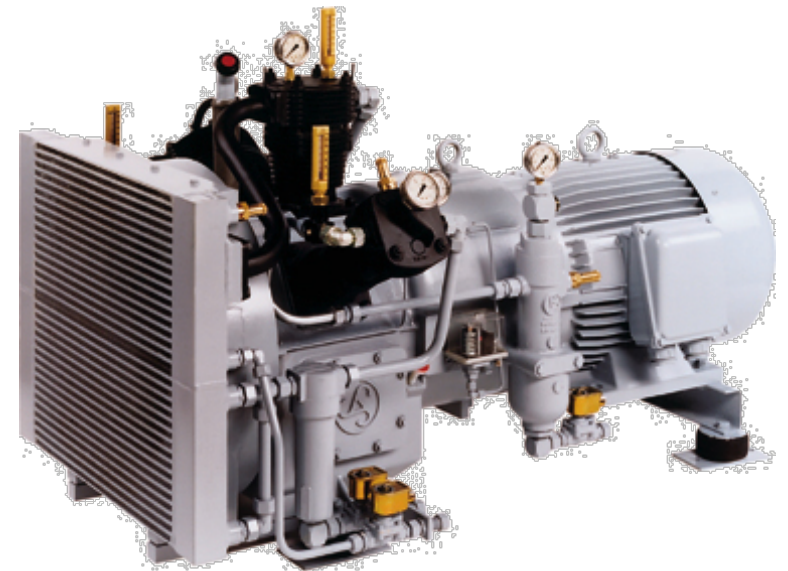


Shipbuilding Navy Marine Industry Offshore

J.P. Sauer & Sohn





Sauer Compressors USA

- Sales, Packaging, Test, Parts and Service
- 13 employees
- 4.3 M € turnover



Sauer Kiel – Germany - established 1884

- Headquarter for the Sauer Compressor Group
- Sales, R & D Engineering, QA, Assembly, Product Test, Parts
- 171 employees



