



Liberator™ Vortex Gas Separators

When too much free gas is introduced into an ESP's impeller, it has the potential to block well fluid entry, causing unstable production or even restricting flow completely by "gas locking the pump." High gas applications may require the use of a gas separator.

The proven Liberator™ vortex gas separator design is available to address gassy applications. Gas interference can cause the ESP equipment to overheat or even fail. The gas separator utilizes centrifugal forces to separate high-density fluids (oil and water) from gas. The result allows for the ESP to produce the high-density fluids up the tubing stream while the gas is then produced up the annulus. In the event that a single rotary gas separator does not completely separate the gas, a tandem gas separator may be utilized to further separate gas from the production stream. Liberator gas separators are also constructed of high-grade stainless steel and with tungsten carbide bearing radial support as standard.



Gas Separator Technical Information

Description	Housing Diameter		Shaft Diameter		Standard Shaft BHP Limitations		High-Strength Shaft BHP Limitations	
	in.	mm	in.	mm	Hp	KW	Hp	KW
338, Vortex, Abrasion Resistant, Monel® Shaft, Carbon Steel, Proprietary Positive Seal Elastomers, Monel Bolts	3.38	85.85	0.6875	17.42	125	93	200	149
400, Vortex, Abrasion Resistant, Monel Shaft, Stainless Steel, Proprietary Positive Seal Elastomers, Monel Bolts	4	101.6	0.875	22.2	256	191	410	306
513, Vortex, Abrasion Resistant, Monel Shaft, Stainless Steel, Proprietary Positive Seal Elastomers, Monel Bolts	5.13	130.3	1.1875	30.2	637	475	1,019	760

Monel® is a registered trademark of Special Metals Corporation.

Liberator™ Gas Separator

Description	Housing Diameter		Shaft Diameter	
	in.	mm	in.	mm
338, Vortex, Abrasion Resistant, Monel® Shaft, Carbon Steel, Proprietary Positive Seal Elastomers, Monel Bolts	2.7	0.8	43	19.5
400, Vortex, Abrasion Resistant, Monel Shaft, Stainless Steel, Proprietary Positive Seal Elastomers, Monel Bolts	2.7	0.8	55	24.9
513, Vortex, Abrasion Resistant, Monel Shaft, Stainless Steel, Proprietary Positive Seal Elastomers, Monel Bolts	3.9	1.2	154	69.9
338, Vortex, Abrasion Resistant, Tandem, Monel Shaft, Proprietary Positive Seal Elastomers, Monel Bolts	4.7	1.4	137	62.1
400, Vortex, Abrasion Resistant, Tandem, Stainless Steel, High-Strength Shaft, Proprietary Positive Seal Elastomers, Monel Bolts	4.7	1.4	137	62.1
513, Vortex, Abrasion Resistant, Tandem, Stainless Steel, High-Strength Shaft, Proprietary Positive Seal Elastomers, Monel Bolts	7	2.1	304	137.9

Standard features: Carbon steel head, base, and housing; Monel® K-500 shaft

Optional features: Stainless Steel, corrosion-resistant Inconel® 718 shaft (HSS), Screen, Durahard™ coating

Monel® and Inconel® are registered trademarks of Special Metals Corporation.