



SCREW AIR COMPRESSOR

www.inthemecompressor.com

- Rotary Air Compressors
- Refrigerated Air Dryer
- Compressed Air Storage & Filtration

- Power : 7.5 - 315 kW,
- Pressure : 1.5 - 40 BAR,
- Output : 30 - 3000 CFM



Company Profile

INTHEME COMPRESSOR

INTHEME COMPRESSOR is an esteemed Indian-registered brand, part of a group of sister companies established in India since 2017. Our core expertise lies in the generation of compressed air using advanced rotary screw air compressor technologies, alongside comprehensive compressed air processing and handling machinery and solutions. INTHEME is dedicated to providing innovative products backed by excellent after-sales support. We offer a holistic, single-source solution encompassing the generation, filtration, separation, handling, and storage of compressed air for diverse end-use equipment. Our foundational beliefs are rooted in integrity, performance, reliability, durability, and environmental sustainability. These principles drive us to deliver compressed air generation and handling machinery with the highest energy efficiency, effectively addressing current industrial needs and safeguarding resources for future generations. Our products are engineered for continuous 24x7 industrial operation, excelling even in challenging environments characterized by fluctuating climates, high temperatures, and dusty conditions, making them ideal for a wide range of industries. Our extensive product portfolio spans:

- Rotary Screw Air Compressors
- Refrigerated Air Dryers
- Compressed Air Storage & Filtration Systems
- Pressure : 1.5 – 40 BAR
- Output : 25 – 3000 CFM
- Power : 7.5 to 315 kW

Leveraging Industry 4.0 professional designs and a stringent quality control system, we guarantee the technical performance and reliability of every piece of equipment, ensuring they are consistently best-in-class. INTHEME COMPRESSOR's mission is to cultivate a world-renowned, high-end brand synonymous with sustainable development. We continuously strive to enhance our value proposition and foster strong partnerships with our customers and employees. We are committed to delivering Innovative, Reliable, Durable, Cost-Efficient, and Energy-Saving products that empower our clients' success.

CUSTOMIZATIONS FOR DIFFERENT INDUSTRY ::

We organize our R&D Teams to Develop Products According to Individual Industry Characteristics and Different Working Conditions and Environments of Their Equipments, so it helps to Meet Special need of Customer and Achieve a Real Industry –Specialized Compressor.



TEXTILE



CERAMIC



LASER IND.



SOLAR



PLASTIC



PHARMA

4IN1 TYPE SCREW AIR COMPRESSOR + AIR DRYER + RECIVER TANK + LINE FILTER



ADVANTAGES

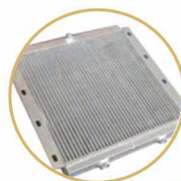
- Free installation
- Save factory space
- Energy saving
- Give clean & dry compressed air

TECHNICAL DATA : 4 in 1

MODEL	Motor Power		Max. working pressure (BAR)				connection	Sound	Dimension			Weight Kgs
	KW	HP	7bar	8bar	10bar	13bar			L	W	H	
ITMC -7.5	7.5	10	45	39	33	28	1 1/2"	62 +- 2	1650	870	1900	370
ITMC -11	11	15	67	61	54	47	1 1/2"	62 +- 2	1930	870	2080	450
ITMC -15	15	20	86	80	75	57	2	62 +- 2	1930	870	2080	490

SINGLE STAGE FIXED SPEED & PM + VFD

■ Power : 7.5 - 160 kW ■ Pressure : 7 - 13 BAR ■ Output : 45 - 1024 CFM



Cooler
High quality aluminum material, alternating expression cooler fins ensure the perfect radiating effect



Oil Filter
INTHEME filters ensure longer working life and save the maintenance time and cost.



Stainless Steel Pipes
High and low temperature resistant, high pressure resistant.



Air Filter
Two-stage dust removal and filtering system with efficiency of up to 99.9% even in heavy-duty environment.