Girodin - Sauer France

- Sales, Packaging, Test, Parts and Service
- 27 employees
- 6.5 M € turnover

Sauer UK

- Sales, Parts, Service
- 3 employees
- 1.5 Mio € turnover



Sauer Zandov – Czech Republic

- Production facility
- 144 employees
- 17 M € turnover



Elgi Sauer Compressor - India

- Sales, Service
- 20 employees
- 1.5 M € turnover

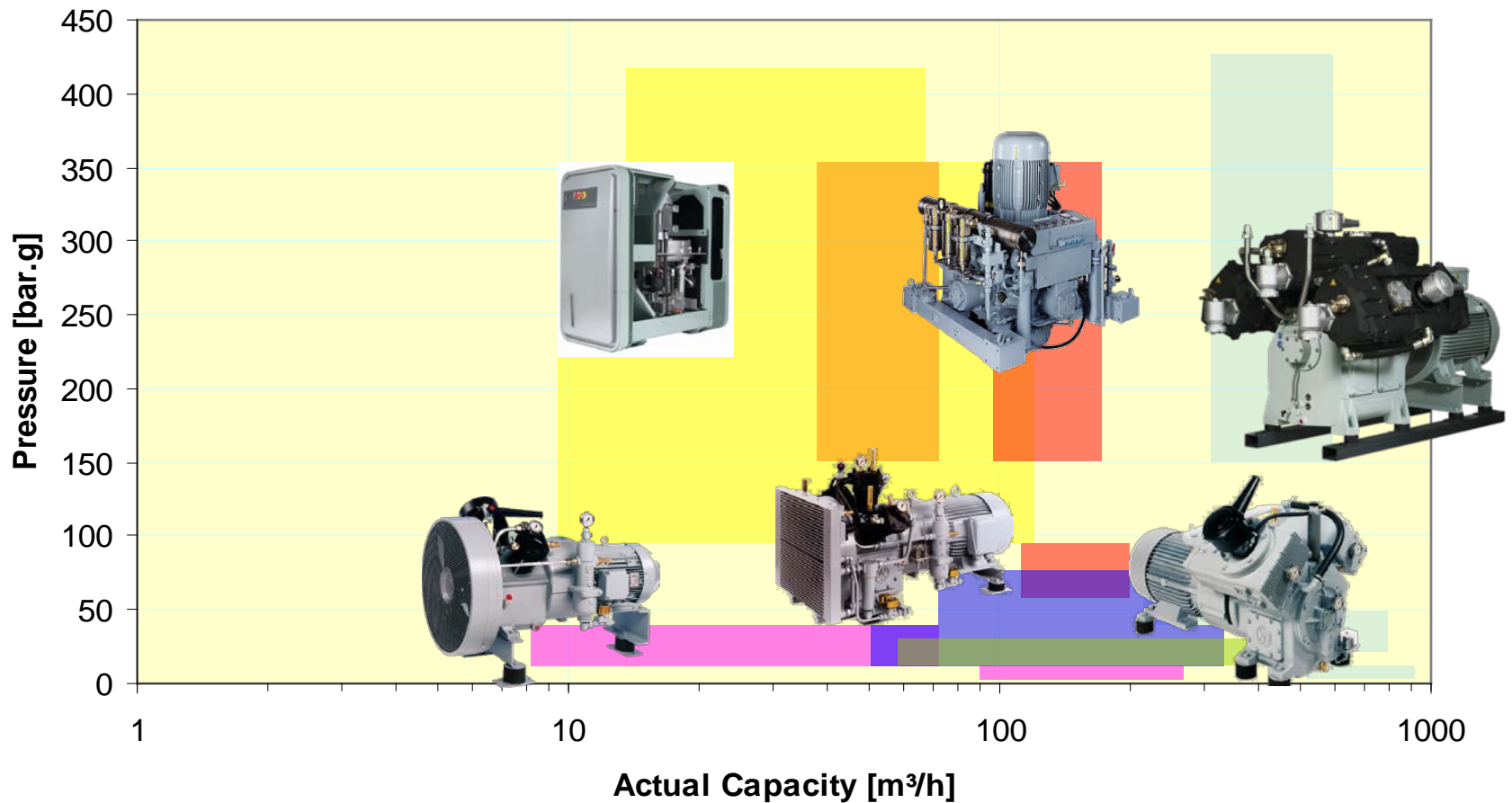


Sauer Asia - Shanghai

- Sales, Parts, Service
- 4 employees

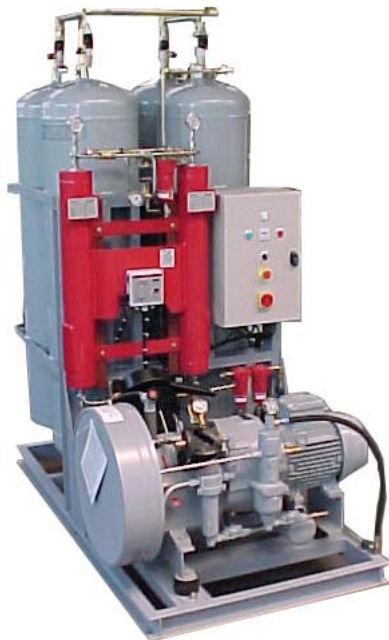


Sauer Air Compressor range



Diesel Starting-air module Sauer UK

- Compressor: WP15L electric Motor and WP15L Diesel driven
 - Flow-rate 14.4 m³/h to 17.4m³/h
 - Working Pressure 40 bar.g
 - Compressor E-Motor power 4 kW
 - Compressor Diesel power 6.7 kW
 - Air Storage 2 x 200l – 40 bar
 - Vessel Code: ASME VIII Division 1
 - Vessel material: stainless steel 316L



Diesel Starting-air module Girodin - Sauer

- Compressor: WP45L electric Motor
 - Flow-rate 50 m³/h
 - Working Pressure 30 bar.g
 - Air Quality dryness (minus) -40°C
 - Puissance compresseur installée: 11kW
 - Air Storage 4 x 200 litre – 40 bar
 - Vessel Code : CE mark PED

