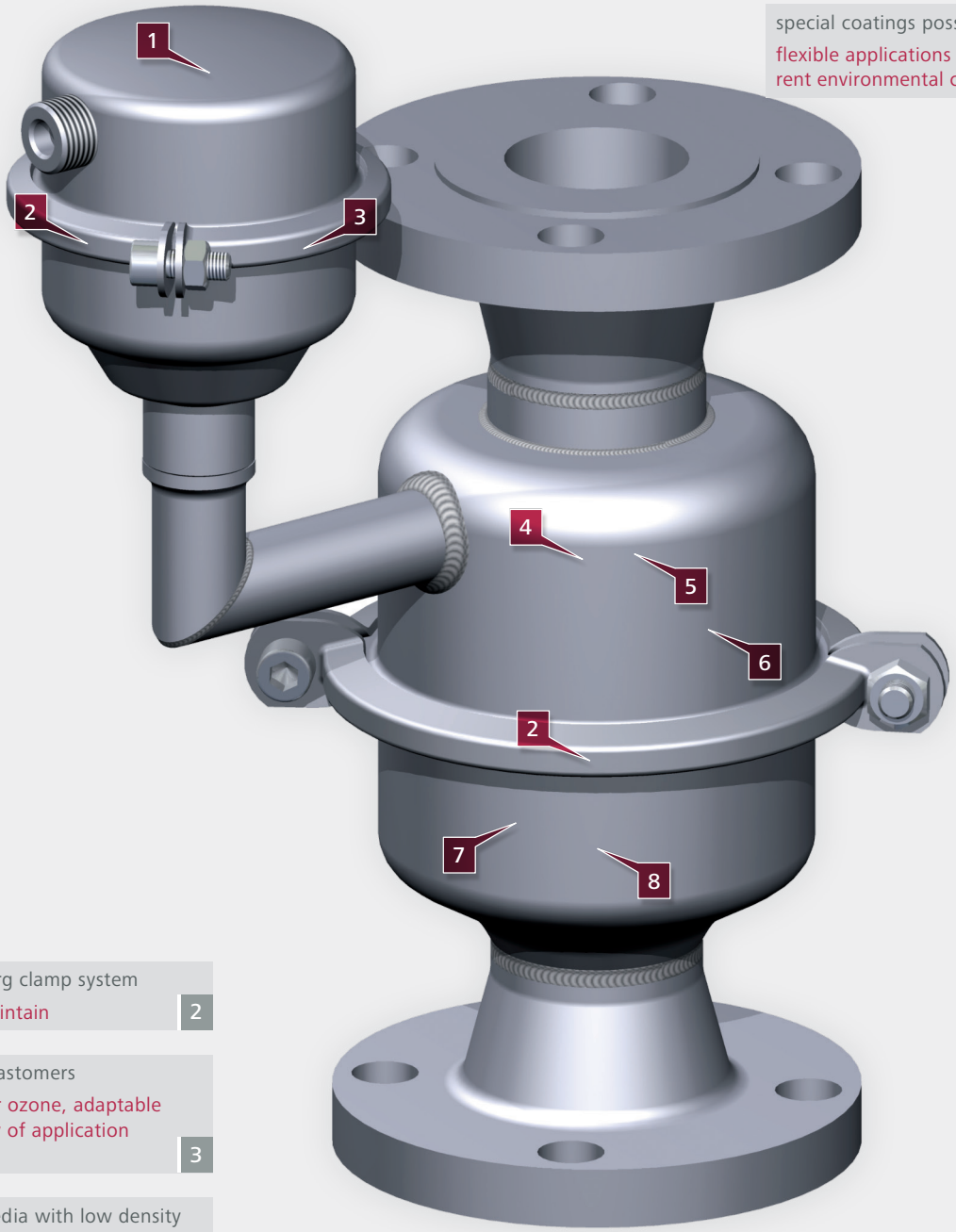
Bleeding and Venting Valve

available in special materials
also suitable for extreme demands 1

compact design
minimum space required, easy transport 6

deep-drawn version possible
good price-performance ratio 7

special coatings possible
flexible applications in different environmental conditions 8



Mankenberg clamp system
easy-to-maintain 2

optional elastomers
suitable for ozone, adaptable to a variety of application conditions 3

also for media with low density
may be used in the petrochemical industry 4

sturdy valve mechanism
low maintenance 5

Bleeding and Venting Valve for highest Flow Rates EB 6.54

Bleeding and Venting Valves in Action

MANKENBERG

Valve for highest Flow Rates — EB 6.54

suitable for high operational pressures | large bleed air volumes during start-up, large vent air volumes during discharge | bleeding under pressure owing to adapted continuous venting valve | avoids cavitation peaks | suitable for all liquid media, also for petrol, oil and chemicals | body made of steel, CrNiMo-steel, massive welded construction, extremely sturdy, also available in seawater-resistant materials | optimal triple functionality

DN	25 - 300	PN	6 - 40
G	1 - 2	T	130 °C
P	0.3 - 40 bar	Q	18,550 Nm^3/h

HIGH GRADE

Ventilation and Bleeding of Pipelines for an Oil Tank Depot in Oman

Crude oils and any derived petrochemical products form the basis of our modern comfort-oriented civilisation. The transport of such normally liquid products presents a logistic challenge which must not be underestimated. After all, around 62% of the crude oil is transported on board of crude oil vessels from the oil production sites, that often are geographically most remote, to the consumers in the industrialised countries.

Loading and unloading of tankers is done in so-called tank terminals. Various products are put in interim storage in sufficiently sized large tanks, before they are loaded onto ships, trains or trucks for onward transport. High-performance pumps convey the crude oil on board to ensure that the times that the ships are in berth are kept to a minimum. In many cases pigs are used to force the contents of the pipeline out of the pipe end for safe discharge. For this purpose, nitrogen is normally used to prevent the formation of explosive mixtures. During start-up of the pipeline, the nitrogen must be discharged out of the pipeline to prevent pressure losses.

In addition, the gaskets of floating tank covers may be damaged owing to gas infiltration, which entails very time-consuming and costly repairs. The Mankenberg bleeding and venting valve EB 6.54 bleeds the pipeline during start-up and operation quickly and completely automatically. Once correctly selected and arranged, the bleeding and venting valve will simultaneously increase the efficiency (through shorter loading times) and the safety of the plant (avoiding pressure surges in pipelines and tanks).