

Dry Gas Seal Pressure Boosters

EMB Series - 160 bar

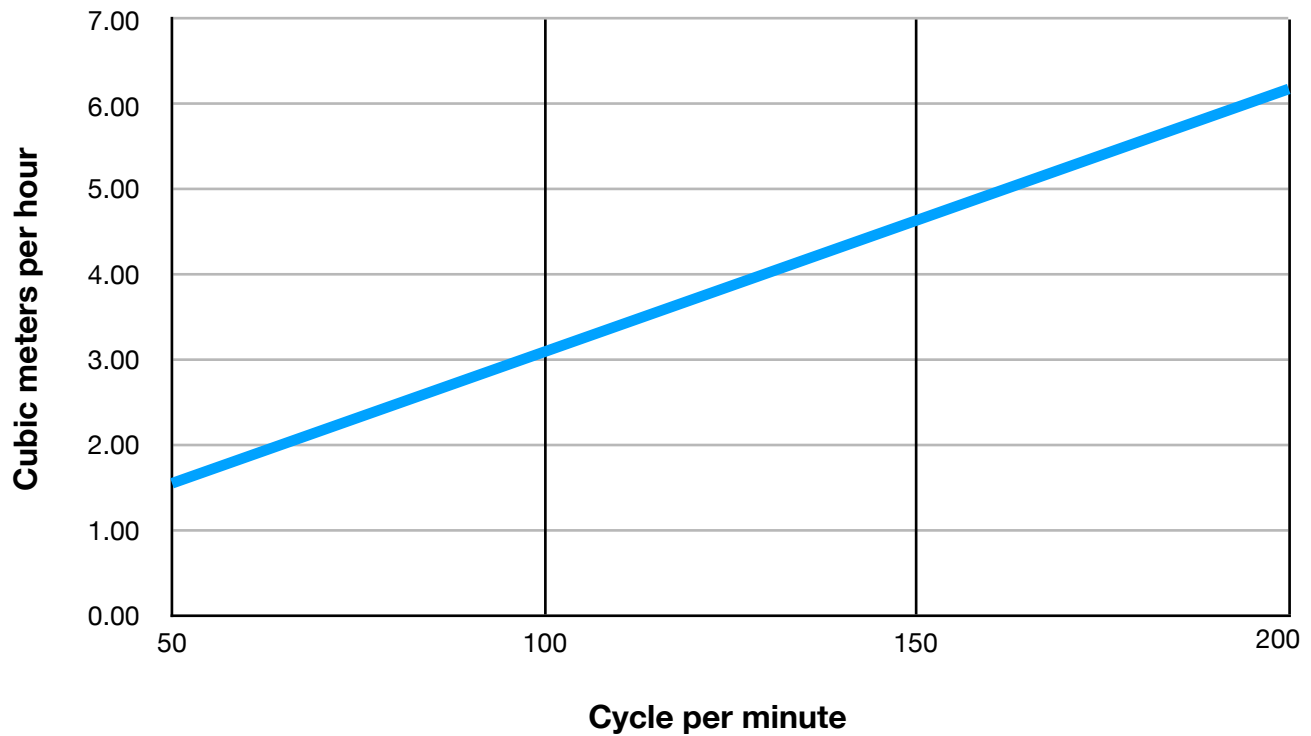


Model Specifications

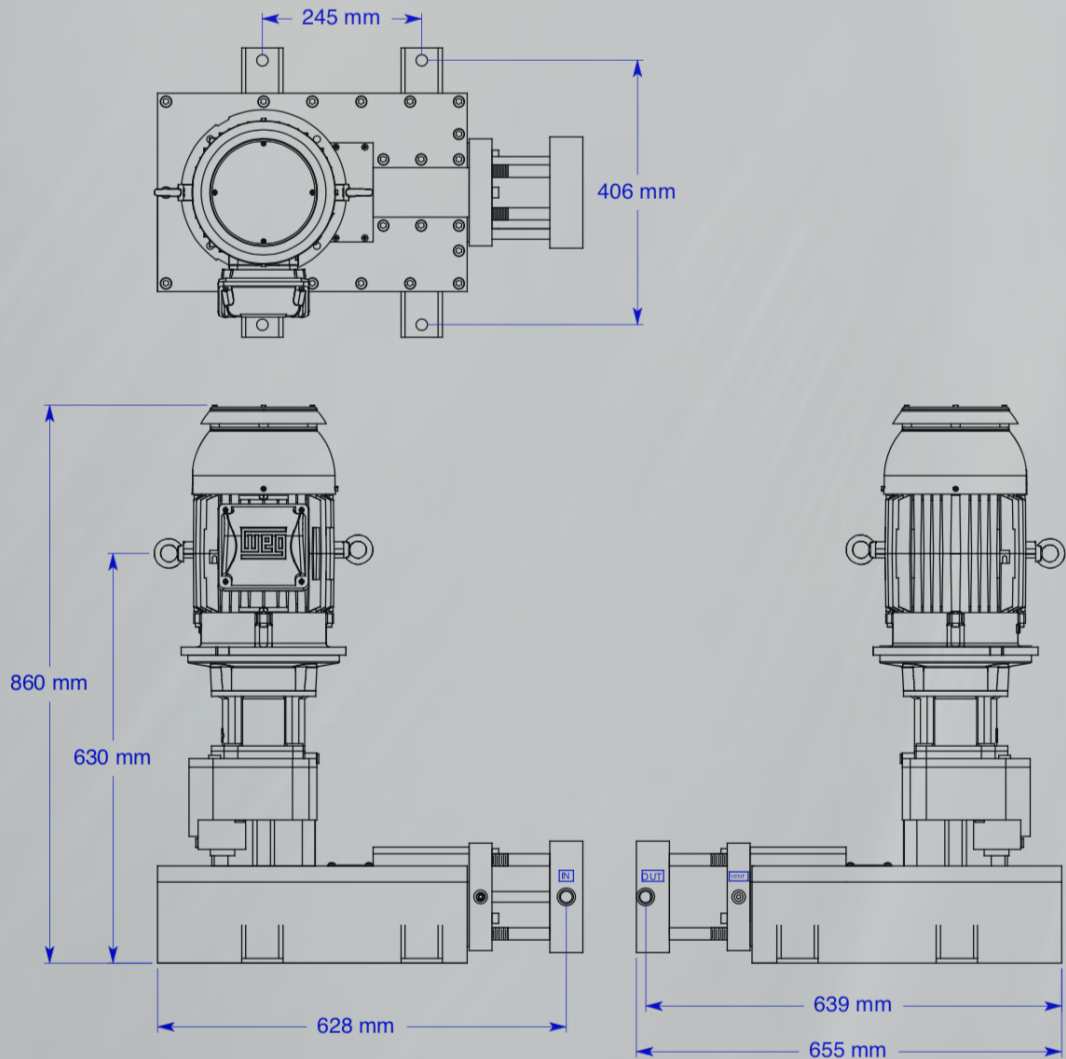
Designed in accordance with the ASME Boiler and Pressure Vessel Code Section VIII, Div. 1 (not stamped). The gas wetted components comply with NACE MR0175/ISO15156-2 and MR0103-2010. The motor hazardous area specification is NEMA Class I, Div. 2, Groups C & D.

Maximum Gas Discharge Pressure	16 MPa
Maximum Gas Discharge Temperature	200 °C
Maximum Pressure Boost	300 KPa
Variable Speed Motor Maximum Power	4 kw
Motor Voltage / Frequency	380V / 50Hz
Booster Cycle Rate	75-194 cpm
Maximum gas displacement flowrate	6 m ³ /hr
Weight	~111 kg
Inlet/Discharge Ports	1/2 NPT
Gas Wetted Booster Components	316L SS