Air Compressor – Power Station - Erzhausen

- Compressor: WP400 water-cooled
 - Flow-rate 320 m³/h
 - Working Pressure 30 bar.g
 - Installed power each 75 kW
 - Power supply 400V 50Hz
 - Hydro-electric power station – turbine control



Air Compressor – Power Station - Georgia

- Compressor: WP4340 mobile Container air-cooled
 - Flow-rate 60 m³/h
 - Working Pressure 350 bar.g
 - Installed power each 22 kW
 - Power supply 400V 50Hz
 - Asportion HP Dryer and filtration

Air Compressor – Power Station - Azerbaijan

- Compressor: WP270L electric Motor
 - Flow-rate 250 m³/h
 - Working Pressure 40 bar.g
 - 21 Units x WP270L
 - Installed power each 45 kW
 - Power supply 400V 50Hz
 - Air adsorption Dryer for each Unit



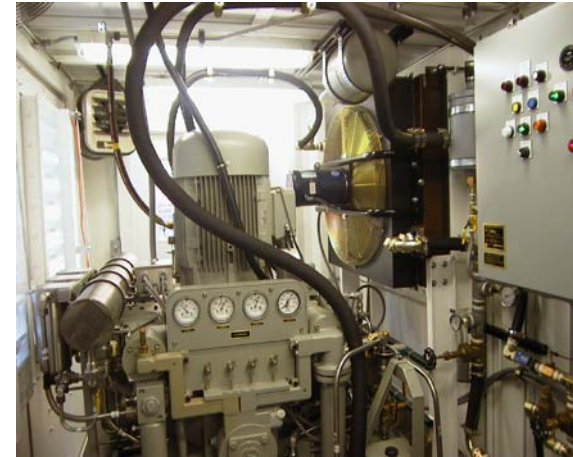
Air Compressor module – IHC Handling

- Compressor: WP4331 electric Motor
 - Flow-rate 30 m³/h
 - Working Pressure 350 bar.g
 - Air Quality dryness (minus) -40°C
 - Installed power 15 - 18.5kW
 - Power supply 400 / 440 V – 50 and 60Hz
 - Air Storage cylinders
 - Custom Container for hydraulic Ships' system



Dockside service air – Sauer USA

- WP5000 high-pressure air compressor:
 - Installation in ISO container 40ft ISO
 - Two x WP5000 'plug-an-play' compressors enclosed
 - Flow-rate each 140m³/h total 280m³/h
 - Working pressure 350 bar
 - Intergrated Membrane Dehydrator dew-point -56°C
 - Residual oil content < 0.3ppm
 - Power 440V - 60Hz each Compressor 55KW
 - Water-tight, rain resistant ISO Container
 - Each Compressor - separte closed-loop water cooling system
 - Ambient temperature operational range -20°C to +40°C



Air Compressor – mobile Drilling Rig - Poland

- Compressor: WP65L hydraulic Motor
 - Flow-rate 70 m³/h
 - Working Pressure 40 bar.g
 - Installed power each 17 kW
 - PTO hydraulic drive



Air Compressor – hazardous area –

ATEX   - Ruhr Gas

- Compressor: WP45L Motor **II 2 G EEx d IIC T3 200°C**
 - Flow-rate 40 m³/h
 - Working Pressure 40 bar.g
 - Installed power 11 kW
 - **II 2 G E Ex c IIC T3 200°C** 5°C<Ta<+45°C

