning agent suppliers.
- ACO's advanced manufacturing technologies ensure durability and our special surface treatment guarantees corrosion resistance. Our systems perform effectively at all times and keep business disruption to a minimum.
- We provide expertise in drainage system planning, correct installation and creating a safe connection with the surrounding floor to avoid unnecessary costs.

Health & Safety

- For additional safety in high risk areas that require heavy water usage, a slip resistant grating is available.
- Each component of the drainage system is easy to remove and clean, and there are no sharp edges for optimum employee safety.
- ACO drainage products have a fire resistant solution certified according to EN 136.

Selection guide

Application

The layout of the drainage system as well as the design of drainage elements has an impact on future operational effectiveness and on costs.

This guide offers a range of basic areas which need to be considered when specifying a drainage system.

To specify an appropriate drainage system for a particular application, the zone of operation and amount and frequency of water used is crucial.

| Production process/ Cleaning process | Zones with high risk for food safety | Zones with medium or low risk for food safety | Zones without direct risk for food safety |
|--|--|---|---|
| Wet production process/ Wet cleaning process | ■ Hygienic design - one piece solution without connections; ladder grating or slot cover | ■ Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow | ■ Hygienic design - recommended for easy cleaning and maintenance. A combination of products could be considered for easy layout design |
| | ■ High retention - high flow rate | ■ High retention - high flow rate | ■ High retention - high flow rate |
| | ■ Slip resistance - high requirement | ■ Slip resistance - high requirement | ■ Slip resistance - high requirement |
| Dry production process/ Wet cleaning process | ■ Hygienic design - one piece solution without connections; ladder grating or slot cover | ■ Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow | ■ Hygienic design is recommended for easy cleaning and maintenance; combination of products could be considered for easy layout design |
| | ■ High flow rate | ■ High flow rate | ■ High flow rate |
| | ■ Slip resistance - medium requirement | ■ Slip resistance - medium requirement | ■ Slip resistance - medium requirement |
| Dry production process/ Controlled wet cleaning process | ■ Hygienic design - one piece solution without connections; ladder grating or slot cover | ■ Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow | ■ Hygienic design - recommended for easy cleaning and maintenance. A combination of products could be considered for easy layout design |
| | ■ Medium to low flow rate | ■ Medium to low flow rate | ■ Medium to low flow rate |
| | ■ Odour proof cover | ■ Odour proof cover | ■ Odour proof cover |

Drainage type

The type of drainage needs to be selected according to the layout of the operational space and technology employed.

Point drainage (Gullies)



Linear drainage (Channel)



www.aco.co.uk/drainage-design

Material resistance

The chemical mixture of the waste water from the process and/or from the cleaning as well as temperature of the final mixture influences the material resistance of the drainage system.

ACO drainage is manufactured from austenitic stainless steel; grades 1.4301 or 1.4404 according to EN 10088 (304 or 316L according to AISI) and is ideal for applications within food processing, dairy, brewery, commercial kitchen, pharmaceutical, chemical industries and leisure.

Besides stainless steel, drainage products also contain sealing materials:

ACO gullies – all the seals are made of NBR (acryl nitrile-butadiene rubber)

or SBR (styrene-butadiene rubber)

ACO box and slot channels – flange connection seals are made of NBR (acryl nitrile-butadiene rubber)

ACO modular box and slot channels – flange connection seals are made of NBR (acryl nitrile-butadiene rubber)

ACO pipes – socket seals can be made from either EPDM (ethylene propylene diene monomer) or FPM (fluoroelastomer) – Viton®.

For details of material resistance see page 116 or contact our Sales/Technical department.

Floor structure and finish

Depending on the composition of the floor construction; the appropriate type of gully or channel should be selected.

If there is a membrane present in the floor structure, the O-ring needs to be removed from the friction ring, which will allow the water from the insulation to be drained to the gully body.

Depending on the floor finish; the appropriate edge of the channel or gully top should be selected.

| | Telescopic gullies | | Fixed height gully | |
|--------------------------------|--|---|--|--------------------------------|
| Floor finish | Tiled, concrete or resin floor | Vinyl | Tiled, thin bed installation | Tiled, concrete or resin floor |
| Channel or gully edge | Standard edge | Vinyl edge | Extended edge | Standard edge |
| Channel or gully top drawing | | | | |
| Waterproof membrane connection | Connected to gully body | Connected to gully body | Connected to channel / gully top | Independent of the gully |
| Gully body type | Telescopic adjustable Adhesive bonding flange | Telescopic adjustable Mechanical clamping flange | Telescopic adjustable Location flange | Fixed height gully |
| Gully body picture | | | | |
| Installation example | | | | |
| See page 106 | | | | |

Accessories

For the collection of solid parts, the gully or channel should be fitted with a silt basket.

| Telescopic connection without flange for waterproofing | | Telescopic connection with flange for waterproofing | |
|--|---|---|--|
| ACO gully EG150 | ACO hygienic gully 157 | ACO hygienic gully 218 | |
| Accessories delivered as standard with the gully | | | |
| | ■ Friction ring; FAT; FAT support | ■ Friction ring; FAT; FAT support | |
| Optional accessories | | | |
| ■ Sieve | ■ Silt basket for vertical gully 0.6 l | ■ Silt basket for vertical gully 1.4 l | |
| | ■ Silt basket for horizontal gully 0.3 l | ■ Silt basket for horizontal gully 0.7 l | |

Gratings selection guide

When selecting the correct grating for your application, careful attention must be given to number of factors. The most important challenge is selecting the right type of grating with appropriate load class. Careful consideration of this will positively influence the grating lifespan.

The correct grating type and load class

The grating itself is the most exposed part of gully or channel in regards to traffic. To minimize the risk of failures, a proper grating type and load class have to be considered based on the defined traffic during all future operations.

■ Type of machinery

Depending on the type of production facility, usually there is a wide range of traffic machinery that will pass over the drainage. Forklifts with pneumatic tires and trolleys with small plastic wheels both behave differently when moving over the same type of grating.

■ Unusual traffic

In occasional situations, machinery that hasn't been considered during grating specification may

enter the area where the drainage is installed. This can include heavy trucks used for cleaning or disposal of waste. Even though this will happen rarely, it presents a great risk of damaging the gratings in just this one instance.

■ Traffic frequency

Wide range of ACO gratings and covers offers a great selection base for both light and heavy load requirements. Consider all grating types and combinations for the most comfortable use.

■ Drainage location

In real life scenario, the traffic movement can be irregular, causing sudden impacts or torque generated by wheels turning on the grating itself. This dynamic load stress can mount up to 2 times the static load value.










Load class standard

ACO gullies and ACO channels are tested and specified in accordance with BS EN 1253 norm and the ACO modu-

lar channels are tested and specified in accordance with BS EN 1433 norm.

The testing method for the two norms is different; therefore the values are not directly comparable.

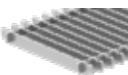
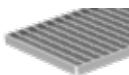
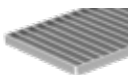

| Application | EN 1253 (Gullies for Buildings)* | Slow Moving Wheel Load (Tonnes) | |
|---|-------------------------------------|---------------------------------|-------------|
| | | Pneumatic Tyres | Solid Tyres |
| | H1.5 | Non-load bearing | |
| A  | K3 | 0.15 | N/A |
| | - | 0.5 | N/A |
| | L15 | 0.7 | N/A |
| AA  | - | 1.5 | N/A |
| AAA  | R50* | 2.5 | 0.5 |
| B  | M125 | 5.0 | 0.75 |
| C  | N250* | 6.5 | 1.0 |
| D  | P400 | 11.0 | 3.0 |
| E  | - | 16.0 | 5.0 |

* These comparisons are indicative of the typical suitable area of application of each product class and are not a like for like performance comparison. Comparisons are for guidance only and not intended to be exact.

Other grating features to consider during selection are hygienic performance, chemical resistance, flow rate and slip resistance.

All of these are necessary to choose the appropriate grating that will last for a long time without any defects.

The table below provides an overview of available gratings and their properties.

| ACO grating type |     | | | | | |
|--|--|----------------------------|----------------------------|--------------------|-----------------|-----------------|
| | ACO frameless ladder grating | ACO ladder grating | ACO slot cover | ACO mesh grating | | |
| | Slip resistant | Slip resistant | Plain | Plain | Slip resistant | Plain |
| Surface | electropolished | pickle passivated | pickle passivated | sand blasted top | electropolished | electropolished |
| Slip resistance | Yes | Yes | No | Yes | Yes | No |
| Cleanability | Excellent | Good | Good | Good | Sufficient | Sufficient |
| Potential for slip - Pendulum test BS 7976-2 | Low | Low | Moderate | Low | Low | Moderate |
| Slip resistance classification - Ramp test DIN 51130 | R11 | R11 | R9 | R11 | R11 | R9 |
| Load class availability acc. EN 1253 for hygienic channels | M 125 | R 50; M 125; N 250; P 400* | R 50; M 125; N 250; P 400* | R 50; M 125; N 250 | L 15 | L 15 |
| Load class availability acc. EN 1253 for hygienic gullies | M 125 | R 50; M 125 | N 250 | R 50; M 125 | L 15 | L 15 |

* P 400 load class available as customised solution only



2

ACO Special Gullies

COLLECT:
Collect and remove



ACO micro floor gully, vertical outlet for resin and tiled flooring

Product information

The ACO Micro Floor Gully with grate is a small gully for low flows that can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Fixed height gully.
Option of locked or unlocked grating.

Product benefits

- For resin, tiled and cementitious floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Perforated grating fitted as standard for pedestrian applications.
Load class K3 to BS EN 1253



Order information

ACO Micro Floor Gully

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Locked | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|--------|----------|----------------|
| | 100 x 100 | 40 | 0.24 | With FAT | K3 | No | SS 304 | 04156 |
| | | | | | | Yes | SS 304 | 04157 |

ACO Condensate gully, horizontal outlet for resin and tiled flooring

Product information

ACO Condensate Gully can be specified as point drainage and has the option waterproofing through membrane clamping.

Telescopic solution enables height and rotational adjustment of connected gully top.

Selection of ladder grates with tundishes available to prevent splashes to the surrounding area.

Product benefits

- Square gully top for resin and tiled flooring
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Ladder grate with tundish
- Also available in 316 stainless steel to special order



Order information

ACO Condensate Gully

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 50 | 1.2 | With FAT | NA | NA | SS 304 | 416417 |

ACO ladder grate with tundish

| | Load class | Slip resistant | Material | Part number |
|--|------------|----------------|----------|-------------|
| | NA | NA | SS 304 | 416418 |
| | NA | NA | SS 304 | 416570 |

ACO Rodding eye gully, vertical outlet

Product information

The ACO Rodding Eye gully is a point access for clearing the drain pipes.

The rodding eye can be specified for applications where waterproofing is independent of the gully body.

Available with square or round solid covers.


Product benefits

- Options for vinyl, resin and tiled floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Solid, square or round covers are available for pedestrian applications.
Load class K3 to BS EN 1253




Order information


ACO Rodding eye vertical, round top

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Flooring type | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|------------------|----------|----------------|
|  | ø168 | 110 | NA | Without FAT | K3 | Resin Tiled | SS 304 | 104004 |

ACO Rodding eye vertical, square top

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Flooring type | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|------------------|----------|----------------|
|  | 150 x 150 | 110 | NA | Without FAT | K3 | Resin Tiled | SS 304 | 104010 |

ACO Rodding eye vertical, square top for vinyl applications

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Flooring type | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|------------------|----------|----------------|
|  | 225 x 225 | 110 | NA | Without FAT | K3 | Vinyl | SS 304 | 105070 |

Solid Covers for Rodding Eye Gully

Product information

Range of solid covers for ACO Rodding Eye Gullies.
Suitable for applications with light pedestrian traffic.

Product benefits

- Square and round solid covers
- Air tight cover for ACO Rodding Eye Gully systems
- Covers are finished/brushed
- Fits to stainless steel gully, fully compliant to BS EN 1253)
- Range of gratings suitable to load class K3 (BS EN 1253)

Order information

ACO Solid Square Cover



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| K3 | No | SS 304 | 105054 |

ACO Solid Round Cover



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| K3 | No | SS 304 | 105049 |



3

ACO EG150 Gullies

COLLECT:
Collect and remove



ACO EG150 Gully

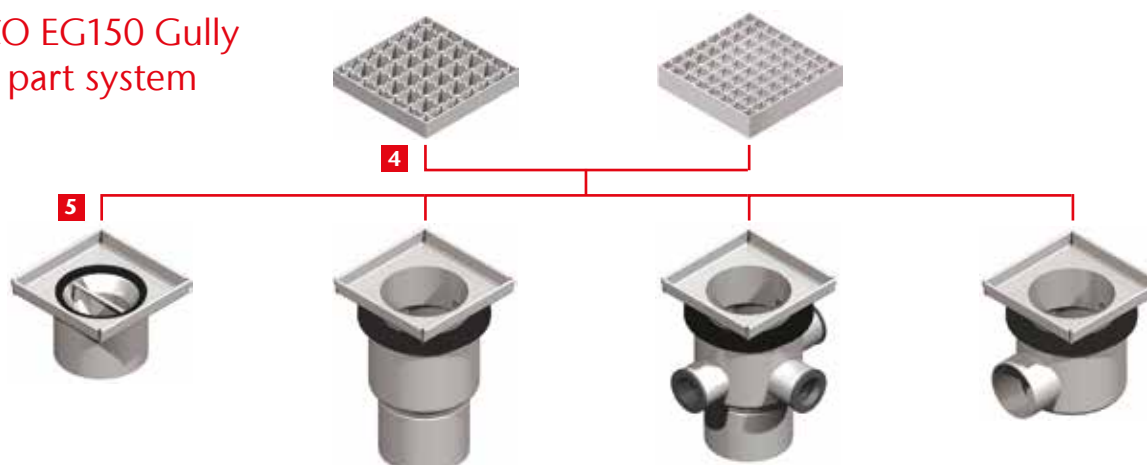
Product range overview

- 1** Gullies for cementitious/resin screed and tile applications with perforated grating (page 26).
- 2** Gullies for damp proof membrane bonding (page 29).
- 3** Gullies for vinyl sheet flooring (page 23).
- 4** Mesh gratings for cementitious/resin screed and tile applications (page 33).
- 5** Gullies for cementitious/resin screed and tile applications with top for mesh grate (page 30).

ACO EG150 Gully - complete



ACO EG150 Gully - 2 part system



Features and benefits

- 1** Perforated grating fitted as standard for pedestrian applications. Load class K3 to BS EN 1253. Anti-ligature options available for EG150 gratings.
- 2** Removable sieve (optional).
- 3** Removable in-line foul air trap fitted as standard, flow rate 1.2 l/s. 50mm water seal meets requirements of BS EN 1253.
- 4** Telescopic height variant providing full 360° rotation and +/- 7.5° pitch and roll adjustment.
- 5** Smooth contour design minimises bacteria traps.
- 6** 3 back inlet variant available supplied with fully interchangeable adaptors to suit 32mm / 1.25" to BS 5254 and 40mm / 1.5" to BS 5255 waste pipes.
- 7** Ø110mm vertical spigot outlet.
- 8** Clamp for vinyl flooring.
- 9** End stops provided to prevent accidental dismantling on telescopic variants.
- 10** Damp proof membrane bonding flanges available for the ultimate in sub-floor security.
- 11** Available with Ø75mm horizontal spigot outlet.
- 12** Shallow gully option, ideal for suspended floor or other restricted depth applications.
- 13** Mesh grating for cementitious / resin screed and tiled applications (2 part system).
- 14** Gullies for cementitious / resin screed and tiled applications.



ACO EG150 gully, vertical outlet for vinyl flooring, complete with Grate

Product information

EG150 gully complete with grate can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Multiple side inlets for extra drainage points.

Product benefits

- Clamp for vinyl sheet flooring
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Perforated grating fitted as standard for pedestrian applications
Load class K3 to BS EN 1253
- Shallow gully option, ideal for suspended floor or other restricted depth applications
- Telescopic gully option, for flexible installation
- Telescopic gully option, with choice of 3 back inlets, supplied with fully interchangeable adaptors to suit 32mm (BS 5254) and 40mm (BS 5255) waste pipes



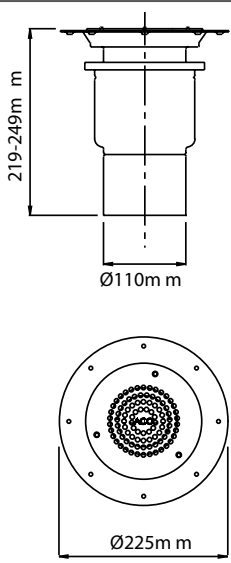
3

Order information

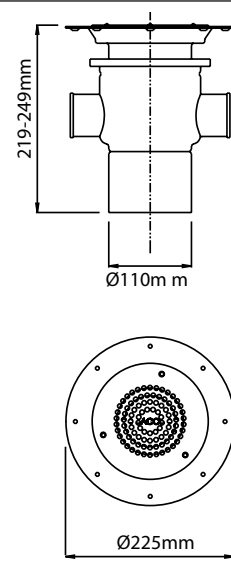
ACO EG150 gully, vertical outlet for vinyl flooring

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 225 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97212 |
| | | | | | | | SS 316 | 97262 |

ACO Gully EG150 fixed, vertical with telescopic, gully top clamping flange and round grating

| | Top size | Outlet diameter | Flow rate BS EN 1253-1 | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|----------|-----------------|---------------------------|------------------|---------------|-------------------|----------|----------------|
| | [mm] | ø [mm] | [l/s] | | | | | |
|  | 225 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97207 |
| | | | | | | | SS 316 | 97257 |

ACO Gully EG150 fixed, side inlets, vertical with telescopic, gully top clamping flange and round grating

| | Top size | Outlet diameter | Flow rate BS EN 1253-1 | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|----------|-----------------|---------------------------|------------------|---------------|-------------------|----------|----------------|
| | [mm] | ø [mm] | [l/s] | | | | | |
|  | 225 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97209 |
| | | | | | | | SS 316 | 97259 |

ACO EG150 gully, horizontal outlet for vinyl sheet flooring complete with grate

Product information

The EG150 Gully complete with grate can be specified as a point drainage in areas where waterproofing is independent of the gully body.

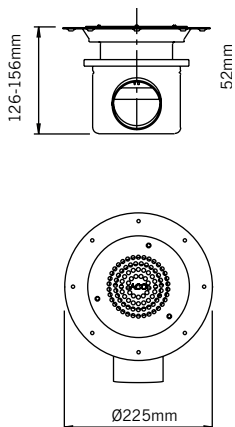
Product benefits

- Clamp for vinyl sheet flooring
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Perforated grating fitted as standard for pedestrian applications.
Load class K3 to BS EN 1253



Order information

ACO Gully EG150 horizontal, with round gully top for vinyl including grating

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
|  | | | | | | | SS 304 | 97208 |
| | 225 | 75 | 1.2 | With FAT | K3 | No | SS 316 | 97258 |

ACO EG150 gully, vertical outlet for resin and tiled flooring complete with grate

Product information

EG 150 complete with grate can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Multiple side inlets for extra drainage points.

Product benefits

- For resin and tiled floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Perforated grating fitted as standard for pedestrian applications. Load class K3 to BS EN 1253
- Shallow gully option, ideal for restricted depth applications
- Telescopic gully option, for flexible installation
- Telescopic gully option, with choice of 3 back inlets, supplied with fully interchangeable adaptors to suit 32mm (BS 5254) and 40mm (BS 5255) waste pipes
- Anti-ligature options available for EG150 gratings.

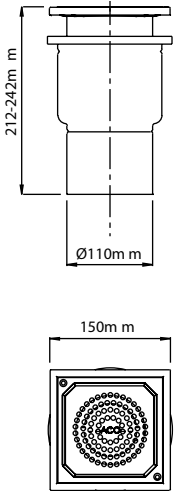


Order information

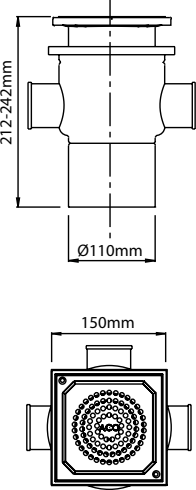
ACO EG150 vertical gully with square grating

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97211 |
| | | | | | | | SS 316 | 97261 |

ACO Gully EG150 vertical with telescopic square gully top and grate

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
|  | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97200 |
| | | | | | | | SS 316 | 97250 |

ACO Gully EG150 vertical and side inlets, complete with telescopic square gully top and grate

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
|  | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97202 |
| | | | | | | | SS 316 | 97252 |

ACO EG150 gully, horizontal outlet for resin and tiled flooring complete with grate

Product information

The EG150 Gully, complete with grate can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Product benefits

- For resin and tiled floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Shallow gully option, ideal for fully supported or concreted suspended floor and other restricted depth applications
- Perforated grating fitted as standard for pedestrian applications. Load class K3 to BS EN 1253
- Anti-ligature options available for EG150 gratings.



Order information

ACO Gully EG150 horizontal complete with telescopic, square gully top and grating

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 75 | 1.2 | With FAT | K3 | No | SS 304 | 97201 |
| | | | | | | | SS 316 | 97251 |

ACO EG150 gully, vertical outlet for resin and tiled flooring, with bonding flange and grate

Product information

The EG150 Gully with bonding flange for waterproofing onto the gully body, complete with grate can be specified as a point drainage.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Multiple side inlets for extra drainage points.