Compressed Air Vessel
Reduction of pressure drops and energy costs, quality air with low oil content.



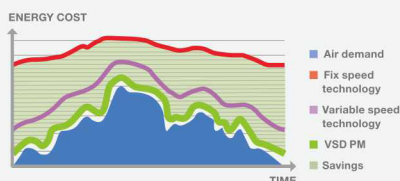
Electric Motor
Premium efficiency Totally TEFC IP54/IP55 motor (Class F insulation) protects against dust and chemicals etc.



Air End
Original Germany INTHEME air end, advanced SAP profile design .

Why VSD (variable speed)?

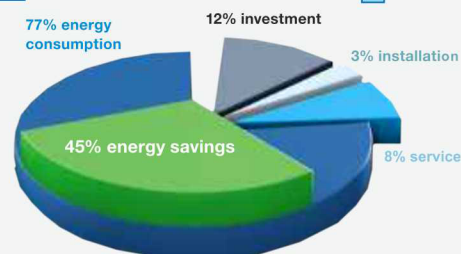
As a majority of customers have a variable demand for compressed air, a variable speed compressor is superior VS a fixed speed compressor in terms of energy saving by perfectly matching air supply to air demand of avoiding unloading losses.



WHY ENERGY

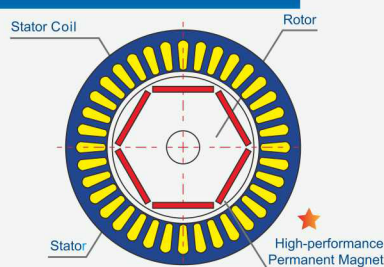
Energy costs represent about **77%** of the total operating cost of your compressor. That is Why efficiently reducing the energy consumption of your compressed air installation should be a major focus.

EFFICIENCY?



Why PM (permanent magnet motor)?

Permanent magnet is a high efficiency motor combines our variable speed technology with our new and highly efficient drive train, resulting in energy savings of up to **40%**



Permanent Magnet Synchronous Motor

SINGLE STAGE REGULAR PRESSURE SCREW AIR COMPRESSOR

AIREND



- Large Design, More Air Flow
- Swedish SKF Heavy Duty Bearings
- Long Life Screw Elements

MOTOR



- Permanent Magnet Synchronous
- Motor, IE4 & IP55 Air Cooled Type
- Achieves Highest Efficiency.

INVERTER



- Provide Slow & Stable Starting to Motor
- Auto Adjust Motor Speed According to Plant Air Demand.

CONTROLLER



- Intelligent Touch Type PLC Controller Provide 14 Protections Like Overload Shock Circuit High Voltage Etc.

TECHNICAL DATA : Fixed Speed & PM+VFD : 7 - 13 BAR

MODEL	Motor Power		Max. working pressure (BAR)				Connection	Sound	Dimension		
	kW	HP	7bar	8bar	10bar	13bar			L	W	H
ICD-7.5	7.5	10	45	39	33	28	1 1/4"	62 +-2	900	650	920
ICD-11	11	15	67	61	54	47	1 1/4"	62 +-2	940	705	1120
ICD-15	15	20	86	80	75	57	1 1/4"	62 +-2	980	710	1030
ICD-18	18	25	113	108	93	75	1 1/4"	68 +-2	1300	785	1185
ICD-22	22	30	134	128	114	99	1 1/4"	68 +-2	1300	785	1185
ICD-30	30	40	186	178	159	134	1 1/2"	72 +-2	1570	895	1295
ICD-37	37	50	238	224	198	175	1 1/2"	72 +-2	1570	895	1295
ICD-45	45	60	284	272	252	205	1 1/2"	72 +-2	1620	940	1355
ICD-55	55	75	372	360	318	300	2"	75 +_2	1850	1080	1635
ICD-75	75	100	480	459	410	354	2"	75 +_2	2045	1250	1705
ICD-90	90	120	584	548	516	435	DN 50	75 +_2	2340	1480	1820
ICD-110	110	150	760	724	618	575	DN 65	78 +-2	2568	1620	1985
ICD-132	132	175	928	884	778	725	DN 65	78 +-2	2568	1620	1985
ICD-160	160	200	1024	985	859	762	DN 65	78 +-2	2720	1750	1985

