

22 years of Service



Feel the Difference

More Air
For Less Power



CIN No. : U29120TZ2015PTC021250



Energy Efficient Screw Air Compressor

- Advanced screw airend
- Intelligent microprocessor based electronic controller
- Three stage air oil separator
- Low specific power consumption
- Less noise level and ease of maintenance
- Very Compact

Introducing
Energy Saving Permanent
Magnetic Motor

Mute & Jumbo Series

www.frankcompressors.com

Compressed air is a type of clean and environmental friendly energy. Frank's goal is to make use of this energy easier by proposing solution and systems that are the result of a careful analysis of the needs of all potential users, distributors and their satisfaction.



Micro Computer Control System

Intelligent micro computer control system. The LCD can show present temperature, working pressure, accumulative working time, malfunction, etc. Maintenance schedule through ON Line.



Advanced Screw Airend

Advanced rotary screw technology, equipped with high efficiency rotary screw airend powered by efficient electric motor.



Loading Head

This newly designed and improved intake controll system ensures economic control and protection of the screw. The control system has been redesigned to be simpler and more reliable. The air intake filter eliminates dust and other harmful particles that may cause premature wearing of the machine. Upon start-up of the machine, the control system will close the intake valve reducing start-up load. Shut down procedure will release pressure from the oil reservoir and prevent lubricant leakage. The new design has resulted in reduced air intake noise.



Spin on Three Stage Separator Air/Oil

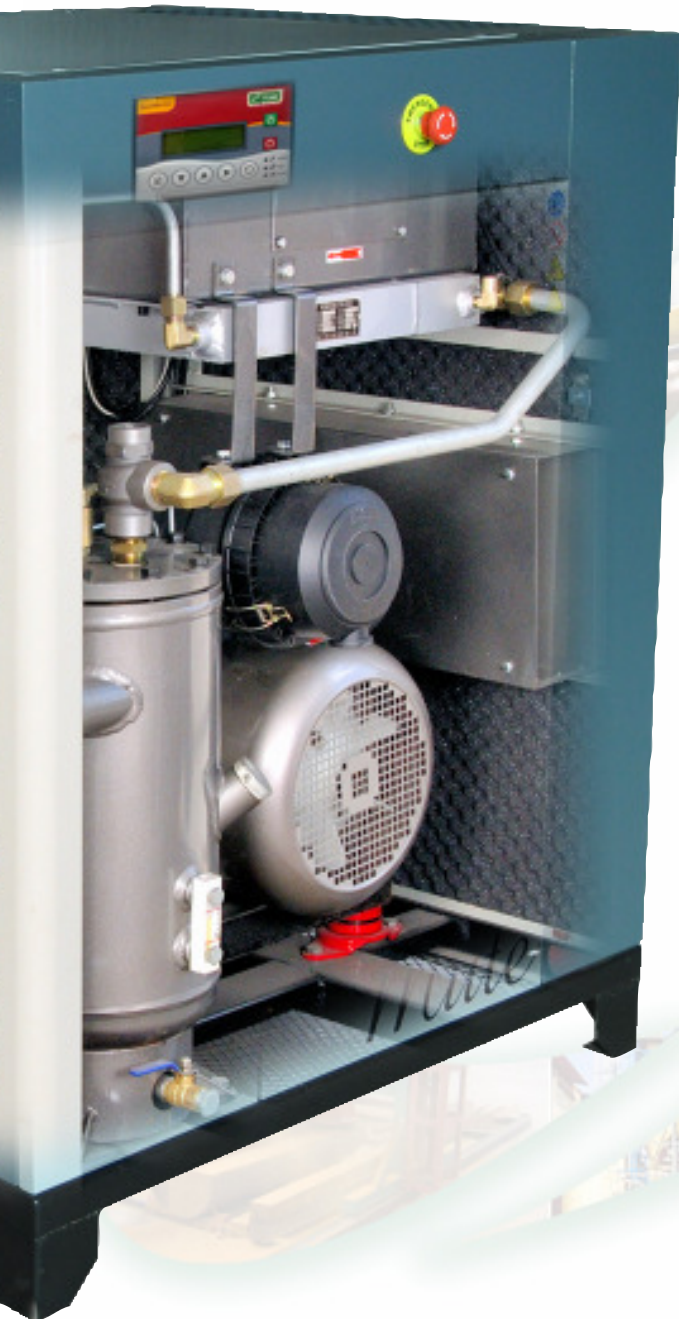
Service & maintenance are made extremely simple through spin on three stage separator (upto 20 HP) and convenient location of oil receiver, oil filters and air oil separator - user friendly from servicing point of view. The separator will remove oil particles from the air down to a ratio of 1-2 parts per million. Efficient separation means post-treatment of all will be economical. Cleaner air means low maintenance costs on pneumatic equipment.



