



GAS CONDITIONING SOLUTIONS FOR THE TURBO MACHINERY INDUSTR

# GAS BOOSTER SOLUTIONS



#### The FSD Advantage

The FSD range of Gas Conditioning Gas Boosters are cutting edge, high performance and cost effective solutions, specifically designed and manufactured for the demands of gas conditioning for the protection of dry gas seals.

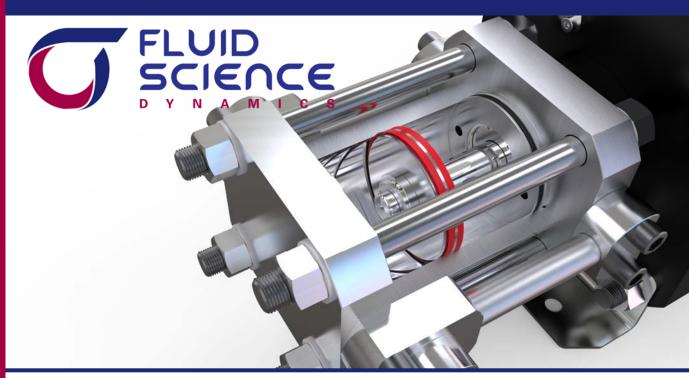
The key design focus has been to utilise the best technologies developed over nearly a decade to provide the highest efficiency, highest output units available to the turbo machinery market today.

## Intelligent Design

Built on proven technology, the FSD range of Gas Boosters offers the most cost effective, high performance solution to replace the need for multiple conventional boosters.

*This cost effective performance benefit means reduced cost, reduced system integration and lower running loads for longer operating life.* 





#### **Ultra Performance**

The FSD gas compression configuration utilises a gas chamber on both the inboard and outboard sides of the gas compression piston. This means compressed gas is displaced in both directions of piston movement at all times.

By using dual opposing gas compression sections, in one cycle four volumes of gas are displaced at moderate compression ratios but at high settle out pressures.

In addition to this huge performance advantage, the FSD boosters are designed with multiple process seals with monitoring functions to capture and detect leakage from the process piston seals. This allows predictive monitoring, planned maintenance and reliable operation when you need it.

#### **Comparative Performance**

The performance gain of the FSD Booster range is obvious when compared to competitive alternatives. Considering a typical gas conditioning operating scenario, the graph below illustrates the performance gain offered by FSD.



<sup>\*</sup> Model Featured—FSD S25-T115 Ultra Flow Booster, Typical 120 bar Settle out

### FLUID SCIENCE D Y N A M I C S

## **Efficient Performance**

The FSD air drive system is super efficient and offers the facility for remote stroke monitoring, remote on/off pilot control and is a fully captured system, meaning any drive gas employed can be fully captured and directed to a safe vent system where required.



SINGLE END COMPRESSOR MODELS



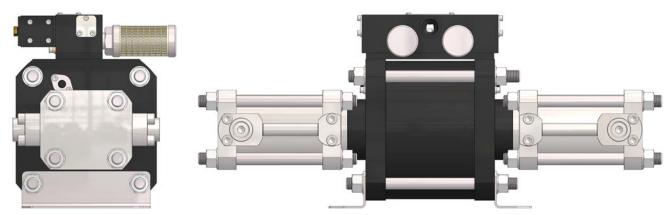
For medium flow rates, the single gas end configuration offers high boost pressures and medium flows up to 300 bar (model dependant). Although targeted at moderate boost pressure applications, the flow performance of this form of booster is far beyond all competitive alternatives.

DRIVE TYPE	S20 DRIVE				S25 DRIVE			
GAS END TYPE (SINGLE)	T76	T90	T103	T115	T76	T90	T103	T115
Working Pressure—bar	300	240	150	120	300	240	150	120
Displacement/Cycle—Litre	0.86	1.22	1.62	2.03	0.86	1.22	1.62	2.03
Boost Ratio	7.1	5.1	3.9	3.1	11.1	7.9	6.1	4.9



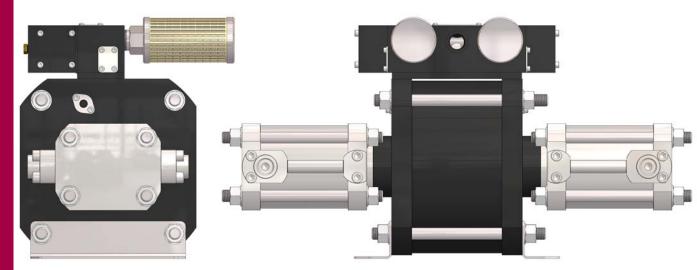


#### HIGH FLOW COMPRESSOR MODELS



For high flow rates, the S20 drive coupled with dual gas ends offers super high performance output. With configurations for operation up to 300 bar (model dependant), this model range represents the peak of high performance gas boosters.

#### ULTRA FLOW COMPRESSOR MODELS



For ultra high flow rates, the S25 drive coupled with dual gas ends offers the peak solution to ultra high performance output. With configurations for operation up to 300 bar (model dependant), this model range represents the pinnacle of ultra performance gas boosters.

DRIVE TYPE	S20 DRIVE				S25 DRIVE			
GAS END TYPE (DUAL)	T76	T90	T103	T115	T76	T90	T103	T115
Working Pressure—bar	300	240	150	120	300	240	150	120
Displacement/Cycle—Litre	1.72	2.45	3.23	4.06	1.72	2.45	3.23	4.06
Boost Ratio	3.7	2.6	2.0	1.6	5.8	4.1	3.1	2.5





#### **Contact Us**

For more information on the FSD Gas Booster Solutions and Gas Conditioning system solutions please contact FSD or our appointed representative.

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