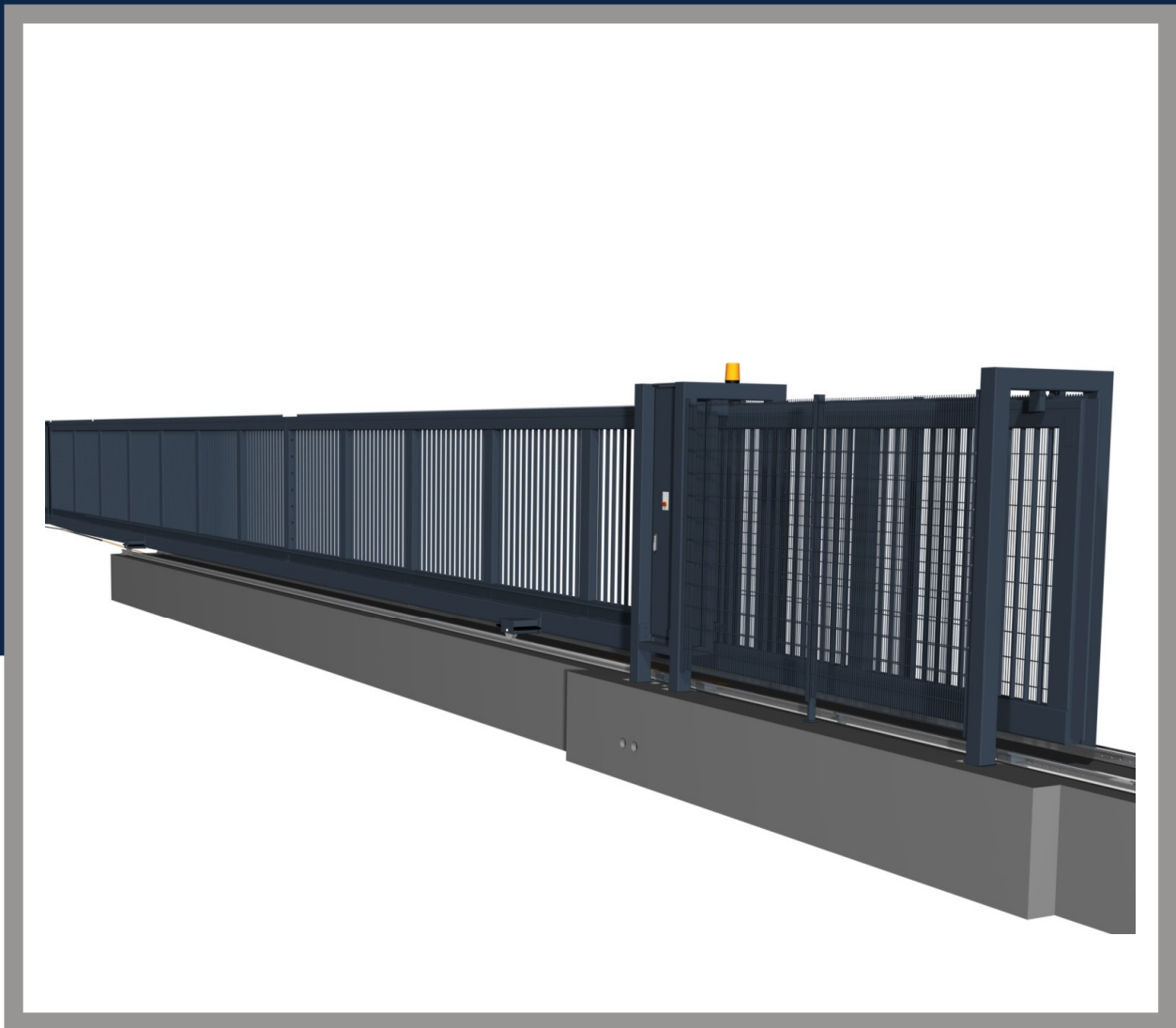


SLIDING GATE - TRACK STG- TAXIWAY GATE 1



FOR CLEAR WIDTHS FROM 25 TO 40 M

STG-TAXIWAY GATE

Taxiway Gates are **sliding gates on tracks** for particularly large passage widths. They are the only practical solution for the mechanical protection of taxiways for aircraft in critical areas of airports. These gate types are also used when property boundaries are to be opened widely (car parks, landfills and recycling yards) to protect entire areas against unauthorised access and traffic. At airports, taxiway gates on taxiways leading to maintenance hangars or military airport areas make sense if aircraft are only occasionally moved from the aviation security area to the operational area. In addition to the clear identification of the area, significant advantages can be achieved in the security structure for employees and supply chains according to LuftSiG § 7.

By the lateral sliding of the gate leaf, along a fence or a wall, the passage area is not spatially restricted. The sliding gate **STG-Taxiway Gate** can be delivered power-operated with deadman or self-locking control. Because of the high weight due to the design, the motorised version is always equipped with a frequency-controlled drive in order to prevent the mechanical overloading of the drive equipment by soft starting and braking in the end positions. The construction of the **STG-Taxiway Gate** complies with all requirements of ICAO, EU Regulation 2320/2002 and LuftSiG §8 and 9. The gate construction basically consists of a torsion-resistant frame, the gate filling, the climb-over protection, the drive system and the track guide and serves as protection against unauthorised entry by persons and vehicles.