Magnetic Motor



By using permanent magnet synchronizing motor the energy saving on the VSD can be increased by 15 to 20%. Permanent magnetic motor and compressors are designed with the one shaft and by 100% transmission efficiency. Compared to normal motor the permanent magnet synchronizing motor performs with the excellent energy efficiency.



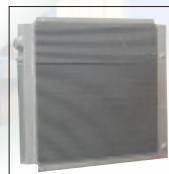
Oil Filter

The screw spin on oil filter makes servicing convenient. The filter eliminates oil impurities and other particles produced by wear and tear. High quality oil filtration extends the service life of rotors, bearings and other moving parts.



Quite Operation

High efficiency cooling fan provides sound level low.



Energy Efficient Combination Cooler

Utilising production methods and design the cooling system was designed to provide sustainable and efficient operation in high temperature high humidity environments. The new cross-exchange cooler not only increases exchange capacity by 10% but also is designed to resist chemical damage.



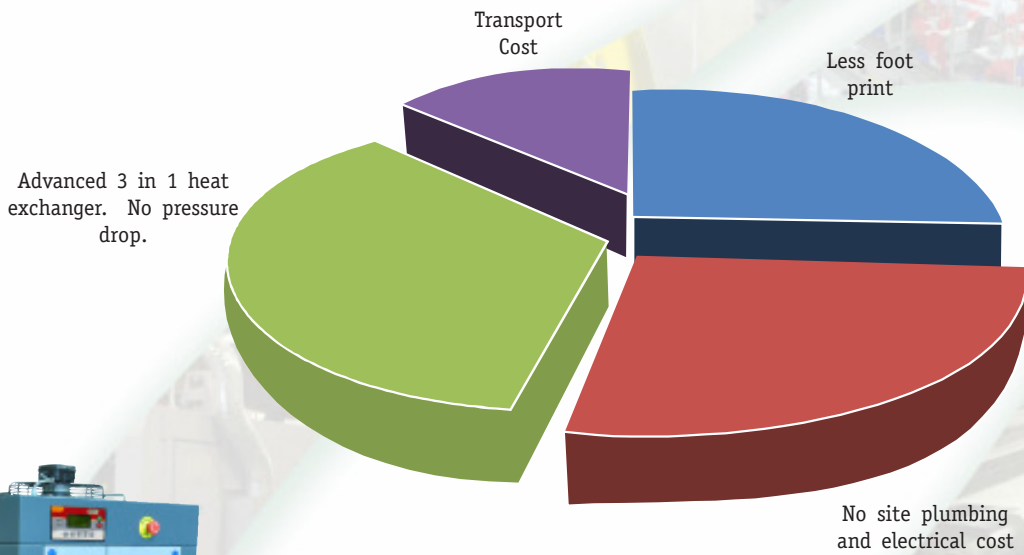
Motor

World-class IE2 electric motor features Grade F insulation and IP54 protection. Bearings are SKF.

Excellence in Integrated air dryer

- Foot print required is less as compressor and dryer mounted on the air tank.
- Huge money and time saved by avoiding site plumbing and electrical.
- Compressor and dryer are independent hence dryer maintenance is possible without stopping the compressor. Therefore no production losses.
- Single transport cost.
- Plug and use on arrival of the compressor.

Cost saving contributors



Tank Mounted Screw Compressor with dryer and filters (Mute Series)

Model	Max Working Pressure in kg/cm ²	Tank Capacity	Motor		Flow cfm	Noise dB (A)	Weight (kgs)	L W H (mm)
			HP	Kw				
Mute-3	10	220	3	2	9.5	61	BM:110 TM:170 CDF:210	BM:0675x0550x0815 TM:1750x0550x1430 CDF:1750x0550x1430
Mute-5	8-10	220	5	3.7	21-18	61	BM:115 TM:175 CDF:215	
Mute-7.5	8-10	220	7.5	5.5	25-22	64	BM:130 TM:190 CDF:230	
Mute-10	8-10-13	270	10	7.5	44-35-28	64	BM:160 TM:250 CDF:300	BM:0825x0550x0740 TM:1900x0550x1470 CDF:1900x0550x1470
Mute-15	8-10-13	500	15	11	63-55-45	65	BM:355 TM:470 CDF:520	BM:0950x0770x1120 TM:2100x0770x1760 CDF:2100x0770x1760
Mute-20	8-10-13	500	20	15	83-74-64	72	BM:375 TM:490 CDF:540	BM:0950x0770x1120 TM:2100x0770x1760 CDF:2100x0770x1760

