

HEAVY DUTY LINE

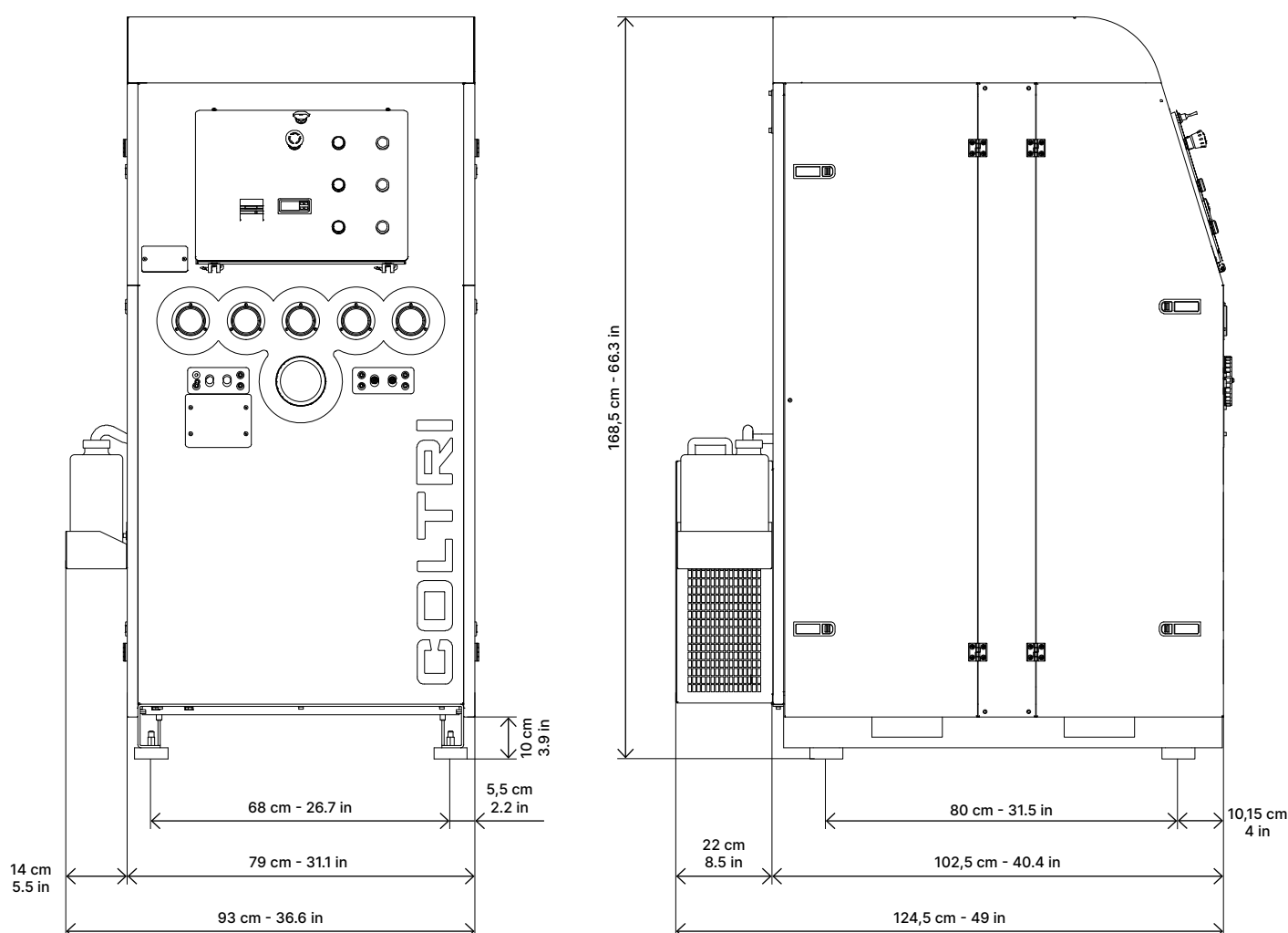
SILENT 450 ET



Contact

What you don't feel is his greatest performance

The **SILENT 450 ET FIRE USA** model reaches new heights in terms of soundproofing, falling below the 70 dB operating threshold. Built to meet the demands of intensive use when large refill capacities are required, it has 4 front filling connections with high pressure hoses and an intuitive control panel. It also has an electric motor and powerful pumping units. For longer filter life, we recommend the Tornado high pressure dryer. Available option: Presec system for filter saturation control or the SAM system for multigas analysis and remote charging panel.



