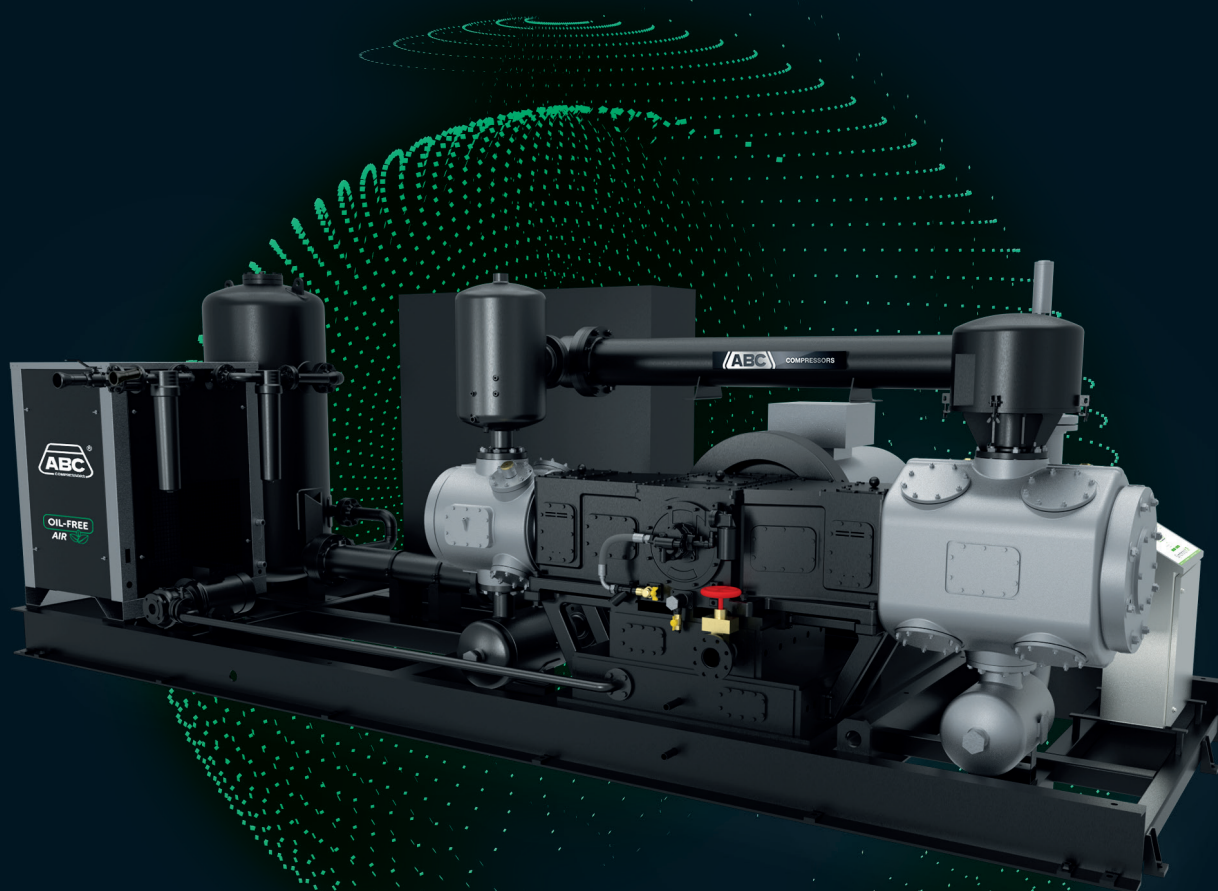




**HORIZON
SYNCHRO**

THE FIRST SYNCHRONOUS PISTON COMPRESSOR

LP



EN

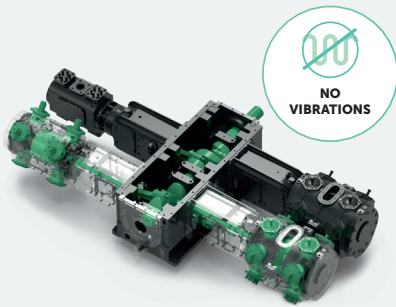
RELIABLE BEYOND LIMITS

THE ONLY OIL-FREE COMPRESSOR THAT COMBINES THE BEST TECHNOLOGICAL FEATURES IN THE MARKET



HORIZONTAL OPPOSED

Balanced forces, NO vibrations

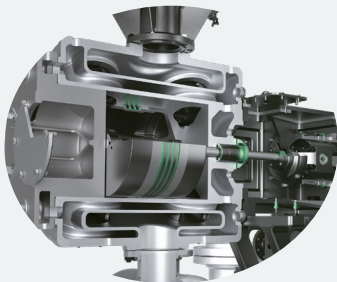


- The cylinders are horizontally opposed, with crankpins displaced by 180°, cancelling out the inertia loads.
- Virtually without vibration.
- **No anti-vibration pads or special foundations are required**, + 2 kg/cm², providing stability of the high pressure air pipes.
- Longer life of mechanical parts as they do not transmit excessive force or produce fatigue on structural parts of the compressor. **20 years machine lifetime.**
- Excellent adaptation to the frequency converter up to 82%, **minimizing unloading scenarios.**
- The compressor and all peripheral components are mounted on a single skid.



DOUBLE ACTING

Robust and efficient design

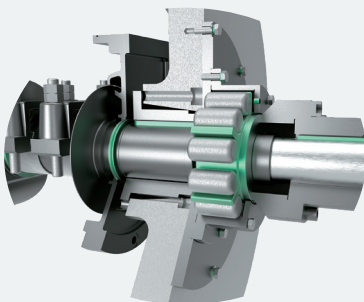


- The double acting cylinders minimize air leaks.
- Less mechanical losses and lower differential pressures.
- Lower operating temperatures in each compressor stage, with less energy consumption.
- Larger valves, durable rings and seals, without premature wear.
