



# SILENCERS

## THE *ilencer*®

The introduction of automatic valves in filling technology and the resulting abrupt relief of residual pressures have drastically increased noise emissions in filling plants. To protect employees and residents, we have been developing and building silencers for 15 years that reduce noise by more than 20 dB.

Specially designed for customer requirements, we now offer a complete product range that covers all technical gases, relief pressures up to 400 bar and volume flows up to 8000 Nm<sup>3</sup>/h.

### **For the relief of residual pressures:**

- ≡ In filling stations for pallet and bundle relief
- ≡ At the tanker / trailer
- ≡ Storage tanks
- ≡ High-pressure systems

### **Relief pressures:**

- ≡ Up to 400 bar

### **Volumetric flows:**

- ≡ Up to 8,000 Nm<sup>3</sup>/h

### **For filling stations to relieve residual pressures**

- ≡ For all gases (N<sub>2</sub>, Ar, O<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>, He etc.)
- ≡ Cleaned free of oil and grease
- ≡ Baffle plate as wall protection
- ≡ Mounting bracket with vibration dampers (protection against vibrations and noise transmission)
- ≡ On request with rain cover
- ≡ Connections: Mounting racks for installation on flat roofs or according to customer requirements

### **Expansion silencer for CO<sub>2</sub> (gaseous and liquid)**

- ≡ Relief of filling hoses on tankers
- ≡ Discharging the gas phase from storage tanks
- ≡ Relief of pipes
- ≡ Measurement report from the employers' liability insurance association on noise reduction is available

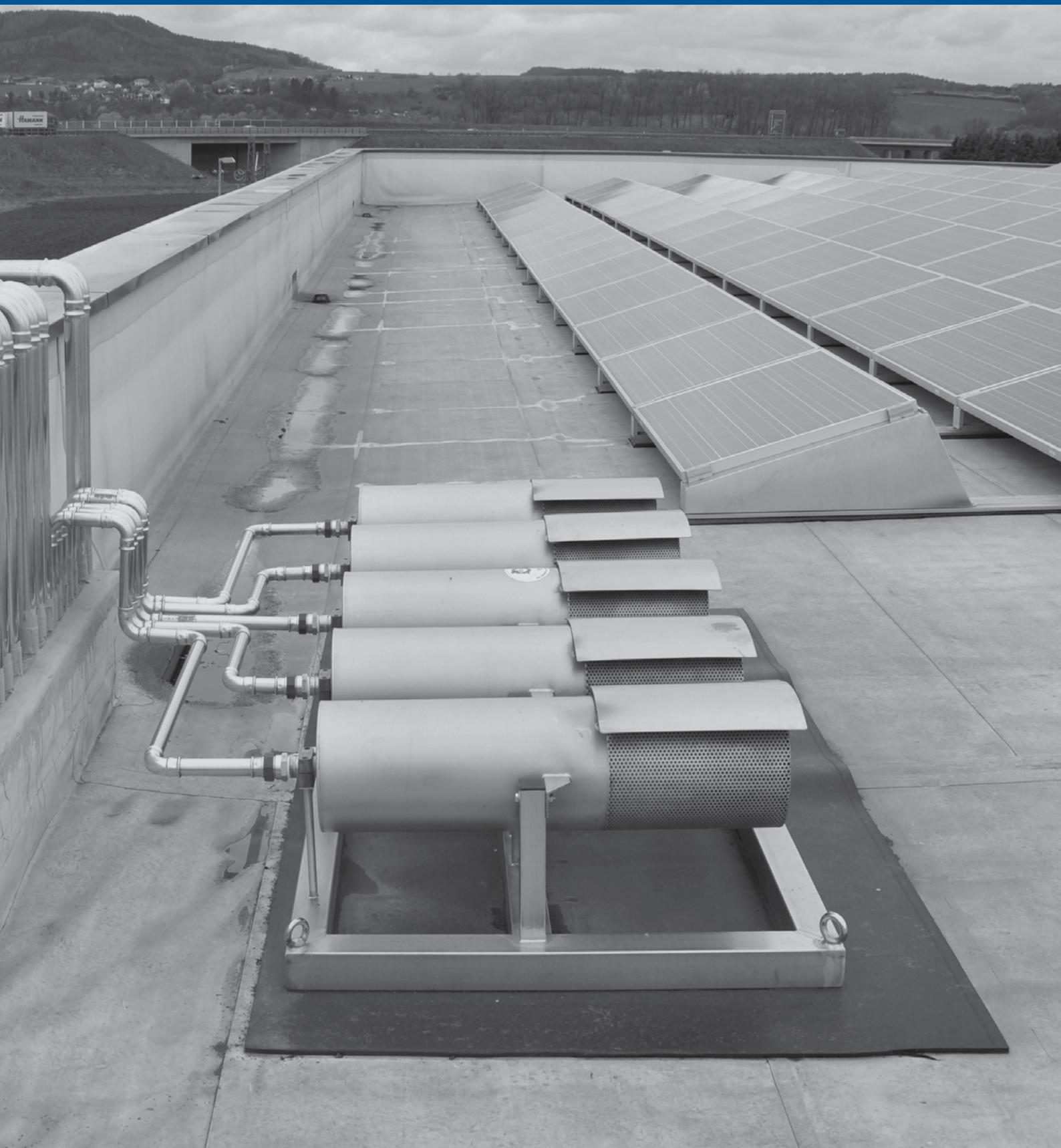
**Silencer rack for flat  
roof mounting**



