Covers for manholes in tunnels

Safety in tunnels is a priority for us. For this purpose, we manufacturer manhole covers and culvert manhole covers. Our covers meet the safety requirements in tunnels and can be easily installed and operated.
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Covers for manholes in tunnels | for new constructions or renovation

Area of application
The cover is used in tunnel's for covering manholes.

Technical data
• Cover made of stainless steel (1.4571 or 1.4301) or galvanised steel and reinforced concrete
• Test category D400 or B125 according to DIN EN 124
  Optional: Heavy-duty model D400 for use in the lane
• Cover weight depending on the size approx. 150 - 400 kg / cover
• Stainless steel screw connection

Fire-resistance rating
• Classification of EI90 in accordance with DIN EN 13501-2 as well as compliance with the “fire resistant” building regulation (“F90” fire-resistance rating in accordance with DIN 4102-2)
• Designed to maintain the function of electrical cable systems for 90 minutes pursuant to DIN 4102-12
• Adequate residual loading capacity for rescue and recovery measures during or after the fire can be ensured
• Inspected by the MPA Dresden

Advantages
• Durability and safety of the covers are achieved by using stainless steel (frame and cover basin), removable silicone seals and circumferential durable elastic sealing tape between the cover frame and in-situ concrete.
• High-quality materials and the specific design ensure easy lifting of the cover, even after many years in operation.
• In the case of multi-piece covers, easy access to the manhole compartment via removable cross beam.
• Continuous height adjustment enables the adjustment to any surrounding.
• Supports for retainer lugs facilitate transport and cover insertion.
Covers for manholes in tunnels | for new constructions or renovation

Standard sizes
- Covers with a clear width of 300 to 1300 mm can be delivered as standard sizes.
- Other dimensions are available upon agreement / request.

Fastening types
- Lugs for reinforcing rods
- Customer-specific cover fastening types in i can be offered upon request

Example for cover construction
Covers for manholes in tunnels  |  for new constructions or renovation

Installation examples  |  new construction

New tunnel construction  |  Concrete manhole with conduits  |  Covering with reinforcing rods

Cross-threading of the reinforcing rods for cover  |  Lift cover from steel frame  |  Place steel frame onto the manhole opening

Adjust level using height adjustment  |  Remove steel frame and install inner formwork  |  Fill with dry mortar, remove formwork, and insert steel frame again

After dry mortar setting, install durable elastic sealing tape  |  Insert cover
Covers for manholes in tunnels | for new constructions or renovation

Installation examples | renovation with one cover

Existing cover is removed
Substructure for Langmatz cover, steel frame is inserted and encased.
Push reinforcing rods through the existing lugs, install durable elastic sealing tape.

Setting in concrete
Finished renovated manhole

Installation examples | renovation with two covers
Covers for culvert manhole in tunnels
| for new constructions or renovation

Area of application

The cover is used in (road) tunnel’s for covering culvert manholes.

Technical data

- Cover made of stainless steel (1.4571 or 1.4301) or galvanised steel
- Test category A15 or B125 according to DIN EN 124
- Overall height 105 mm
- Cover weight approx. 40 kg (e.g. for 600 x 1000 mm inside width)
- Total weight approx. 60 kg (e.g. for 600 x 1000 mm inside width)
- Stainless steel lock

Advantages

- Durability and safety of the covers are achieved by using stainless steel (frame and cover), removable silicone seals and circumferential durable elastic sealing tape.
- 1-man operation
- High-quality materials ensure easy pulling back of the cover, even after many years in operation.
- Continuous height adjustment enables the adjustment to any surrounding.

Installation example
Covers for culvert manhole in tunnels | for new constructions or renovation

Standard sizes

- Inside width 600 x 600 mm
- Inside width 600 x 800 mm
- Inside width 600 x 900 mm
- Inside width 600 x 1000 mm
- Other sizes upon request

Example for cover construction
Covers for culvert manhole in tunnels | for new constructions or renovation

Installation examples | new construction

- New tunnel construction
- Border area laid out with reinforcement
- Reinforcement cut out, manhole compartment encased
- Dry mortar compacted for formwork
- Formwork removed
- Installation of the durable elastic sealing tape
- Insertion of the steel frame
- Cover attachment
- Level verification
- Set dry mortar
- Border strip filling with concrete
Practical Examples
References

Excerpt from our customer list

Utility companies                               Local authorities, municipalities
Telecommunications companies                   System integration companies
Public transport, railways                      Builders' merchants
                                                Installation companies

Germany

- Agnesburgtunnel, ca. 707 Meter
- Galerie Gemering, ca. 965 Meter
- Galerie Gilching, ca. 520 Meter
- Kö-Bogen-Tunnel, ca. 870 Meter
- Luise-Kiesselbach-Tunnel, ca. 1530 Meter
- Rheinalleetunnel, ca. 650 Meter
- Schönbuchtunnel, ca. 626 Meter
- Trappentreutunnel, ca. 550 Meter
- Tunnel Allach, ca. 1030 Meter
- Tunnel Alte Burg, ca. 874 Meter
- Tunnel Etterschlag, ca. 500 Meter
- Tunnel Königshainer Berge, ca. 3281 Meter
- Tunnel Oberau, ca. 2971 Meter
- Tunnel Rendsburg, ca. 640 Meter
- Tunnel Stellingen, ca. 893 Meter
- Tunnel Vötting, ca. 705 Meter
- Virngrundtunnel, ca. 465 Meter
We are looking forward to your visit, phone call or e-mail.