Gas Separator

MANKENBERG

CrNiMo steel (316L), deep-drawn, corrosion-resistant, lightweight and compact, also available in special materials

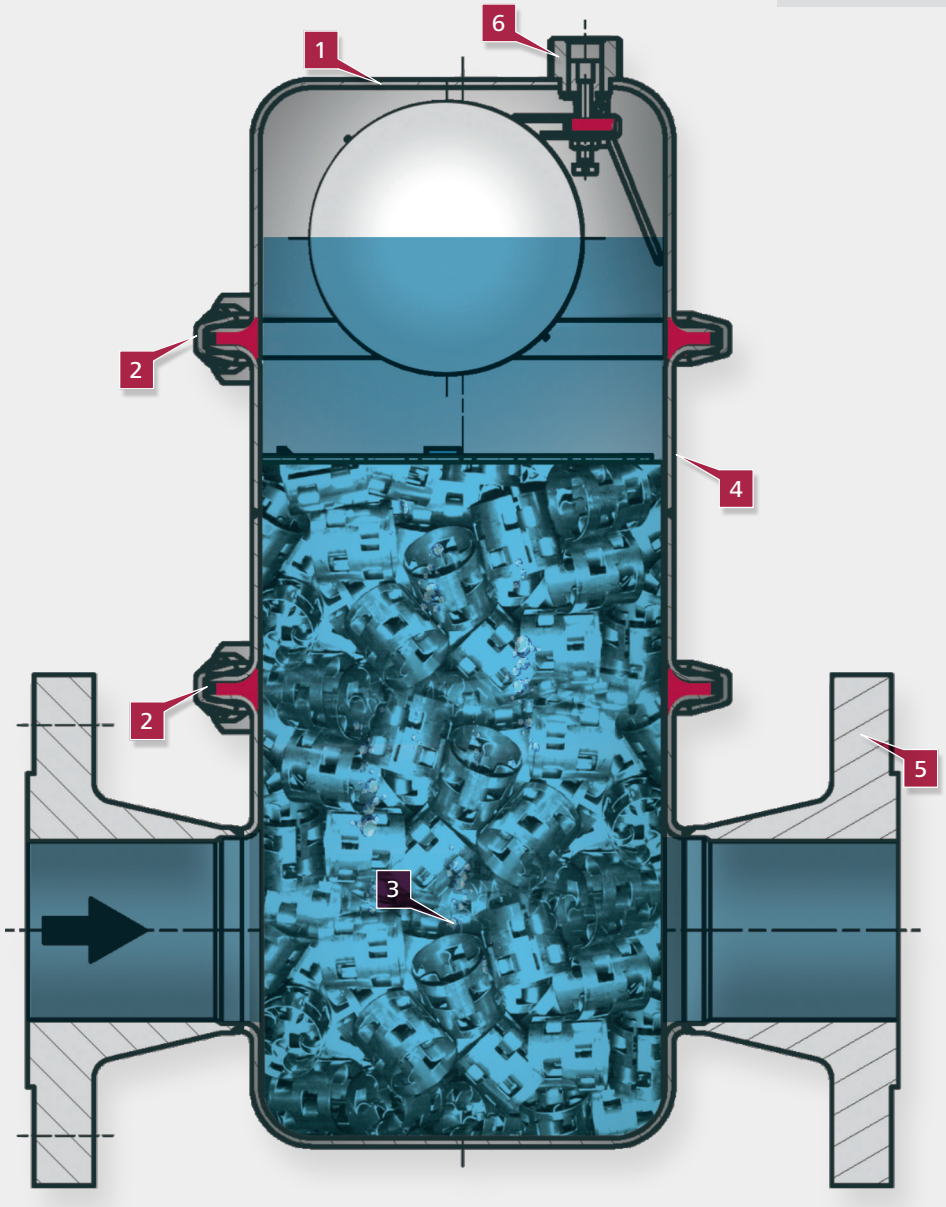
long operational lifespan, easy installation, minimum space required 1

body surface RA ≤ 1.6 µm

easy-to-clean 4

a wide variety of connection types: DIN, ANSI or aseptic flanges, weld-on ends ...

no adapters or fitting pieces required 5



Mankenberg clamp system

easy-to-maintain 2

special packed bed with fillers separates the gas from the liquid 3

Special Feature

integrated bleeding valve

automatical drain, no medium loss 6

Gas Separator with integrated Bleeding/Venting Valve AS 5

Gas Separator in Action

MANKENBERG

Gas Separator with integrated Bleeding/Venting Valve — AS 5

of straight design, with specially shaped packed bed for effective gas separation | suitable for nearly all liquids | completely made of deep-drawn CrNiMo steel (316L) – body surface finish Ra ≤ 1.6 µm | easy-to-maintain owing to the clamp system | corrosion resistant, very lightweight and compact | long operational lifespan, manageable installation – highest effectiveness with compact design

DN	50	PN	16
		T	130 °C
P	0 - 16 bar		

HIGH GRADE

Separation of Air or Gas Bubbles from the Fluid

When flowing through pipelines, liquids usually convey air or gas bubbles. The formation of bubbles may be detrimental to the customer's plant when it comes to plant control or flow measurement may be incorrect or vibrations may be caused. Collapsing bubbles can also occasion cavitation erosion, which is highly destructive. Pressures and flow velocities oscillate owing to the implosion of the bubbles. This accelerates removal of the material and pitting-type corrosion can form in pipelines and components. This is why degassing must be continuously performed to increase the operational lifespan of the various components and the efficiency of the entire plant.

The Mankenberg gas separator AS 5 is precisely tailored to this problem. It efficiently discharges the gas carried along with the fluid to be transported. In a fuel transshipment facility, the valve automatically separates and discharges the air or gas. In so doing, it uses the principle of coalescence in which micro gas bubbles merge to larger-sized bubbles when they touch and/or cling to a foreign particle.

The AS 5 is a compact straight-way valve with integrated bleeding valve. Pipelines often are installed without dome. Therefore, the AS 5 assumes the function of the pipe expansion. When the fluid flushes the fillers, the special packed bed ensures that the gases contained in the fluid will remain stuck to the fillers in the form of micro bubbles and form larger gas bubbles. The fillers have a contact surface of abt. 2m². Their special form combines high throughput with high separation efficiency coupled with low pressure drop.

Thanks to the large valve body and the integrated bleeding and venting valve, the air/gas bubbles are discharged from the system without any fluid loss. The AS 5 is very lightweight and compact measuring only 220 mm x 300 mm and weighing not more than abt. 11 kg.