



problem  
analysis  
solution

kommu...  
inspiration  
zusammen...  
resulte...  
defin...  
profi planu...  
gen arbe...

Entwick...  
zielstrebigke...  
schafft  
leistung  
Maßnahmen

## Pressure measurement on railway tank wagons



### Application:

## Bourdon tube pressure gauges for pressure monitoring on tank wagons for powdery goods

Deutsche Bahn AG, for manufacturers of rail cars, shipping companies (e.g. chemical industry)

Tank wagons that transport powdery goods belong to the special purpose wagons. These are normally equipped with a pressure gauge for pressure monitoring.



### The problem:

Tank wagons that transport powdery goods have to be monitored on varying pressure ratios. During test operation (24 h) the pressure range lies at 1.0 bar. During transport, the pressure must lie at 0.5 bar. Unloading takes place at a pressure of 2.5 bar, which may not be exceeded.

### Our solution:

In order to accurately monitor these values, we have "spread" our pressure gauge. This means that in a range of 0 – 1.4 bar over 120°, we are able to read the values precisely. The unloading pressure lies at 2.5 bar. A red mark indicates the unloading pressure. This pressure may not be exceeded.

### With special scale: RChgG 63 – 1 rmFr

- ◆ 0 – 4 bar
- ◆ Case with crimped-on ring stainless steel
- ◆ Connection G $\frac{1}{4}$  B
- ◆ With front flange for panel mounting
- ◆ Acrylic glass
- ◆ Movement stainless steel
- ◆ Accuracy class 1.6
- ◆ Special scale for varying pressure ratios:
  - ◆ for test operation 1 bar
  - ◆ for transport 0.5 bar
  - ◆ for unloading 2.5 bar