Product benefits

- For resin and tiled floors
- Gully body with bonding flange for waterproofing
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Perforated grating fitted as standard for pedestrian applications. Load class K3 to BS EN 1253
- Telescopic gully option, for flexible installation
- Telescopic gully option, with choice of 3 back inlets, supplied with fully interchangeable adaptors to suit 32mm (BS 5254) and 40mm (BS 5255) waste pipes
- Anti-ligature options available for EG150 gratings.



Order information

ACO Gully EG150 vertical with telescopic, square gully top and grating

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97216 |
| | | | | | | | SS 316 | 97266 |

ACO Gully EG150 vertical, side inlets with telescopic, square gully top and grating

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97205 |
| | | | | | | | SS 316 | 97255 |

ACO EG150 gully, vertical outlet for resin and tiled flooring, 2-part system

Product information

The EG150 gully combination can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Fixed height and telescopic versions. Gully top suitable for mesh grates with different properties.

Telescopic solution enables height and rotational adjustment of connected gully top. Multiple side inlets for extra drainage points.

3

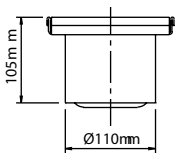
Product benefits

- For resin and tiled floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- 2-part gully systems
- Selection of mesh grates available
- Shallow gully option, ideal for suspended floor or other restricted depth applications
- Telescopic gully option, for flexible installation
- Telescopic gully option, with choice of 3 back inlets, supplied with fully interchangeable adaptors to suit 32mm (BS 5254) and 40mm (BS 5255) waste pipes

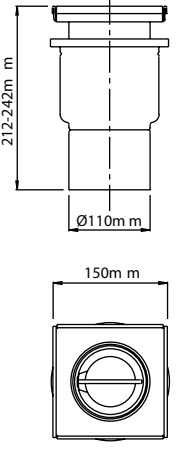


Order information

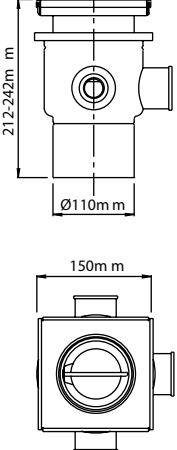
ACO Gully EG150 vertical, with square top

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
|  | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 400834 |
| | | | | | | | SS 316 | 400835 |

ACO Gully EG150 vertical with square, telescopic gully top

| | Top size | Outlet diameter | Flow rate | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|-----------|-----------------|-----------------------|---------------|------------|----------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1 [l/s] | | | | | |
|  | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97296 |
| | | | | | | | SS 316 | 97298 |

ACO Gully EG150 vertical, inlets with square, telescopic gully top

| | Top size | Outlet diameter | Flow rate | Foul air trap | Load class | Slip resistant | Material | Part number |
|---|-----------|-----------------|-----------------------|---------------|------------|----------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1 [l/s] | | | | | |
|  | 150 x 150 | 110 | 1.2 | With FAT | K3 | No | SS 304 | 97312 |
| | | | | | | | SS 316 | 97314 |

ACO EG150 gully, horizontal outlet for resin and tiled flooring, 2-part system

Product information

The EG150 gully combination can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Telescopic gully suitable for both mesh and ladder grates.

Telescopic solution enables height and rotational adjustment of connected gully top.

Product benefits

- For resin and tiled floors
- Tested and certified according to BS EN 1253
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- 2-part gully systems
- Selection of mesh grates available
- Shallow gully option, ideal for suspended floor or other restricted depth applications



Order information

ACO EG150 gully, horizontal outlet for resin and tiled flooring

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1 [l/s] | Foul air trap | Load class | Slip resistant | Material | Part number |
|--|------------------|------------------------------|------------------------------------|------------------|---------------|-------------------|----------|----------------|
| | 150 x 150 | 75 | 1.2 | With FAT | NA | NA | SS 304 | 97308 |
| | | | | | | | SS 316 | 97310 |

Gratings for gully top 150 x 150

Product information

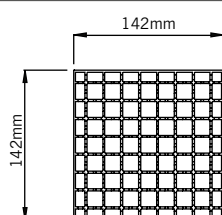
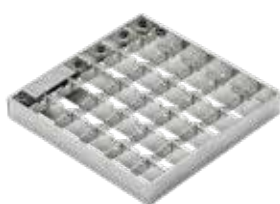
Ladder and mesh grates suitable for light pedestrian traffic applications.

Product benefits

- Mesh grate for EG150 2-part system
- Mesh grate is electro-polished, Ladder grate is pickled
- Grates to load class K3 (BS EN 1253)
- Slip resistant solution available

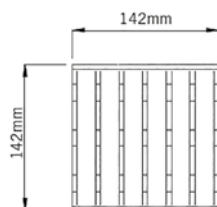
Order information

ACO mesh grating



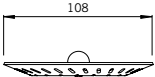
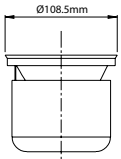
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| K13 | Yes | SS 304 | 05964 |
| | | SS 316 | 15964 |
| K13 | No | SS 304 | 05965 |
| | | SS 316 | 15965 |

ACO ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| K13 | Yes | SS 304 | 96851 |
| | | SS 316 | 401527 |

Accessories and replacement parts for ACO gully EG150

| Description | Used with | Material | Part number |
|---|--|----------|-------------|
|  <p>ACO Sieve ■ Stainless steel</p> | <p>■ ACO gully EG150, Fixed height or telescopic</p> | SS 304 | 97235 |
| | | SS 316 | 97285 |
|  <p>ACO Foul air trap ■ Stainless steel ■ Water seal 50 mm</p> | <p>■ ACO gully EG150, Fixed height or telescopic</p> | SS 304 | 97217 |
| | | SS 316 | 97267 |



4

ACO Hygienic Drainage Gullies

COLLECT:
Collect and remove



General introduction

Hygiene**First**

As one of the World's leading commercial drainage specialists, The ACO Group understands the critical role that drainage plays in a successful commercial food preparation business.

We appreciate that food safety, hygiene and cost control are all vital factors, yet we also understand that for many, drainage is out of sight and out of mind.

As a result, many drainage systems are not designed well, which leads to inefficiencies, costly on going cleaning and maintenance. In worst case scenario it can result in food contamination, closure of a facility and even loss of a business. As the company that's driving the future of drainage, we are determined to change this by raising the profile of hygienic drainage and improving standards across every part of the process.

Our HygieneFirst philosophy represents our commitment to delivering products that provide ultimate hygienic performance. We design drainage solutions that minimize operational costs without compromising food safety.

4

Hygienic design requirements

ACO offers sustainable drainage systems which are designed to protect business, the environment and ultimately public health.

Our aim is to constantly improve every aspect of safety, hygiene and functional performance.

We believe that our systems and services are truly unique, delivering unparalleled benefits to everyone involved in project delivery or subsequent operation.

National Sanitation Foundation (NSF) International

ACO has become the first and only drainage company to obtain 14159-1 – Hygiene Requirements for the Design of Meat and Poultry Processing Equipment certification for its products from NSF International.

The certification has been awarded to ACO in recognition of the hygienic performance of its drainage systems and products, and its compliance with the strict standards and procedures of the NSF.

It also underlines ACO's ongoing commitment to the very high standards of manufacturing and to research-led product development which ensures its products deliver optimum hygienic performance.

EHEDG

ACO hygienic drainage fulfils stringent hygienic requirements to prevent harmful bacteria contamination. We apply relevant hygienic design principles that are reserved for food contact surfaces BS EN 1672, BS EN ISO 14159 and EHEDG documents No. 8, 13 and 44 to the design of our drainage products.



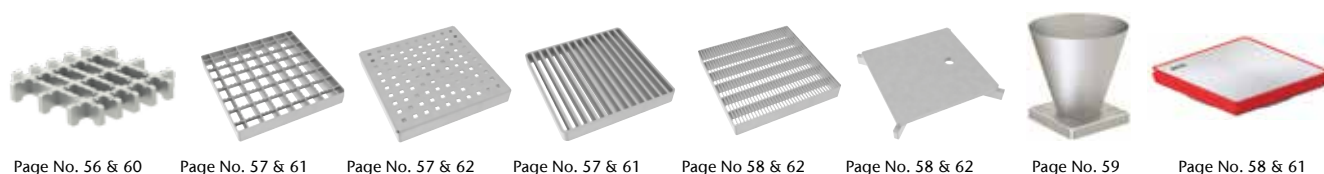
ACO Gully 157 - Fixed Height

Product range overview

- 1** Gratings
- 2** Silt baskets
- 3** Gully bodies for fixed height

ACO Gully 157 is designed to be used in applications where hygiene, durability and performance requirements are paramount. Available in both stainless steel grades 304 and 316 the range comprises of a variety of different product choices. The floor construction and depth, together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully.

As shown below, two generic gully configurations are available. Fixed height gullies are convenient, freestanding units suitable for cementitious, resin or tiled floors.



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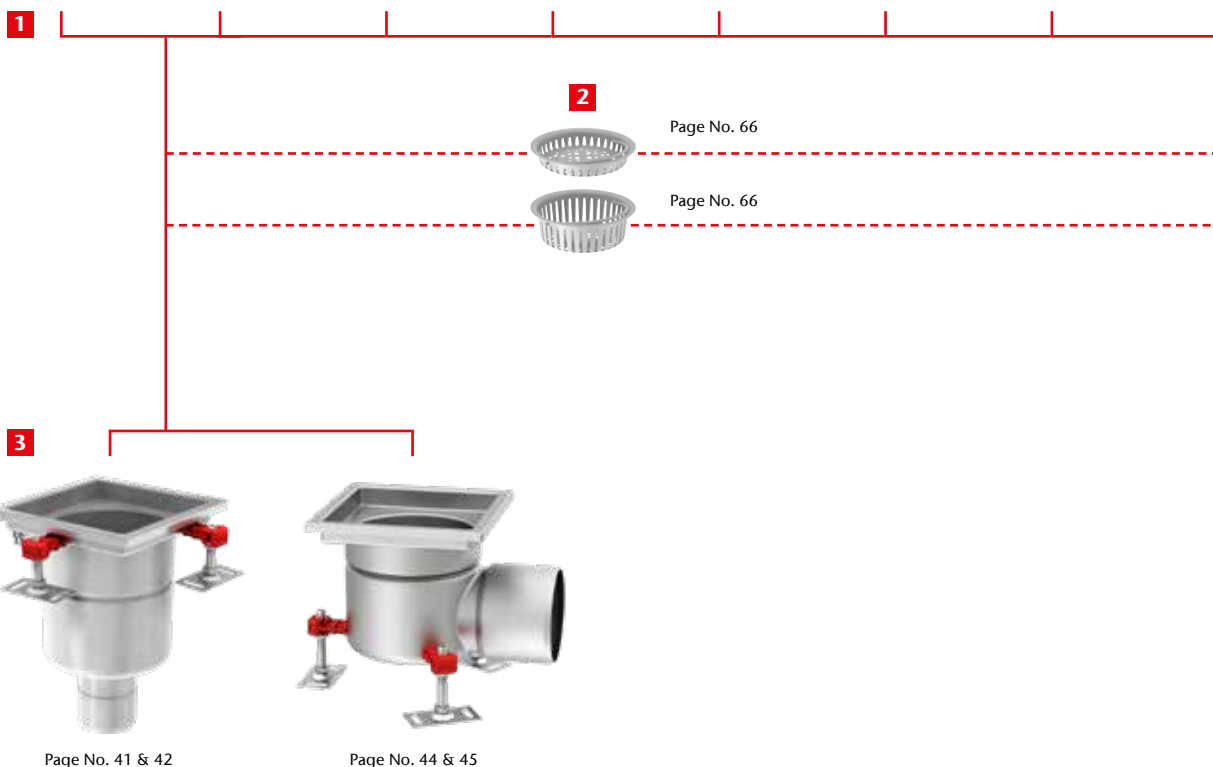
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User benefits

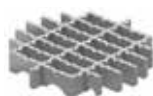
- Fully compliant to BS EN 1253.
- Hygienic design following BS EN 1672 and BS EN ISO 14159 requirements.
- Slip resistant gratings provide user safety.
- Easy and low cost cleaning.
- Stainless steel construction for durability and long life.
- Optional silt basket.
- Wide range of grating choice.
- Gully top edge infill supplied as standard for hygiene and durability.
- Positive membrane drainage.

Contractor benefits

- Low construction height.
- Friction lock telescopic adjustment reduces installation time.
- Gully levelling facilities.
- Quick and reliable flange connection for waterproofing membranes.
- Friction ring converts easily to membrane seepage drainage.
- Gully top edge infill for durability and eliminates time-consuming back filling.
- Easy installation for all floor types – ceramic tiles, cementitious, resin screeds and vinyl.

Specifier benefits

- Fully compliant to BS EN 1253.
- Hygienic design following BS EN 1672 and BS EN ISO 14159 requirements.
- Slip resistant gratings provide user safety.
- Stainless steel construction for durability and long life.
- Gully top edge infill supplied as standard for hygiene and durability.
- Wide range of gratings for all load class applications.
- Low construction height.
- Reliable waterproofing membrane connection options.
- Waterproofing membrane seepage drainage provision.
- Suitable for all floor types – ceramic tiles, cementitious, resin screeds and vinyl.



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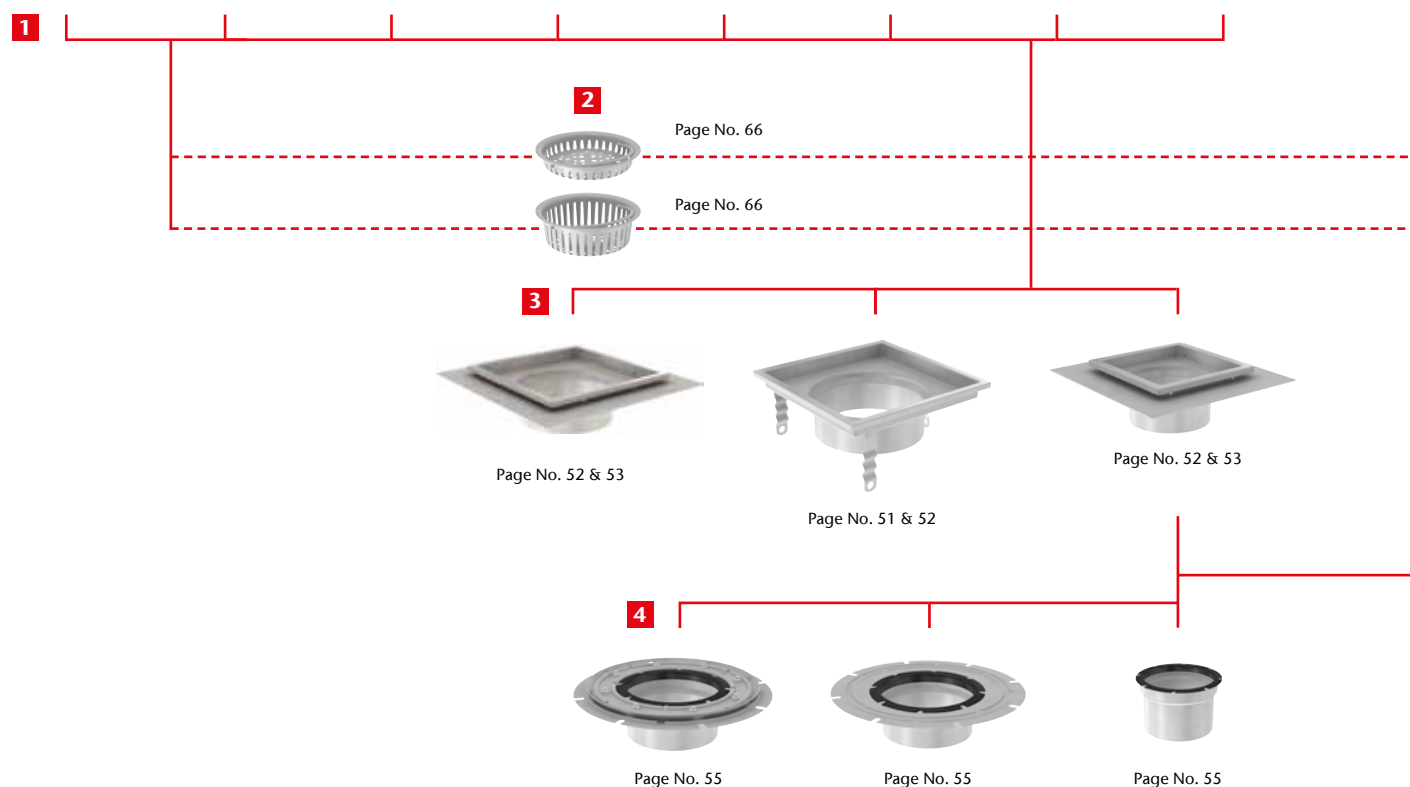
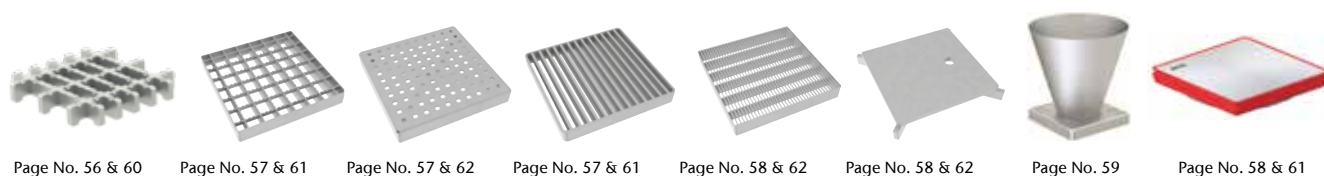
ACO Gully 157 - Telescopic

Product range overview

- 1** Gratings
- 2** Silt baskets
- 3** Gully tops
- 4** Raising pieces
- 5** Gully bodies for telescopic adjustable gullies

ACO Gully 157 is designed to be used in applications where hygiene, durability and performance requirements are paramount. Available in both stainless steel grades 304 and 316 the range comprises of a variety of different product choices. The floor construction and depth, together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully.

As shown below, two generic gully configurations are available. Telescopic gullies can be installed either with ACO gully tops or with ACO stainless steel linear drainage channels in most flooring constructions, including floors with waterproofing membranes.



User benefits

- Fully compliant to BS EN 1253.
- Hygienic design following BS EN 1672 and BS EN ISO 14159 requirements.
- Slip resistant gratings provide user safety.
- Easy and low cost cleaning.
- Stainless steel construction for durability and long life.
- Optional silt basket.
- Wide range of grating choice.
- Gully top edge infill supplied as standard for hygiene and durability.
- Positive membrane drainage.

Contractor benefits

- Low construction height.
- Friction lock telescopic adjustment reduces installation time.
- Gully levelling facilities.
- Quick and reliable flange connection for waterproofing membranes.
- Friction ring converts easily to membrane seepage drainage.
- Gully top edge infill for durability and eliminates time-consuming back filling.
- Easy installation for all floor types – ceramic tiles, cementitious, resin screeds and vinyl.

Specifier benefits

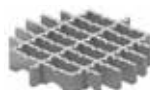
- Fully compliant to BS EN 1253.
- Hygienic design following BS EN 1672 and BS EN ISO 14159 requirements.
- Slip resistant gratings provide user safety.
- Stainless steel construction for durability and long life.
- Gully top edge infill supplied as standard for hygiene and durability.
- Wide range of gratings for all load class applications.
- Low construction height.
- Reliable waterproofing membrane connection options.
- Waterproofing membrane seepage drainage provision.
- Suitable for all floor types – ceramic tiles, cementitious, resin screeds and vinyl.



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Location flange gully bodies
- no waterproof membrane

Adhesive bonding flange gully bodies
- welding or adhesive bonding of waterproof membrane

Clamping flange gully bodies
- mechanical clamping of waterproof membrane

Hygienic design principles

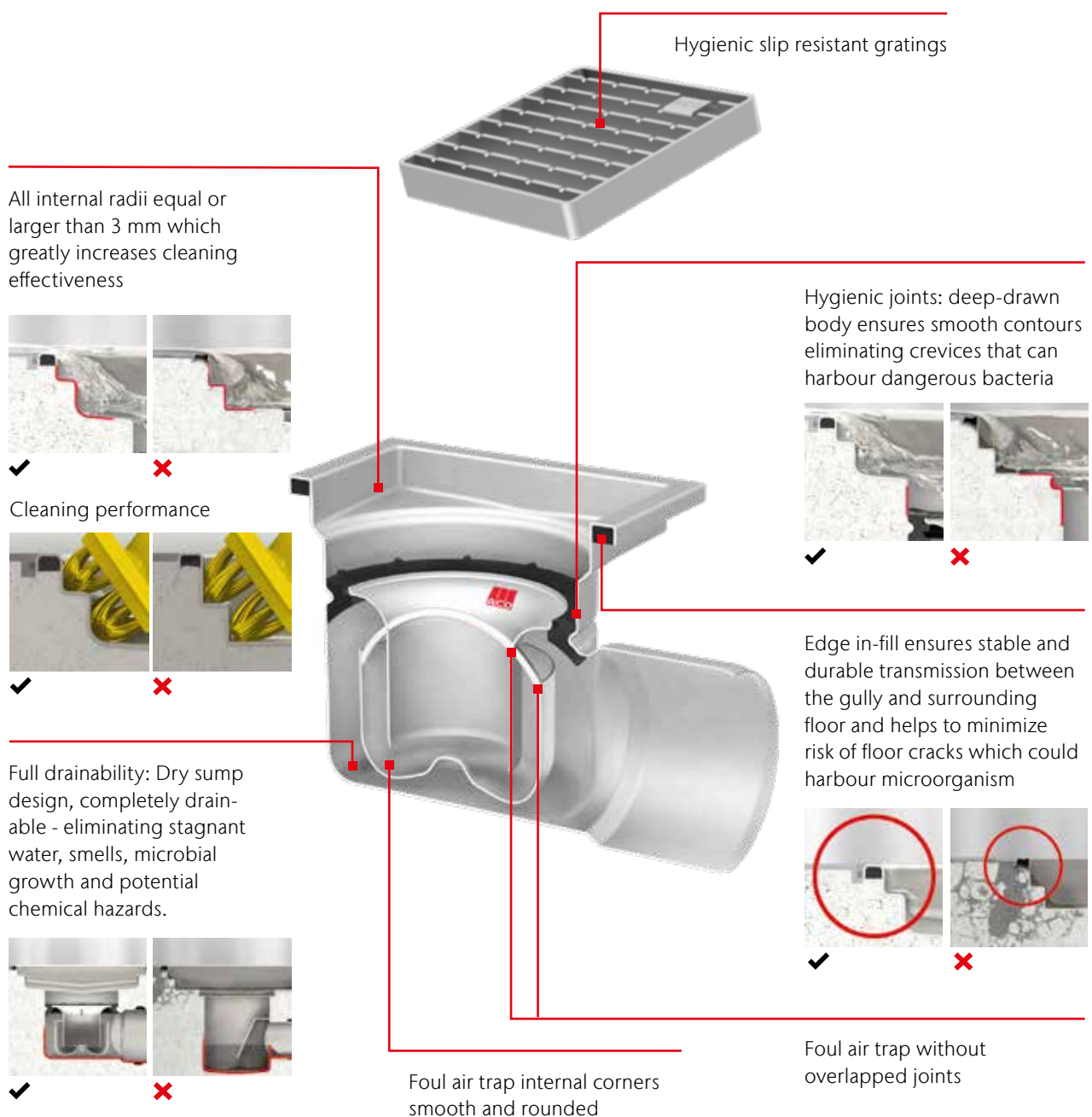
Hygienic design

ACO hygienic drainage fulfils hygienic requirements to prevent harmful bacterial contamination.

