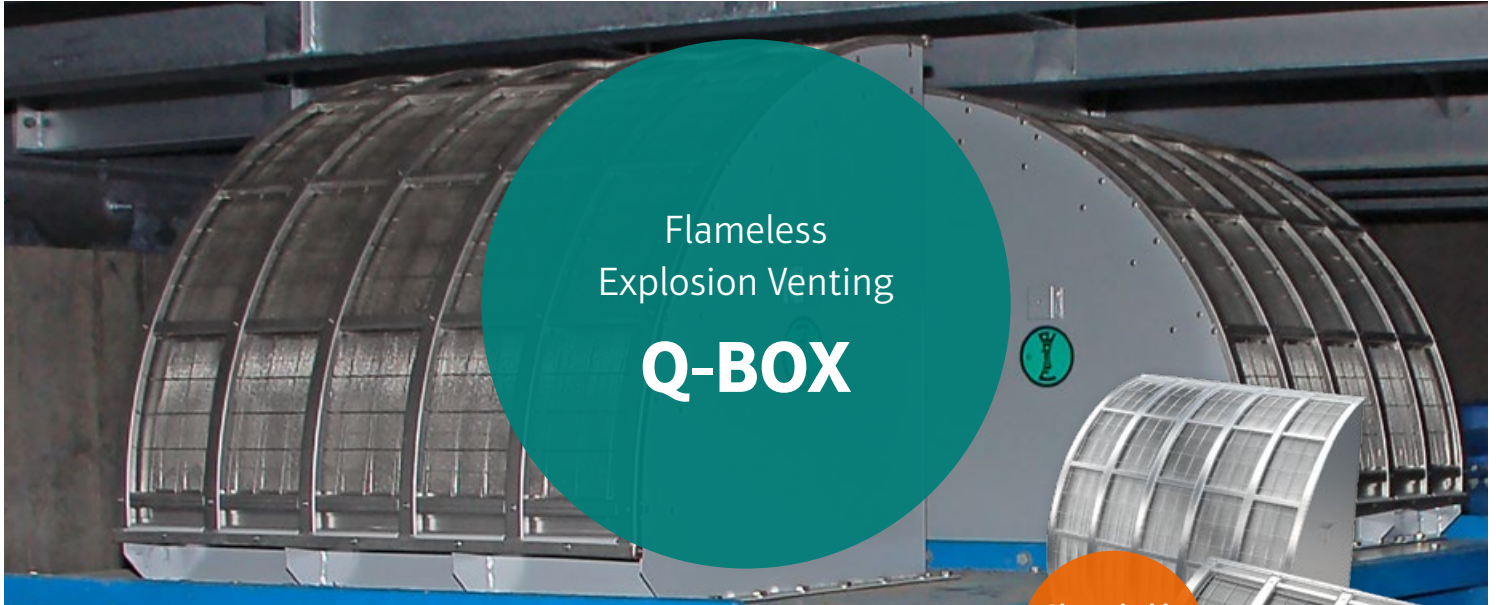




Safety is for life.

## PRODUCT INFORMATION



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 that are at risk of dust explosions, such as filters, elevators or silos with  $K_{St}$ -Values  $< 200 \text{ bar} \times \text{m/s}$  and large explosion venting areas.

### 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 vent 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



Meets the  
requirements  
of NFPA 68

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

### 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	$\geq 380 \text{ }^\circ\text{C}$
Static response pressure	0.1 bar
Max. red. explosion pressure $P_{red}$	$\leq 2.0 \text{ bar (305} \times \text{610 mm)}$
	$\leq 0.7 \text{ bar (586} \times \text{920 mm)}$
Ambient temperature	-40 to +60 °C
Process temperature	-30 to +180 °C (higher temperatures available on request)

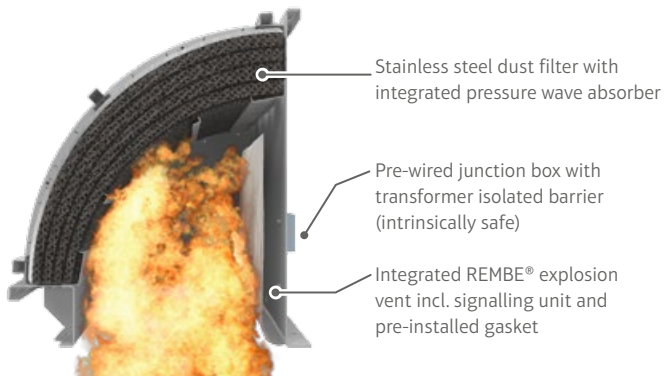
### Dimensions and weight

Q-Box Dimensions	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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REMBE® GmbH Safety+Control

Gallbergweg 21 | 59929 Brilon, Germany | T +49 2961 7405-0 | F +49 2961 50714  
info@rembe.de | www.rembe.de