Displacement Flowrate in cubic meters per hour

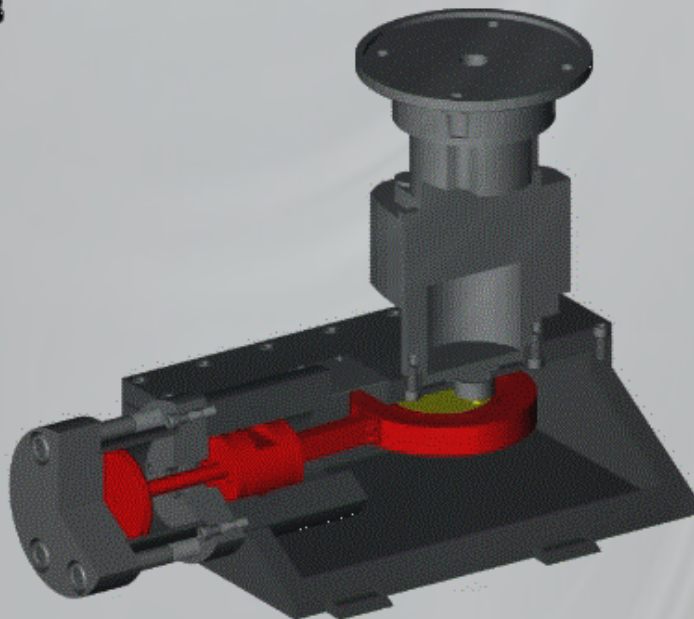


General Arrangement Drawing



