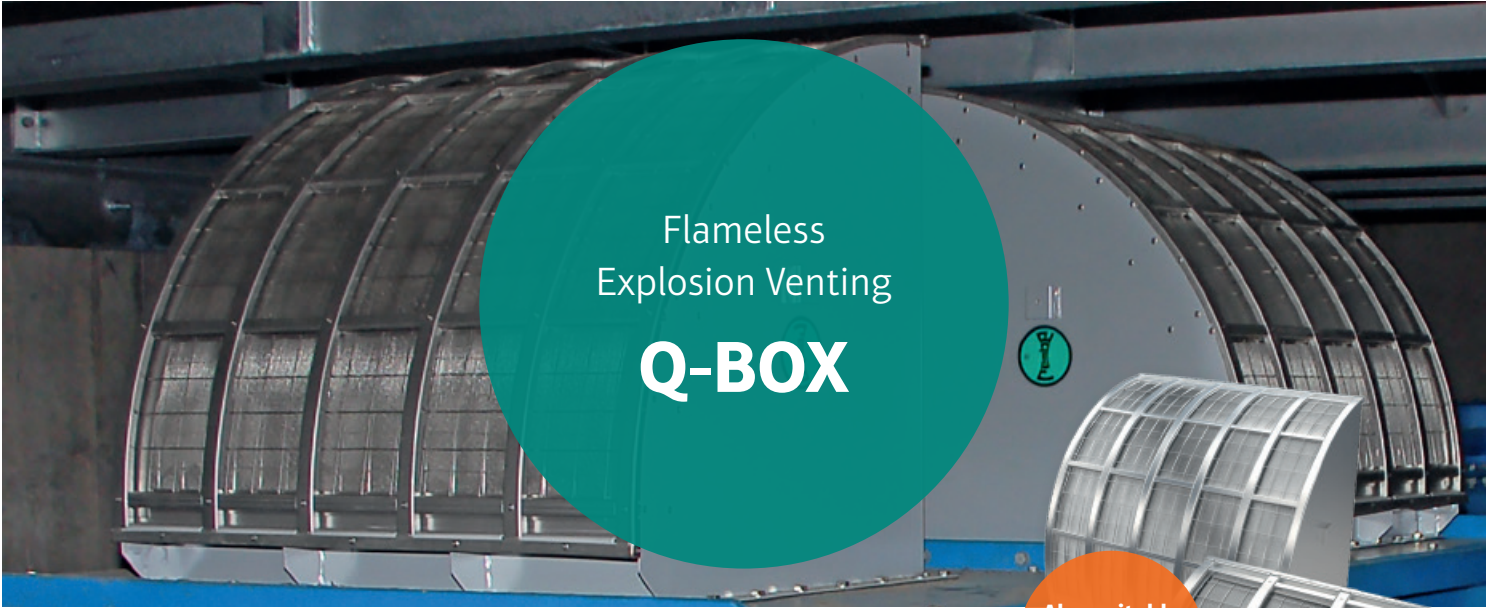




Safety is for life.



Flameless  
Explosion Venting  
**Q-BOX**

Also suitable  
for outdoor  
applications!

## COST-EFFECTIVE INDOOR EXPLOSION VENTING FOR DUST EXPLOSIONS

The Q-Box guarantees safe explosion venting in production halls. The flame gases are instantly extinguished inside the Q-Box by efficient cooling.

The Q-Box is designed for plant components with low rigidity and large explosion venting areas as well as for plants that are at risk of dust explosions, such as filters, elevators or silos with  $K_{St}$ -Values < 200 bar × m/s.

