For the design of production plant in open processes in the food and consumables industry where ease of cleaning is crucial.

When it comes to the exacting demands of food safety, stainless steel enclosures, including those with a protection category of IP 69K, and enclosures in hygienic design are “two different animals”.

Rittal Hygienic Design offers mechanical engineers and plant operators in the food sector decisive new building blocks for the hygiene demands of the future. This innovative sub-range is based on our world-renowned expertise in enclosure manufacturing and enclosure climate control.

The Rittal Hygienic Design for food safety is based on:

- Machinery Directive (Directive 98/37/EC)
  Food machinery section, Appendix 1, point 2.1 (to be replaced by 2006/42/EC)
- DIN EN 1672-2:2005 Food machinery – General design principles – Part 2: Hygiene requirements
- DIN EN ISO 14 159 Machine safety – Hygiene requirements pertaining to the design of machinery
- Document 13 EHEDG-Guideline to the Hygienic Design of apparatus for open processes, prepared in collaboration with 3-A and NSF International
Hygienic Design

Become healthier, better and more productive – with Rittal Hygienic Design.

Benefits compared with conventional enclosures:

- Higher productivity through greater system availability.
- Reducing the amount of cleaning required (faster cleaning, reduced energy requirements, reduced use of chemicals).
- Superior product quality and greater durability by reducing the contamination risk, which in turn helps to avoid production losses.
- Improved protection for both consumers and employees.

Make existing plant more hygienic. This saves time with cleaning and disinfection, i.e. downtime is reduced, and plant productivity is increased, provided . . .

- the wall-mounted devices and enclosures are installed at a distance for cleaning purposes. With the wall spacer bracket HD.

- enclosures with cable entry from below are mounted on the new HD base rather than on a base/plinth or a mounting angle frame.

- the new HD levelling feet eliminate the need for adjustment with external threads.

- the polyamide or brass cable entry with external thread is replaced by the new HD stainless steel cable gland.

- the standard flat roofs in TS 8 enclosures are replaced by a sloped attachment.

- terminal boxes (Premium-KL IP 69K), used e.g. as socket outlets, are mounted on the wall at 45° instead of horizontally.
Benefits in detail:
- Roof angled forwards by 30°.
- Horizontal drainage edge to protect the seal.
- Chamfered door fold.
- Silicone seal on the outside, no gap.
- Seal may be swapped over.
- Seal dyed blue to clearly distinguish it from foodstuffs.
- Hinges inside the enclosure.
- External fastener made from stainless steel.
- Fastener insert easy to clean.
- Enclosure of all-round solid construction. This means that after machining, only essential openings remain.
- No new project planning input required, since the same mounting plate dimensions are used as in AE enclosures.

Material:
- Enclosure and door: Stainless steel 1.4301 (AISI 304)
- Mounting plate: Sheet steel
- Lock inserts HD: Stainless steel 1.4404 (AISI 316L)

Surface finish:
- Peak-to-valley height of enclosure surfaces < 0.8 μm
- Mounting plate zinc-plated

Protection category:
- IP 66 to EN 60 529/09.2000

Supply includes:
- Enclosure of all-round solid construction, single door, interchangeable door hinge

<table>
<thead>
<tr>
<th>Width (B) mm</th>
<th>Packs of</th>
<th>220</th>
<th>390</th>
<th>390</th>
<th>510</th>
<th>610</th>
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<tbody>
<tr>
<td>Height</td>
<td>front (H1) mm</td>
<td>350</td>
<td>430</td>
<td>650</td>
<td>550</td>
<td>430</td>
<td>650</td>
<td>1050</td>
<td>1250</td>
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<tr>
<td></td>
<td>rear (H2) mm</td>
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<td>549</td>
<td>769</td>
<td>669</td>
<td>601</td>
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<td>1221</td>
<td>1421</td>
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<tr>
<td>Depth (T) mm</td>
<td>155</td>
<td>210</td>
<td>210</td>
<td>210</td>
<td>300</td>
<td>210</td>
<td>300</td>
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<td></td>
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<tr>
<td>Model No. HD</td>
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<td>1302.600</td>
<td>1306.600</td>
<td>1308.600</td>
<td>1307.600</td>
<td>1320.600</td>
<td>1310.600</td>
<td>1316.600</td>
<td>1317.600</td>
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<tr>
<td>Accessories</td>
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<tr>
<td>Supporting structure HD with 2 feet</td>
<td>Height 300 mm</td>
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<td>–</td>
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<td>Supporting structure HD with 2 or 4 feet according to design code number, see page 300.</td>
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</table>

To order enclosures in 1.4404 (AISI 316L) please add the extension .500 to the Model No. Delivery times available on request.

