



Aspro Variable Compressor

Two functions in the same system:
Standard compressor and Booster





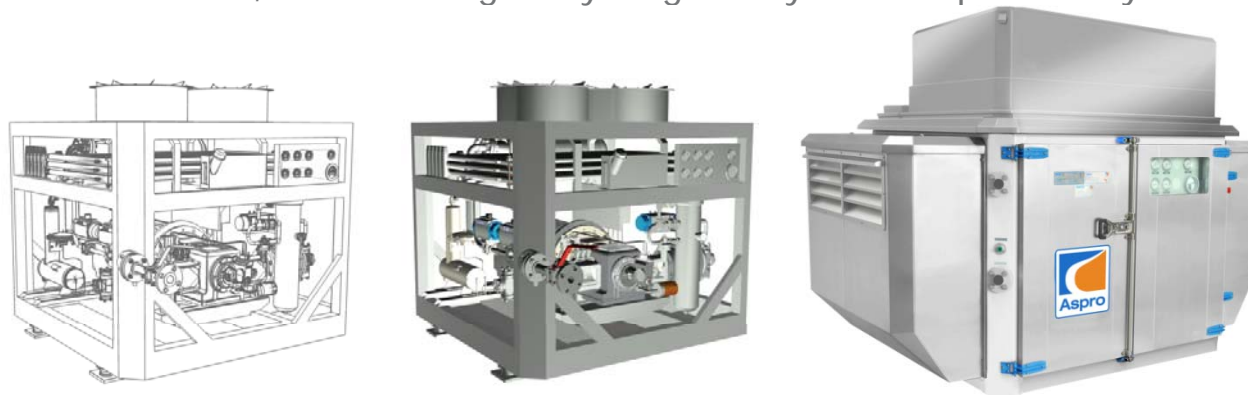
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Aspro Variable Compressor

- + Aspro developed this compression system of advanced technology, to cover the needs in areas where there is still no gas pipelines. Its versatility allows them to receive gas coming from gas transport units or directly from the gas pipeline to supply a refueling CNG station in normal conditions.
- + Joining the functions of a **booster compressor** with those of a **standard gas compressor** for in line work, concentrating everything in only one compression system.



Innovation and technology up to every customer for a better service



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Functioning

Operating from a gas transport unit.

- + This new technology makes possible the gas supply to the compressor, with pressures that range between 250 and 7 bar, optimizing the consumption of energy and reducing operative costs.
- + When pressure makes a variation, the compressor adapts itself automatically.





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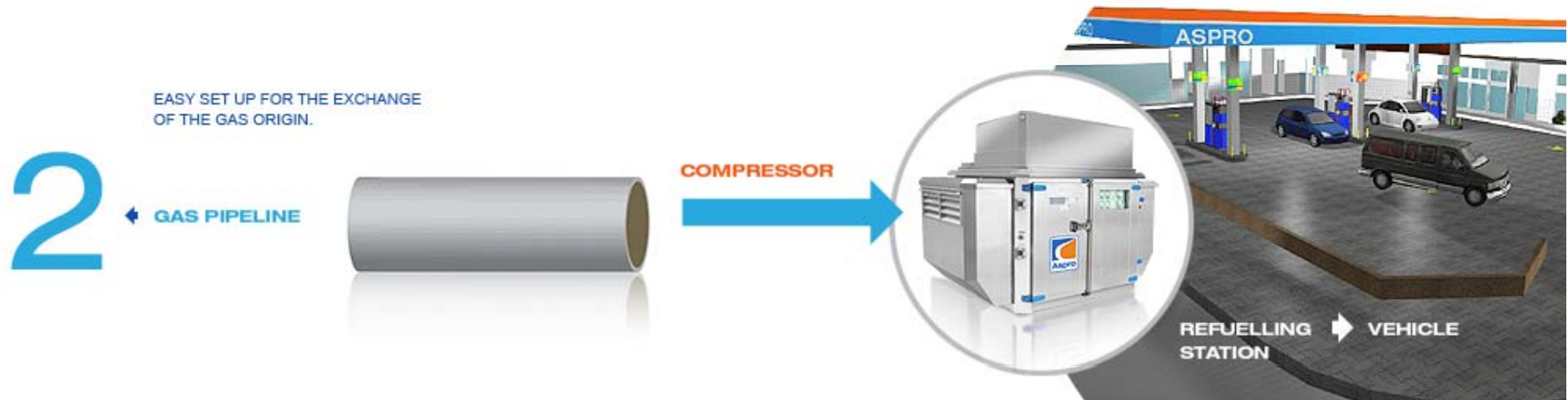
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Functioning

Operating with gas pipelines net.

- + Also, with an easy set up and without need to install a new compressor, it is possible to use the same system as a standard compressor, taking the gas from gas pipelines.