Sauer Industrial Compressors

Dependable Compressors



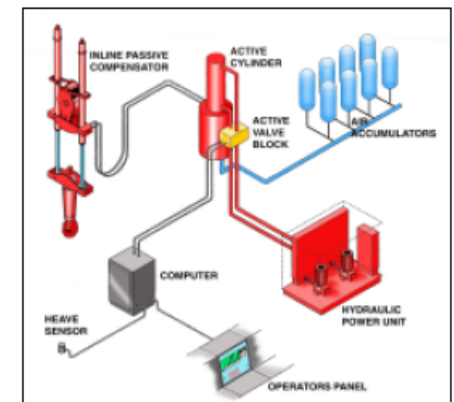
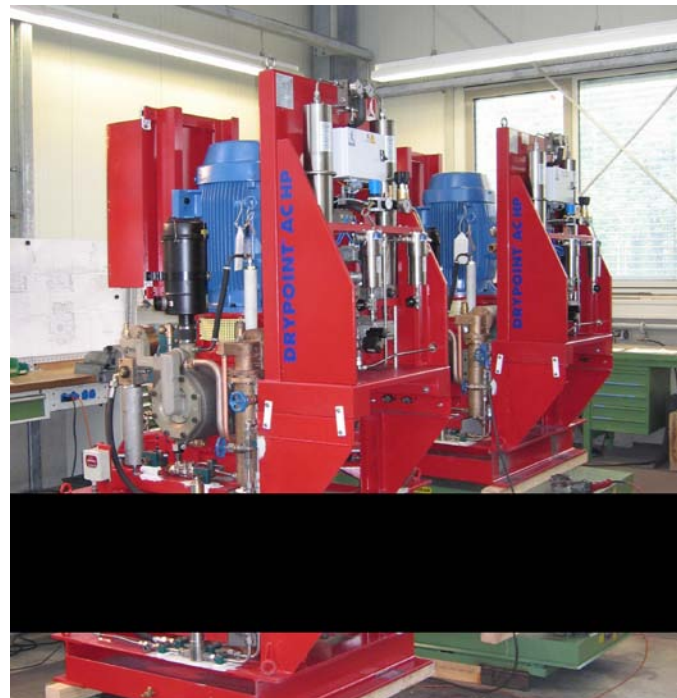
Offshore Rig Motion Compensation

• WP5000 Air & Nitrogen gas Compressors:

- Flow-rate 150 - 170 Sm³/h
- Working pressure 300 bar
- Installed power 55kW
- Power supply 690 V / 60 Hz
- Air quality dew-point -40°C
- Air & Gas adsorption Dryer
- Nitrogen gas purity +98%

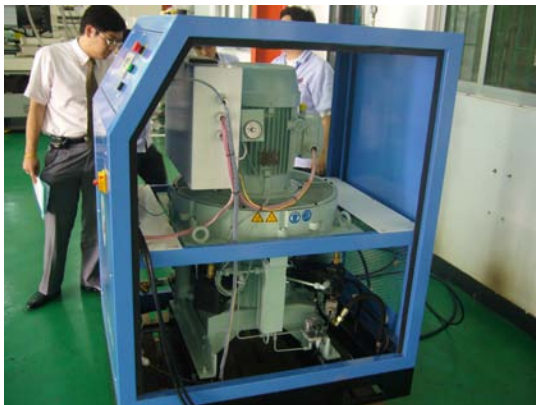


AKER KVAERNER
WP5000 Air Compressor



Gas Assist Injection Moulding (GAIM) – HDVF Germany

- WP4331 Nitrogen gas Compressor:
 - Flow-rate 30 Sm³/h
 - Working pressure 350 bar
 - Installed power 18.5kW
 - Power supply 400 V / 50 Hz
 - Gas generated from PSA (adsorption) at -40°C
 - Nitrogen gas purity typically +99.99%



Gas Injection (HK)

- WP4325 Tornado Nitrogen gas Compressor:
 - Flow-rate 25 Sm³/h
 - Working pressure 350 bar
 - Installed power 11 kW
 - Power supply 400 V / 50 Hz



Gas assist Laser-Cutting

- WP4325 Tornado nitrogen gas Compressor:
 - Flow-rate 25 Sm³/h
 - Working pressure 350 / 420 bar
 - Installed power 11 kW
 - Power supply 400 V / 50 Hz
 - Gas generated from PSA (adsorption) at -40°C
 - Nitrogen gas purity typically +99.99%



MSS – Sauer UK -
WP4325 nitrogen
gas compressor 350
bar



Curtis Wright –
Sauer USA -
WP4325 nitrogen
gas compressor(s)