We apply the relevant hygienic design principles reserved for food processing equipment BS EN 1672, BS EN ISO 14159, EHEDG document No. 8, 13, 44.

ACO gully hygienic features:

- Full drainability
- Internal radii equal or larger than 3 mm
- Hygienic joints
- Edge in-fill
- Stainless steel grade min. 1.4301 according to EN 10088 (304 according to AISI) and 316
- Fully pickled and passivated



ACO hygienic gully 157 fixed height, vertical outlet

Product information

Fixed height gullies can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Those gullies can be combined with different grates depending on requested load class.

Product benefits

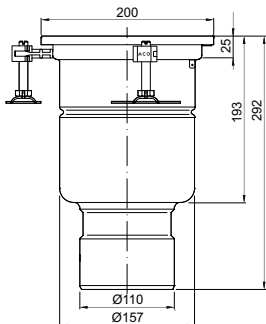
- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (BS EN 13501-2)
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



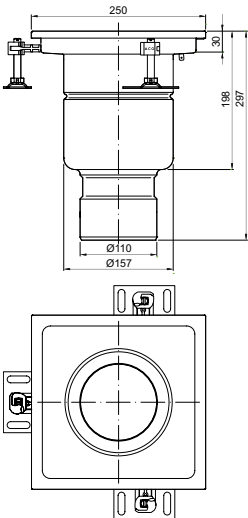
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Order information

ACO Gully 157 fixed height, vertical outlet

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|-----------|-----------------|-----------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1 / Direct | | | |
| | | | [l/s] | | | |
| Standard edge - square 200 x 200mm | | | | | | |
|  | 200 x 200 | 110 | 3.5 / 4.5 | With FAT | SS 304 | 408003 |
| | | | | | SS 316 | 408103 |

ACO Gully 157 fixed height, vertical outlet

| | Top size | Outlet diameter | Flow rate | BS EN 1253-1 / Direct | Foul air trap | Material | Part number |
|---|-----------|-----------------|-----------|-----------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | [l/s] | | | | |
| Standard edge - square 250 x 250mm | | | | | | | |
|  | 250 x 250 | 110 | 3.5 / 4.5 | With FAT | SS 304 | 408019 | |
| | | | | | SS 316 | 408119 | |

ACO hygienic gully 157

fixed height, vertical outlet, round top

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Those gullies can be combined with different grates depending on requested load class.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to BS EN 1253
- Wide range of gratings including slip resistant solution
- Fire tested and certified solution available for classes EI90 – EI 180 (BS EN 135012-2)
- Adjustable EasyFix levelling feet



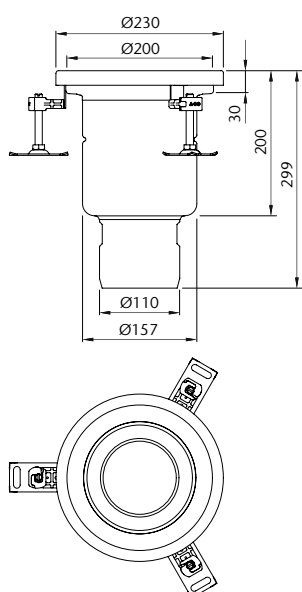
4

Order information

ACO Gully 157 fixed height, vertical outlet

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|----------|-----------------|--------------------------------|---------------|----------|-------------|
| | ø [mm] | ø [mm] | BS EN 1253-1 / Direct [l/s] | | | |

Standard edge - round



230

110

3.5 / 4.5

With FAT

SS 304

446737

SS 316

446745

ACO hygienic gully 157 fixed height, horizontal outlet

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Those gullies can be combined with different grates depending on requested load class.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet

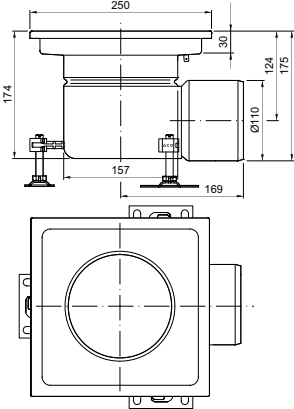


Order information

ACO Gully 157 fixed height, horizontal outlet

| | Top size [mm] | Outlet diameter ø [mm] | Flow rate EN-1253-1 / Direct [l/s] | Foul air trap | Material | Part number |
|---|------------------|------------------------------|--|---------------|----------|----------------|
| Standard edge - square 200 x 200mm | | | | | | |
| | 200 x 200 | 110 | 2.8 / 5.0 | With FAT | SS 304 | 408011 |
| | | | | | SS 316 | 408111 |

ACO Gully 157 fixed height, horizontal outlet

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|-----------|-----------------|-----------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | EN-1253-1 / Direct [l/s] | | | |
|  | 250 x 250 | 110 | 2.8 / 5.0 | With FAT | SS 304 | 408027 |
| | | | | | SS 316 | 408127 |

ACO hygienic gully 157

fixed height, horizontal outlet, round top

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Those gullies can be combined with different grates depending on requested load class.

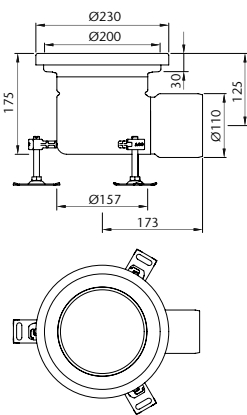
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO1 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings including slip resistant solution
- Adjustable EasyFix levelling feet



Order information

ACO Gully 157 fixed height, horizontal outlet

| Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|-----------------|-----------------------------|---------------|----------|---------------|
| ø [mm] | ø [mm] | BS EN 1253-1 / Direct [l/s] | | | |
| Standard edge - round | | | | | |
|  | 230 | 110 | 2.8 / 5.0 | With FAT | SS 304 446741 |
| | | | | | SS 316 446749 |

ACO hygienic gully 157 telescopic, vertical outlet

Product information

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Gullies are equipped with flanges for connection of waterproof membrane.

Product benefits

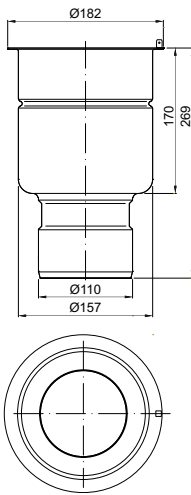
- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to BS EN 1253
- Fire tested and certified solution available for classes EI90 – EI 180 (BS EN 135012-2)
- Suitable for all floor types including vinyl flooring
- Telescopic friction ring included



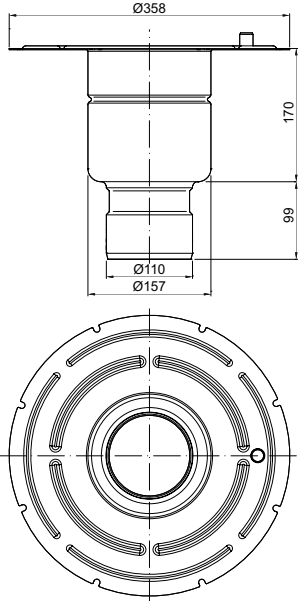
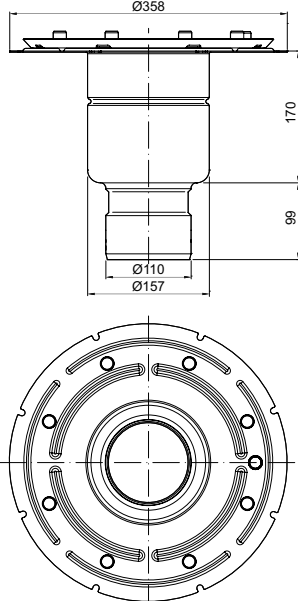
4

Order information

ACO Telescopic vertical gully

| | Type of flange | Outlet diameter ø [mm] | Flow rate EN-1253-1 / Direct [l/s] | Foul air trap | Material | Part number |
|---|-----------------|---------------------------|--|---------------|----------|-------------|
| | | | | | | |
|  | Location flange | 110 | 3.5 - 4.4 / 4.5 | With FAT | SS 304 | 408055 |
| | | | | | SS 316 | 408155 |

ACO Telescopic vertical gully

| | Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|----------------------------|-----------------|-----------------------------|---------------|----------|-------------|
| | | ø [mm] | EN-1253-1 / Direct [l/s] | | | |
|  | Adhesive bonding flange | 110 | 3.5 - 4.4 / 4.5 | With FAT | SS 304 | 408057 |
| | | | | | SS 316 | 408157 |
|  | Mechanical clamping flange | 110 | 3.5 - 4.4 / 4.5 | With FAT | SS 304 | 408059 |
| | | | | | SS 316 | 408159 |

ACO hygienic gully 157 telescopic, horizontal outlet

Product information

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Gullies are equipped with flanges for connection of waterproof membrane.

Product benefits

- BS EN 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to BS EN 1253
- Suitable for all floor types including vinyl flooring
- Telescopic friction ring included
- Adjustable EasyFix levelling feet



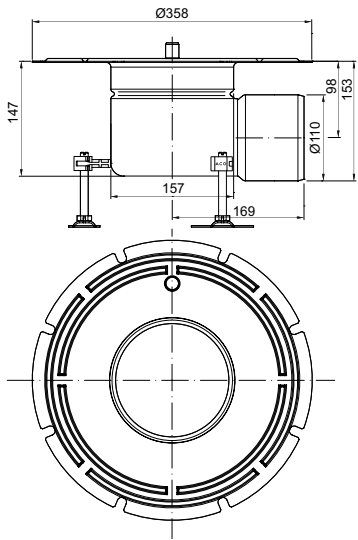
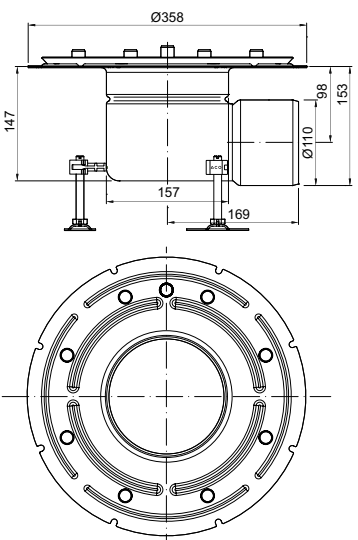
4

Order information

ACO Telescopic horizontal gully

| | Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|-----------------|-----------------|-----------------------------|---------------|----------|-------------|
| | | ø [mm] | BS EN 1253-1 / Direct [l/s] | | | |
| | Location flange | 110 | 2.8 - 4.4 / 4.5 | With FAT | SS 304 | 408079 |
| | | | | | SS 316 | 408179 |

ACO Telescopic horizontal gully

| | Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|----------------------------|-----------------|--------------------------------|---------------|----------|-------------|
| | | ø [mm] | BS EN 1253-1 / Direct [l/s] | | | |
|  | Adhesive bonding flange | 110 | 2.8 - 4.4 / 4.5 | With FAT | SS 304 | 408081 |
| | | | | | SS 316 | 408181 |
|  | Mechanical clamping flange | 110 | 2.8 - 4.4 / 4.5 | With FAT | SS 304 | 408083 |
| | | | | | SS 316 | 408183 |

ACO hygienic gully 157 gully top, telescopic

Product information

A gully top can be combined with a telescopic gully. Different types of gully top are available depending on the required floor structure.

Product benefits

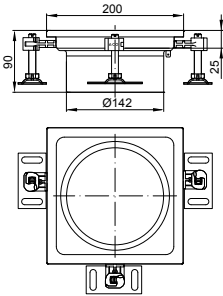
- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Protective cover available on request. See page 264 for more details
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



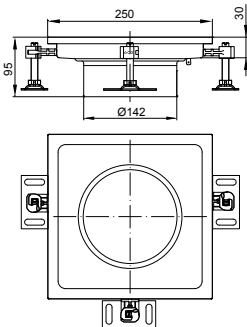
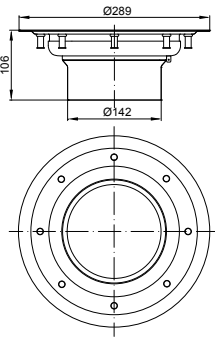
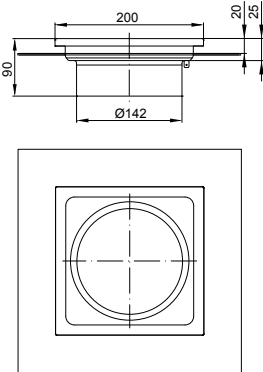
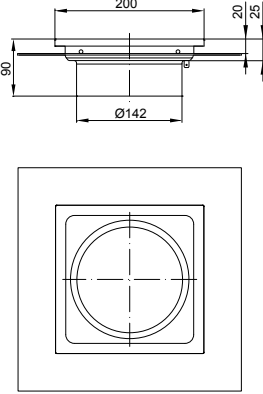
4

Order information

ACO Telescopic gully top

| Gully top type | Gully top size [mm] | Material | Part number |
|---|------------------------|-----------|------------------|
|  | Standard edge | 200 x 200 | SS 304 408208 |
| | | | SS 316 408218 |

ACO Telescopic gully top

| | Gully top type | Gully top size [mm] | Material | Part number |
|---|--------------------------------------|------------------------|----------|----------------|
| | | | | |
|  | Standard edge | 250 x 250 | SS 304 | 408248 |
| | | | SS 316 | 408258 |
|  | Vinyl edge | Ø289 | SS 304 | 408240* |
| | | | SS 316 | 408250* |
|  | Extended edge | 200 x 200 | SS 304 | 408241 |
| | | | SS 316 | 408251 |
|  | Extended edge with drainage holes | 200 x 200 | SS 304 | 408244 |
| | | | SS 316 | 408254 |

* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gratings

For gully top 200 x 200 mm [Page 56](#)

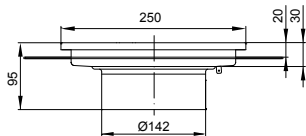
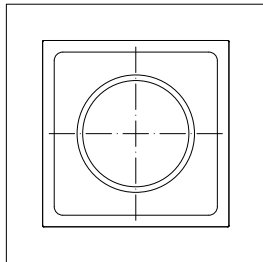
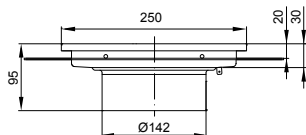
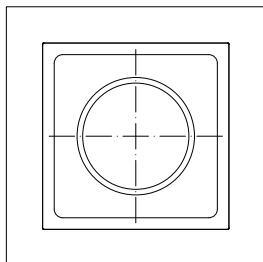
For gully top 250 x 250 mm [Page 60](#)

For vinyl top Ø170 mm [Page 65](#)

Accessories

For ACO hygienic gully 157 [Page 66](#)

ACO Telescopic gully top

| Gully top type | Gully top size | Material | Part number | |
|--|-----------------------------------|-----------|-------------|--------|
| [mm] | | | | |
|  | Extended edge | 250 x 250 | SS 304 | 408245 |
|  | | | SS 316 | 408255 |
|  | Extended edge with drainage holes | 250 x 250 | SS 304 | 408246 |
|  | | | SS 316 | 408256 |

4

ACO hygienic gully 157

gully top, telescopic, round top

Product information

Gully top can be combined with telescopic gully. Different gully top type is available depending on floor structure.

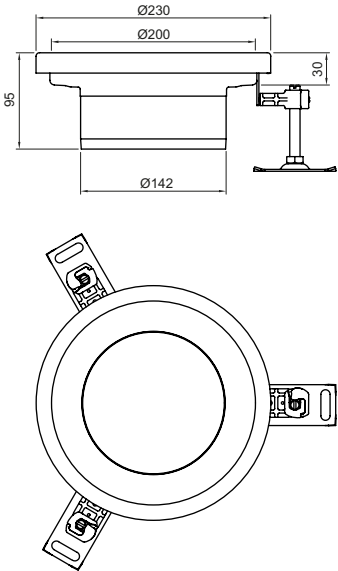
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Protective cover available on request
- Tested and certified according to BS EN 1825
- Wide range of gratings including slip resistant solution
- Adjustable EasyFix levelling feet



Order information

ACO Telescopic gully top - round

| | Gully top type | Gully top size ø [mm] | Material | Part number |
|---|----------------|--------------------------|----------|-------------|
| | | | | |
|  | Standard edge | 230 | SS 304 | 446750 |
| | | | SS 316 | 446751 |

ACO hygienic gully 157 raising piece, telescopic

Product information

Raising piece can be used for floor structures where multiple waterproofing is needed (heat insulation) or where construction height of the slab needs to be increased.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Tested and certified according to BS EN 1253
- Suitable for all floor types including vinyl flooring
- Variety of flanges for membranes
- Telescopic friction ring included



4

Order information

ACO Telescopic raising piece

| | Type of flange | Material | Part number |
|--|----------------------------|----------|-------------|
| | Location flange | SS 304 | 408249 |
| | | SS 316 | 408259 |
| | Adhesive bonding flange | SS 304 | 408206 |
| | | SS 316 | 408216 |
| | Mechanical clamping flange | SS 304 | 408207 |
| | | SS 316 | 408217 |

Gratings for gully top 200x200

Product information

Variety of grate types is available depending on application and requested load class.

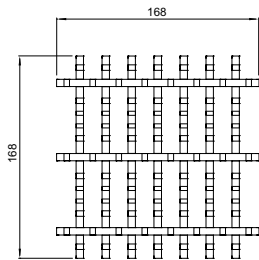
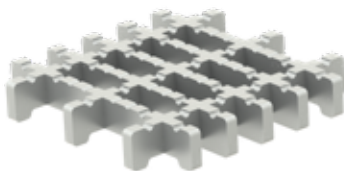
For applications with high hygienic demands ladder grate or cast grate should be selected.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253 and NSF International
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (BS EN 1253)
- Slip resistant solution available

Order information

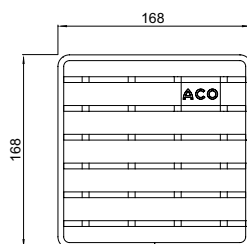
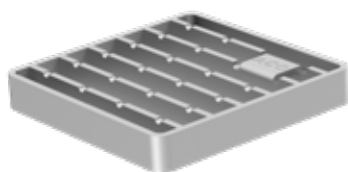
ACO hygienic frameless ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 446264 |
| | | SS 316 | 446265 |

Note: Surface electropolished

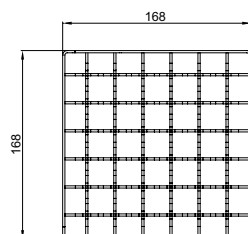
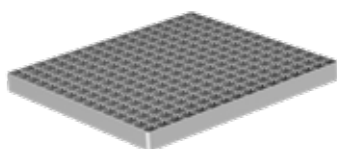
ACO hygienic ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 416912 |
| | | SS 316 | 416913 |
| N250 | No | SS 304 | 408043 |
| | | SS 316 | 408143 |

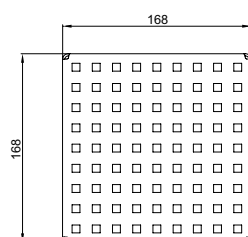
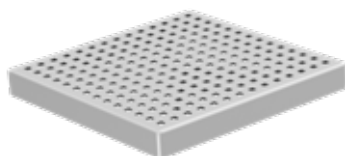
Note: Surface pickle passivated

ACO mesh grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L 15 | Yes | SS 304 | 408090* |
| | | SS 316 | 408190* |
| | No | SS 304 | 408091* |
| | | SS 316 | 408191* |

ACO quadrato grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L 15 | No | SS 304 | 408092* |
| | | SS 316 | 408192* |

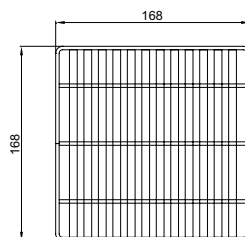
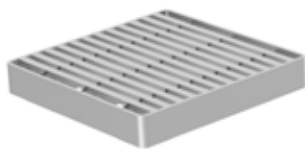
* Hygienic design following BS EN 1672, BE EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gully System

For ACO hygienic gully 157 – fixed height [Page 41, 42, 44, 45](#)

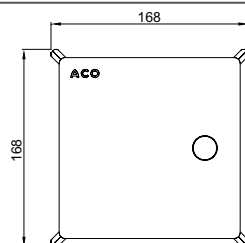
For ACO hygienic gully 157 – gully top - telescopic [Page 51-53](#)

ACO heelsafe grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L 15 | No | SS 304 | 408022* |
| | | SS 316 | 408122* |

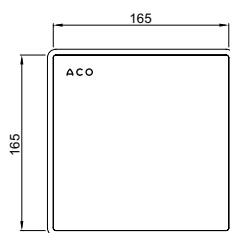
ACO hygienic slot cover



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS304 | 445782 |
| | | SS316 | 445783 |

Note: Top surface sandblasted

ACO odour proof gully cover



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | No | SS 316 | 445398* |
| M125 | No | SS 316 | 445605* |

To ensure easy removal of this cover please select and ACO Vacuum handle from page 66

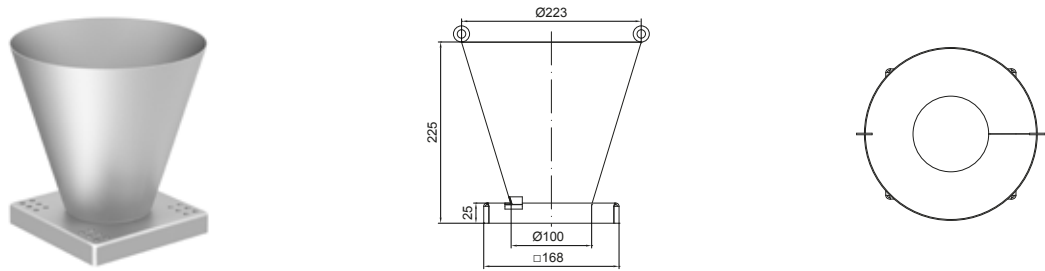
* Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gully System

For ACO hygienic gully 157 – fixed height [Page 41, 42, 44, 45](#)

For ACO hygienic gully 157 – gully top - telescopic [Page 51-53](#)

ACO tundish for gully top



| Description | Material | Part number |
|-------------------------------------|----------|-------------|
| ACO tundish for gully top 200 x 200 | SS 304 | 415918 |

Gratings for gully top 250x250

Product information

Variety of grate types is available depending on application and requested load class.