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Advantages



- + Two functions in the same system: Standard compressor and Booster.
- + It can be supplied from a gas transport unit or directly from a gas pipeline supporting the same performance.
- + Easy installation since it is made under the same conditions as a standard compressor and only one time.
- + High performance operating with a gas transport unit.
- + Entry of variable gas pressure in automatic form from 250 up to 7 bar.
- + Simple set up for the exchange of the gas origin: gas unit transport or gas pipeline net.
- + Reuse of caloric energy of the same compressor in the process of pressure reduction.
- + Saving of energy consumption due to the dedicated priority panel.



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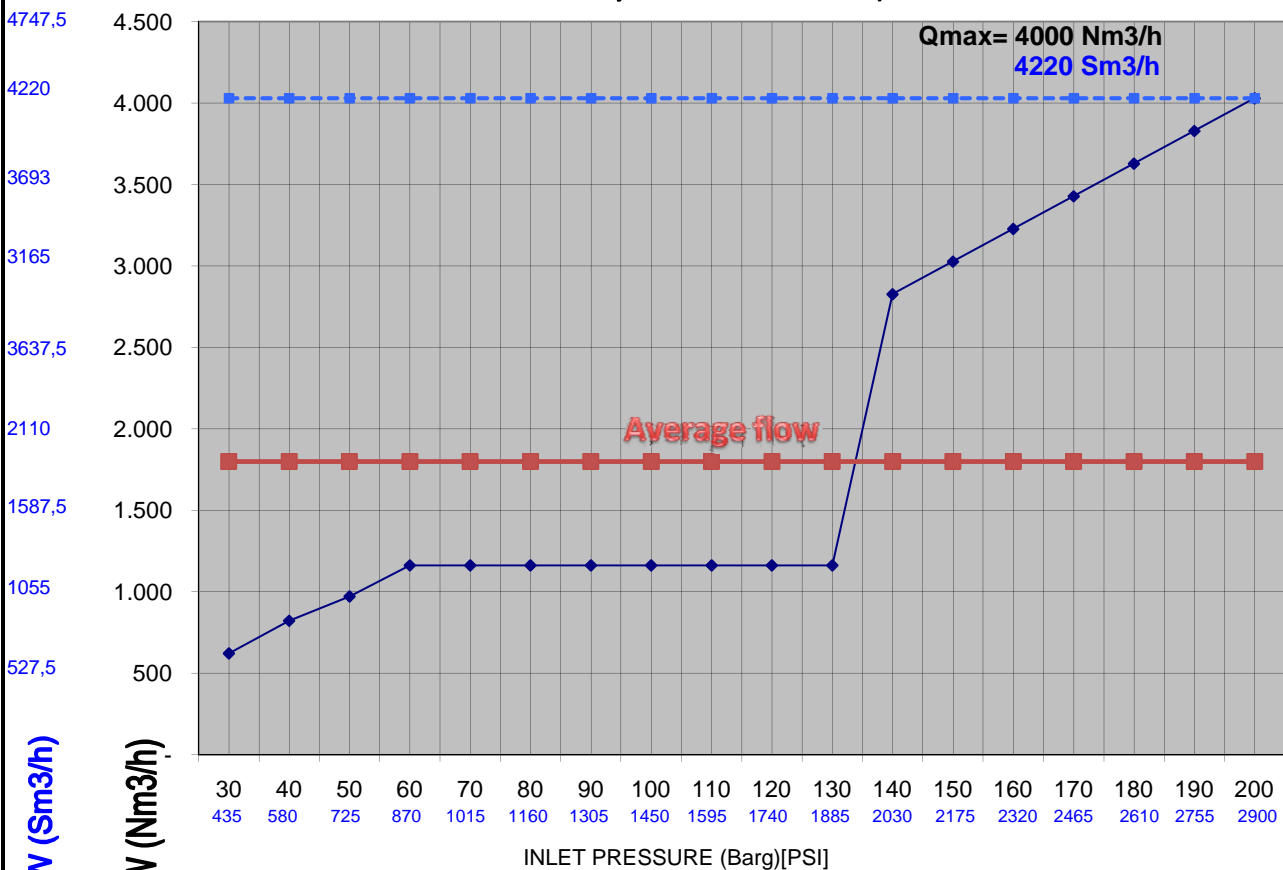