Gas assist Laser-Cutting

- WP33LB Nitrogen gas Booster:
 - Flow-rate 80 Sm³/h
 - Final working pressure 40 bar suction pressure 7 barg
 - Installed power 11 kW
 - Power supply 400 V / 50 Hz
 - Gas generated from PSA (adsorption) at -40°C

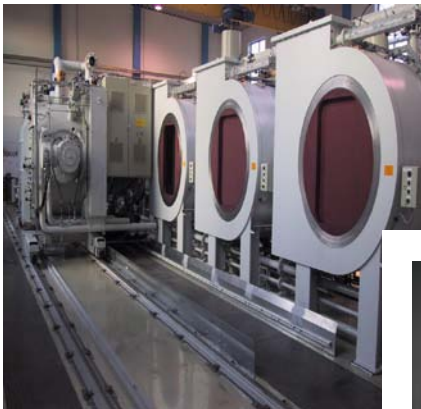
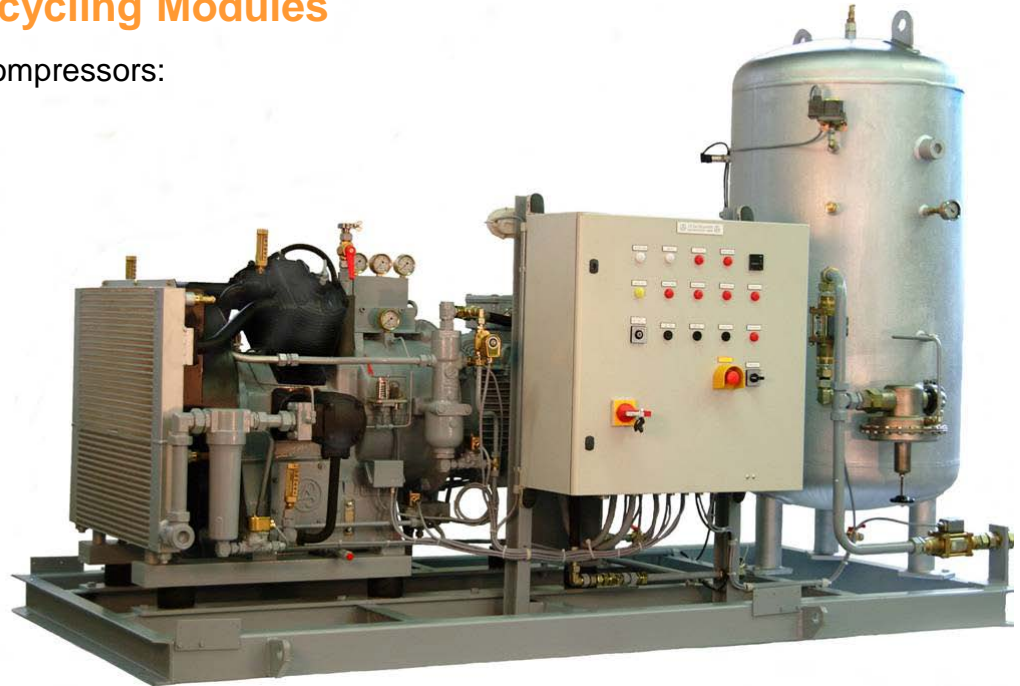
Helium Gas recovery – Girodin Sauer – Paris University

- WP4341 gas-tight compressor with HP gas storage:
 - Flow-rate 43m³/h
 - Working pressure 200 bar
 - Gas dryness -40°C
 - Installed power 30kW
 - Acoustic enclosure 72dBA
 - Gas analyser to check Helium gas purity
 - Suction gas balloon 10m³
 - High-pressure gas adsorption Dryer
 - Storage gas cylinders for liquifier
 - Remote data interface for electronic control / surveillance