### Your Advantages

- Flexible use of the Q-Box permits **process-efficient plant design**.
- **Perfect protection of the surrounding area:** Neither heat, dusts nor a dangerous pressure wave emerge from the vessel – everything stays in the Q-Box.
- **Reduced downtime:** Access to the protected plant does not require a safety interlock (LOTO).
- **Cost-effective alternative to venting ducts:** No running costs for venting ducts and external maintenance, a visual inspection is sufficient.
- **Integrated signalling unit** for reliable monitoring.
- **Flexible solution for indoor and outdoor use.**
- **Simple retrofitting to existing explosion panel installations.**
- **Reduces noise levels.**

Made  
in  
Germany

- ✓ Certified in accordance with EN 14797
- Application in accordance with EN 14491
- Developed in accordance with EN 16009



ATEX  
EC type examination  
certificate no.  
BVS 06 ATEX H 028 X

SIL equivalent SIL 2

### Please note:

The combination of the Q-Box and isolation systems prevents pressure waves and flames propagating to other parts of the plant.





Safety is for life.

## PRODUCT INFORMATION

Explosion Safety | Q-Box

### Technical data

$K_{St}$ -Value	$\leq 200 \text{ bar} \times \text{m/s}$
$P_{max}$	$\leq 9 \text{ bar}$
Minimum ignition energy	$\geq 3 \text{ mJ}$
Minimum ignition temperature	$\geq 370 \text{ }^\circ\text{C}$
Static response pressure	0,1 bar
Max. $P_{red}$	$\leq 0,5 \text{ bar}$
Ambient temperature	-50 to +120 °C
Process temperature	-30 to +180 °C (higher temperatures available on request)

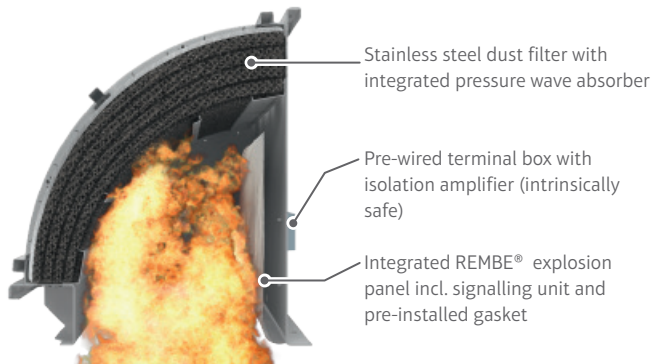
### Dimensions and weight

Q-Box Nominal width	Height	Weight
<b>305 × 610 mm</b>	500 mm	ca. 28 kg
<b>586 × 920 mm</b>	780 mm	ca. 77 kg

Other measurements available on request.

## Competitive advantages

- Process-optimised plant layout.
- No external maintenance costs.



Q-Box components



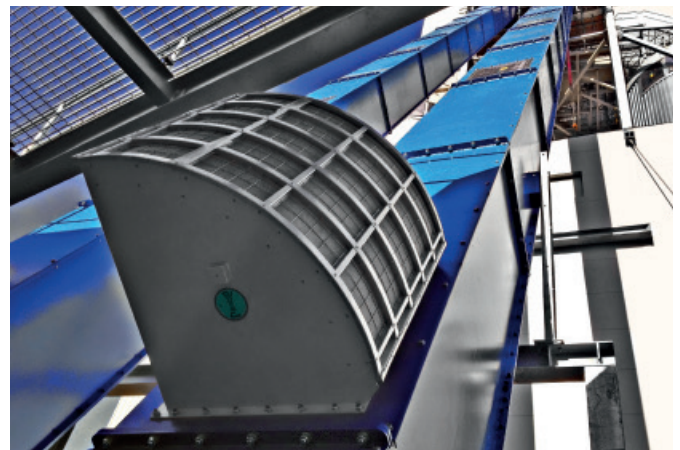
The sanitary cover protects the Q-Box against dust from outside sources.



Explosion venting of a chip bunker using the Q-Box to protect the surrounding infrastructure.



Flameless explosion venting in a grinder machine.



Explosion Safety of a trough chain conveyor using the Q-Box in a biomass power plant.

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