- During unloading scenarios, the coolers do not require ventilation, which increases efficiency and decreases energy consumption.
- High performance cooling chambers without valves on the head of the cylinders.
- A minimum of 2 suction/exhaust valves per stage, preventing the machine from stopping in the event of a valve failure.



SYNCHRONOUS DIRECT COUPLED MOTOR

Without transmission loss and increased IE5 efficiency.



- 20% reduction in electrical loss.
- Synchronous system: Motor speed = compressor speed.
- 100% direct coupled motor with 0 transmission losses.
- Quicker and longer lasting shaft alignment.
- Longer motor life with NO radial forces.
- NO belts or gearbox, maintenance free.

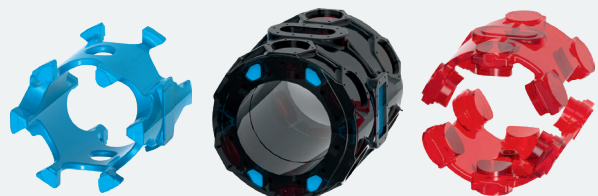
PERFECT VOLUMETRIC DESIGN

Blue

The heat that is generated is immediately eliminated by the water from the chambers to reach the isothermal cycle.

Red

The design of the compression chambers allows a stable and uniform distribution of the air with less charge loss.



HORIZON SYNCHRO

OUR NEW COMPRESSOR RANGE

The future begins
with innovation

HORIZON SYNCHRO born with a mechanical configuration that makes it unique in performance: with an improved efficiency in airflow, better heat transfer and more stability.

Discover the new range of ABC COMPRESSORS with the heart of HORIZON.