**SILENCERS | 03**

PRESSURE-RESISTANT  
AND LOW-NOISE

 **THEISEN**  
SMART SOLUTIONS

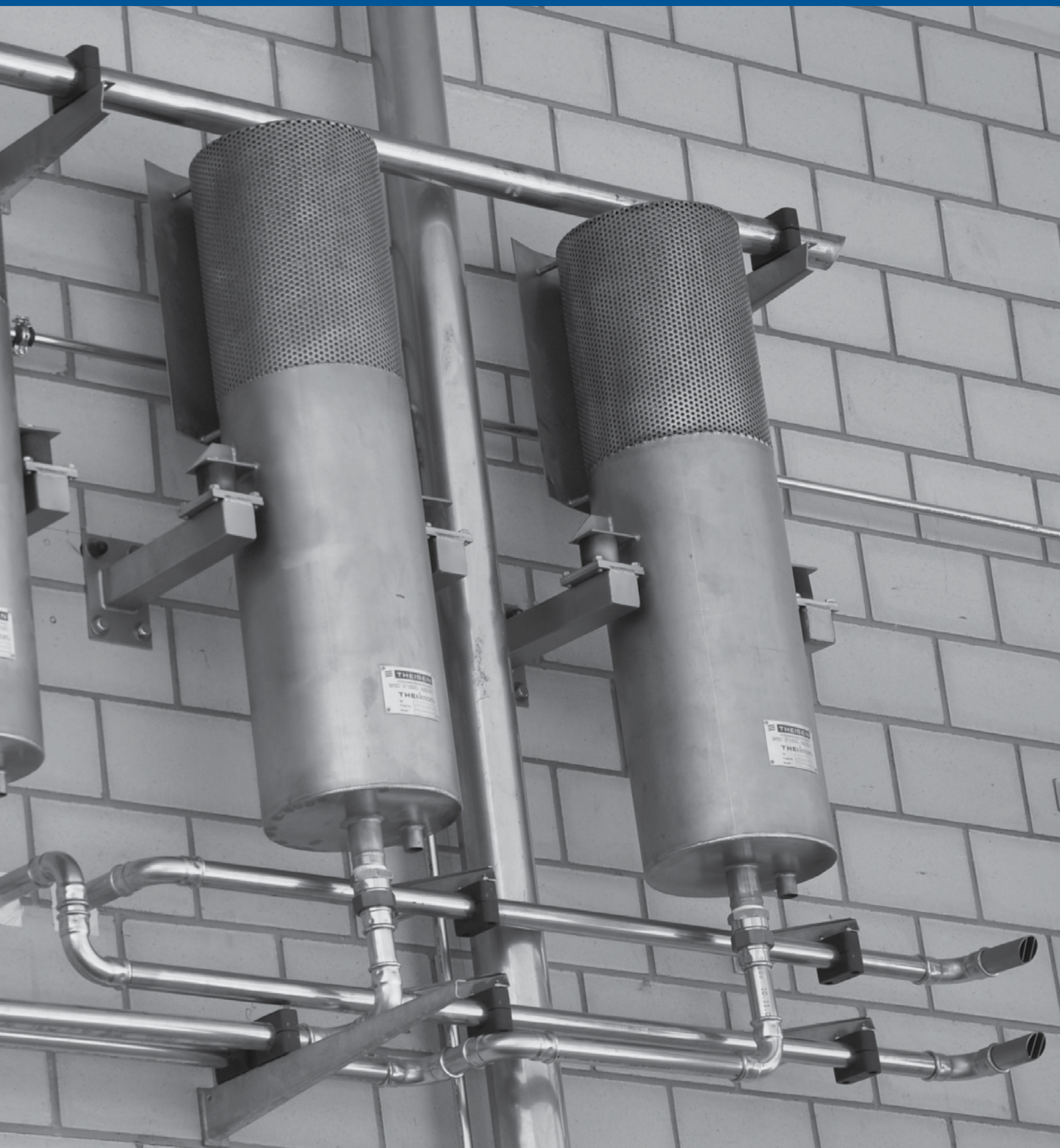




Silencers with bracket and  
vibration dampers for wall mounting











### **Silencer for pressure reducing regulator on storage tank**

Noise pollution often occurs at LIN/LOX/LAR/LCO<sub>2</sub> storage tanks in the vicinity of residential areas or office buildings.

Our silencers enable noise emissions to be reduced significantly with little effort.

### **Technical details and special features**

- ≡ Suitable for cryogenic temperatures