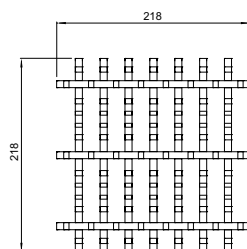
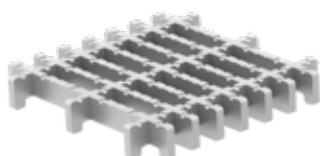
For applications with high hygienic demands a ladder grate should be selected.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253 and NSF International
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (BS EN 1253)
- Slip resistant solution available

Order information

ACO hygienic frameless ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 446268 |
| | | SS 316 | 446269 |

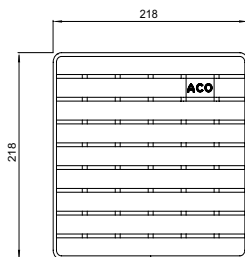
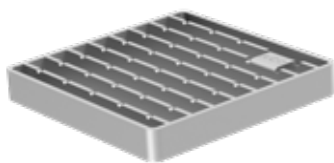
Note: Surface electropolished

Gully System

For ACO hygienic gully 157 – fixed height [Page 41, 42, 44, 45](#)

For ACO hygienic gully 157 – gully top - telescopic [Page 51-53](#)

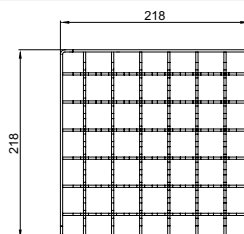
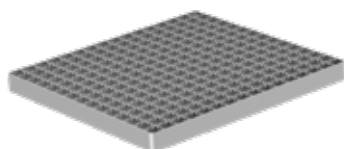
ACO hygienic ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 416914 |
| | | SS 316 | 416915 |
| N250 | No | SS 304 | 408044 |
| | | SS 316 | 408144 |

Note: Surface pickle passivated

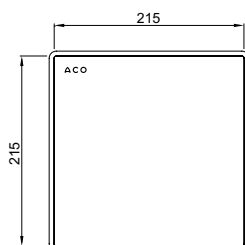
ACO mesh grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | Yes | SS 304 | 408095* |
| | | SS 316 | 408195* |
| | No | SS 304 | 408096* |
| | | SS 316 | 408196* |

Note: Surface electropolished

ACO Gully 157 odour cover S/S316



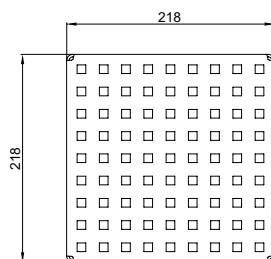
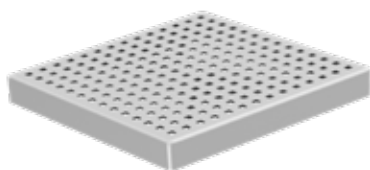
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | No | SS 316 | 445399 |
| M125 | No | SS 316 | 445607 |

To ensure easy removal of this cover please select and ACO Vacuum handle from page 66

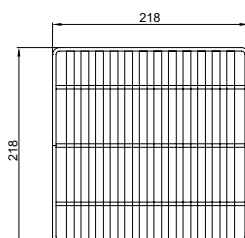
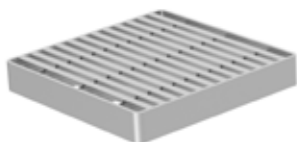
Gully System

For ACO hygienic gully 157 – fixed height [Page 41, 42, 44, 45](#)

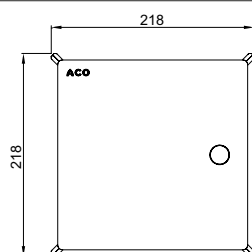
For ACO hygienic gully 157 – gully top - telescopic [Page 51-53](#)

ACO quadrato grating

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 408097* |
| | | SS 316 | 408197* |

ACO heelsafe grating

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 408031* |
| | | SS 316 | 408131* |

ACO hygienic slot cover

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 445786 |
| | | SS 316 | 445787 |

Note: Top surface sandblasted

* Hygienic design following BS EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gully System

For ACO hygienic gully 157 – fixed height [Page 41, 42, 44, 45](#)

For ACO hygienic gully 157 – gully top - telescopic [Page 51-53](#)

Gratings for gully top ø 230 mm

Product information

Variety of grate types is available depending on application and requested load class.

For applications with high hygienic demands a ladder grate should be selected.

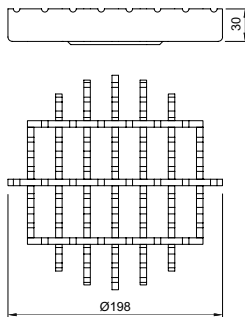
Product benefits

- Hygienic design following BS EN 1672, BS EN 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253 and NSF International
- Range of gratings suitable to load class R 50 and M 125 (BS EN 1253)
- Slip resistant solution available

4

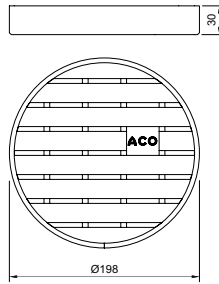
Order information

ACO hygienic frameless ladder grating - round



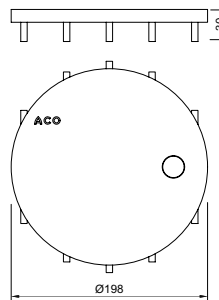
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 446780 |
| | | SS 316 | 446781 |
| M125 | Yes | SS 304 | 446784 |
| | | SS 316 | 446785 |

Note: Surface electropolished

ACO hygienic ladder grating - round

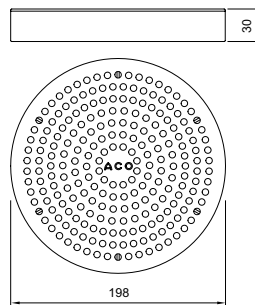
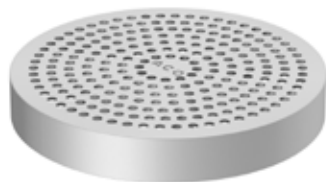
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 447761 |
| | | SS 316 | 447762 |
| N250 | Yes | SS 304 | 446974 |
| | | SS 316 | 446975 |

Note: Surface electropolished

ACO hygienic slot cover - round

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 446788 |
| | | SS 316 | 446789 |

Note: Top surface sandblasted

ACO perforated grating - round

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 447728 |
| | | SS 316 | 447736 |

Note: Surface electropolished

Gully SystemFor ACO hygienic gully 157 – fixed height [Page 43, 46](#)For ACO hygienic gully 157 – gully top, telescopic [Page 54](#)

Gratings for vinyl top ø170

Product information

Variety of grate types is available depending on application and requested load class.

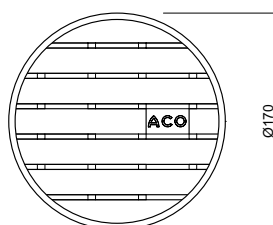
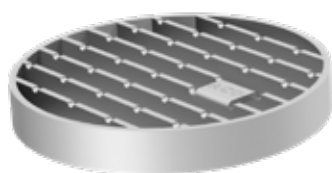
For applications with high hygienic demands a ladder grate should be selected.

Product benefits

- Hygienic design following BS EN 1672, BE EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253
- Stainless steel construction for durability and long life
- Range of gratings suitable to load class L 15 and M 125 (BS EN 1253)
- Slip resistant solution available

Order information

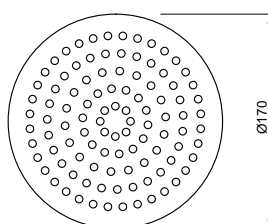
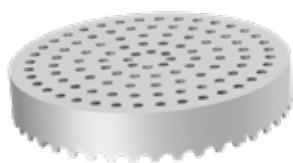
ACO ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 97146 |
| | | SS 316 | 97367 |

Note: Surface electropolished

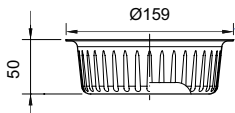
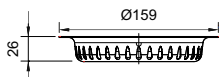
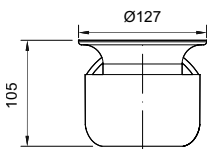
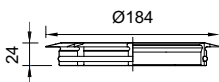
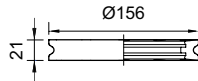
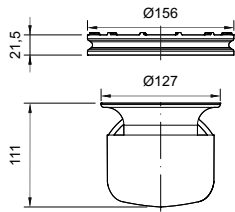
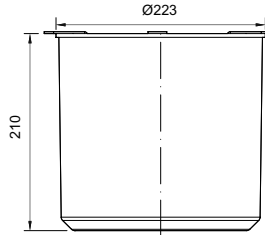
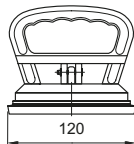
ACO perforated grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 97152* |
| | | SS 316 | 97369* |

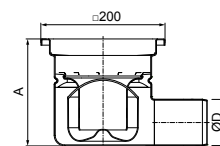
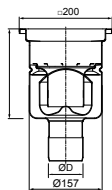
Accessories

Accessories and replacements for ACO hygienic gully 157

| | Description | Used with | Material | Part number |
|---|---|--|--------------|-------------|
|  | ACO silt basket ■ Stainless steel ■ 0.6 litre capacity | ■ ACO hygienic gully 157, vertical | SS 304 | 416904 |
| | | □ Fixed height or telescopic | SS 316 | 416905 |
|  | ACO silt basket ■ Stainless steel ■ 0,3 litre capacity | ■ ACO hygienic gully 157, horizontal | SS 304 | 416906 |
| | | □ Fixed height or telescopic | SS 316 | 416907 |
|  | ACO hygienic foul air trap ■ Stainless steel ■ Water seal 50 mm | ■ ACO hygienic gully 157 □ Telescopic | SS 304 | 408200 |
| | | | SS 316 | 408210 |
|  | ACO friction ring ■ SBR (Styrene-butadiene rubber) | ■ ACO hygienic gully 157 □ Telescopic | SBR | 408205 |
|  | ACO standard foul air trap support ■ NBR (Acryl nitrile-butadiene rubber) | ■ ACO hygienic gully 157 □ Fixed height □ Telescopic | NBR | 408201 |
|  | ACO fire resistant kit for gully 157/DN 70 □ Fixed height, vertical □ Telescopic, vertical | ■ ACO hygienic gully 157 □ Fixed height, vertical □ Telescopic, vertical | SS 316 / NBR | 416932 |
| | | | | |
|  | ACO fire resistant kit for gully 157/DN 100 □ Fixed height, vertical □ Telescopic, vertical | ■ ACO hygienic gully 157 □ Fixed height, vertical □ Telescopic, vertical | SS 316 / NBR | 416933 |
| | | | | |
|  | ACO vacuum handle | ■ ACO odour proof gully cover | Aluminium | 445622 |

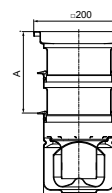
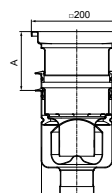
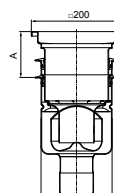
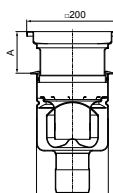
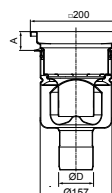
Flow rates and construction heights

ACO hygienic gully 157 – fixed height



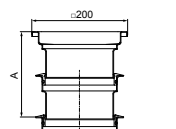
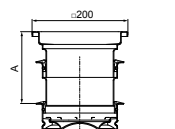
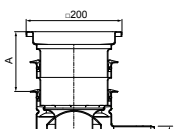
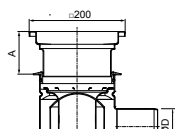
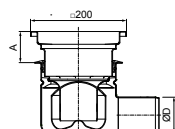
| Outlet diameter | Outlet position | Flow rate [l/s] | Outlet diameter | Outlet position | Flow rate [l/s] |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| øD | | A = 193 [mm] | øD | | A = 170 [mm] |
| 110 | Vertical | 3.5 | 110 | Horizontal | 2.8 |

ACO hygienic gully 157 – telescopic, vertical



| Outlet diameter | Outlet position | Flow rate [l/s] | | | | |
|-----------------|-----------------|-----------------|-------------|--------------|--------------|--------------|
| øD | | A = 65 [mm] | A = 91 [mm] | A = 125 [mm] | A = 153 [mm] | A = 180 [mm] |
| 110 | Vertical | 3.5 | 4.0 | 4.1 | 4.2 | 4.4 |

ACO hygienic gully 157 – telescopic, horizontal



| Outlet diameter | Outlet position | Flow rate [l/s] | | | | |
|-----------------|-----------------|-----------------|-------------|-------------|--------------|--------------|
| øD | | A = 52 [mm] | A = 82 [mm] | A = 97 [mm] | A = 127 [mm] | A = 157 [mm] |
| 110 | Horizontal | 2.8 | 3.3 | 3.6 | 4.0 | 4.4 |

For applications where locked gratings are required, ACO Gully 157 and 218 gullies can be supplied with factory fitted standard lockings (activated by a standard hexagon wrench) or security lockings (activated by a security hexagon wrench).

Notes

1. Gully gratings will be modified at the factory for locking as part of gully locking kit.
2. Locking kits include gully modification, locking bar and fixing.
3. Appropriate standard or security locking wrench to be ordered separately.

Grating Lockings and Security

| Description | Pricing unit | Part number |
|-------------------------------------|---------------|-------------|
| Security Gully Locking Kit | Per gully top | 26350 |
| Standard Gully Locking Kit | Per gully top | 26360 |
| Standard Hexagon Locking Wrench 5mm | Each | 46876 |
| Security Hexagon Locking Wrench 5mm | Each | 46786 |

ACO Gully 218 - Fixed Height

Product range assembly overview

ACO Gully 218 fixed height consist of a gully body that be combined with with a foul air trap and silt basket and topped with a selection of grating styles. The grating should be chosen to match the traffic passing over the gully.

The solid and dotted lines below illustrate the order components should be put together into the gully body (as relevant) to form a finished gully.

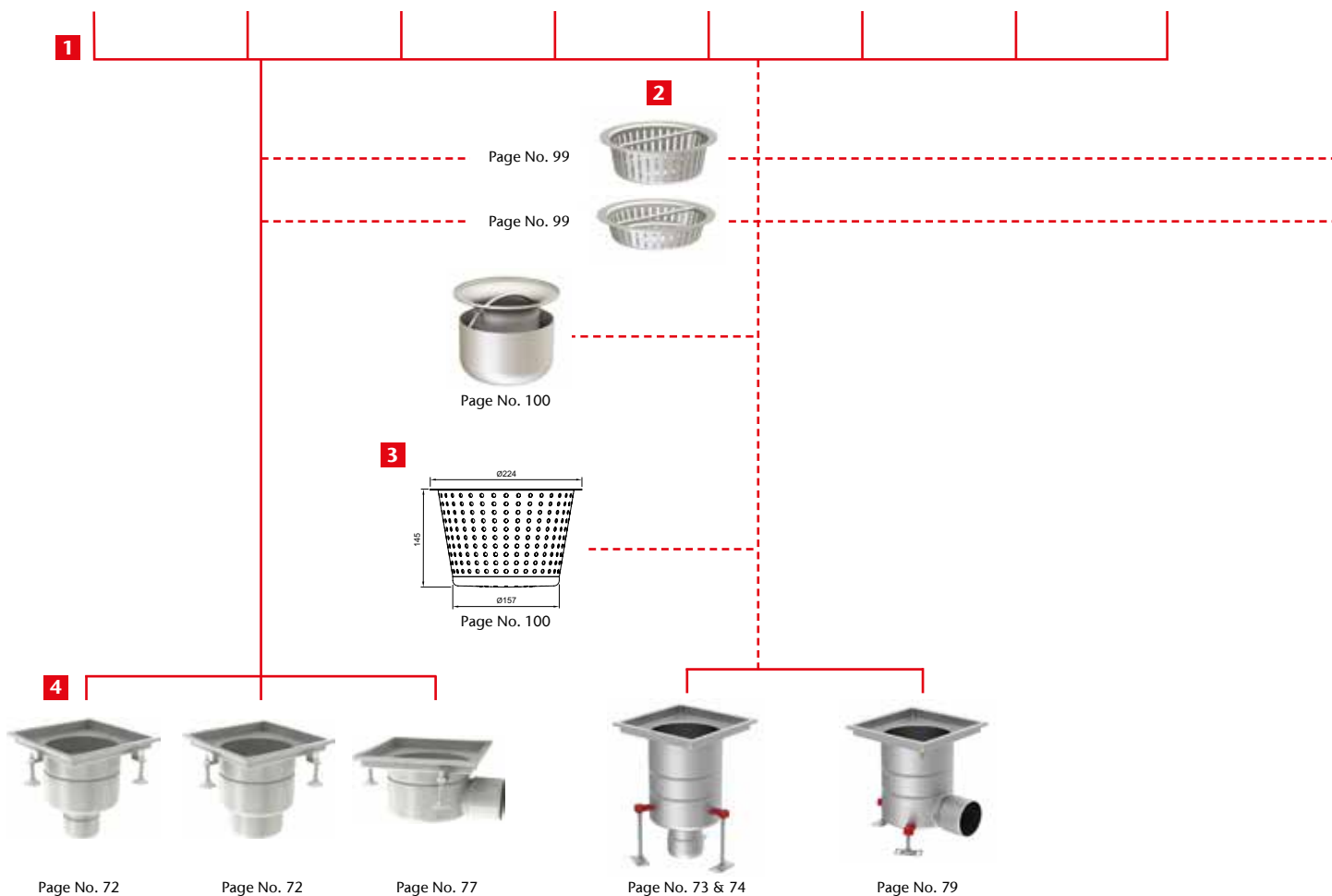
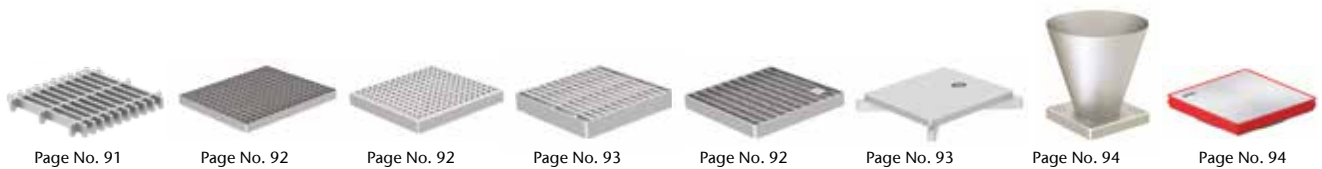
- 1** Gratings
- 2** Silt baskets
- 3** High flow foul air trap
- 4** Gully bodies for fixed height

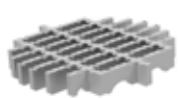
ACO Gully 218 are designed to be used in applications where hygiene, durability and performance requirements are paramount. Available in both stainless steel grades 304 and 316 the range comprises of a variety of different product choices.

The floor construction and depth, together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully.

