

THE COMPANY

Metalex has been awarded an ISO 9001:2000 certification from the renowned accreditation agency ICS-ANZ for pioneering the design, development and application of refrigeration technologies and is fast establishing a global reputation for manufacturing quality refrigeration compressor.

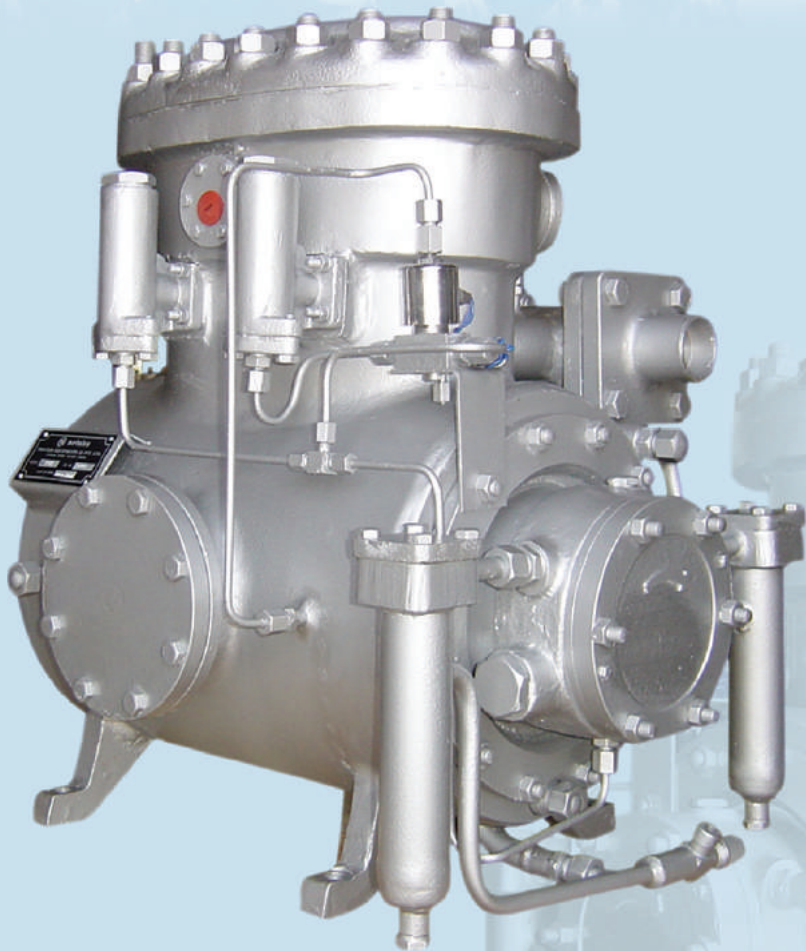
Enriched from a three decade experience in the compressor industry and after being widely acclaimed and well acceptance of the MX series compressors, Metalex is proud to **launch the MPX-2 Compressor.**

The MPX-2 compressor covers a wide range of application from high to low temperature applications such as Cold Storage, Quick Freezing, Ice Plant, Breweries, Industrial Gas & Chemical Process Plant Plus Research & Development establishments.

The MPX-2 series are well designed - robust machines capable of running for prolonged periods with minimum maintenance and these machines are the perfect choice for all users desiring optimum efficiency with minium cost.

These compressors are exceptionally compact and occupy less space. They are also designed to accommodate varying refrigeration demands with maximum economy.

MPX-2 SERIES



MPX-2 SERIES REFRIGERATION COMPRESSORS

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DESIGN ELEMENTS

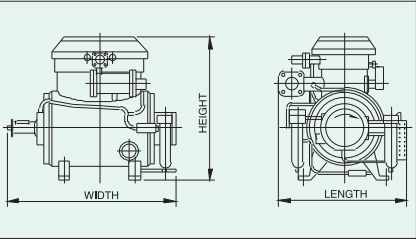
- The crankcase and cylinder welded into an all steel construction makes these compressor leak proof and reliable heavy duty machine - which is exceptionally strong, still light in weight and shock proof.
- The crankshaft has exceptionally good running properties and wear resistance. Force feed lubrication is ensured by a crankshaft driven gear pump.
- Renewable cylinder-liners made of a special grade of fine grained cast iron are pressed into the Cylinder Liner. The delivery valve seat is held in position a strong retaining spring, protecting compressor against damage of liquid carryover.
- The pistons made of light metal alloy, have three compression rings and one oil ring ensuring ample lubrication but low oil consumption.
- The connecting rods are of aluminium alloy and drilled for force feed lubrication of the bearings.
- The suction and discharge valve of special alloy steel, are ring-plate type which assure by their large area an sample gas passage at a low lift.
- MPX-2 compressor is provided with flywheel for v belt drive for speeds between 600 and 1390 RPM and flexible coupling for direct drive at 1450 RPM
- MPX-2 compressor has a built-in safety valve.
- Automatic unloaded starting - equipment is also provided, as a standard fitting on compressor.

metalex process equipment (i) pvt. ltd.