Cable gland HD, without external thread, Model No. see page 1056.
Hygienic Design

Supporting structure HD with levelling

Material:
Stainless steel tube 1.4301 (AISI 304)

Supply includes:
Assembly parts and seals.

Accessories:
Wall spacer bracket for secure mounting, see page 301.

Benefits in detail:
Solid cross-sections and continuously welded seams ensure complete water-tightness. The round profile helps to avoid the common problem of collecting dirt, particularly with horizontal surfaces. The guaranteed floor clearance of the enclosures facilitates easy wet or dry cleaning. Horizontal cross struts and support strips ensure a high level of stability. The width supports the installation of individual supporting structures underneath bayed TS 8 enclosure systems.

with 4 feet for TS 8

Design
● including levelling 0 – 55 mm
● without base mount
● with horizontal grille for cable routing between the support strips, rear

with 2 feet for compact enclosures HD

Design
● including levelling 0 – 55 mm
● without base mount
● with horizontal grille for cable routing

Note:
Additional wall spacer brackets are essential for secure mounting.

Supporting structure HD according to specifications

with 4 feet, height 300 mm

Design code number

Example:
Supporting structure for TS 8, width 1000 mm, depth 800 mm, without levelling, with base mount.

Example:
Supporting structure for compact enclosure HD, width 390 mm, depth 210 mm, without levelling, without base mount.

with 2 feet, height 300 mm

Design code number

Example:
Supporting structure for compact enclosure HD, width 390 mm, depth 210 mm, without levelling, without base mount.

1) Please additionally give the design code. Other heights available on request. Delivery times available on request.
Levelling feet HD

**Material:**
Stainless steel 1.4301 (AISI 304)

**Supply includes:**
Assembly parts and seals.

**Benefits in detail:**
The threaded spindle for levelling is completely concealed by a cover, and permanently sealed, thereby eliminating the time-consuming work of cleaning and disinfecting the thread.

Option of securing to the
- Enclosure
- Base/plinth

<table>
<thead>
<tr>
<th>For enclosures</th>
<th>Levelling range mm</th>
<th>Base mount</th>
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<td>TS 8 (M12)</td>
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</table>

Delivery times available on request. To order in stainless steel 1.4404 (AISI 316L) please add the extension .XX1 to the Model No.

Wall spacer bracket HD

**Material:**
Stainless steel tube 1.4301 (AISI 304)

**Supply includes:**
Assembly parts and seals.

**Benefits in detail:**
Finding a way to permanently and securely seal the enclosure against the wall remains a problem. With this in mind, we recommend that you leave sufficient space to clean behind the enclosure.

Depending on the weight and dimensions, one, two, three or four supports may be fitted for attachment purposes.

Wall spacer brackets may also be used in customised designs or with an adaptor plate for mounting other components such as switches and sockets, as well as wire-mesh cable trays.

<table>
<thead>
<tr>
<th>Distance from wall mm</th>
<th>Packs of</th>
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</thead>
<tbody>
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<tr>
<td>150</td>
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<td>300</td>
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<td>4000.120</td>
</tr>
</tbody>
</table>

Delivery times available on request. To order in stainless steel 1.4404 (AISI 316L) please add the extension .XX1 to the Model No.

Enclosure key HD

**For lock insert HD**

**Bit HD**
for universal key SZ 2549.500
See page 959.

<table>
<thead>
<tr>
<th>Packs of</th>
<th>Model No. HD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2549.500</td>
</tr>
</tbody>
</table>

Delivery times available on request.

Sloped attachment

**for TS 8**
For retro-fitting individual or bayed TS 8 enclosures of sheet steel, spray-finished, or stainless steel.
On request.