TWO STAGE : 5 - 12 BAR

FIXED SPEED & PM + VFD SCREW AIR COMPRESSOR

- Power : 22kw - 315 kw
- Pressure : 5/8/10/13 Bar



TWO-STAGE AIR-END

- More free air delivery volume with same power.
- Low air-end speed ensures longer service life, lesser chance of overheating & leakage problem





TECHNICAL DATA :

Regular Pressure Two Stage Fixed Speed & PM + VFD : 7 - 13 BAR

MODEL	Motor Power		Max. working pressure (BAR)				connection	Sound	Dimension			Weight Kgs
	KW	HP	7bar	8bar	10bar	13bar			L	W	H	
TIC-37	37	50	275	261	235	180	1 1/2"	72 +-2	2400	1600	1500	1420
TIC-45	45	60	353	311	260	215	1 1/2"	72 +-2	2470	1600	1560	1530
TIC-55	55	75	462	440	370	305	2"	75 +_2	2620	1650	1700	2100
TIC-75	75	100	586	545	490	420	2"	75 +_2	2620	1650	1700	2200
TIC-90	90	120	720	690	610	540	DN 50	75 +_2	2780	1750	1900	2550
TIC-110	110	150	860	805	730	630	DN 65	78 +-2	3220	1950	1980	2780
TIC-132	132	175	1040	970	860	790	DN 65	78 +-2	3850	2250	2200	3100
TIC-160	160	200	1220	1145	1065	990	DN 65	78 +-2	4050	2310	2280	3380

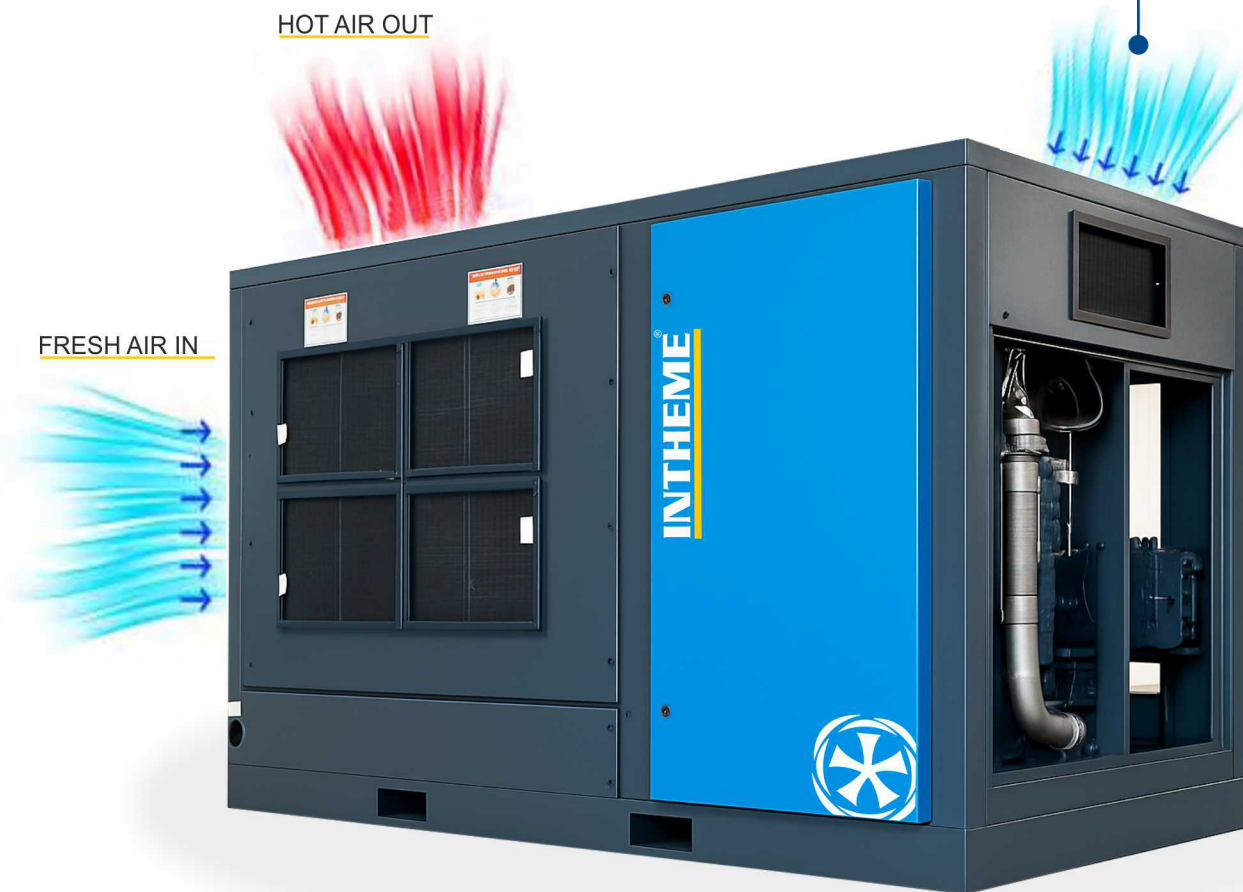
TECHNICAL DATA :