RELIABILITY



PERMANENT MAGNET MOTOR



VARIABLE SPEED DRIVE



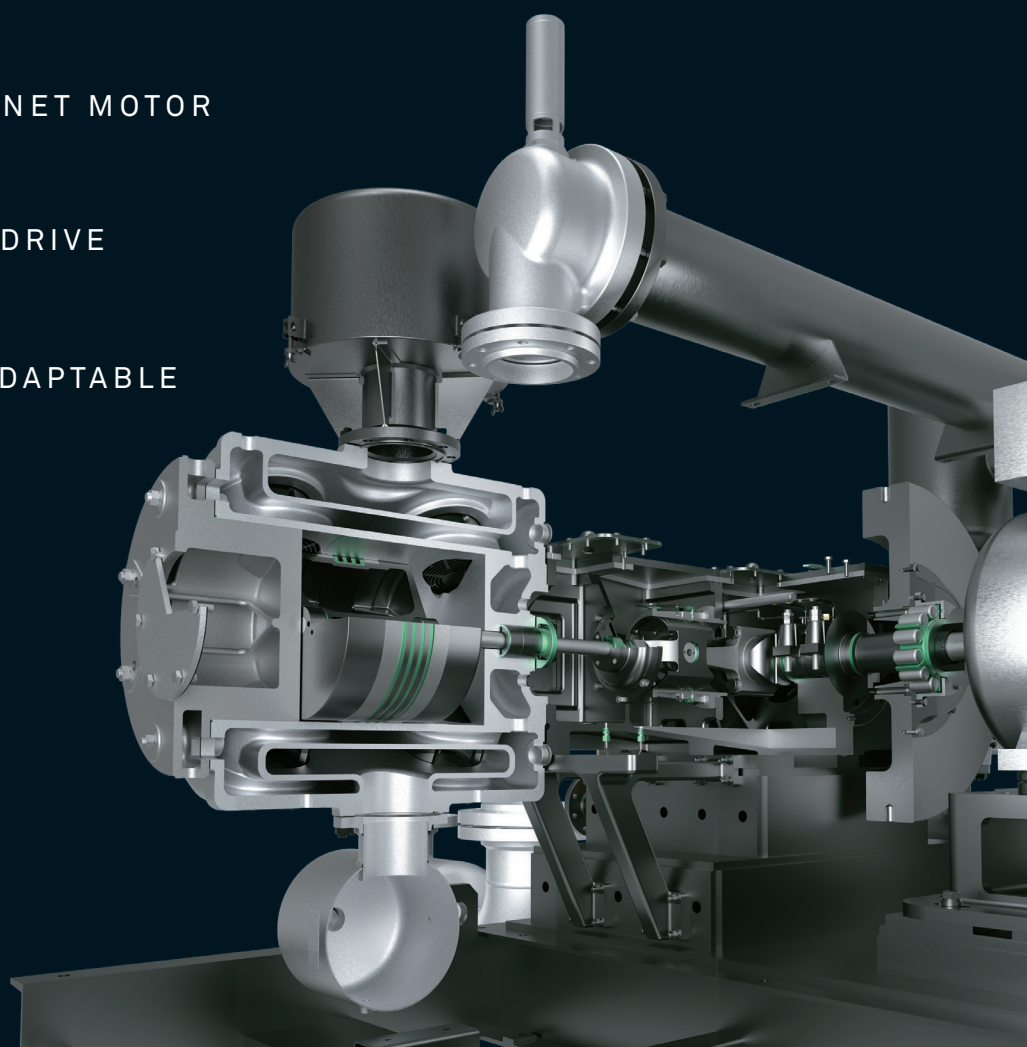
VERSATILE AND ADAPTABLE



INDUSTRY 4.0



SUSTAINABILITY





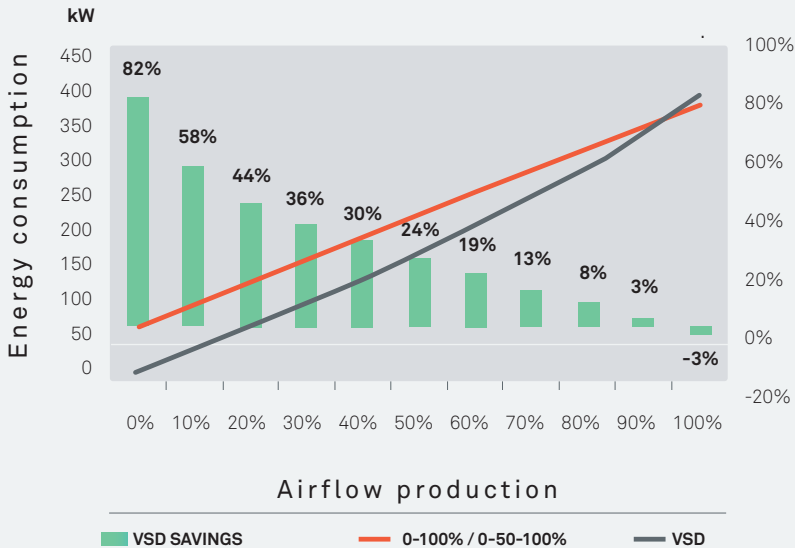
VARIABLE SPEED DRIVE

The first compressor that eliminates idling times

With a frequency drive at the forefront of technology that allows the widest regulation range in the market, minimizing energy consumption.

HORIZON SYNCHRO takes full advantage of the energy savings thanks to its integrated frequency converter.