Technical data

Type of gas	Breathing air EN 12021
Intake pressure	Atmospheric / max 300 millibar
Working pressure	232 bar / 300 bar / 330 bar
Max working pressure	300 bar
Permissible ambient temperature range	-10° C ÷ +40° C
Permissible altitude	0 ÷ 1.500 m SLM
Max permissible tilt	15°
Oil	Synthetic Coltri Oil ST 755
Oil change interval	1 anno / 1.000 h
Frame	Steel - Colour Black RAL 9005 - Powder coating painting - Scratch proof

Compressor

	450 ET
Charging rate Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	450 l/min 27 m³/h 15,9 cfm
Purification System	Hyperfilter x 2
Cooling air flow	4.050 m³/h
Weight¹	446 kg - 983 lb
Dimensions (W x D x H)¹	93 × 124,5 × 168,5 cm - 36.6 × 49 × 66.3 in

¹ Standard model. Dimensions and weight may vary depending on accessories.

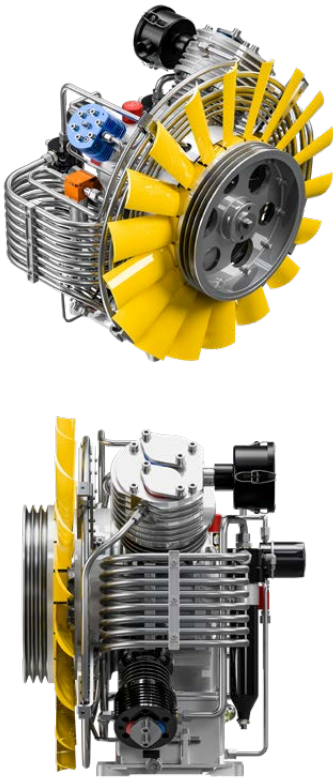
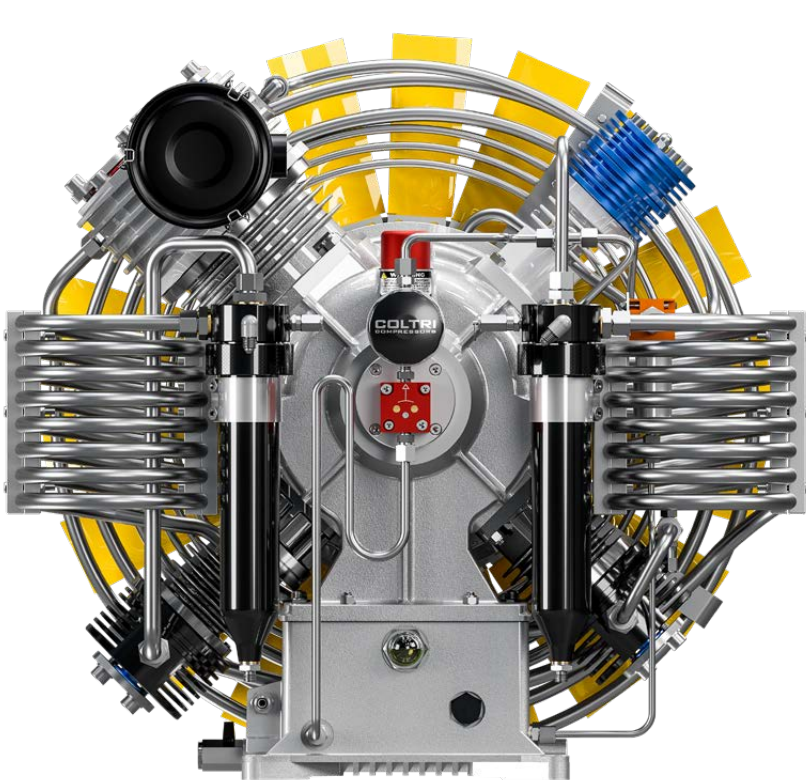
Electric motor

450 ET		
Type	Three-phase electric	
Power	7,5 kW - 10 Hp	
Operating voltage/frequency Different voltage / frequency available on request.	400 V, 50 Hz	440 V, 60 Hz
Rated current	15 A	
Speed (RPM)	2.870	3.440
Protection class	IP55	

The IP55 protection class, compliant with IEC 60034-5, guarantees protection against dust deposits and water jets from any direction.