- ≡ Connection according to customer requirements (metallic sealing, clamping ring system, soldered nozzle, sleeve, nipple, etc.)
- ≡ Various sizes available



Heated collecting vessel for forced  
evaporation of CO<sub>2</sub> snow



## Collecting vessel for CO<sub>2</sub> snow

CO<sub>2</sub> snow resulting from the relief of hoses and pipes can lead to impairment of work processes if large quantities are involved.

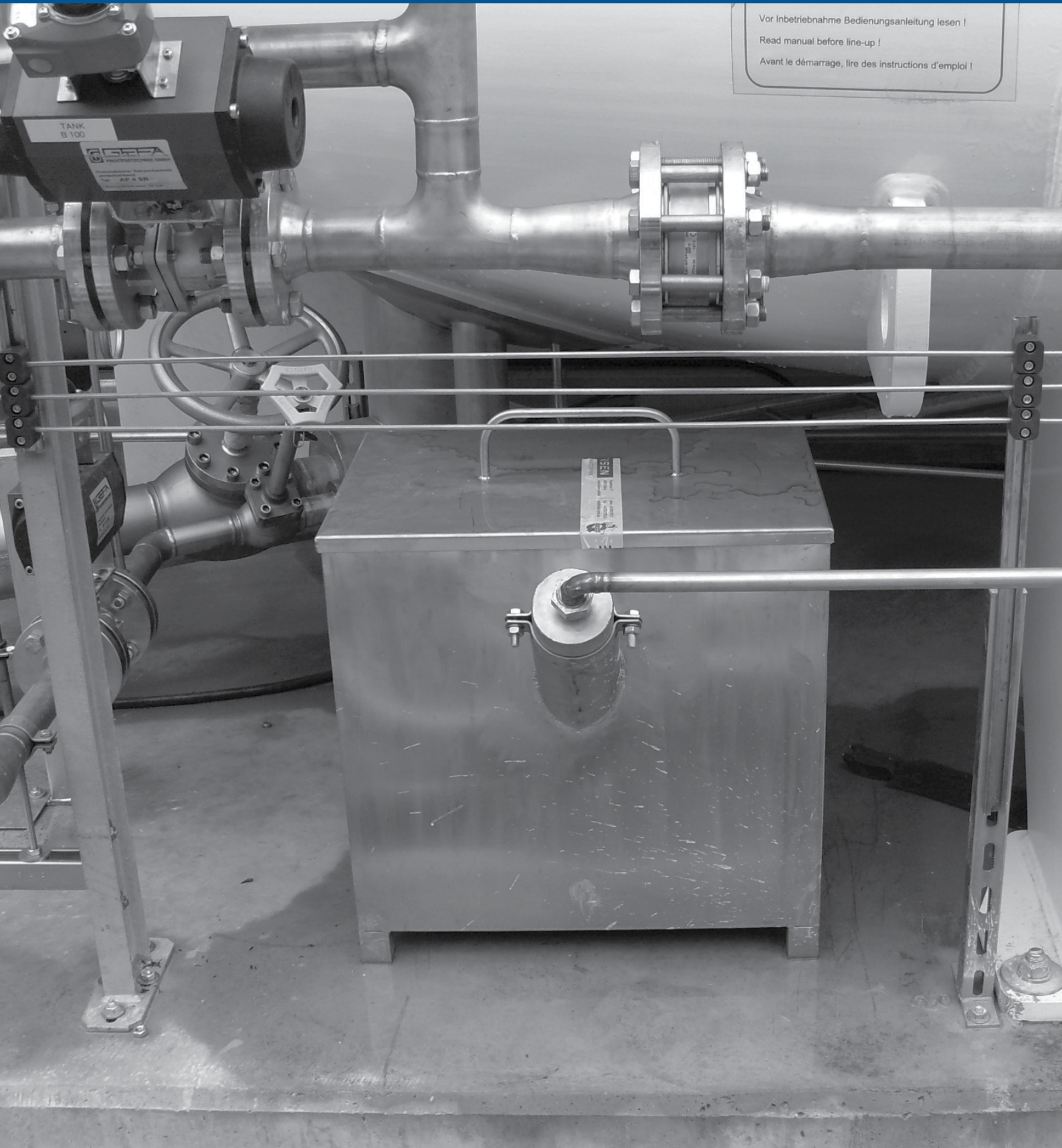
We provide the option for controlled collection via a collecting vessel – plus targeted evaporation with the heated version.