ENERGY SAVINGS



- Average **energy savings** of 30% when regulating.
- Up to **82% energy savings** during idle times.
- **Average payback** in less than 2 years.
- **Absence of starting peaks**: start-up current = nominal current.
- **Minimises pressure fluctuations** when regulating.



INDUSTRY 4.0

The first true digital compressor

Its central brain ensures 100% digital control and automation from a single HMI point, with cloud monitoring and predictive maintenance. Thanks to the electronic control, our compressors do not require manometers and all drains are automatically drained from the control desk with no intervention needed.

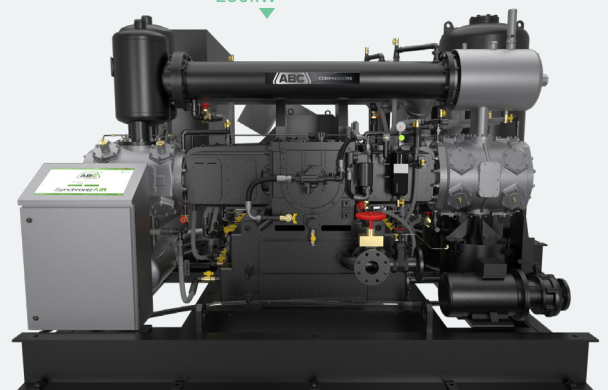
The new configuration includes a control desk for the whole package (including peripherals) to control, among other values:

- Air temperature and pressure per stage.
- Water temperature and pressure per stage.
- Oil temperature and pressure.
- Temperature of the motor.
- Dryer dew point.

With an integrated VSD as standard in all the range, it ensures a start current equal to nominal current, with regulation range from 100% to 18%.



HORIZON SYNCHRO 2500 LP
280kW





SUSTAINABILITY

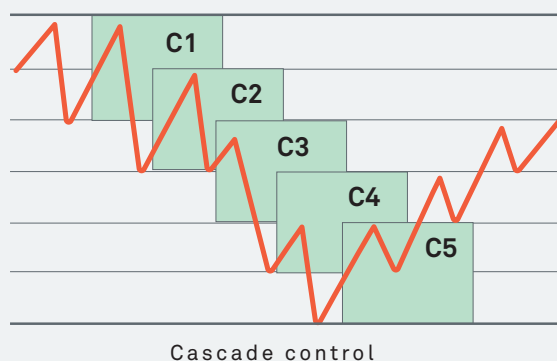
Bringing to life the factory of the future

SynchronizAIR

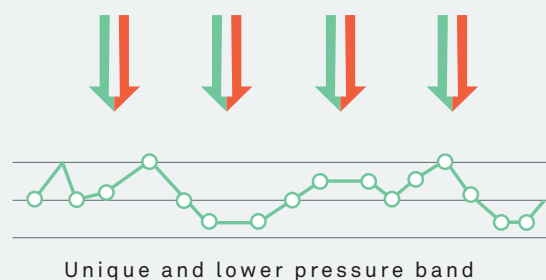
SynchronizAir is the unique automatic system that allows a complete and centralized control of your multitechnology & multibrand compressor room.

TECHNICAL CHARACTERISTICS

Unique pressure band for all the compressors in the plant, regardless the number of compressors, avoiding cascade regulation.



Reduced energy consumption



MAIN BENEFITS

1. Energy savings:

- Reduction of compression pressure.
- Simultaneous pressure regulation of several compressors with VSD.
- Avoids idling times.

2. Complete integration:

- Unique and lower pressure band for all plant compressors.
- Setpoint at a single point.
- Compatible with flow meters, power meters, etc.
- Allows integrating multi-brand compressors.