Low Pressure Two Stage Fixed Speed & PM + VFD : 5 BAR

MODEL	Motor Power		Max. working pressure (BAR)	Capacity		Connection	Sound	Dimension			Net Weight Kgs
	KW	HP		cfm	m3/min			L	W	H	
TLP PM-37	37	50	5	325	9.48	DN 50	68 +- 2	2400	1600	1500	1650
TLP PM-45	45	60	5	406	11	DN 50	68 +- 2	2470	1600	1560	1850
TLP PM-55	55	75	5	511	14.47	DN 65	70 +-2	2620	1650	1700	2220
TLP PM-75	75	100	5	670	18.97	DN 65	73 +-2	2620	1650	1700	2350
TLP PM-90	90	120	5	833	23.59	DN 80	73 +-2	2780	1750	1900	2850
TLP PM-110	110	150	5	995	28.17	DN 100	75 +-2	3220	1950	1980	3410
TLP PM-132	132	175	5	1235	34.97	DN 100	75 +-2	3850	2250	2200	4300
TLP PM-160	160	200	5	1482	41.97	DN 125	75 +-2	4050	2310	2280	5530
TLP PM - 200	200	270	5	1880	53.24	DN 150	75 +-2	4100	2310	2300	6400

OPTIMIZED COOLING SYSTEM

- The whole series two stage air compressor we have upgraded the cooling system has separated the cold area and the hot area to ensure the air compressor can run in the high temperature environment.
- Equipped with the independent fan for electricity box, ensure inverter and electricity parts work smoothly.
- Using the centrifugal fan necessary for the high end air compressor lower noise and have much larger volume than the axial flow fan with good cooling performance.