## Technical details and special features

- ≡ Snow is fed into the box via the silencer and automatically evaporated by means of a heating rod
- ≡ The heating rod comes with safety temperature limiter and temperature controller. The switching temperatures can thus be freely selected
- ≡ Power 6kW or according to customer requirements

Collecting vessel for  
CO<sub>2</sub> trailer relief





### Other silencers:

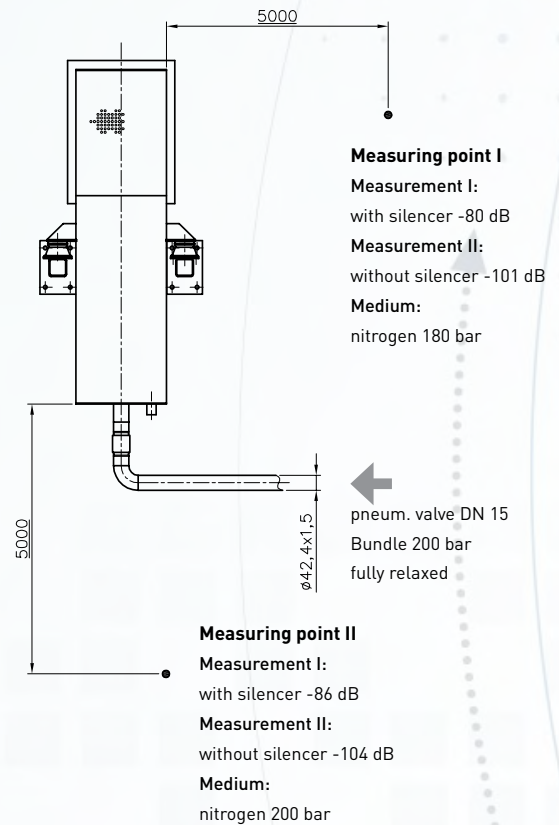
- ≡ Silencer for H<sub>2</sub> for trailer relief
- ≡ Pressure relief at storage tanks
- ≡ Baffle plate as wall protection
- ≡ Relief of storage vessels for tank inspection
- ≡ Relief of high-pressure sintering plants
- ≡ Relief of large volume flows in the low pressure range
- ≡ For direct mounting on compressed gas bundles

### Materials:

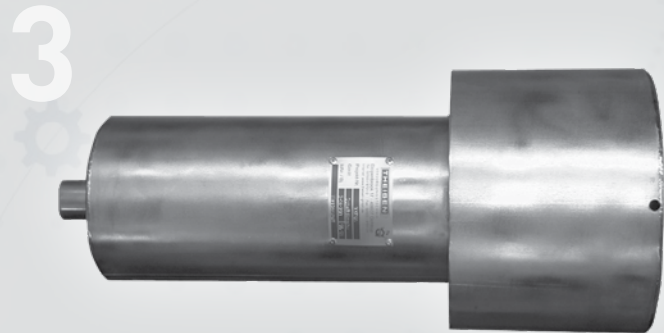
- ≡ Stainless steel
- ≡ Copper / Brass

### Accessories:

- ≡ Rain cover
- ≡ Wall brackets or stand bracket
- ≡ Collection box for CO<sub>2</sub> dry ice