There are two generic gully configurations available with either a horizontal or vertical outlet, as shown below:

- Take your gully body top from section 4.
- Add in your foul air trap, silt basket and grating as appropriate from sections 1,2 and 3.
- All gully systems are push fit and height adjustable, either telescopically or threaded.

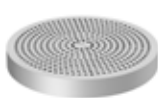




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Page No. 96



Part No. 450009
Page No. 98



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Page No. 80



Page No. 81

Page No. 76

ACO Gully 218 - Telescopic

Product range assembly overview

Introducing ACO Gully 218 telescopic gullies. These gullies consist of a telescopic gully body that be combined with a raising piece, a foul air trap and silt basket and topped with a selection of grating styles. The grating should be chosen to match the traffic passing over the gully.

The solid and dotted lines below illustrate the order components should be put together into the gully body (as relevant) to form a finished gully.

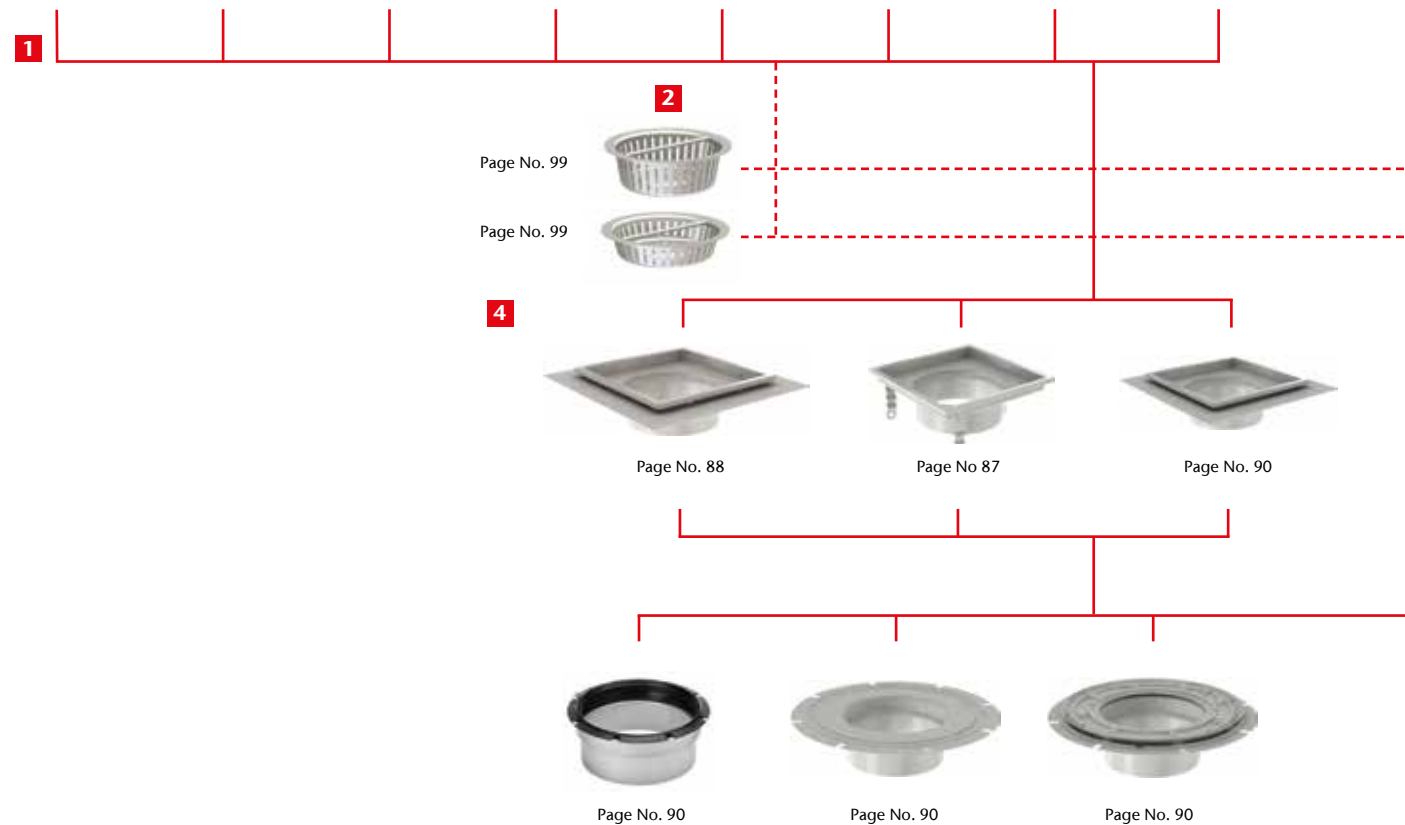
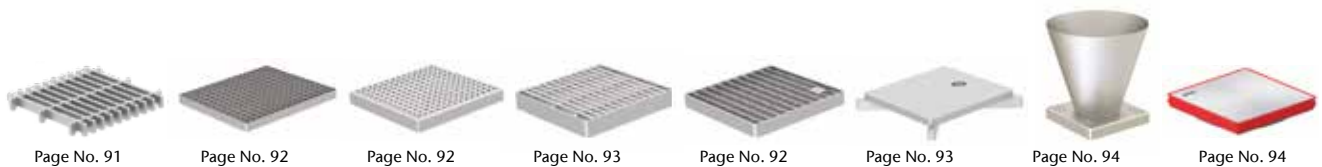
- 1** Gratings
- 2** Silt baskets
- 3** High flow foul air trap
- 4** Gully tops
- 5** Raising pieces
- 6** Gully bodies for telescopic adjustable gullies

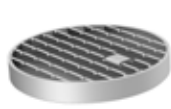
ACO Gully 218 are designed to be used in applications where hygiene, durability and performance requirements are paramount. Available in both stainless steel grades 304 and 316 the range comprises of a variety of different product choices.

The floor construction and depth, together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully.

There are two generic gully configurations available with either a horizontal or vertical outlet, as shown below:

- Take your gully top from section 4 and insert it into your gully body from section 6.
- If your gully contains any product from sections 3-5 please insert these as relevant into the gully body in the order shown below and finish by inserting the gully grating from section 1.
- All gully systems are push fit and height adjustable, either telescopically or threaded.





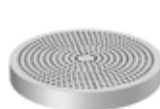
Page No. 97



Page No. 97



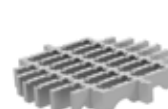
Page No. 96



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Page No. 89



Page No. 82



Page No. 85



Page No 83 & 84



Page No 86



Page No 83 & 84



Page No. 86

Location flange gully bodies - no waterproof membrane

Adhesive bonding flange gully bodies - welding or adhesive bonding of waterproof membrane

Clamping flange gully bodies - mechanical clamping of waterproof membrane

ACO hygienic gully 218

fixed height, vertical outlet - square top

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of

the gully body. Those gullies can be combined with different grates depending on requested load class.

Product benefits

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



Order information

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|-----------|-----------------|----------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/ Direct [l/s] | | | |
| | 300 x 300 | 110 | 4.8 / 5.5 | With FAT | SS 304 | 408005 |
| | | | | | SS 316 | 408105 |
| | 300 x 300 | 160 | 5.0 / 5.5 | With FAT | SS 304 | 408007 |
| | | | | | SS 316 | 408107 |

Gratings

For gully top 300 x 300 mm [Page 91-94](#)

Accessories

For ACO hygienic gully 218 [Page 99-100](#)

ACO hygienic gully 218 extended fixed height, vertical outlet

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of

the gully body. Those gullies can be combined with different grates depending on requested load class.

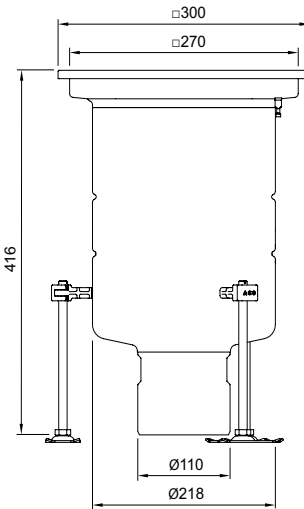
Product benefits

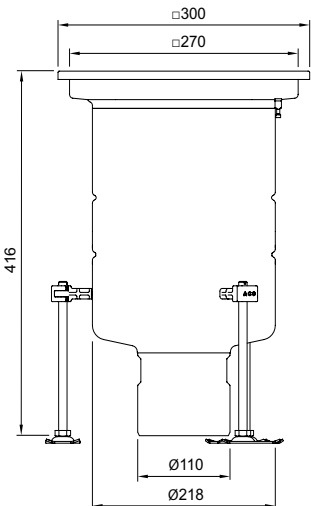
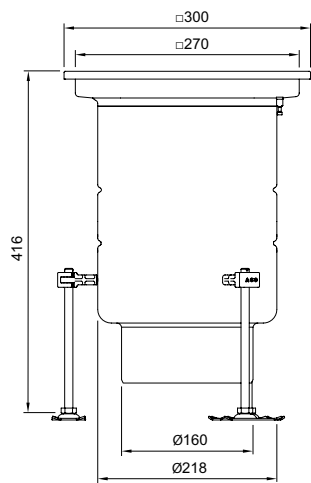
- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (BS EN 13501-2)
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



4

Order information

| Description | Top size | Outlet diameter | Flow rate | BS EN-1253-1/Direct | Foul air trap | Material | Part number |
|---|---------------------------|-----------------|-----------|---------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | | [l/s] | | | |
| Standard edge | | | | | | | |
|  | extended foul air trap | 300 x 300 | 110 | 6.5 / 9.5 | With FAT | SS 304 | 446848 |
| | | | | | | SS 316 | 446850 |

| Description | Top size | Outlet diameter | Flow rate | | Foul air trap | Material | Part number |
|--|---------------------|-----------------|---------------------|-----------|---------------|----------|-------------|
| | | | BS EN-1253-1/Direct | [l/s] | | | |
| | [mm] | ø [mm] | | | | | |
| Standard edge | | | | | | | |
|  | waste filter basket | 300 x 300 | 110 | 6.5 / 4.8 | With FAT | SS 304 | 446941 |
| | | | | | | SS 316 | 446942 |
|  | waste filter basket | 300 x 300 | 160 | 6.5 / 4.8 | With FAT | SS 304 | 446943 |
| | | | | | | SS 316 | 446944 |

ACO hygienic gully 218

fixed height, vertical outlet - round top

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of

the gully body. Those gullies can be combined with different grates depending on requested load class.

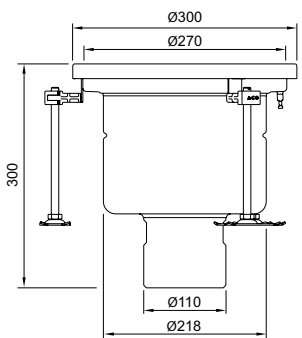
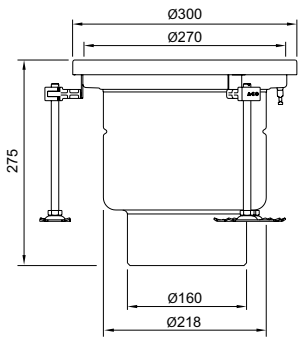
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (BS EN 13501-2)
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



4

Order information

| | Top diameter | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|--------------|-----------------|------------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
| Standard edge  | 300 | 110 | 4.8 / 5.5 | With FAT | SS 304 | 446753 |
| | | | | | SS 316 | 446759 |
|  | 300 | 160 | 5.0 / 5.5 | With FAT | SS 304 | 446755 |
| | | | | | SS 316 | 446761 |

Gratings

For gully top ø 300 mm [Page 95-96](#)

Accessories

For ACO hygienic gully 218 [Page 99-100](#)

ACO hygienic gully 218, fixed height, vertical outlet, round top, fixed filter

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. This gully comes with security fixed secondary filter to maximise hygienic performance and minimise the potential for blockages.

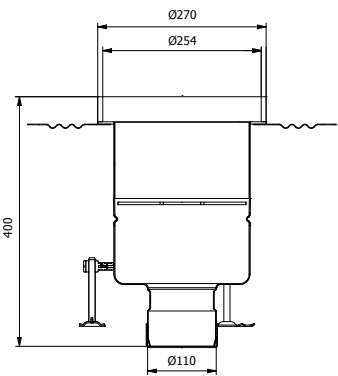
Product benefits

- Security fixed secondary filter inside gully body prevents larger food particles going into the drain system even when waste basket and FAT removed
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Ladder grating with load class N250 (BS EN 1253)
- Adjustable EasyFix levelling feet



Order information

ACO Fixed filter gully

| | Top diameter | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|--------------|-----------------|---------------------------|---------------|----------|-------------|
| | ø [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | 270 | 110 | TBC | With FAT | SS 304 | 450007 |

ACO hygienic gully 218

fixed height, horizontal outlet - square top

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of

the gully body. Those gullies can be combined with different grates depending on requested load class.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



4

Order information

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|----------------------|-----------|-----------------|---------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
| Standard edge | | | | | | |
| | 300 x 300 | 110 | 4.4 / 5.0 | With FAT | SS 304 | 408013 |
| | | | | | SS 316 | 408113 |

ACO hygienic gully 218 extended fixed height, horizontal outlet

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of

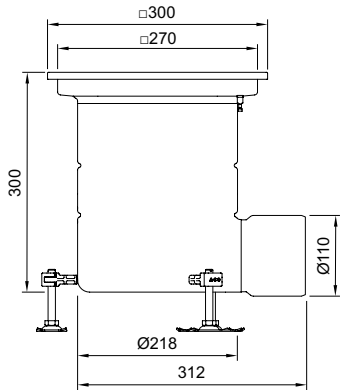
the gully body. Those gullies can be combined with different grates depending on requested load class.

Product benefits

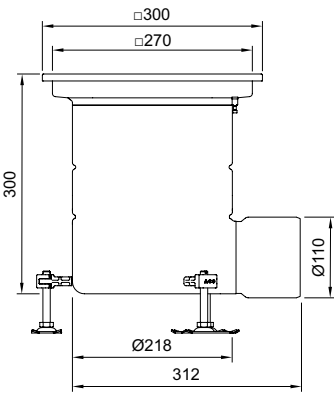
- Hygienic design following EBS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



Order information

| | Description | Top size [mm] | Outlet diameter ø [mm] | Flow rate BS EN 1253-1/Direct [l/s] | Foul air trap | Material | Part number |
|---|---------------------------|------------------|------------------------------|---|---------------|----------|----------------|
|  | extended foul air trap | 300 x 300 | 110 | 6.5 / 8.8 | With FAT | SS 304 | 447663 |
| | | | | | | | SS 316 |

Standard edge

| Description | Top size | Outlet diameter | Flow rate | | Foul air trap | Material | Part number |
|---|---------------------|-----------------|---------------------|-----------|---------------|----------|-------------|
| | | | BS EN 1253-1/Direct | [l/s] | | | |
| | [mm] | ø [mm] | | | | | |
|  | waste filter basket | 300 x 300 | 110 | 4.7 / 3.7 | With FAT | SS 304 | 446939 |
| | | | | | | SS 316 | 446940 |

ACO hygienic gully 218

fixed height, horizontal outlet - round top

Product information

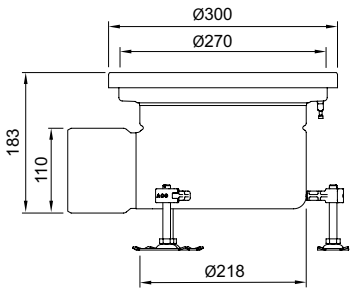
Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different grates depending on requested load class.

Product benefits

- Hygienic design following BS EN 1672, BS EN 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



Order information

| | Top diameter | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|--------------|-----------------|---------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | 300 | 110 | 4.4 / 5.0 | With FAT | SS 304 | 446757 |
| | | | | | SS 316 | 446763 |

ACO hygienic gully 218, fixed height, horizontal outlet, round top, fixed filter

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. This gully comes with

security fixed secondary filter to maximise hygienic performance and minimise the potential for blockages.

Product benefits

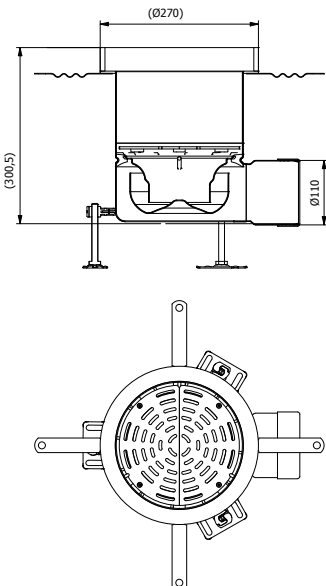
- Security fixed secondary filter inside gully body prevents larger food particles going into the drain system even when waste basket and FAT removed
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Wide range of gratings for load class N (BS EN 1253)
- Adjustable EasyFix levelling feet



4

Order information

ACO Fixed filter gully

| | Top diameter | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|--------------|-----------------|---------------------------|---------------|----------|-------------|
| | ø [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | 270 | 110 | TBC | With FAT | SS 304 | 450008 |

ACO hygienic gully 218 telescopic, vertical outlet

Product information

Telescopic gully can be combined either with ACO gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Gullies are equipped with flanges for connection of waterproof membrane.

Product benefits

- Hygienic design following BS EN 1672, BE EN ISO 14158 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to BS EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (BS EN 13501-2)
- Suitable for all floor types including vinyl flooring
- Telescopic friction ring included

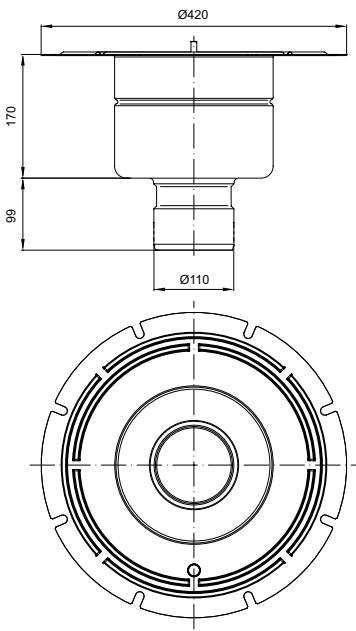
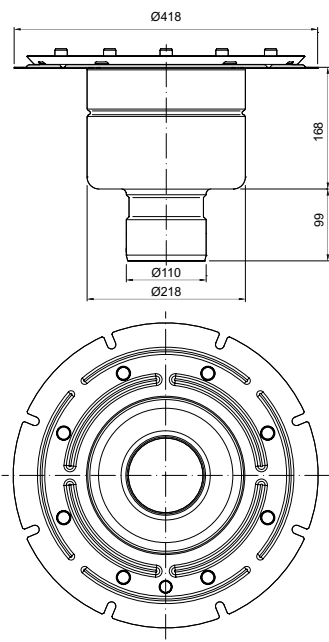


Order information

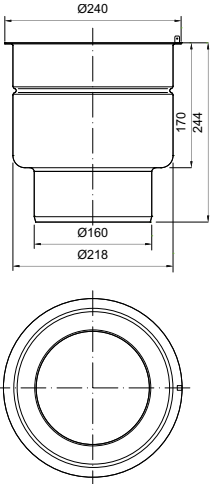
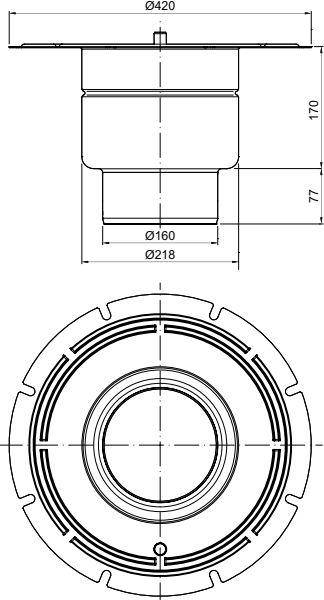
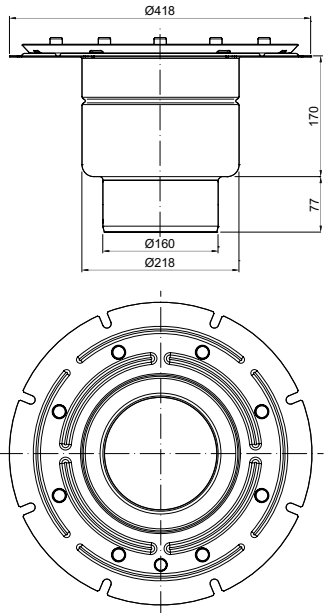
ACO Telescopic vertical gully

| | Type of flange | Outlet diameter ø [mm] | Flow rate BS EN 1253-1/Direct [l/s] | Foul air trap | Material | Part number |
|--|-----------------|---------------------------|---|---------------|----------|-------------|
| | | | | | | |
| | Location flange | 110 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408061 |
| | | | | | SS 316 | 408161 |

ACO Telescopic vertical gully

| | Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|----------------------------|-----------------|------------------------------|---------------|----------|-------------|
| | | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | Adhesive bonding flange | 110 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408063 |
| | | | | | SS 316 | 408163 |
|  | Mechanical clamping flange | 110 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408065 |
| | | | | | SS 316 | 408165 |

ACO Telescopic vertical gully

| | Type of flange | Outlet diameter ø [mm] | Flow rate BS EN 1253-1/Direct [l/s] | Foul air trap | Material | Part number |
|---|----------------------------|---------------------------|---|---------------|----------|-------------|
|  | Location flange | 160 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408067 |
| | | | | | SS 316 | 408167 |
|  | Adhesive bonding flange | 160 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408069 |
| | | | | | SS 316 | 408169 |
|  | Mechanical clamping flange | 160 | 5.0 - 6.2 / 5.5 | With FAT | SS 304 | 408071 |
| | | | | | SS 316 | 408171 |

ACO hygienic gully 218 telescopic, horizontal outlet

Product information

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Gullies are equipped with flanges for connection of waterproof membrane.