Another variant is the opposite arrangement of 2 **Taxiway Gates** to increase the passage width up to 80m. The gates can be controlled with all common access control systems and are predestined for passages through factories, barracks and taxiways at airports with high security levels.

Attributes:

- reliable protection of outdoor areas and open-air grounds with high security level against intrusion
- proven reliability and high production maturity due to a high degree of standardisation
- modular design optimised for export in containers
- with power-operated systems, braking and soft start in the end positions
- clear optics due to vandalism-proof integration of all drive components
- emergency drive release not exposed, but integrated in the gate post in a tamper-proof manner
- 100% duty cycle, industrial standard
- numerous options, e.g. can be extended as a lock gate

STG-TAXIWAY GATE

Used for aircraft separation with simultaneous protection against unauthorized access by persons, especially in areas that require control and protection:

- authority facilities
- industrial plants and power plants
- military facilities
- supply facilities
- airports (access to aviation security area)

Versions / Names:

STG-TAXIWAY GATE- 25000 power-operated: sliding gate with track

STG-TAXIWAY GATE- 40000 power-operated: sliding gate with track

Specifications:

	STG-Taxiway Gate-25000	STG-Taxiway Gate 40000
Passage width	25,000 mm	40,000 mm
thereof self-supporting		
without rail in the roadway	6,000 mm	12,500 mm
Variable gate height	2,000 to 3,650 mm	2,000 to 3,650 mm
Ground clearance	50 mm	50 mm
Lateral sliding area	27,000 mm	45,000 mm
Gate leaf	2 pieces	3 parts (4 parts for sea freight)
Container size	45 feet, open top, high cube, if necessary	45 feet, open top, high cube, if necessary
Running rail profile	track rail made of 2x S XX	track rail made of 2x S XX
Downstand beam	minimum RT* 250/150	minimum RT* 250/150
Frame, reinforcement	RT* 150/100, ST*150	RT* 200/150, ST*150
Filling	RT* 50/30	RT* 50/30
3x twin portal for guide and stop	ST* 200	ST* 250
Drive motor	3x230/400 V, 50 Hz, 1.5 kW self-locking gear magnetic brake, frequency converter	3x230/400 V, 50 Hz, 3 kW self-locking gear magnetic brake, frequency converter
Opening time	approx. 100 seconds (without braking)	approx. 160 seconds (without braking)

* RT = rectangular tube, ST = square tube

The **sliding gate STG-TAXIWAY GATE** is manufactured as an assembly unit, consisting of the gate leaf, the guide post, the stop post, the running gear, the drive, control, safety and operating components.

STG-TAXIWAY GATE

The **sliding gate leaf** is welded torsion-resistant and dimensioned according to the static requirements. The gate filling is welded in between the upper and lower bars (bar spacing max. 120 mm). The lower beam is used to accommodate brackets with rollers on roller bearings for the track rails SXX.

The **gate guide** consists of twin portals made of tubular steel profiles with rainproof head plate and a laterally mounted roller guide with 2 guide rollers on adjustable V2A bolts.

The **stop post** also consists of a twin portal made of tubular steel profiles with a rainproof head plate and a set-back inlet fork.

Electric drive:

The three-phase motor 230/400 Volt, 50 Hz for industrial uninterrupted operation is combined with a maintenance-free, low-noise worm gear running in an oil bath. The three-phase geared motor installed in a separate lockable **drive control cabinet** is equipped with a slip clutch. The locking mechanism works through the self-locking worm gear and a magnetic brake. The driving force is provided by a sprocket and an adjustable and spring-loaded gall chain attached to the door leaf. The control (24 Volt) consists of a microprocessor control including the proximity limit switches. A key switch OPEN/CLOSE with EMERGENCY STOP button is mounted on the inside of the control cabinet.

Easily accessible components: All components required for operation are accommodated safely inside the drive gate post. This simplifies assembly, commissioning and maintenance considerably.

Control: Microprocessor control unit and frequency converter

Mains connection: three-phase 3x230/400 V, 50 Hz

Control voltage: 24 VDC

Power consumption: according to data sheet (without accessories)

Duty cycle: 60%, class 3

Class of protection: IP 44

The control functions of the power-operated version are:

- gate stop as well as gate open and close in dead man's position
- optional equipment with safety contact strips for self-locking control
- remote control, which can be controlled via potential-free contacts (optional)
- standard transfer of alarm signals for gate states gate open, gate closed, collective fault
- that all gate typical components can be connected and controlled in different logics.

STG-TAXIWAY GATE

Behaviour in case of power failure / emergency: By releasing the slipping clutch in the profile cylinder-locked drive column, manual operation is possible in the event of a power failure.