Technical data pumping unit MCH 22

	450 ET
Charging rate	450 l/min
Measured during 10 liters cylinder filling from 0-200 bar tolerance +/- 5% at + 20 ° C ambient temperature.	27 m³/h
	15,9 cfm
Speed (RPM)	1.050
Number of stages	4
Number of cylinders	4
Cylinder bore 1st stage	120 mm
Cylinder bore 2nd stage	60 mm
Cylinder bore 3rd stage	32 mm
Cylinder bore 4th stage	15 mm
Stroke	50 mm
Direction of rotation (from flywheel side)	Counter clockwise (left)
Drive type	V-belt A type
Intermediate pressure 1st stage	~ 3,2 bar
Intermediate pressure 2nd stage	~ 16 bar
Oil sump capacity	4 liters
Max intake pressure	1,3 bar (absolute) / 300 millibar - 4,35 psi

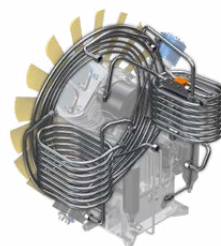




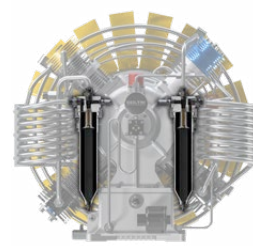
Forced lubrication with low pressure gear pump



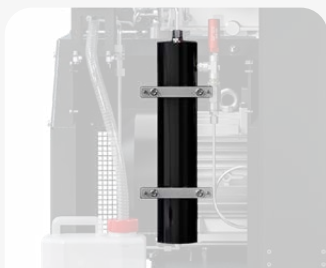
Suction filter: 10 µm



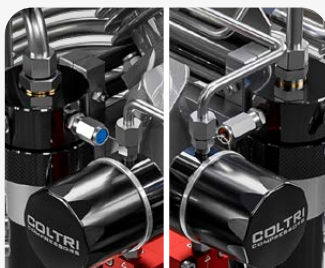
Pipes, fitting and nuts in stainless steel AISI 316



Interstage condensate separators



High pressure final condensate separator double effect



Safety valves after each stage of compression



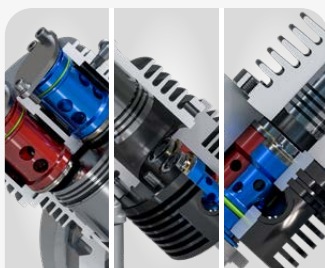
Special cast iron cylinders with low roughness lapping



Aluminum connecting rods



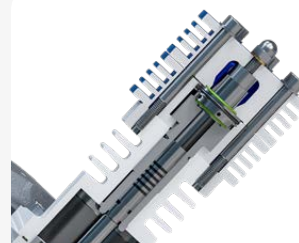
Forged steel crankshaft



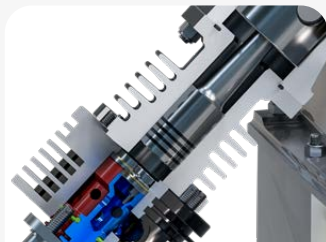
High-flow first, second and third stage valves



Roller Bearings for intensive work



Fourth stage in tempered steel with 6 piston rings in special cast iron



Second, third and fourth stages with pushing pistons to eliminate lateral forces on the pistons