Product benefits

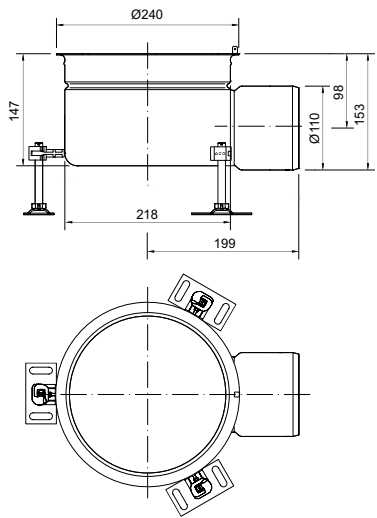
- Hygienic design following EBS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to BS EN 1253
- Suitable for all floor types including vinyl flooring
- Telescopic friction ring included
- Adjustable EasyFix levelling feet



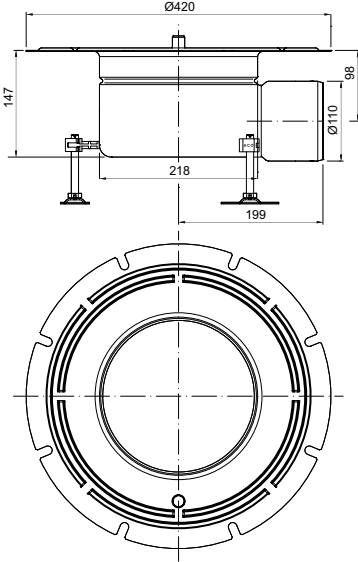
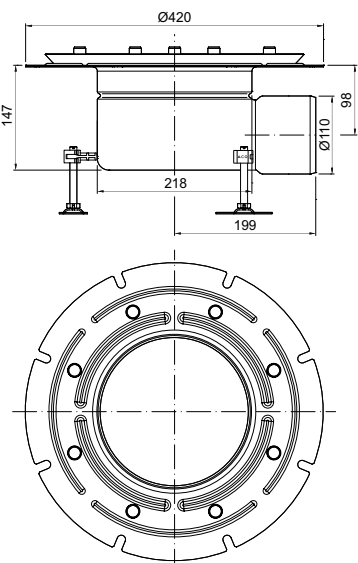
4

Order information

ACO Telescopic horizontal gully

| Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|-----------------|---------------------------|-----------------|----------|---------------|
| | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | Location flange | 110 | 4.4 - 5.4 / 5.0 | With FAT | SS 304 408085 |
| | | | | | SS 316 408185 |

ACO Telescopic horizontal gully

| | Type of flange | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|----------------------------|-----------------|------------------------------|---------------|----------|-------------|
| | | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | Adhesive bonding flange | 110 | 4.4 - 5.4 / 5.0 | With FAT | SS 304 | 408087 |
| | | | | | SS 316 | 408187 |
|  | Mechanical clamping flange | 110 | 4.4 - 5.4 / 5.0 | With FAT | SS 304 | 408089 |
| | | | | | SS 316 | 408189 |

ACO hygienic gully 218 gully top, telescopic

Product information

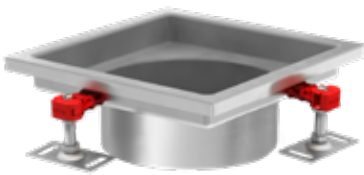
Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel.

Gullies are equipped with flanges for connection of waterproof membrane.

Product benefits

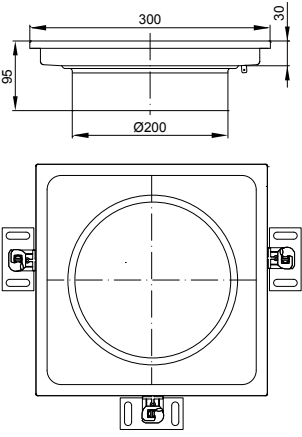
- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (BS EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



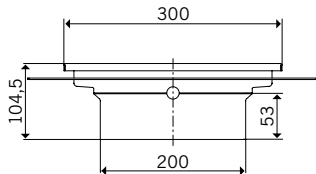
4

Order information

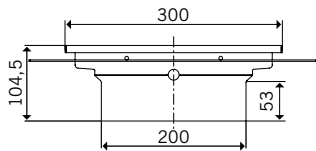
ACO Telescopic gully top

| Gully Top type | Gully Top size [mm] | Material | Part number |
|---|------------------------|----------|-------------|
| | | | |
|  | Standard edge | SS 304 | 408228 |
| | 300 x 300 | SS 316 | 408238 |

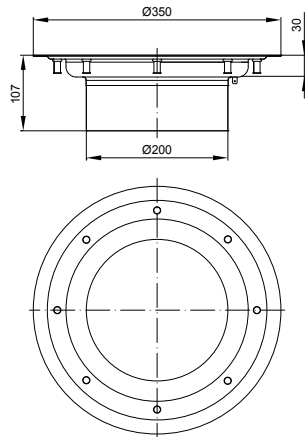
ACO Telescopic gully top

| Gully Top type | Gully Top size [mm] | Material | Part number | |
|---|------------------------|-----------|-------------|--------|
|  | Tiled edge | 300 x 300 | SS 304 | 408243 |
| | | | SS 316 | 408253 |

ACO Telescopic gully top

| Gully Top type | | Gully Top size [mm] | Material | Part number |
|--|------------|------------------------|----------|-------------|
|  | Tiled edge | 300 x 300 | SS 304 | 408247 |
| | | | SS 316 | 408257 |

ACO Telescopic gully top

| Gully Top type | Gully Top size [mm] | Material | Part number |
|---|------------------------|----------|-------------|
|  | Vinyl edge | Ø350 | |
| | | SS 304 | 408242* |
| | | SS 316 | 408252* |

* Hygienic design following BS EN 1672, BE EN ISO 14158 and EHEDG document No. 8, 13, 44 not applied.

ACO hygienic gully 218

gully top, telescopic, round top

Product information

Gully top can be combined with telescopic gully. Different gully top type is available depending on floor structure.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Protective cover available on request
- Tested and certified according to BS EN 1253
- Wide range of gratings including slip resistant solution
- Adjustable EasyFix levelling feet



4

Order information

ACO Telescopic round gully top

| | Gully top type | Gully top size ø [mm] | Material | Part number |
|--|----------------|--------------------------|----------|-------------|
| | | | | |
| | Standard edge | 300 | SS 304 | 446764 |
| | | | SS 316 | 446765 |

ACO hygienic gully 218 raising piece, telescopic

Product information

Raising piece can be used for floor structures where multiple waterproofing is needed

(heat insulation) or where construction height of the slab needs to be increased.

Product benefits

- Hygienic design following EBS EN 1672, BS EN 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Tested and certified according to BS EN 1253
- Suitable for all floor types including vinyl flooring
- Variety of flanges for membranes
- Telescopic friction ring included



Order information

ACO Telescopic gully raising piece

| | Type of flange | Material | Part number |
|--|----------------------------|----------|-------------|
| | Location flange | SS 304 | 408209 |
| | | SS 316 | 408219 |
| | Adhesive bonding flange | SS 304 | 408226 |
| | | SS 316 | 408236 |
| | Mechanical clamping flange | SS 304 | 408227 |
| | | SS 316 | 408237 |

Accessories

For ACO hygienic gully 218 [Page 99-100](#)

Gratings for gully top 300x300

Product information

Variety of grate types is available depending on application and requested load class.

For applications with high hygienic demands a ladder grate should be selected.

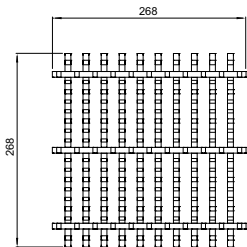
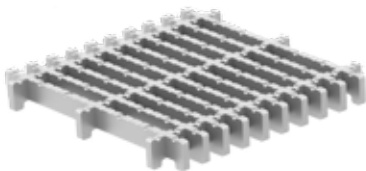
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253 and NSF International
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (BS EN 1253)
- Slip resistant solution available

4

Order information

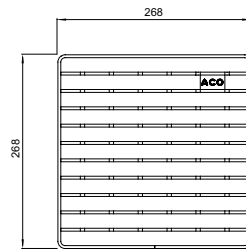
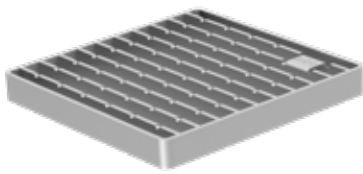
ACO hygienic frameless ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 446272 |
| | | SS 316 | 446273 |

Note: Surface electropolished

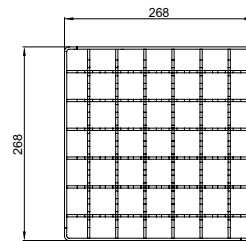
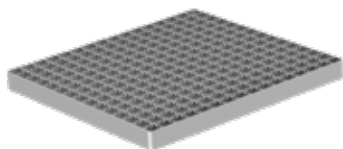
ACO hygienic ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 416916 |
| | | SS 316 | 416917 |
| N250 | No | SS 304 | 408045 |
| | | SS 316 | 408145 |

Note: Surface electropolished

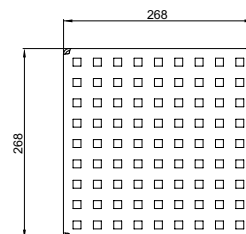
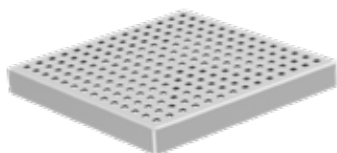
ACO mesh grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | Yes | SS 304 | 408034 |
| | | SS 316 | 408134 |
| | No | SS 304 | 408035* |
| | | SS 316 | 408135* |

Note: Surface electropolished

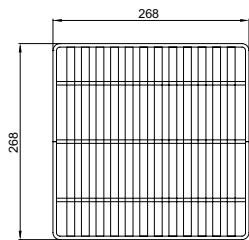
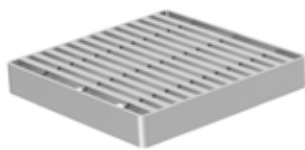
ACO quadrato grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 408036* |
| | | SS 316 | 408136* |

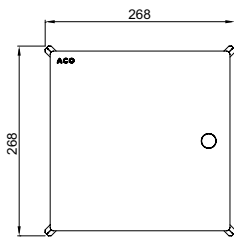
* Hygienic design following BS EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

ACO heelsafe grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 408040* |
| | | SS 316 | 408140* |

ACO hygienic slot cover

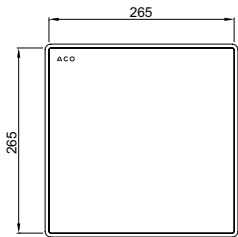


| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 408039 |
| | | SS 316 | 408139 |

Note: Top surface sandblasted

* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

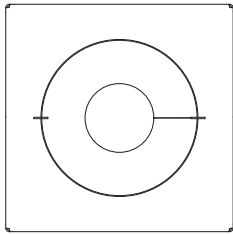
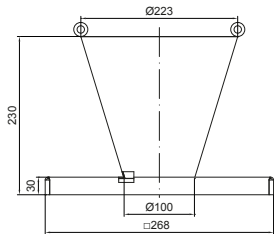
ACO odour proof gully cover



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | No | SS 304 | 445400* |
| M125 | No | SS 316 | 445609* |

To ensure easy removal of this cover please select and ACO Vacuum handle from page 99

ACO tundish for gully top



| Description | Material | Part number |
|-------------------------------------|----------|-------------|
| ACO tundish for gully top 300 x 300 | SS 304 | 413547 |

* Hygienic design following BS EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gratings for gully top ø 300 mm

Product information

Variety of grate types is available depending on application and requested load class.

For applications with high hygienic demands a ladder grate should be selected.

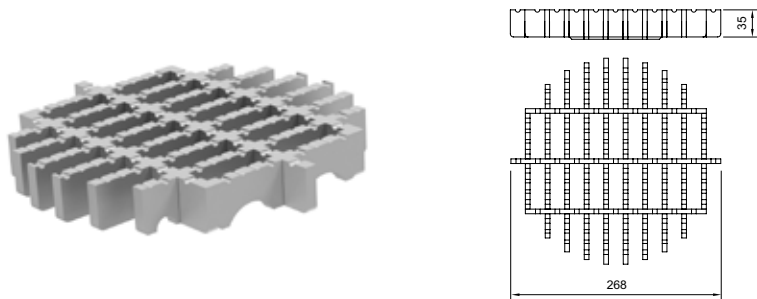
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253 and NSF International
- Range of gratings suitable to load class R 50 and M 125 (BS EN 1253)
- Slip resistant solution available

4

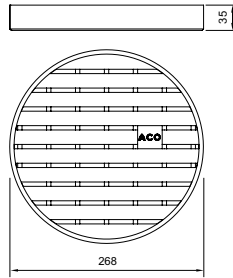
Order information

ACO hygienic frameless ladder grating - round



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M 125 | Yes | SS 304 | 446786 |
| | | SS 316 | 446787 |

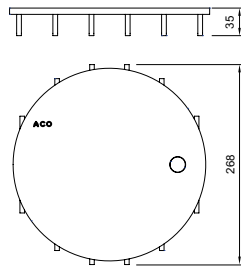
Note: Surface electropolished

ACO hygienic ladder grating - round

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R50 | Yes | SS 304 | 447763 |
| | | SS 316 | 447764 |
| N 250 | Yes | SS 304 | 447644 |
| | | SS 316 | 447645 |

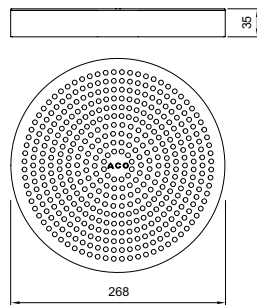
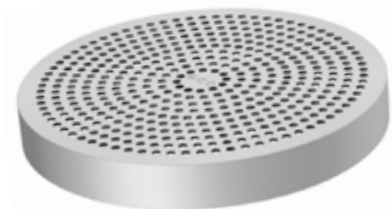
Note: Surface electropolished

4

ACO hygienic slot cover - round

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M125 | Yes | SS 304 | 446790 |
| | | SS 316 | 446791 |

Note: Top surface sandblasted

ACO perforated grating - round

| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | No | SS 304 | 447732 |
| | | SS 316 | 447740 |

Note: Surface electropolished

Gratings for vinyl top ø222

Product information

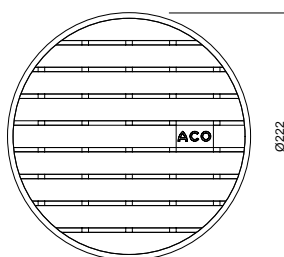
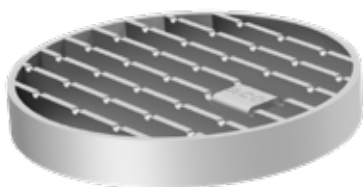
Variety of grate types is available depending on application and requested load class.

For applications with high hygienic demands a ladder grate should be selected.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fits to stainless steel gully, fully compliant to BS EN 1253
- Stainless steel construction for durability and long life
- Range of gratings suitable to load class L 15 and M 125 (BS EN 1253)
- Slip resistant solution available

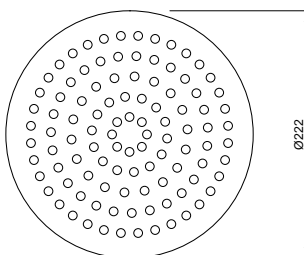
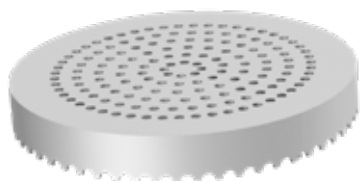
ACO ladder grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| M 125 | Yes | SS 304 | 97146 |
| | | SS 316 | 97367 |

Note: Surface electropolished

ACO perforated grating



| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L 15 | No | SS 304 | 97152* |
| | | SS 316 | 97369* |

* Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

Gratings for gully top ø270

Product information

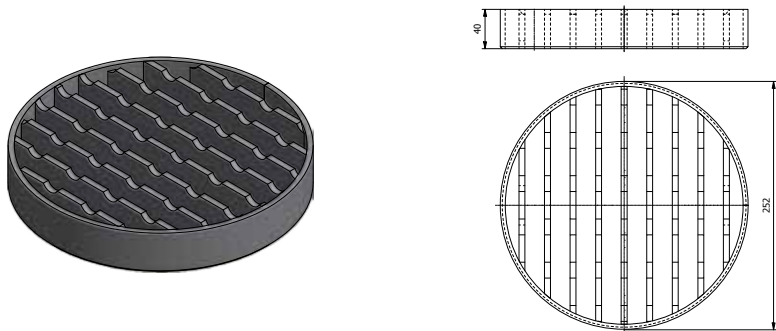
High load class grate for use with the filter gully.

Designed in accordance with hygienic principles.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Stainless steel construction for durability and long life
- Load class N 250 (BS EN 1253)
- Slip resistant solution available

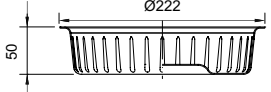
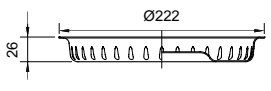
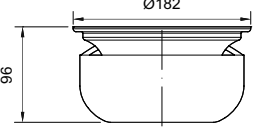
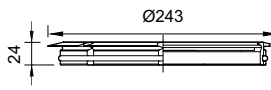
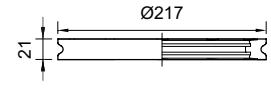
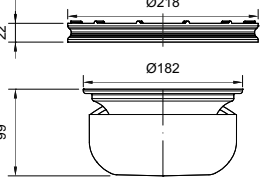
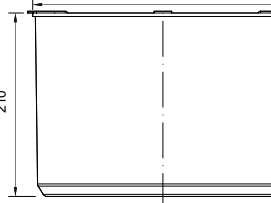
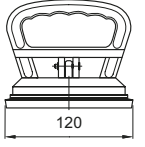
ACO ladder grating



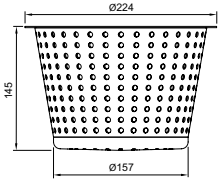
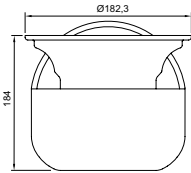
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| N250 | Yes | SS 304 | 450009 |

Note: Surface pickle passivated

Accessories and replacements for ACO hygienic gully 218

| | Description | Used with | Material | Part number |
|---|---|--|--------------|-------------|
|  | ACO silt basket ■ Stainless steel ■ 1,4 litre capacity | ■ ACO hygienic gully 218, vertical <input type="checkbox"/> Fixed height or telescopic | SS 304 | 416908 |
| | | | SS 316 | 416909 |
|  | ACO silt basket ■ Stainless steel ■ 0,7 litre capacity | ■ ACO hygienic gully 218, horizontal <input type="checkbox"/> Fixed height or telescopic | SS 304 | 416910 |
| | | | SS 316 | 416911 |
|  | ACO hygienic foul air trap ■ Stainless steel ■ Water seal 50 mm | ■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic | SS 304 | 408220 |
| | | | SS 316 | 408230 |
|  | ACO friction ring ■ SBR (Styrene-butadiene rubber) | ■ ACO hygienic gully 218 <input type="checkbox"/> Telescopic | SBR | 408225 |
|  | ACO standard foul air trap support ■ NBR (Acryl nitrile-butadiene rubber) | ■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic | NBR | 408221 |
|  | ACO fire resistant kit for gully 218/DN 110 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical | ■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical | SS 316 / NBR | 416934 |
|  | ACO fire resistant kit for gully 218/DN 160 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical | | | |
|  | ACO vacuum handle | ■ ACO odour proof gully cover | Aluminium | 445622 |

Accessories and replacements for ACO hygienic gully 218

| Description | Used with | Material | Part number |
|--|---|-----------------------------|-----------------------------|
|  <p>ACO waste filter basket ■ Stainless steel</p> | <p>■ ACO hygienic gully 218 extended fixed height, waste filter basket</p> <p>□ Vertical or horizontal</p> | <p>SS 304</p> <p>SS 316</p> | <p>446945</p> <p>446946</p> |
|  <p>ACO extended hygienic foul air trap ■ Stainless steel</p> | <p>■ ACO hygienic gully 218 extended fixed height, extended foul air trap</p> <p>□ Vertical or horizontal</p> | <p>SS 304</p> <p>SS 316</p> | <p>447807</p> <p>447808</p> |

For applications where locked gratings are required, ACO Gully 157 and 218 gullies can be supplied with factory fitted standard lockings (activated by a standard hexagon wrench) or security lockings (activated by a security hexagon wrench).

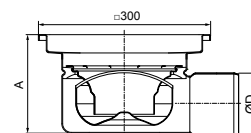
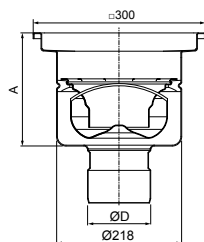
Notes

1. Gully gratings will be modified at the factory for locking as part of gully locking kit.
2. Locking kits include gully modification, locking bar and fixing.
3. Appropriate standard or security locking wrench to be ordered separately.