Booster can be secured with M16 or 5/8" screws

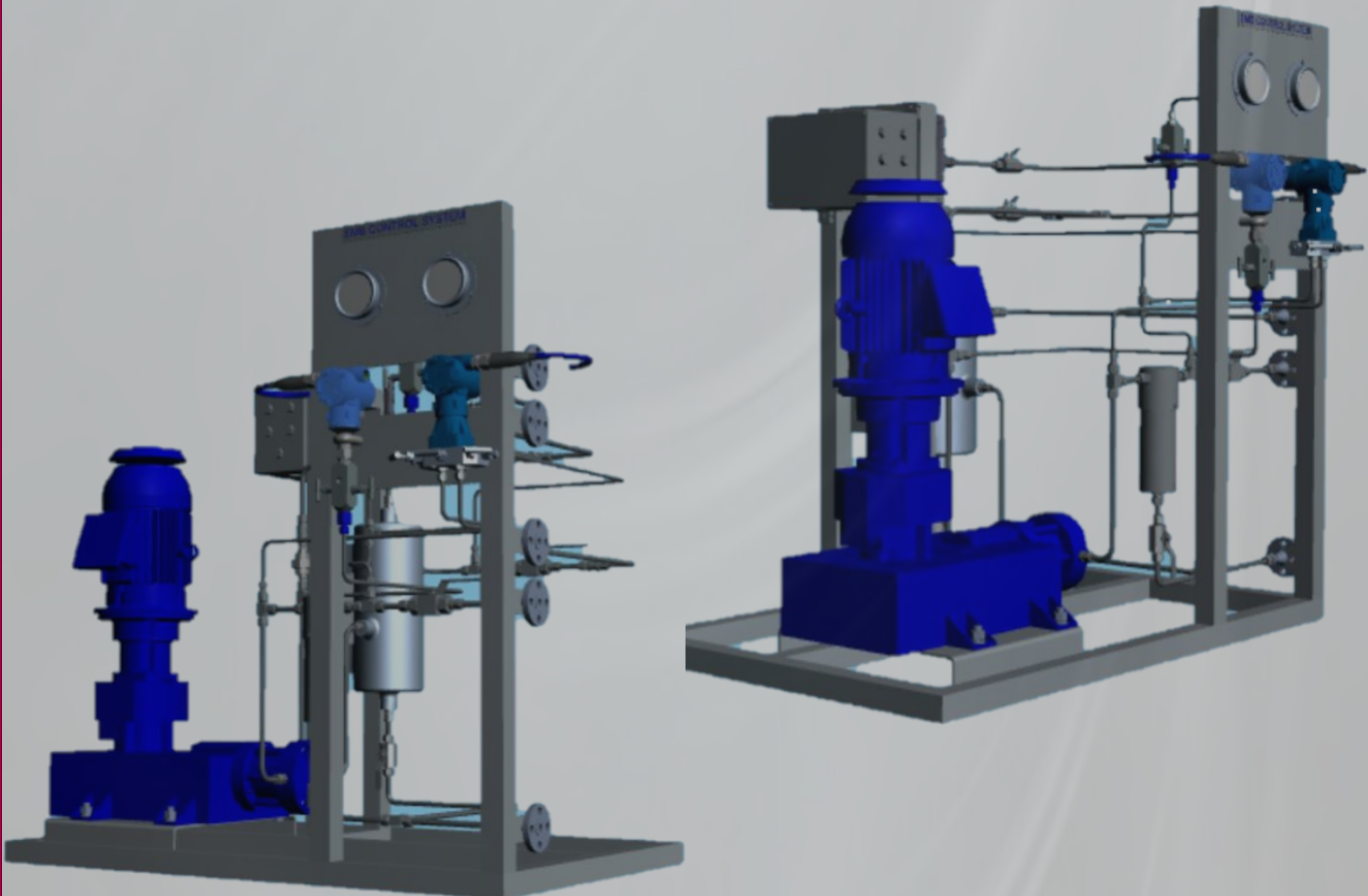
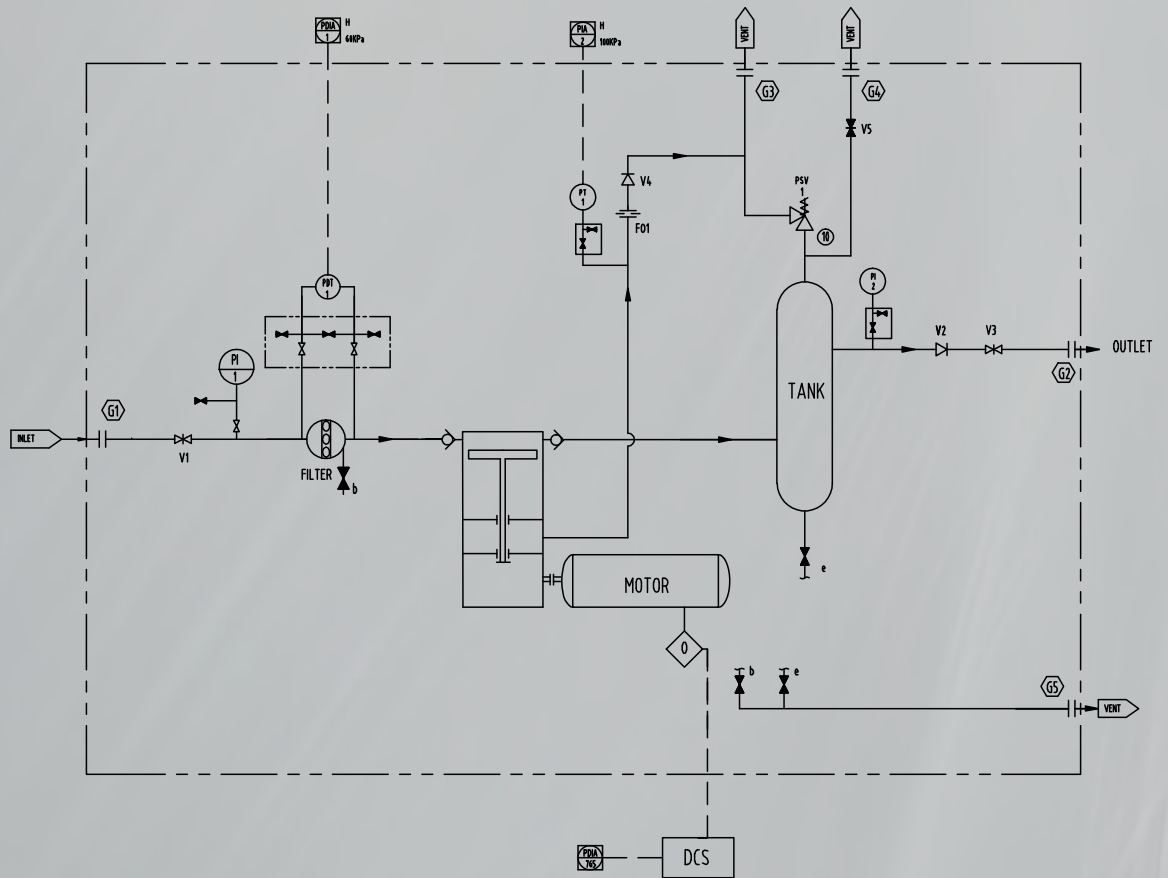
EMB