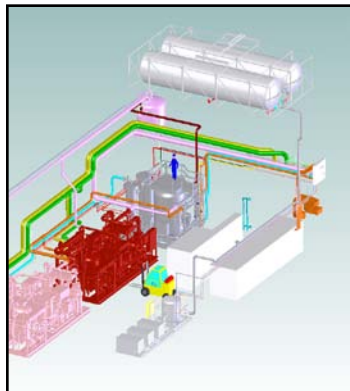
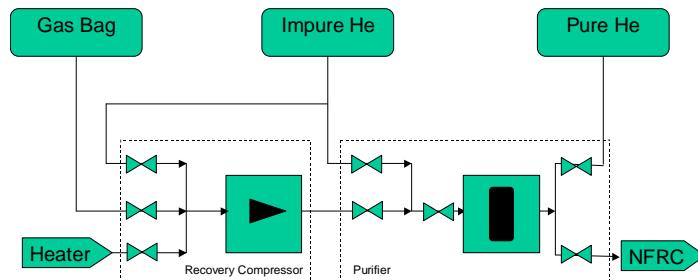
Metal heat treatment - Helium Gas recycling Modules

- WP156L, WP276L and WP316L gas-tight Compressors:
 - Helium gas flow-rate 100 - 270m³/h
 - Working pressure 20 bar – 0 bar – 20 bar
 - Installed power 30kW, 55kW, 75kW
 - Power supply 400V / 50Hz
 - Acoustic enclosure noise level <78 dBa
 - 99% gas recycle capability
 - Unique Sauer suction control / regulation



Helium recovery Module – Girodin Sauer

- 3 x WP276L Helium gas Compressors:
 - Mass flow 2g/s ~ 32g/s (43m³/h to 694m³/h)
 - Working pressure from 3 bar to 25 bar
 - Installed power 3 x 69kW
 - Power supply 380V/60Hz
 - Pressure vessels ASME VIII Div. 1



Helium Gas recovery Module – PTB Berlin

- WP4330 Helium gas Compressors silenced Modules:
 - Flow rate 43m³/h
 - Working pressure 200 bar
 - Installed power kW
 - Power supply 380V/50Hz
 - Leak-rate 10⁻¹ mbar per l/s
 - Linde Liquifier



Helium Gas recycling G Series HP Module(s)

- WP4351 Helium gas Compressors Modules:

- Flow rate 100 m³/h
- Working pressure 200 bar
- Installed power 45kW
- Power supply 4000V/50Hz
- Leak-rate 10⁻¹ mbar per l/s



Helium PP Technology WP4351

Helium FZ Jülich WP4351

Hazardous Gas Compressors – ATEX compliant

- Gas-tight G Series WP4351 Natural Gas compressor:
 - Flow-rate 110 Nm³/h
 - Working pressure 250 bar
 - Installed power 45 KW
 - Gas recovery vessel 500 litre
 - ATEX 95 & 137
 - Compressor II 2 G E Ex c IIB T3 T200°C 5°C<Ta<+45°C
 - Motor II 2 G E E x d IIC T4 -20°C<Ta<+40°C IP55
 - Control valves II 2 G E E x d IIC T4 -20°C<Ta<+40°C IP65
 - Instrumentation II 2G E Ex IA IIC T5 -20°C <Ta <+60°C IP65



Natural Gas Compressors – Aachen Institute

- Gas-tight G Series WP276L Natural Gas compressor:
 - Flow-rate 200 Nm³/h
 - Working pressure 25 bar
 - Suction pressure (domestic) 25 mbar
 - Installed power 45 KW
 - Gas recovery vessel 750 litre
 - ATEX 95 & 137

Air & Gas Compressors « WP6000 & WP4000 »

- Air Compressor WP6442:
 - Flow-rate 500 m³/h
 - Working pressure 400 bar
 - Installed power 200 KW
 - Six cylinder
 - Water-cooled



Air & Gas Compressors « WP6000 & WP4000 »

- Gas Booster WP4104B 15 Dragon Steel Tiawan:
 - Flow-rate 1250 Nm³/h
 - Final working pressure 30 bar
 - Gassuction pressure 13 bar.g
 - Installed power 67 KW
 - Rotational speed 1170 rpm (60Hz)
 - Nitorgen / Argon gas booster



Sauer Industrial Compressors

Dependable Compressors