Grating Lockings and Security

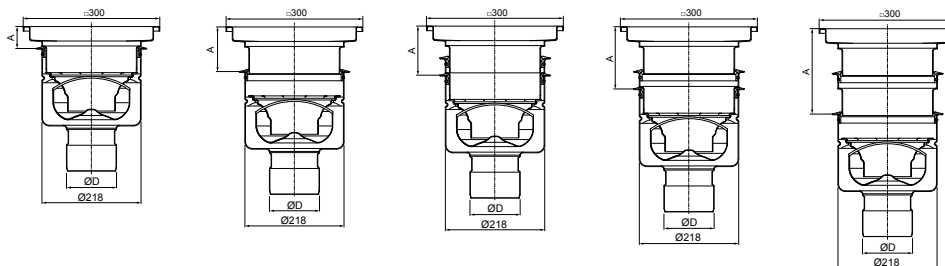
| Description | Pricing unit | Part number |
|-------------------------------------|---------------|-------------|
| Security Gully Locking Kit | Per gully top | 26350 |
| Standard Gully Locking Kit | Per gully top | 26360 |
| Standard Hexagon Locking Wrench 5mm | Each | 46876 |
| Security Hexagon Locking Wrench 5mm | Each | 46786 |

ACO hygienic gully 218 – fixed height



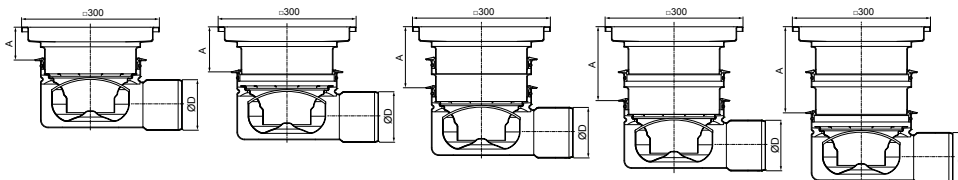
| Outlet diameter | Outlet position | Flow rate [l/s] | Outlet diameter | Outlet position | Flow rate [l/s] |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| ØD | | A = 200 [mm] | ØD | | A = 177 [mm] |
| 110 | Vertical | 5.0 | 110 | Horizontal | 4.4 |
| 160 | Vertical | 5.0 | - | - | - |

ACO hygienic gully 218– telescopic, vertical



| Outlet diameter | Outlet position | Flow rate [l/s] | | | | |
|-----------------|-----------------|-----------------|-------------|--------------|--------------|--------------|
| ØD | | A = 65 [mm] | A = 91 [mm] | A = 125 [mm] | A = 153 [mm] | A = 180 [mm] |
| 110 | Vertical | 5.0 | 5.5 | 5.6 | 5.8 | 6.2 |
| 160 | Vertical | 5.0 | 5.5 | 5.6 | 5.8 | 6.2 |

ACO hygienic gully 218 – telescopic, horizontal



| Outlet diameter | Outlet position | Flow rate [l/s] | | | | |
|-----------------|-----------------|-----------------|-------------|--------------|--------------|--------------|
| ØD | | A = 72 [mm] | A = 98 [mm] | A = 132 [mm] | A = 156 [mm] | A = 187 [mm] |
| 110 | Horizontal | 4.4 | 4.6 | 4.8 | 4.9 | 5.4 |

ACO hygienic gully 315

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

For the ACO high capacity gully 2 gratings need to be ordered for 1 gully.

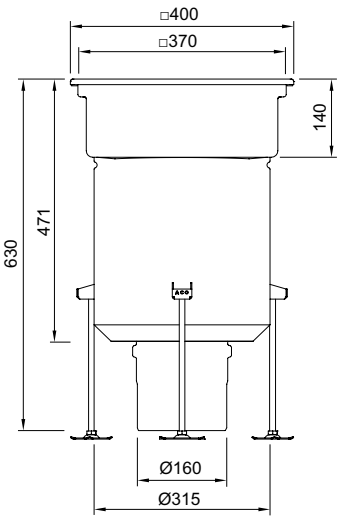
Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request



Order information

ACO Hygienic Gully 315

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|---|-----------|-----------------|---------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
|  | 400 x 400 | 160 | 9.5 / 20 | With FAT | SS 304 | 446844 |
| | | | | | SS 316 | 446846 |

ACO hygienic gully 440

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

For the ACO high capacity gully 2 gratings need to be ordered for 1 gully.

Product benefits

- Hygienic design following BS EN 1672, BS EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available on request



4

Order information

ACO Hygienic Gully 440

| | Top size | Outlet diameter | Flow rate | Foul air trap | Material | Part number |
|--|-----------|-----------------|---------------------------|---------------|----------|-------------|
| | [mm] | ø [mm] | BS EN 1253-1/Direct [l/s] | | | |
| | 600 x 600 | 200 | 12 / 32 | With FAT | SS 304 | 446397 |
| | | | | | SS 316 | 446413 |

Gratings for ACO hygienic gully 315 and 440

Product information

Variety of grate types is available depending on application and requested load class.

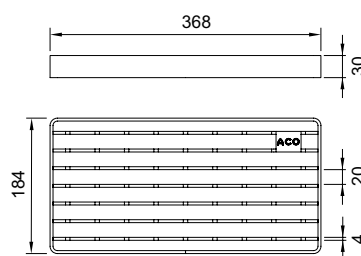
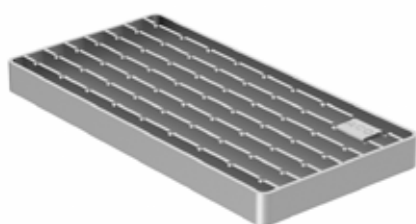
For applications with high hygienic demands a ladder grate should be selected.

For the ACO high capacity gully 2 gratings need to be ordered for 1 gully.

Product benefits

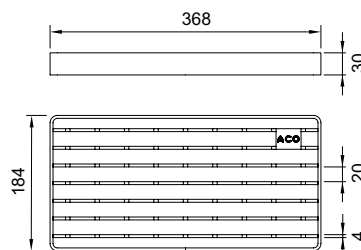
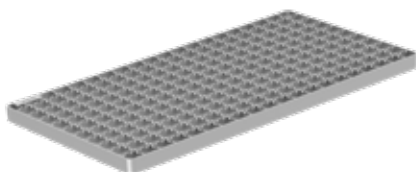
- Fully pickled and passivated
- Slip resistant solution available

ACO hygienic ladder grating for ACO hygienic gully 315



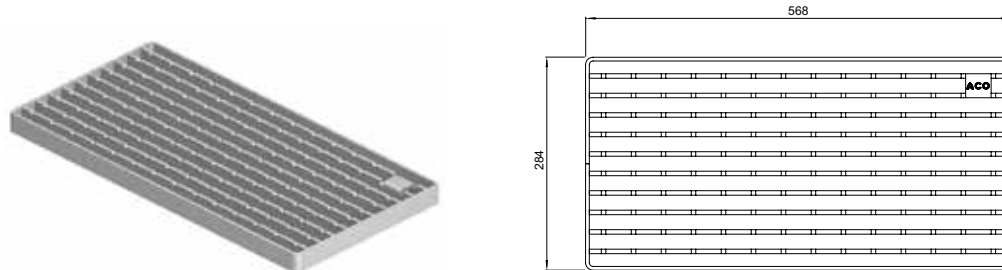
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R 50 | Yes | SS 304 | 447766 |
| | | SS 316 | 447767 |

ACO hygienic mesh grating for ACO hygienic gully 315



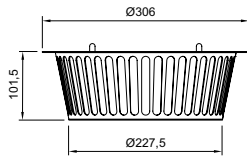
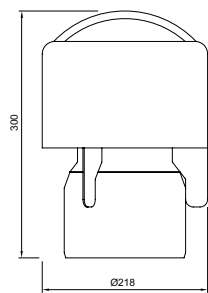
| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| L15 | Yes | SS 304 | 447825 |
| | | SS 316 | 447822 |

ACO hygienic ladder grating for ACO hygienic gully 440

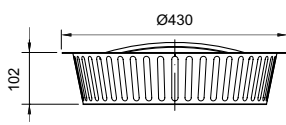
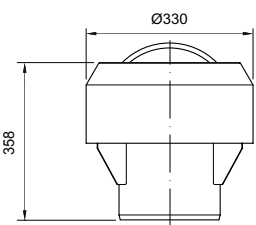


| Load class | Slip resistant | Material | Part number |
|------------|----------------|----------|-------------|
| R 50 | Yes | SS 304 | 446400 |
| | | SS 316 | 446416 |

Accessories and replacements for ACO hygienic gully 315

| Description | Used with | Material | Part number |
|---|--|----------|-------------|
|  <p>ACO silt basket ■ Stainless steel</p> | ■ ACO hygienic gully 315 □ Fixed height | SS 304 | 447681 |
| | | SS 316 | 447682 |
|  <p>ACO hygienic foul air trap ■ Stainless steel</p> | ■ ACO hygienic gully 315 □ Fixed height | SS 304 | 447673 |
| | | SS 316 | 447674 |

Accessories and replacements for ACO hygienic gully 440

| Description | Used with | Material | Part number |
|---|--|----------|-------------|
|  <p>ACO silt basket ■ Stainless steel</p> | ■ ACO hygienic gully 440 □ Fixed height | SS 304 | 446399 |
| | | SS 316 | 446415 |
|  <p>ACO hygienic foul air trap ■ Stainless steel</p> | ■ ACO hygienic gully 440 □ Fixed height | SS 304 | 446398 |
| | | SS 316 | 446414 |

Gully System

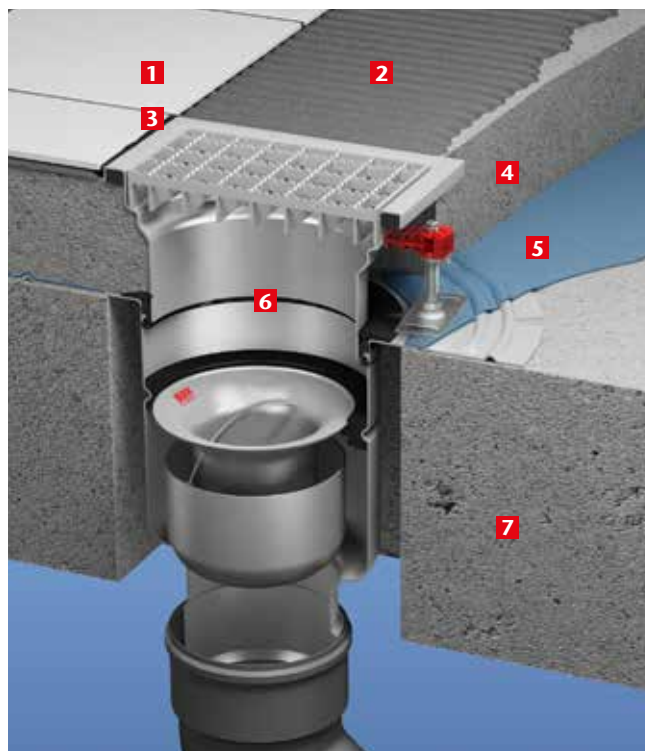
For ACO hygienic gully 315 – fixed height [Page 102](#)

For ACO hygienic gully 440 – fixed height [Page 103](#)

ACO hygienic gully

ACO hygienic gully – telescopic flanged gully installed in suspended concrete slab construction

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Gully
- 7** Suspended concrete slab core-bored to accept gully body



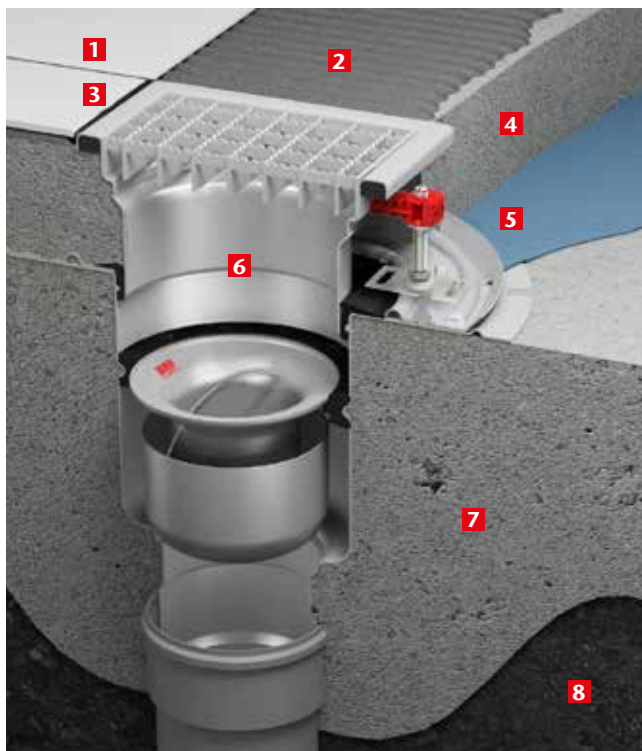
ACO hygienic gully – telescopic flanged gully and raising flanged piece installed in suspended concrete slab construction

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Insulation
- 7** Double flange gully
- 8** Suspended concrete slab core-bored to accept gully body



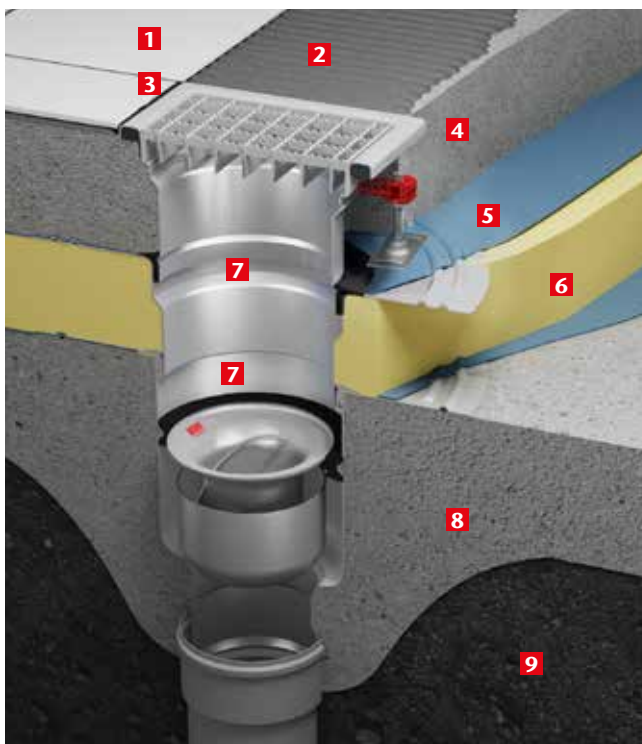
ACO hygienic gully – telescopic flanged gully installed in solid concrete floor

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Flange gully
- 7** Solid concrete floor slab
- 8** Compacted soil



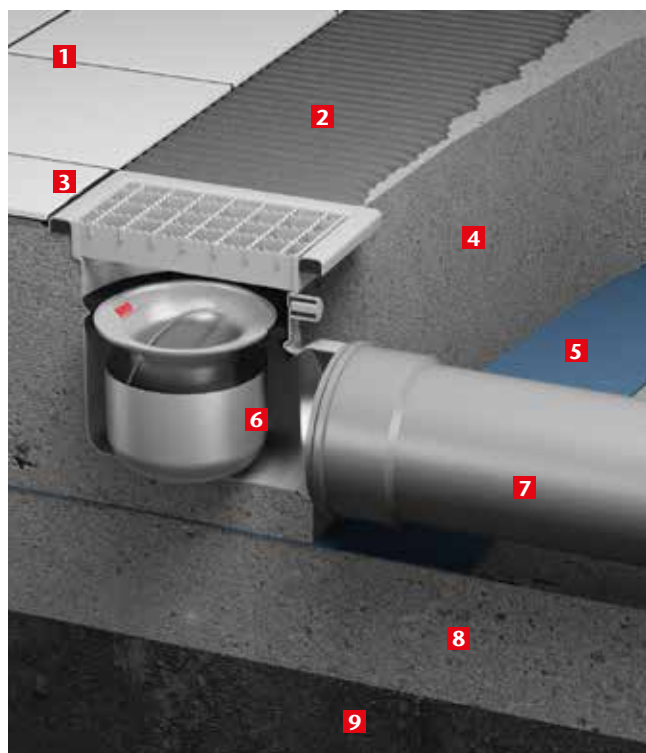
ACO hygienic gully – telescopic flanged gully and raising piece installed in solid concrete floor

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Insulation
- 7** Double flange gully
- 8** Solid concrete floor slab
- 9** Compacted soil



ACO hygienic gully – fixed height gully installed in solid concrete floor

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Damp proof membrane (DPM)
- 6** Gully
- 7** Outlet pipe
- 8** Floor slab
- 9** Compacted soil





5

ACO Industrial Drainage Support

COLLECT:
Collect and remove



Transport & handling information

ACO gully

- ACO gullies are packed on framed pallets, protected by cardboard inserts and PE foil. Individual products are packed in protective plastic net.
- Outlet pipes are equipped with protective lids.
- Gully tops and flanges are covered with protective blisters, which also protect the inside areas during installation. Individual products are packed in plastic protective net.
- Handle the gully/ gully parts with care. Any rough handling (e.g. pulling gully across the floor, dropping gully from a truck, etc.) may cause deformation resulting in bad installation and may affect its product performance.
- Contact with carbon steel may cause stainless steel corrosion.

ACO grating

- ACO grating is packed on framed pallets protected by cardboard inserts and PE foil.
- Articles are either wrapped separately in ACO paper box or placed loose within EUR pallet space.
- It is strongly recommended to transport gratings in their original packaging to avoid damage. Store preferably on dry and flat surface.
- Handle the gratings with care.
- Any rough handling (e.g. pulling gully across the floor, dropping gully from a truck, etc.) may cause deformation resulting in bad installation and may affect its product performance.
- Contact with carbon steel may cause stainless steel corrosion.

ACO gullies – Fire Protection Introduction

ACO has developed a solution which prevents the spreading of fire and high temperatures within different building's floors where ACO hygienic gully, ACO hygienic channel and ACO pipe are installed.

The solution has been tested according to EN 1366-2 Fire resistance tests for service installations and classified according to EN 13501 Fire classifications of construction products and building elements. For classification details please see table below.

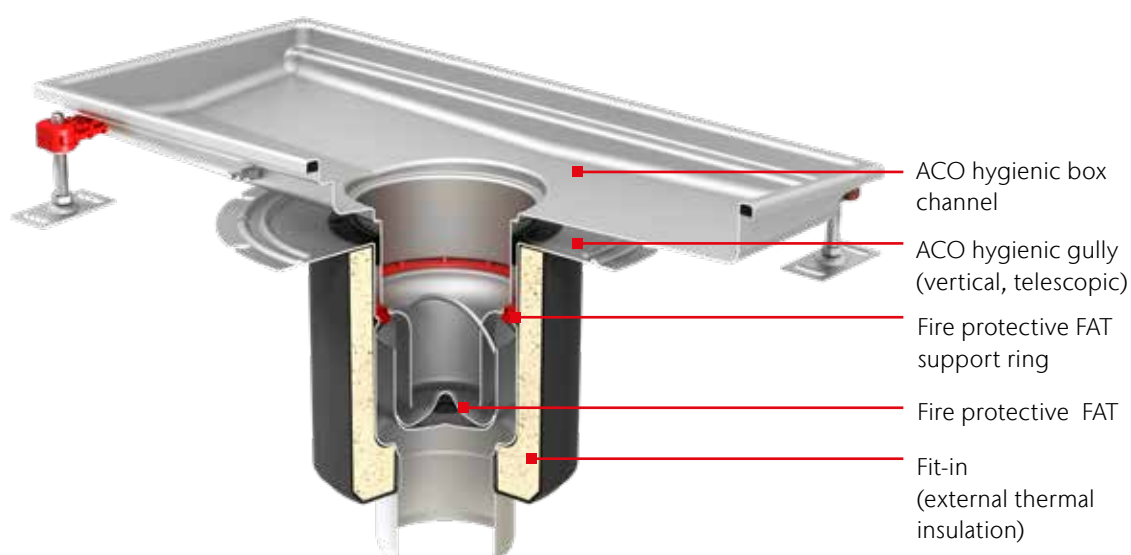
ACO fire protective kit can be used with telescopic vertical or fixed height vertical ACO hygienic gully and with ACO hygienic box channel, consisting of following items:

- External protection – Fit in
- Internal protection
 - Fire protective foul air trap
 - Fire protective foul air trap support

This solution has been designed and tested for use in either concrete or aerated concrete ceiling slabs with a minimum height of 150 mm.

ACO hygienic gully and ACO hygienic box channel installed with ACO fire protective kit can be connected to any kind of sewerage with ACO pipe regardless of its material, e.g. non combustible cast iron drain pipes SML, stainless steel ACO pipe (building material class A1) or plastic drain pipes (building material class B1/B2). All mentioned components of external and internal protection must be used to guarantee correct function of fire protection!