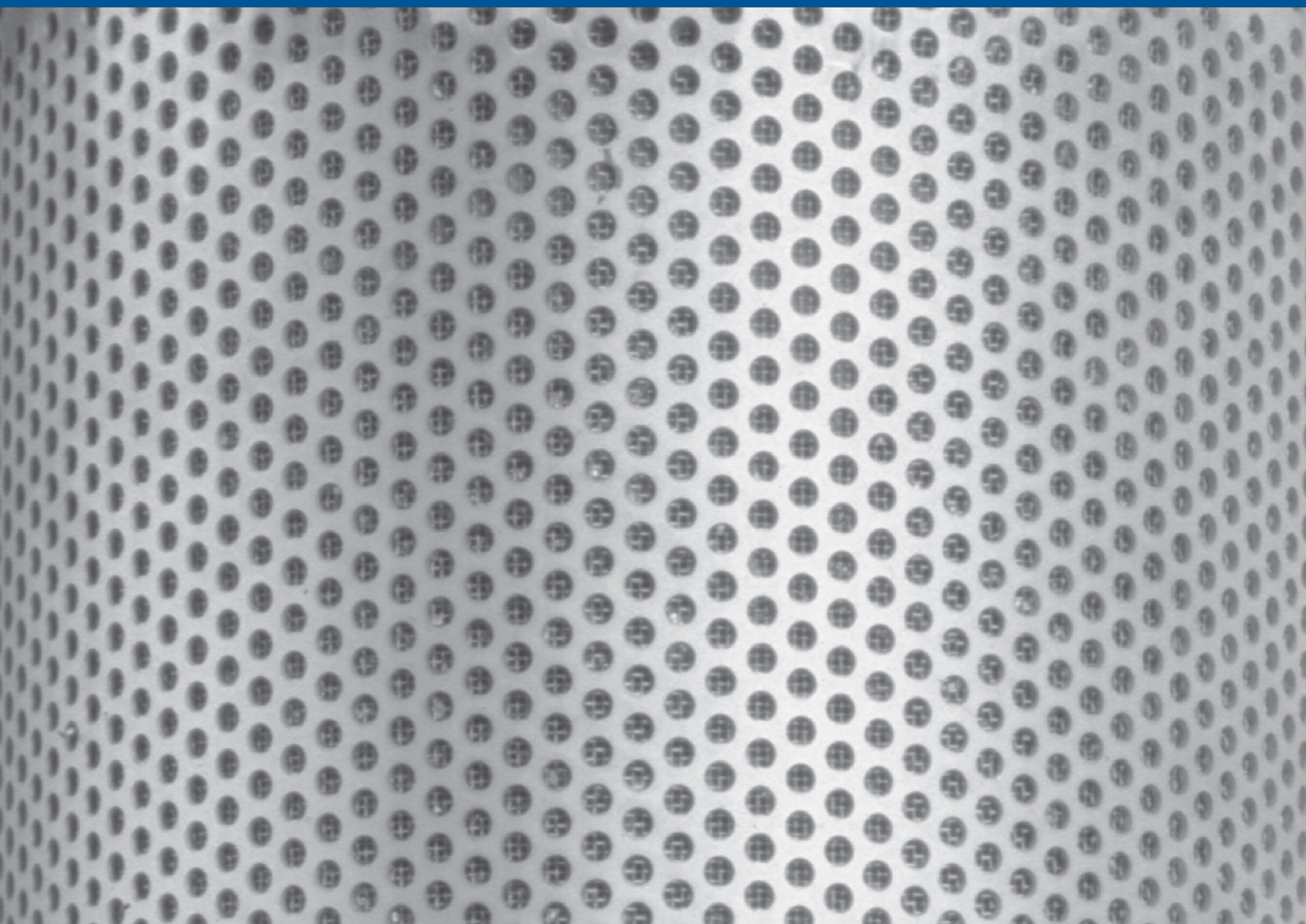


- 1 Silencer DN 150 CO<sub>2</sub> liquid/gaseous**  
for trailer hose relief, version with stainless steel clamp
- 2 Silencer DN 80 CO<sub>2</sub> liquid/gaseous** for filling hose  
pressure relief, with handle
- 3 Silencer H<sub>2</sub>**  
for trailer relief, version with protection cover
- 4 Silencer for exhaust gas**  
Capacity up to 8,000 Nm<sup>3</sup>/h
- 5 Relief silencer made of copper / brass**  
for filling systems Connection 1 1/4"



SMART SOLUTIONS

Pressure-resistant and low-noise



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