MPX-2 Performance Chart

Evaporating Temperature	Condensing Temperature															
	Ammonia (Nh ₃)						Freon-12 CCl ₂ F ₂						Freon-22 CHClF ₂			
	35 ^o C		40 ^o C		45 ^o C		35 ^o C		40 ^o C		45 ^o C		35 ^o C		40 ^o C	
	TR	KW	TR	KW	TR	KW	TR	KW	TR	KW	TR	KW	TR	KW	TR	KW
+10 ^o C	51.1	28.11	49.8	32.06	47.6	36.24	27.4	22.45	26.0	24.38	24.5	26.10	46.0	33.56	43.0	36.99
+5 ^o C	42.8	27.96	41.1	31.10	39.7	34.82	22.9	21.70	21.6	28.34	20.4	26.68	38.6	32.66	36.4	35.20
0 ^o C	35.0	27.44	33.5	29.83	31.7	32.66	18.9	20.78	17.8	21.85	16.7	22.97	32.0	31.17	30.2	33.33
-5 ^o C	28.2	25.95	26.9	27.81	25.2	29.98	15.5	19.46	14.5	20.85	13.5	20.81	26.3	29.38	24.7	30.95
-10 ^o C	22.4	23.94	21.2	24.91	19.7	26.99	12.5	17.75	11.6	18.27	10.8	18.64	21.4	27.14	20.0	28.26
-15 ^o C	17.4	21.70	16.3	22.74	15.0	24.09	9.9	16.63	9.1	16.33	8.4	16.55	17.1	24.53	15.9	25.43
-20 ^o C	(13.1)	19.46	(12.1)	20.21			7.7	14.17	7.0	14.32	6.4	14.32	13.5	21.92	12.4	22.37
-25 ^o C	9.3	17.23					5.7	12.68	5.1	12.45	4.5	12.30	10.1	19.16	9.2	19.24
-30 ^o C							4.0	10.66					7.4	16.26		

- APPLICATION NOTES :
- Values within brackets (), isentropic discharge temperature exceeds 12° C and water cooling for the cylinder jacket is essential.
 - Capacity and Power Consumption are proportional to speed.
 - Minimum permissible speed is 600 RPM.
 - The Performance data is just a guideline. For specific details contact us.
 - Direction of Rotation : Anticlockwise when viewed from shaft end.
 - Gd2 value of crank mechanism : 0.2464 kgf-m².



Approximate Ice Making Capacity of MPX-2 Refrigeration Compressor		
Speed	MPX-2	
RPM	Tons of ice produced in 24 working hrs.	Shaft kW required
600	3.3	9.39
1000	5.6	15.66
1450	8.1	22.75

MPX-2 Technical Specification

Compressor	Length mm	width mm	Height mm	Number of Cylinders	Bore mm	Stroke mm	Swept volume M3/H at 1450 RPM	Connection Size		Weight Without Fly Wheel	Speed in RPM		Discharge Pressure max
								Suction	Discharge		Max	Min	
MPX-2	745	562	685	2	110	85	140.7	50	40	250 kgs.	1450	600	18.5 ata

Accessories & Spare Parts



- The MPX-2 Savings in a glance :
- ✓ Saving - Energy / Power
 - ✓ Saving - Space
 - ✓ Saving - Refrigerant
 - ✓ Saving - Maintenance
 - ✓ Saving - Spare Parts Prices
 - ✓ Saving - Better Price / Best Performance Ratio

Cold Storages ♦ Quick Freezing ♦ Ice Plants ♦ Distillery & Breweries ♦ Dairy Industry



Industrial Gas & Chemical Process Plants ♦ Research & Development Establishments ...

- Metalex Package of Benefits :
- ✓ High Product Quality
 - ✓ Fast Developing Network
 - ✓ Wide acceptability of MX Compressors
 - ✓ Lean & efficient Work team
 - ✓ Result-Oriented Solution Provider