CE certification

Standard equipment

Purification system Hyperfilter

DOUBLE HYPERFILTER regenerable or disposable cartridge

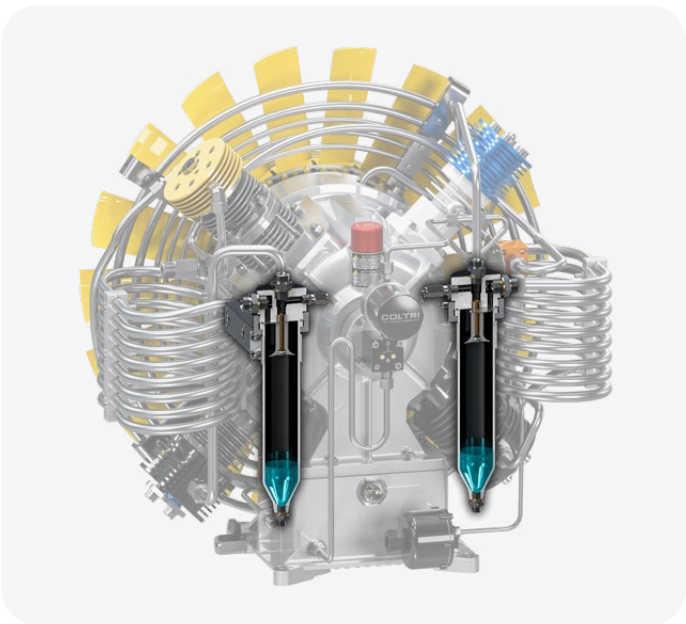


Purification system	Hyperfilter x 2
Operating pressure (Standard)	250 bar / 330 bar / 360 bar
Operating pressure max. (PS)	420 bar
Processable air capacity (air inlet temperature in the filter 20° C at 300 bar) ¹	3.050 m ³

¹ When using a filter cartridge without HOPCALITE CO CATALYST.
If a cartridge with CO removal is used, the process air capacity is reduced by about 20%.

Condensate separation system

- Interstage separator after 2nd stage, forged and anodized aluminum
- Double final separator for removal of oil/water condensate
- Final safety valve, mounted on the separator housing
- Pressure maintenance valve / non-return valve



Contamination	Maximum content as per DIN EN 12021:2014	Air quality*
H ₂ O	25 mg/m	≤ 10 mg/m
CO	5 ppm(v)	≤ 4
CO ₂	500 ppm(v)	≤ 500
Oil	0,5 mg/m	≤ 0,5 mg/m

* Measured at our facility using ASCO HORA 160 ANALYZER.

- Only with special filter cartridge with HOPCALITE CO CATALYST. and up to a maximum concentration of 25 ppm CO in intake air. The compressed clean breathing air then contains a maximum of 5 ppm CO.
- The level of CO₂ in the intake air must not exceed the maximum level of CO₂ as per EN 12021:2014.
- Reported values exceed standards:
 - ISO 8573-1 class 3 for particles
 - ISO 8573-1 class 1 for humidity
 - ISO 8573-1 class 1 for oil



Compressor control and automatic condensate drain system



Electronic pressure switch



Interstage pressure gauges



Soundproof frame gauge



Filling connection

4 Filling connection to choose from: DRV DIN 232 bar, INT/YOKE DRV 232 bar e DRV DIN 300 bar.



Filling hose



High pressure rear outlet

Optional



Presec. Filter control system



CO SafeGuard



Tornado refrigerator - Dryer

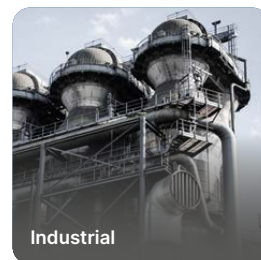
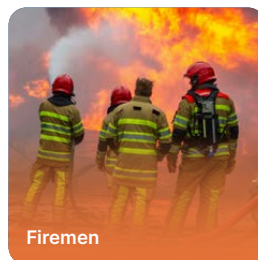
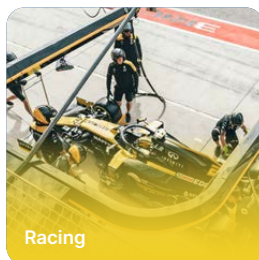
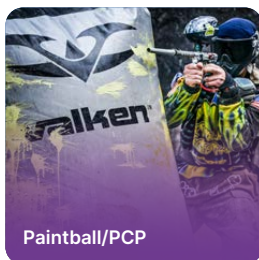
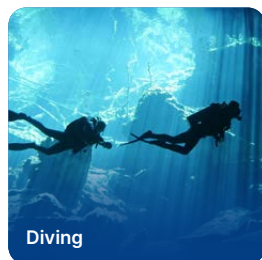


7" Touch Screen Panel



Multi-Gas Analysis System (SAM)

Application fields



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