Booster Comparison Table

	EMB	CENTRIFUGAL REGENERATIVE TURBINE	Air-Driven Booster
Minimum Cost	X	2.5 X	0.5 X
Drive	Electric motor	Electric motor	Pneumatic cylinder
Pressure booster	Reciprocating piston	Regenerative turbine	Reciprocating piston
Displacement flow	Unaffected by supply pressure	Inadequate at low supply pressure	Unaffected by supply pressure
High pressure design	Simple and economical	Difficult and expensive	Simple and economical
Flowrate control	Simple	Simple	Difficult
Energy Efficiency	Above 90%	Below 20%	Below 30%
24/7 operation	Yes	Yes	Yes
Typical boost pressure	Low but adequate	Low but adequate	High if desired
Gas temperature increase	Negligible	Substantial	Negligible
Instrument air requirement	No	No	Yes
Lubrication requirement	No	No	No
Maintenance interval	5,000-9000 hours	17,000 hours	4,000-6000 hours
Field repairable	Yes	No	Yes
Difficulty of repair	Low	High	Medium
Cost of repair	Low	Very high	Low
Rod seal leakage	< 20 ml/min	None	< 50 ml/min
Weight	Medium	High	Low
Size	Large	Large	Small
Noise	Low	Low	High

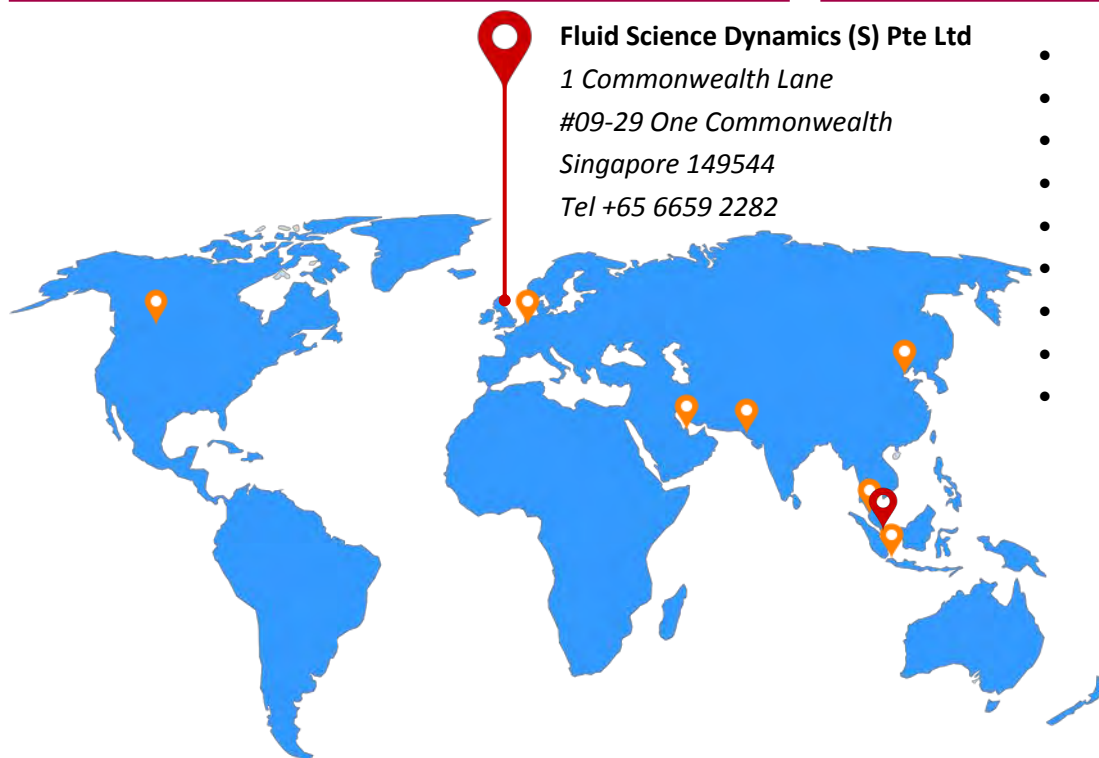
P & ID



LOCATIONS

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