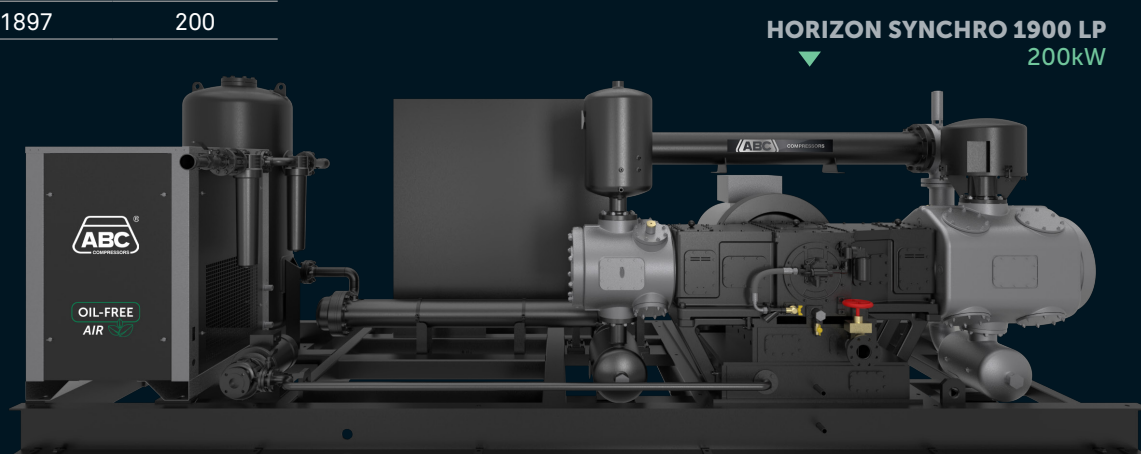
3. Machine learning:

- Records trends and foresees pressure/ flow deviations.
- Intelligent and personalised parametrisation.

LOW PRESSURE COMPRESSOR RANGE

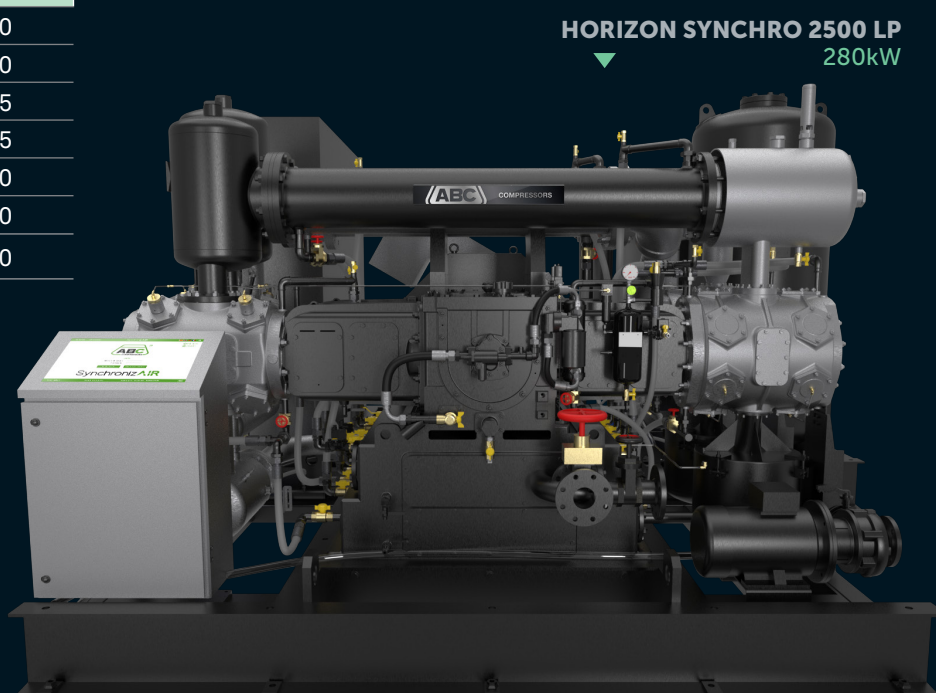
HORIZON SYNCHRO*	CAPACITY	INSTALLED POWER
	m ³ /h	kW
HS700-LP	726	75
HS900-LP	894	90
HS1000-LP	1007	110
HS1200-LP	1203	132
HS1500-LP	1499	160
HS1900-LP	1897	200

DESIGNED WITH 2 CYLINDRERS



HORIZON SYNCHRO*	CAPACITY	INSTALLED POWER
	m ³ /h	kW
HS2300-LP	2277	250
HS2500-LP	2468	280
HS3000-LP	3030	315
HS3400-LP	3416	355
HS3900-LP	3895	400
HS4200-LP	4170	450
HS4600-LP	4623	500

DESIGNED WITH 4 CYLINDRERS



* Designed up to 13 bar. Catalogue data for 9 bar in accordance with ISO 1217 / 50 Hz

* Higher flows available on request.