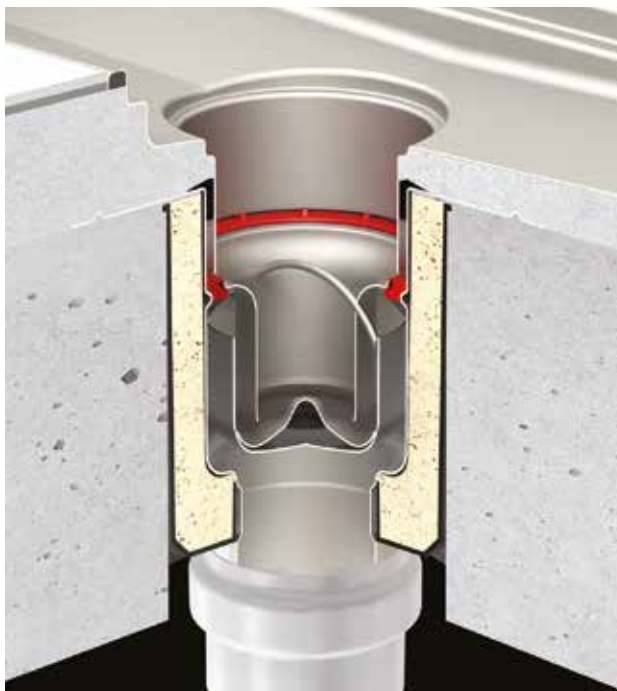
Tested at: PAVUS, a.s. protocol: No. Pr-13-2.061



| Gully type | Outlet diameter | Classification |
|--------------------------|-----------------|----------------|
| ■ ACO hygienic gully 157 | 110 | EI 120 |
| ■ ACO hygienic gully 218 | 110 | EI 180 |
| | 160 | EI 90 |

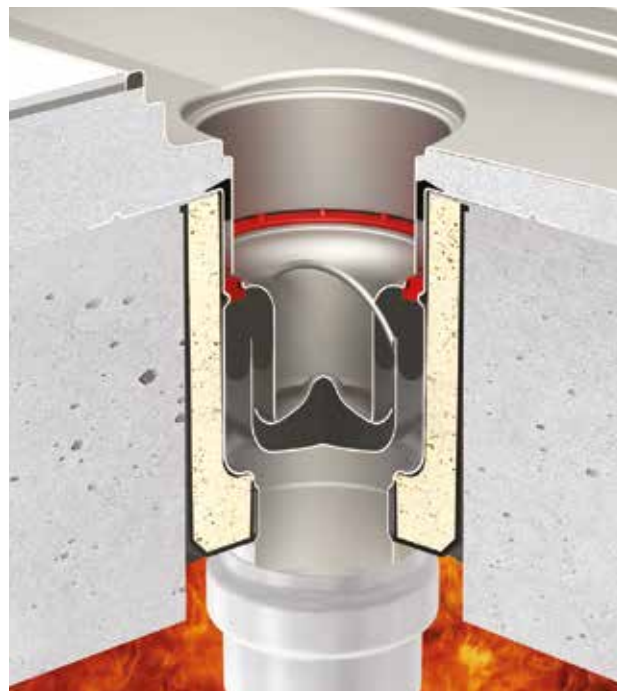
Classification according to EN 13 501, protocol: PK2-11-13-901-C-0

ACO gullies – Fire Protection Installation and function



Before activation

- Installation scheme with assembled fire protective solution in ceiling construction.



Fire activation

- Function of fire protective solution to prevent the spread of fire within storey structure by transmission (ACO gully).
- Time preventing the spread of fire is limited from 90 minutes to 180 minutes.

Cleaning stainless steel

Drainage is a critical component affecting the hygienic performance of commercial food preparation business. Effective drainage helps to mitigate hazards from the external environment and is central to the safe and hygienic operation internally. Within the food production facility, surface liquids represent potential hazard of microbiological contamination.

Liquids may be part of the cleaning process, or may originate from specific equipment discharge points, or be simply the result of an accidental spillage. Quite often the liquids contains other components – organic matter being predominant. Floor drainage components cater for these situations through three core functions - interception, conveyance of fluids, and ability to act as a barrier.

Effective cleaning of drainage in commercial food preparation business reduces risk of contamination and spoiling of food during preparation, processing, and storage. The main objective of cleaning is to remove soil to obtain a clean surface and thereby reduce number of microorganisms. A further reduction of microorganism can be obtained by disinfection step.

Principles of cleaning

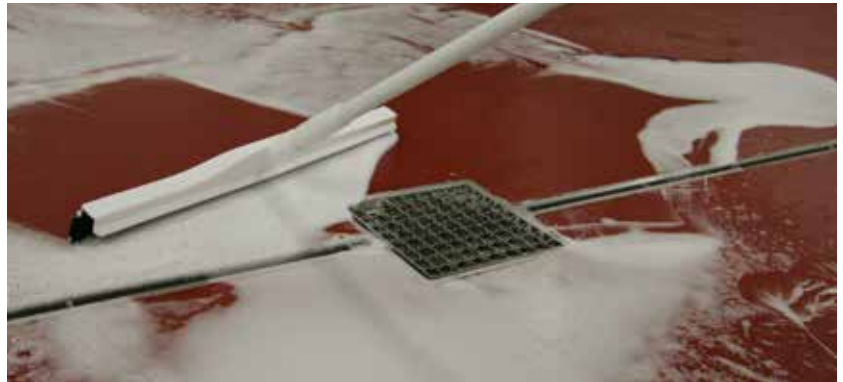
The principles of cleaning involve a combination of thermal, kinetic and chemical energy. The cleaning processes are always a combination of these factors and time of these to work. The key point to highlight is that all equipment – including

drainage – in food processing plant should have hygienic design, which is easy to clean and disinfect. Otherwise the cleaning process is time and energy consuming and not cost effective.

All surfaces of ACO stainless steel drainage are hygienically designed – no sharp corners, edges, dead spaces and crevices. ACO drainage is easily accessible for cleaning and visual inspection.

The effectiveness of drainage cleaning depends on a number of factors:

- Soil type and properties
- Material, design and surfaces
- Water quality
- Cleaning chemicals
- Cleaning procedure
- Cleaning parameters; like temperature, time, flow velocity and concentration of chemicals



There are two different types of surface to be cleaned:

■ Product contact surface

All equipment that intentionally or unintentionally (e.g. due to splashing) comes in to contact with final product or from which product or condensate may drain, drop or be drawn into the main product or product container.

■ Non product contact surface

All other exposed surfaces, including surfaces associated with equipment, such as support structures, control panels and external surfaces. It also includes surfaces related to the manufacturing environment, such as floors, walls and drain channels.

We also differentiate the cleaning process as to whether it is applied dry or wet.

■ Dry cleaning

Dry cleaning is essentially a mechanical removal of soils using sweeping, brushing, wiping and vacuuming. Environments typically to be cleaned by dry methods include plants which are producing flour, cocoa, dry milk products, dry soups and dry infant formulas.

■ Wet cleaning

Wet cleaning involves application of fluids (usually water based) to achieve the desired cleaning result. This can be applied to Open Plant Cleaning (OPC): surfaces to be cleaned have to be accessible to fluids. In addition, some components may be physically removed from production area and cleaned separately – Cleaning out of place (COP). Drainage systems require wet cleaning.

The last is a distinction between whether the cleaning process is done manually or automatically.

■ Manual cleaning

Manual cleaning is generally considered as labour intensive and, therefore often expensive. The manual tools should be hygienic – resistant to applied chemicals and suitable for a specific operation. On top of it; operators should be properly trained to be able to perform cleaning as expected to achieve clean surfaces. ACO drainage has all elements of hygienic design that makes cleaning of ACO drainage much easier and faster when compared to competitive products.

■ Automatic cleaning

Utensils and dismantled parts of equipment are cleaned and disinfected automatically in industrial washing machines, tray or tunnel washers (automatic COP). Cleaning in place (CIP) is also defined as automatic cleaning system.

Cleaning chemicals

There are four main classes of cleaning compounds:

- detergents
- alkalis
- acids
- disinfectants/sanitizers

Detergents

This broad group of chemicals is widely used in households and industry to lift off different type of soil from surfaces through the use of cleaning foams and emulsions that can be easily rinsed off.

Alkalies

Alkaline compounds are effective for dissolution of proteins and removal of fats. Example of alkalis are sodium hydroxide (caustic soda) and potassium hydroxide. These compounds are hazardous to personnel and mostly used in CIP – automatic dosing system is recommended.

Acids

Acids, both organic and inorganic, are commonly used for removal of mineral deposits, such as: hard water scale or milkstone. Acids are potentially corrosive to construction materials and must be used with care.

When chemical cleaning is performed, it is necessary to use low-pressure sprays, foam or gel. Foam and gel are more viscous than sprayed agents and preferred as they are not prone to aerosol formation. Selection of the correct detergent for given application should be always done in co-operation with the detergent supplier.

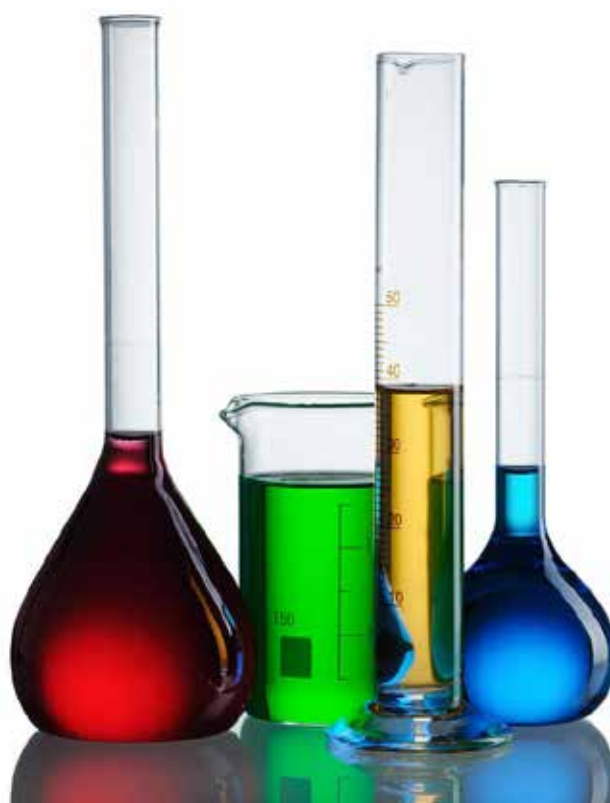
Disinfectants/sanitizers

In of high risk areas or production areas with microbiological sensitive products, the floors and drain systems should be sprayed with disinfectants/sanitizers, which will reduce the contamination risk even more. The disinfectants/sanitizers will kill remaining micro-organisms, according to the required specifications.

The plant downtime and labour associated with cleaning is a major cost of any food processing operation.

Sources of soil

The primary source of soil is from the processed food product itself. Microbiological biofilms mainly contribute to the soil build ups on drainage surfaces. These films vary in their solubility depending upon such factors as heat effect, age, dryness, time, etc. It is essential that personnel involved in the cleaning process design have understanding of the nature of the soil to be removed before selecting a detergent and cleaning method. The rule of thumb is that acid cleaners dissolve alkaline soils (minerals), and and detergents dissolve acid soils and food wastes (proteins).



Resistance of Material

| | AISI 316 | | AISI 304 | | | |
|------------------------------|-----------|-----------|----------|-----|-----|------|
| | Stainless | Stainless | EPDM | NBR | FPM | TPEV |
| Acetone | 1 | 1 | 1 | 4 | 4 | 1 |
| Acetic acid (diluted) 30% | 1 | 1 | 1 | 2 | 2 | 1 |
| Acetic acid 100% | 1 | 1 | 1 | 3 | 3 | 1 |
| Acetic acid anhydride | 1 | 1 | 2 | 3 | 4 | 2 |
| Aluminium chloride | 4 | 4 | 1 | 1 | 1 | 1 |
| Aluminium sulfate | 1 | 4 | 1 | 1 | 1 | 1 |
| Ammonium carbonate | 1 | 1 | 1 | 4 | 2 | 1 |
| Ammonium chloride | 2 | 3 | 1 | 1 | 1 | 1 |
| Ammonium hydroxide | 1 | 1 | 1 | 4 | 2 | 1 |
| Amyl chloride | 1 | 1 | 4 | 4 | 1 | 4 |
| Anilin | 1 | 1 | 2 | 4 | 3 | 1 |
| Anilin hydrochloride | 4 | 4 | 2 | 2 | 2 | 2 |
| Barium chloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Barium hydroxide | 1 | 1 | 1 | 1 | 1 | 1 |
| Benzaldehyde | 1 | 1 | 1 | 4 | 4 | 1 |
| Benzene | 1 | 1 | 4 | 4 | 1 | 4 |
| Benzoic acid | 1 | 1 | 4 | 4 | 1 | 1 |
| Borax | 1 | 1 | 1 | 2 | 1 | 1 |
| Boric acid | 1 | 1 | 1 | 1 | 1 | 1 |
| Bromine | 4 | 4 | 4 | 4 | 1 | 4 |
| Bromine chloride acid | 4 | 4 | 1 | 2 | 1 | 2 |
| Bromine hydrogen acid | 4 | 4 | 1 | 4 | 1 | 2 |
| Bromoethylene | 1 | 1 | - | - | - | - |
| Butanol | 1 | 1 | 4 | 1 | 1 | 3 |
| Butyl acetat | 1 | 1 | 2 | 2 | 4 | 3 |
| Butyric acid | 1 | 1 | 2 | 4 | 4 | 3 |
| Calcium bisulfate el sulfite | 1 | 1 | 4 | 1 | 1 | 1 |
| Calcium chloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Calcium hydroxide | 1 | 1 | 1 | 1 | 1 | 1 |
| Calcium hypoklorite | 2 | 3 | 1 | 3 | 1 | 3 |
| Carbon disulfide | 1 | 1 | 4 | 4 | 1 | 3 |
| Carbon tetrachloride | 1 | 1 | 4 | 3 | 1 | 4 |
| Chloracetic acid (mono) | 4 | 4 | 2 | 4 | 4 | 2 |
| Chloride | 4 | 4 | - | - | - | - |
| Chloril acid | 4 | 4 | 1 | 4 | - | 3 |
| Chlorine (dry) | 1 | 1 | 1 | 2 | 1 | 4 |
| Chlorobenzene | 1 | 1 | 4 | 4 | 1 | 4 |

| | AISI 316 | | AISI 304 | | | |
|------------------------|-----------|-----------|----------|-----|-----|------|
| | Stainless | Stainless | EPDM | NBR | FPM | TPEV |
| Chloroform | 2 | 2 | 4 | 4 | 1 | 4 |
| Chlorosulfonic acid | 2 | 3 | 4 | 4 | 3 | 4 |
| Copper chloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Copper nitrate | 1 | 1 | 1 | 1 | 1 | 1 |
| Copper sulfate | 1 | 1 | 1 | 1 | 1 | 1 |
| Ether | 1 | 1 | 3 | 4 | 3 | 3 |
| Ethyl chloride | 1 | 1 | 1 | 1 | 1 | 3 |
| Fatty acid | 1 | 1 | 4 | 2 | 1 | 1 |
| Fluorine (dry) | 1 | 1 | - | - | - | - |
| Fluorine hydrogen acid | 4 | 4 | 2 | 4 | 1 | 4 |
| Formaldehyde | 1 | 1 | 1 | 2 | 1 | 1 |
| Formic acid | 1 | 1 | 1 | 2 | 3 | 2 |
| Furfural | 1 | 1 | 2 | 4 | 4 | 4 |
| Gallic acid | 1 | 1 | 2 | 2 | 1 | 2 |
| Hydrochloric acid | 4 | 4 | 1 | 4 | 1 | 1 |
| Hydrogen peroxide | 1 | 1 | 3 | 4 | 2 | 3 |
| Iodine (wet) | 4 | 4 | 2 | 2 | 1 | 2 |
| Lead acetate | 1 | 1 | 1 | 2 | 4 | 1 |
| Magnesium chloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Magnesium sulfate | 1 | 1 | 1 | 1 | 1 | 1 |
| Mercury | 1 | 1 | 1 | 1 | 1 | 1 |
| Methanol | 1 | 1 | 1 | 1 | 3 | 1 |
| Methyl chloride | 1 | 1 | 3 | 4 | 1 | 3 |
| Methylene chloride | 2 | 2 | 4 | 4 | 2 | 4 |
| Natphalene | 1 | 1 | 4 | 4 | 1 | 1 |
| Nickel chloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Nickel sulfate | 1 | 1 | 1 | 1 | 1 | 1 |
| Nitric acid | 3 | 3 | 3 | 4 | 1 | 4 |
| Oxalic acid | 3 | 3 | 1 | 2 | 1 | 2 |
| Perchloric acid | 4 | 4 | 2 | 4 | 1 | 1 |
| Phorsphor acid | 1 | 1 | 2 | 4 | 1 | 1 |
| Picric acid | 1 | 1 | 2 | 2 | 1 | 2 |
| Potassium bromide | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassium carbonate | 1 | 1 | 1 | 2 | 1 | 1 |
| Potassium chlorate | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassium cyanide | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassium hydroxide | 1 | 1 | 1 | 2 | 2 | 1 |

| | AISI 316 | AISI 304 | | | | |
|------------------------|-----------|-----------|------|-----|-----|------|
| | Stainless | Stainless | EPDM | NBR | FPM | TPEV |
| Potassium nitrate | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassium permanganate | 1 | 1 | 1 | 3 | 1 | 1 |
| Potassium sulfate | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassium sulfide | 1 | 1 | 1 | 1 | 1 | 1 |
| Potassiumchloride | 2 | 2 | 1 | 1 | 1 | 1 |
| Prophylene dichloride | 1 | 1 | 4 | 4 | 1 | 4 |
| Sal ammoniac | 2 | 3 | 1 | 1 | 1 | 1 |
| Silver nitrate | 1 | 1 | 1 | 2 | 1 | 1 |
| Soda (ash) | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium acetate | 1 | 1 | 1 | 2 | 4 | 1 |
| Sodium bicarbonate | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium bisulfate | 1 | 3 | 1 | 2 | 1 | 1 |
| Sodium bisulfite | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium bromide | 2 | 2 | 1 | 3 | 1 | 2 |
| Sodium chlorate | 1 | 1 | 1 | 2 | 1 | 1 |
| Sodium chloride | 4 | 4 | 1 | 1 | 1 | 1 |
| Sodium cyanide | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium fluoride | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium hydroxide | 1 | 1 | 1 | 2 | 2 | 1 |
| Sodium hypoklorite | 4 | 4 | 2 | 2 | 1 | 1 |
| Sodium nitrate | 1 | 1 | 1 | 2 | 2 | 1 |
| Sodium sulfate | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium sulfide | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium sulfite | 1 | 1 | 1 | 1 | 1 | 1 |
| Stannicous chloride | 2 | 3 | 2 | 1 | 1 | 2 |
| Sulfur | 1 | 1 | 1 | 4 | 1 | 1 |
| Sulfur chloride | 1 | 1 | 4 | 3 | 1 | 3 |
| Sulfur dioxide | 1 | 2 | 1 | 4 | 1 | 1 |
| Sulfuric acid | 4 | 4 | 2 | 4 | 1 | 3 |
| Sulfurous acid | 1 | 3 | 2 | 2 | 1 | 2 |
| Tionyl chloride | 1 | 1 | 4 | 4 | 1 | 4 |
| Toluene (toluol) | 1 | 1 | 4 | 4 | 1 | 4 |
| Trichloroethylene | 1 | 1 | 4 | 3 | 1 | 4 |
| Turpentine | 1 | 1 | 4 | 1 | 1 | 4 |
| Xylene (xylol) | 1 | 1 | 4 | 4 | 2 | 4 |
| Zinc sulfate | 1 | 1 | 1 | 1 | 1 | 1 |

1 = Very good service to operating limit of material

2 = Moderate service

3 = Limited or variable service

4 = Unsatisfactory

Note:

Concentration levels and length of exposure have a direct influence on the resistance of stainless steel to certain chemicals. Each application should therefore be carefully reviewed to determine the suitability of stainless steel.

Assumptions:

Data presented are used as a guide only, for detailed information please contact our Sales/Technical department.

Manual cleaning of drainage

- Remove all present raw materials, wrapping materials and tools.
- Cover all equipment that could be contaminated.
- Remove excess dirt from floor and gratings, and place into designated container.
- Remove gratings.
- Remove and empty silt basket and foul air trap.
- Place collected waste and dirt into designated container. Rinse grating, silt basket and foul air trap with clean water. Then place foul air trap into its original position.
- Wash all surfaces with designated detergent and designated hand brush.
- Rinse all surfaces with clean water.
- Visually check surface cleanliness - repeat cleaning process if necessary.
- Place silt basket and grating to its original position.
- Rinse the entire equipment with clean water.

Overview with recommended cleaning procedures for drainage

These instructions are for guidance only. **Always follow manufacturer's instructions.**
All procedures have to be verified and adjusted to the application specifics.

| Frequency | Daily | Weekly |
|---|--|--|
| Procedure | Removal of organic deposits (fats, proteins, saccharides and polysaccharides) | Removal of inorganic deposits that could promote very resistant biofilms |
| Note: Removal of rinse water residues | | |
| Physical agents | <ul style="list-style-type: none"> ■ Steam ■ Medium pressure water to max 25 bar ■ Mechanical / kinetic energy (brushes, CIP medium velocity) | Mechanical abrasive methods – polishing |
| Note: Removal of excess water with a squeegee | | |
| Chemical agents | <ul style="list-style-type: none"> ■ Caustics (sodium hydroxide, potassium hydroxide) ■ Detergents / surfactants | <ul style="list-style-type: none"> ■ Nitric acid for stainless steel passivation where chlorine attack could be expected ■ Inorganic acids (phosphoric acid) ■ Weak organic acids |
| Note: Alcohols (isopropyl alcohol, ethanol) | | |
| Examples of chemical cleaning agents suitable for ACO stainless steel drainage | Standard chemical agents used for floor cleaning should be sufficient (should be validated) Oxofoam, Endorochlor (Diversey) | <ul style="list-style-type: none"> ■ Acifoam (Diversey) ■ Acigel (Diversey) ■ Super Dilac (Diversey) |
| Note: Chlorine tablets (Suma Tab D4 by Diversey) are often added to the water in foul trap in microbial sensitive production area's | | |

Any cleaning procedures, including those recommended by equipment suppliers, must be properly validated at the equipment, where it will be applied and on the soil that could be expected even after certain time of usage.

Always follow manufacturer's instructions to avoid damage to the equipment.

Every ACO product supports
the ACO system chain



-
- ACO gully
 - ACO channel
 - ACO pipe
-

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