BM - Base Mounted; TM - Tank Mounted; CDF - Tank Mounted with Dryer & Filters



Base Mounted Screw Compressor (Mute HD Series)

Model	Max Working Pressure in kg/cm ²	Motor		Flow cfm	Noise dB (A)	Weight (kgs)	L W H (mm)
		HP	Kw				
Mute HD-15	7-10-13	15	11	71-60-48	72	365	950x770x1120
Mute HD-20	7-10-13	20	15	96-89-78	72	430	1000x850x1240
Mute HD-25	7-10-13	25	18.5	120-105-85	72	445	
Mute HD-30	7-10-13	30	22	138-116-94	72	485	
Mute HD-40	7-10-13	40	30	205-173-140	72	780	1310x1250x1430
Mute HD-50	7-10-13	50	37.5	255-209-180	72	790	
Mute HD-60	7-10-13	60	45	305-255-210	73	950	
Mute HD-75	7-10-13	75	55	368-303-271	73	1540	1600x1524x1863
Mute HD-100	7-10-13	100	75	478-410-370	73	1540	
Mute HD-125	7-10-13	125	90	572-486-440	74	2480	2100x1600x2000

Base Mounted Screw Compressor (High Pressure Mute Series)

Mute HD-15 HP	16	15	11	46	70	375	950x770x1025
Mute HD-20 HP	16	20	15	57	70	440	1000x850x1245
Mute HD-25 HP	16	25	18.5	78	70	455	1000x850x1245
Mute HD-30 HP	16	30	23	92	70	495	1000x850x1245

Free Air Delivery (FAD) is tested as per 1217:2009 Annexure C edition : 4. Sound level measures as per ISO 2151, Second edition at 1m distance in field conditions, +/- .3dB(A).

VSD Screw Air Compressor



The FRANK (Variable frequency) Variable Speed Drive VSD Series is designed as a total concept, rather than by adding a frequency converter to an existing machine, it is tightly integrated and mechanically tested and has low vibration at high performance.

Main benefits are a highly stable air net pressure, low starting currents, a total absence of peaks and a high power factor.

By varying the speed of the drive motor, the FRANK (variable frequency) Variable Speed Drive VSD Series compressor output closely follows the air demand by covering a wide range, without load-unload switching. The result is a constant pressure, without fluctuations, which greatly benefits to your overall process stability.

Furthermore, a great energy saving between 20% and 35% is achieved during partial load. The reduction in energy cost over a typical life cycle might even surpass the initial investment cost of the screw air compressor. In other words, the savings realized by VSD can pay for the entire machine.

Energy Saving 1:1 Direct Drive transmission - Jumbo Series

Jumbo & Jumbo HD series are built for continuous duty in very hard conditions of use. The design of the machine have been focused not only on power consumption, but also on maintenance and operational costs and installation ease.

The drive between the airend and electric motor is carried out by means of gearless direct coupling connection. One to one direct drive by maintenance free coupling reduces number of components needed in gear drive, increasing reliability and service life through elimination of wear & transmission loses. Low speed 2950 RPM larger airends are more efficient than high speed airends. A dedicated airend for any machine at any pressure in order to grant maximum performance in the complete range.



Jumbo 1000



Jumbo HD 50 - 125



Lower speed means increased efficiency and durability with reduced compressed air cost, less wear & less maintenance cost.

Base Mounted Screw Compressor (Jumbo Series)

Model	Max Working Pressure in kg/cm ²	Motor		Flow cfm	Noise dB (A)	Weight (kgs)	L W H (mm)
		HP	Kw				
Jumbo HD Series							
Jumbo HD-25	7	25	18.5	118	72	480	1350x800x1350
Jumbo HD-40	7	40	30	205	72	830	1450x1150x1580
Jumbo HD-100	7	100	75	523	73	1850	1900x1250x1560
Jumbo Series							
Jumbo-30	9	30	22	123	72	530	1350x800x1250
Jumbo-40	9	40	30	178	72	830	1450x1150x1580
Jumbo-50	9	50	37.5	225	72	850	1450x1150x1580
Jumbo-60	9	60	45	268	72	1450	1650x1150x1580
Jumbo-75	9	75	55	339	73	1900	1850x1450x1700
Jumbo-100	9	100	75	450	73	2200	1850x1450x1700
Jumbo-125	8-10-12	125	90	566-516-435	75	1650	1700x1250x2000
Jumbo-150	8-10-12	150	110	700-615-560	75	2500	1900x1600x2250
Jumbo-180	8-10-12	180	132	850-779-690	75	2600	1900x1600x2700
Jumbo-220	8-10-12	220	160	956-885-794	76	3150	1900x1800x2800
Jumbo-250	8-10-12	250	185	1062-956-797	78	3330	2000x1800x3000