MAKE THE BEST CHOICE



MOTOR
TECHNOLOGY



MOTOR
EFFICIENCY



TRANSMISSION



STARTER



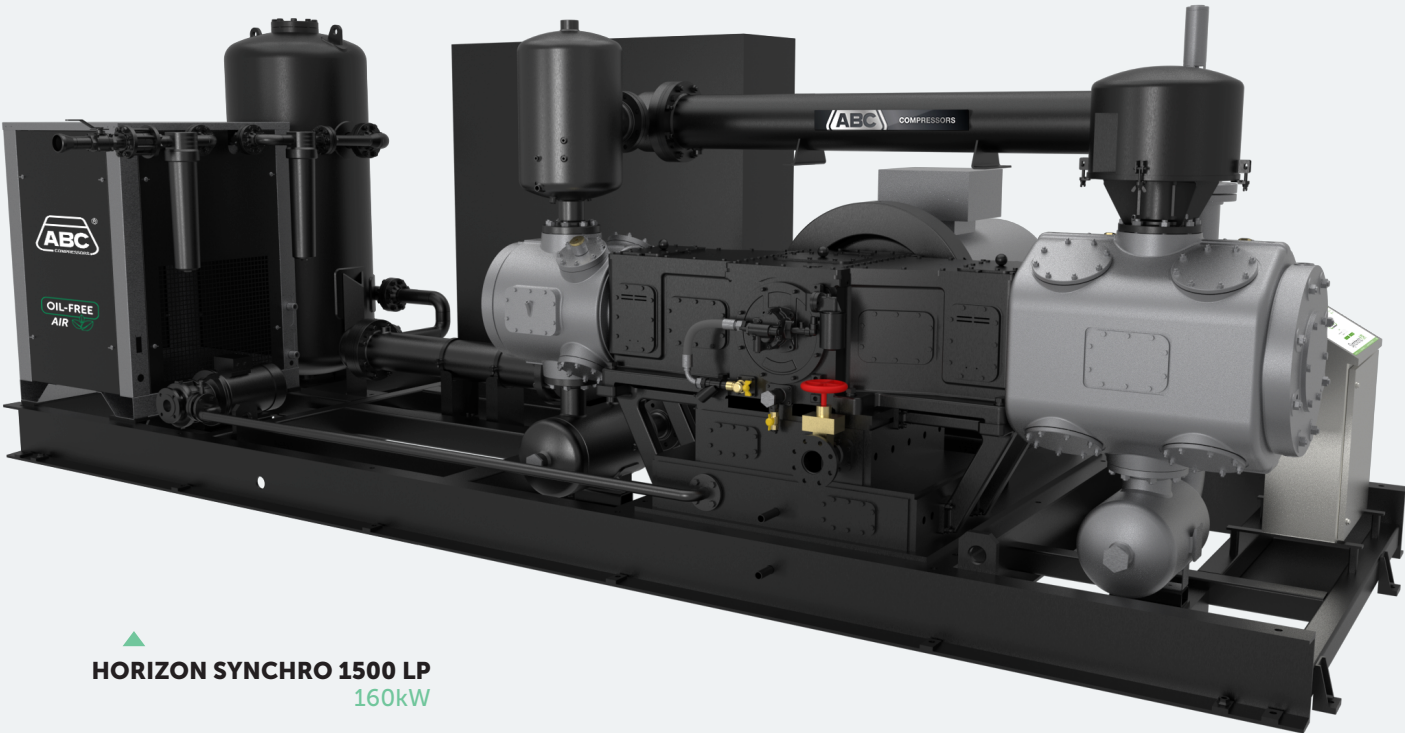
LAYOUT



DELTA T

PERMANENT MAGNET	IE5	DIRECT COUPLING	VSD	HORIZONTAL	< 7°C
INDUCTION	IE4	GEARBOX	SOFT STARTER	V SHAPE	>10°C
	IE3	BELTS	WYE DELTA	L SHAPE	>15°C
	IE2			AIR COOLED SCREW WATER COOLED SCREW	

CHOOSE HORIZON
SYNCHRO



HORIZON SYNCHRO 1500 LP
160kW

DISCOVER OUR RANGE OF PRODUCTS



HIGH
PRESSURE

LOW
PRESSURE

X- PET

CO₂

H₂

TAILOR MADE
COMPRESSORS



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