Main characteristics

	SCA 50-2 M BD	SCA 50-3 BD	70-2 BD	70-3 BD	75-2 BD	115-3 BD	115-5-14 BD
Type	Horizontal reciprocating						
Number of stages	2	3	2	3	4	3	3
FROM GAS TRANSPORT UNIT							
Max. suction pressure	250 bar	250 bar	250 bar	250 bar	250 bar	250 bar	250 bar
Min. suction pressure	25 bar	7 bar	25 bar	14 bar	25 bar	14 bar	14 bar
FROM GAS PIPELINE							
Max. suction pressure	50 bar	19 bar	60 bar	19 bar	60 bar	19 bar	14 bar
Min. suction pressure	25 bar	7 bar	25 bar	12 bar	25 bar	12 bar	7 bar
Discharge pressure	250 bar	250 bar	250 bar	250 bar	250 bar	250 bar	250 bar
Stroke	50 mm	50 mm	70 mm	70 mm	75 mm	115 mm	115 mm
Main motor power	37 kW (50 HP)	45 kW (60 HP)	75/90 kW (100/125 HP)		75 (100 HP)	110/160 kW (125/220 HP)	75/160 kW (100/220 HP)
Air-cooler power	2,2 kW	2,2 kW	2,3 kW	3 kW	5,5 kW	5,5/ 7,5 kW	11 kW
Voltage-Frequency	220/380 / 480 vca - 50 / 60 hz						
Speed (RPM)	1500/1800	1500/1800	1500/1800	1500/1800	1500/1800	1000	1000
Average Flow (Nm3)	250	200	650	600	1800	900	1300
Weight	3.500 Kg	6.000 Kg	1.950 Kg	1.950 Kg	3.800 Kg	12.000 Kg	12.000 Kg

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Performance curve of system: IODM 75-2 BD compressor and Unit Trailer



Inlet Pressure	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Power (Kw)	65	67	69	71	71	71	71	71	71	71	71	63	60	58	56	54	52	50
Flow (Nm3/h)	621	822	971	1162	1162	1162	1162	1162	1162	1162	1162	2826	3027	3227	3428	3628	3828	4000
Specific power	0,105	0,082	0,071	0,061	0,061	0,061	0,061	0,061	0,061	0,061	0,061	0,022	0,020	0,018	0,016	0,015	0,014	0,013

REQUIRED INVOLVED COMPONENTS OF SYSTEM

- * CNG COMPRESSOR IODM 75 BD
- * CNG TRAILER APROX. 20000 LITRES
- * TWO CNG DISPENSERS 20 Nm3/Minute
- * PRIORITY PANNEL WITH STATIONARY STORAGE: 2 lines, medium and high pressure from stationary storage, low line from unit trailer.

		Toler. Grales Gen. Tolerances	N° CODIGO: CODE Nr: 33303-S			
		Lineal -				
		Angular -				
		Radial -	TUTULO/ TITLE: PERFORMANCE OF IODM 75 BD SYSTEM	Fecha Date	Nombre Name	
		Filo max ext Max Ext Edge		Dibujó Designed	05/10/2010	F.J.G.L.
		Filo max int Max int edge		Revisó Checked	04/01/2011	F.J.G.L.
		Conjunto: Part:		Aprobó Aprobred	04/01/2011	V.P.
28-9-2011	000			Escala Scale	Cantidad Quantity	
FECHA/DATE	NIVEL/LEVEL	Reemplaza a: - Replace to: -		-	-	



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Optionals

- + Acoustic enclosure with FLP lighting
- + Gas detector
- + Pre-lubricator
- + Spark proof coupling guard
- + High - temperature pipes protection
- + Fire fighting system.
- + Flame detector.
- + Gas flow meter
- + Priority panel
- + Pressure regulating valve with optional low pressure by pass
- + Inter-stage pressure transducers.
- + Inter-stage temperature transducer.
- + Crankcase oil level sensor
- + Vent pipe with flame arrester.
- + Lube oil heater.
- + Temperature switch.
- + Containers automatic drain.
- + Inlet filter (single or duplex).
- + On board control panel.
- + Monitoring system



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Variable compressors in the world



COLOMBIA

Petromil

Is a wholesale distributing company of petroleum-derived products. They carried out an important project for CNG stations that do not have access to the gas pipeline.



IODM 70-3-19 BD



IODM 115-3-19 BD

COMPRESSORS

4 (IODM 70-3-19/IODM 115-3-19)

DAILY SALES

6.000 m³





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Variable compressors in the world

India

IGL

It is one of India's leading natural gas distribution companies and has a CNG refueling stations network along New Delhi city.



IODM 70-3-19 BD

COMPRESSORS

114 (IODM 70-3-19 BD)





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Variable compressors in the world

Thailand

PTT

Is a Thai state-owned set-listed oil and gas company. It is one of the local largest corporations and has a wide refueling stations network in the country. They use variable compressors for stations that were supplied by gas transport units.



IODM 115-3-19 BD



IODM 115-5-14 BD

COMPRESSORS

18 (IODM 115-3-19 BD / 115-5-14 BD)





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Aspro Variable Compressors

- + Adaptability and efficiency
- + in the same system.

Aspro, the future of CNG today.