Principle of Operation - Nippydry

Warm compressed air enters the Air / Air Heat Exchanger where it is pre-cooled by outgoing cold dry air. The pre-cooled air enters the Air to Freon Heat Exchanger where it is cooled down to +3°C. At this temperature, water condenses into liquid droplets, which are removed from the air stream by a very efficient Demister and automatically discharged by a Automatic Drain Valve. The Cold dry compressed air passes back through the secondary side of the Air to Air Heat Exchanger where it is reheated by the incoming warm air.



- Dewpoint +3°C
- Designed for high ambient temperatures
- Time delay for compressor safety

Specification of Dryer

Model	Flow in scfm	Power Consumption in KW		End Connection	Dimensions in mm			Weight in Kg	Max. Working Pressure
		R 134a	R 407c		H	W	D		
Nippydry 20	20	0.32	—	½" BSP	505	202	502	25	16
Nippydry 20 HP	20	0.32	—	½" BSP	610	450	500	35	30
Nippydry 30	35	0.32	—	½" BSP	505	202	502	25	30
Nippydry 40 HP	40	0.34	—	½" BSP	400	400	590	68	40
Nippydry 45	45	0.34	—	½" BSP	525	450	475	48	16
Nippydry 50	50	0.36	—	½" BSP	525	450	475	48	16
Nippydry 60	60	0.36	—	½" BSP	525	450	475	48	16
Nippydry 60 HP	60	0.36	—	1" BSP	400	400	590	48	40
Nippydry 75	75	0.36	—	1" BSP	525	450	475	48	16
Nippydry 80	80	0.85	—	1" BSP	675	485	525	65	16
Nippydry 80 HP	80	0.36	—	1" BSP	500	500	690	85	40
Nippydry 100	100	0.85	—	1" BSP	675	485	525	65	16
Nippydry 130	130	0.85	—	1" BSP	675	485	525	65	16
Nippydry 150	150	1.02	—	1½" BSP	860	670	700	123	16
Nippydry 150 HP	150	0.85	—	1" BSP	675	485	525	65	40
Nippydry 200	200	2.08	2.34	1½" BSP	860	670	700	129	16
Nippydry 250	250	2.08	2.34	1½" BSP	860	670	700	129	16
Nippydry 250 HP	250	2.08	2.34	1½" BSP	860	670	700	129	40
Nippydry 300	300	2.40	2.40	2" NB	1275	850	800	240	16
Nippydry 400	400	2.50	2.30	2" NB	1275	850	800	260	16
Nippydry 500	500	2.50	2.30	2" NB	1275	850	800	290	16
Nippydry 650	650	—	3.50	2" NB	1700	1100	1425	350	16
Nippydry 800	800	—	4.00	3" NB	1700	1100	1425	490	16
Nippydry 1000	1000	—	5.10	3" NB	1700	1100	1425	580	16
Nippydry 1250	1250	—	7.90	4" NB	1700	1100	1425	620	16
Nippydry 1500	1500	—	7.90	4" NB	1700	1100	1425	900	16
Nippydry 2000	2000	—	10.20	6" NB	1700	1100	1450	1020	16

For any other capacity contact factory. Specifications are subject to change without notification.

Compressed Air Filters



Model	Element Grade	Flow cfm	Pressure Kg/cm ²	Pipe Size BSP	Height (mm)	Width (mm)
F_F65	P / O / M	65	13	¾"	260	100
F_F150	P / O / M	150	13	1"	350	150
F_F250	P / O / M	250	13	1½"	750	220
T 600_	P / X / Y	350	16	1½"	474	114
T 851_	P / X / Y	500	16	2"	666	148
T 1210_	P / X / Y	710	16	2"	736	148

Specification

Description	Element Grade		
	P	O/X	M/Y
Filter Element	Borosilicate	Borosilicate	Borosilicate
Particle Removal	5 (Micron)	1 (Micron)	0.01 (Micron)
Max. Oil carryover	5 (mg/m ³)	0.5 (mg/m ³)	0.01 (mg/m ³)
Max. Working Temp.	80°C	80°C	80°C

Ordering Code : Example : Model FPF 65 Element Grade - P; T600Y Element Grade - Y