Foundation console for field rail and drive control post as standard:

- 300 mm upper edge area with spacious cable entry
- pairwise arrangement of dowel holes and adjusting screws for an optimal perpendicular and flush assembly

TORWERK – long-lasting corrosion protection in 4 steps:



The coating thickness is 260 µm, all requirements on corrosion protection stresses according to DIN EN 12944-2 of the category C4 (long protective effect) are met.

First-class surface haptics through:

- hermetically welded construction
- a surface free of zinc cavities
- no protrusion of flat ground weld seams (mitre corners) after zinc coating
- no warping caused by zinc blowholes in the surface

Environmentally friendly procedure:

- no use of solvents
- recycling of the overspray

Options:

Colour design / labelling:

Gate posts and gate leaves can be designed in different RAL/DB colours.

STG-TAXIWAY GATE

Signaller:

- LED rotating beacon (standard)
- LED light red/ green (optional)
- Reflexite contour markings from microprismatic foils with high reflection value, visibility even from an acute angle, on the inside and outside of the lower gate beam

Safety (optional):

- TÜV approved safety device, self-monitoring, according to European gate standards DIN EN 12978 + 12453 for power-operated gates, consisting of double chamber pressure strips on the main and secondary locking edges and the electronic analysis unit
- 2 light barriers, consisting of sender and receiver in different heights between the gate posts as additional security device
- rail heating with temperature control system

Climb over protection and accessories:

- serrated band 45 mm high
- steel tips 50 x 10 mm, 50 mm space
- barbed wire in ... rows on vertical holders (approx. 2 m space between holders)

Controls:

- key switch open-close outside and key switch emergency-stop-close inside (standard)
- radio remote control (optional)
- key switch on/off (optional)
- time switch (optional)
- code card reader and other communication systems possible on request

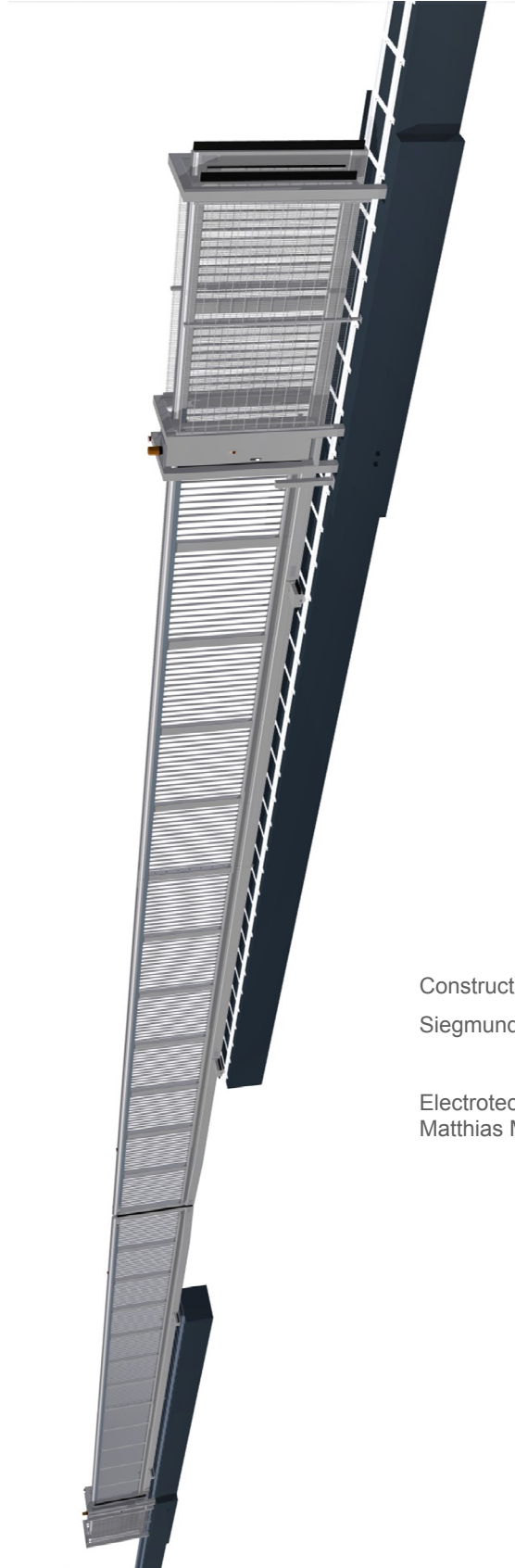
Design of the gate leaves:

- instead of bar filling, optional filling in the manner of a fence
- closed sheet filling or perforated sheet filling in powder-coated design limited possible

Torwerk assembly service:

Each **STG-TAXIWAY GATE** is completely pre-assembled at the factory and internally wired and as far as possible connected before it is delivered. Due to the high weight and dimensions of this gate, an increased assembly effort must be expected.

STG-TAXIWAY GATE



Construction and design:

Siegmund Huth / Kathrin Krebs / Maik Brunner

Electrotechnical equipment: Stefan Carl /
Matthias Martius

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