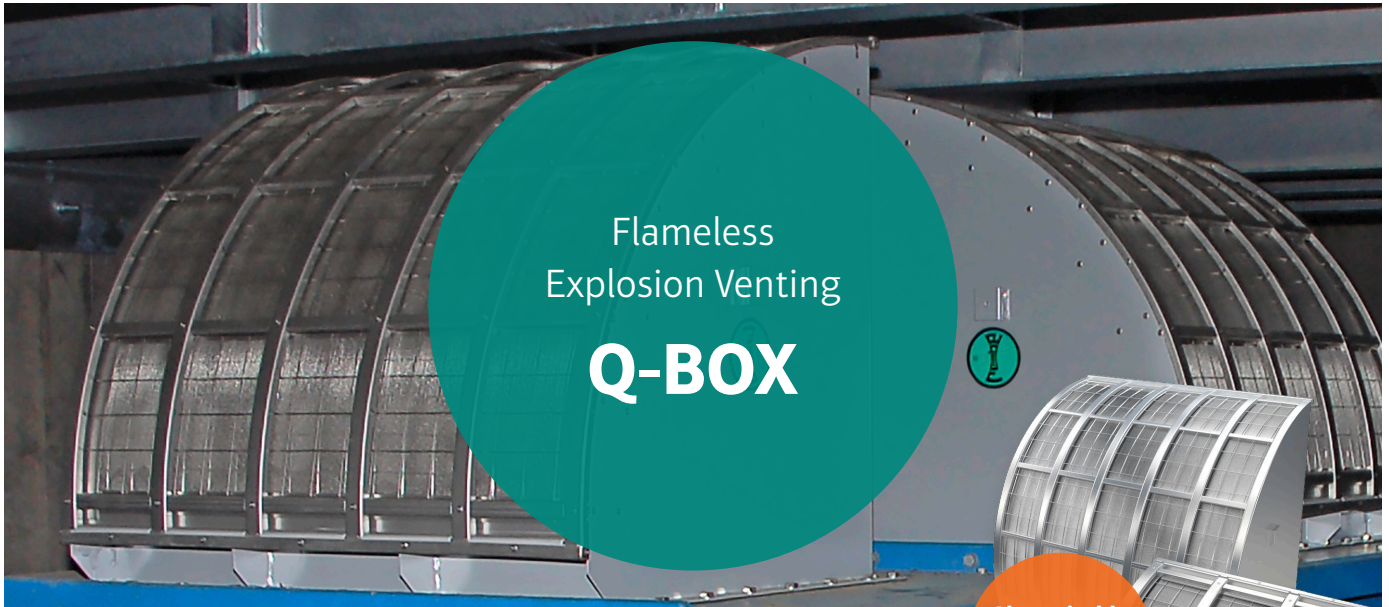




Safety is for life.™

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 16009 EN 14797



ATEX
EC type examination
certificate no.
BVS 16 ATEX H 021 X

SIL equivalent SIL 2



Meets the
requirements
of NFPA 68

Please note!

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



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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)

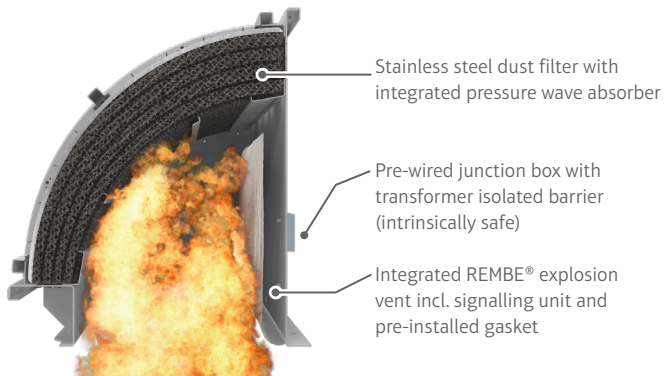
Dimensions and weight

Q-Box Dimensions	Height	Weight
305 × 610 mm	500 mm	ca. 28 kg
586 × 920 mm	780 mm	ca. 77 kg

Other measurements available on request.

Competitive advantages

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



Q-Box components.



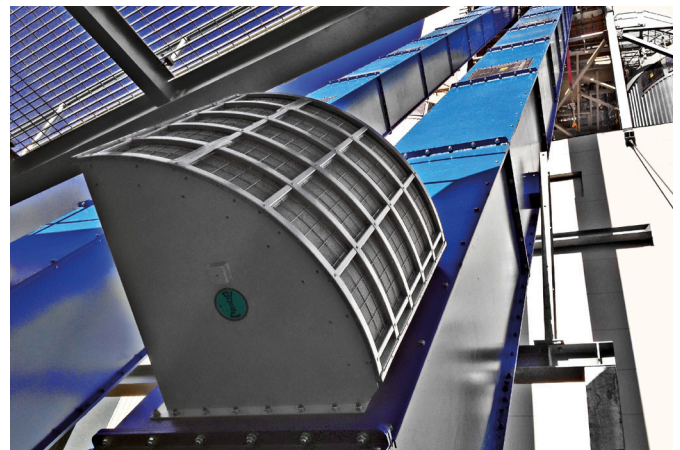
The sanitary cover protects the Q-Box against dust from outside sources.



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.

Consulting. Engineering. Products. Service.

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