LOW PRESSURE SINGLE STAGE : 2 - 3.5 BAR



- Large & Dual Air - Oil Separator System
- Lower Pressure Higher Air Flow
- External Oil Pump For Forced Lubrication
- Achieve Best Specific Power (kW/CFM)

TECHNICAL DATA :

Low Pressure Single Stage (2 - 3.5 BAR)

Model	Max Working Pressure BAR	F.A.D		Motor Power		Connection	Net Weight kgs	Dimension (L*W*H) mm
		m ³ /min	CFM	hp	kw			
LPM-55	3.5	15.71	620	75	55	DN80	2350	2700*1880*1850
LPM-75	3.5	21.49	840	100	75	DN100	2700	2750*1900*1900
LPM-90	3.5	28.74	1015	120	90	DN125	3600	3450*2100*2150
LPM-110	3.5	35.40	1250	150	110	DN150	4900	3760*2230*2280
LPM-132	3.5	44.46	1570	175	132	DN180	5500	4000*2330*2300
LPM-160	3.5	50.57	1800	200	160	DN200	6000	4500*2330*2330

16/20 BAR SERIES

SPECIAL FOR LASER CUTTING MACHINE SCREW AIR COMPRESSOR

- Power: 11kw – 37kw
- Pressure: 11kw-37kw(16bar), 15kw-37kw(20bar)



Energy-Saving



Save Space



Reliable



- Advantage
Low cost, widely application.
- Applicable materials
Carbon steel, aluminum, aluminum alloy, stainless steel, brass, etc.
- Air supply pressure
13bar - 16bar.



- All spare parts upgrade to 20bar high pressure resistance, such as intake valve, air/oil separator tank, air-end, motor and piping.
- High pressure design oil filter, with better filter function.

MATCHING TABLE

SCREW AIR COMPRESSOR & LASER CUTTING MACHINE

Laser Cutting Machine	Screw Air Compressor	Cutting Thickness (carbon steel)
≤1.5kw	11kw(16bar)	2mm
≤3kw	15kw(16bar)	4mm
≤6kw	15kw(16bar)	6mm
≤10kw	22kw(16bar)	8mm
12-15kw	22/37kw(20bar)	10-12mm



TECHNICAL DATA : FIXED SPEED - 16 BAR

Model	Max Working Pressure		F.A.D		Motor Power		Air Tank Capacity	Connection	Net Weight kgs	Dimension (L*W*H) mm
	bar	psig	m ³ /min	CFM	hp	kw	L			
ICTG-11	15.8	229	1.0	35	15	11	400L	G3/4"	510	1850*1030*1880
ICTG-15	15.8	229	1.50	53	20	15	400L	G3/4"	510	1850*1030*1880
ICTG-22	15.8	229	2.30	81	30	22	400L	G3/4"	560	1850*1030*1880

TECHNICAL DATA : FIXED SPEED - 20 BAR

Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight kgs	Dimension (L*W*H) mm
	bar	psig	m ³ /min	CFM	hp	kw			
ILC-15	20	290	1.1	38	20	15	G1"	480	1150*800*1135
ILC-22	20	290	2.0	70	30	22	G1"	500	1150*800*1125
ILC-37	20	290	2.8	98	50	37	G1-1/2"	680	1350*930*1320

- According to the standard of GB19153-2009
- Standard Power Supply: 415V/50Hz/3Ph
- Please contact us for any specification that is not within the above mentioned standards.
- Compressor Stage: One Stage Compression
- Exhaust Temperature: Ambient Temperature + 45°C

30/40 BAR SERIES

HIGH PRESSURE TYPE PERMANENT MAGNET VSD SCREW AIR COMPRESSOR

- Power: 15kw – 250kw
- Pressure: 15kw-220kw(30bar),22kw-250kw(40bar)
15kw(20bar)
- All models: soft starting

ADVANTAGES

- High efficiency and energy saving
- Low maintenance cost
- Mute design, low noise
- Stable and reliable

HIGH PRESSURE
TWO STAGE AIR-END



TECHNICAL DATA : High Pressure Two Stage (30 BAR)

Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight kgs	Dimension (L*W*H) mm
	bar	psig	m ³ /min	CFM	hp	kw			
CMN15G-2.0	20	290	1.5	52.965	20	15	3/4"	868	1650*1150*1310
CMN18G-3.0	30	435	1.73	61.0863	25	18.5	3/4"	868	1650*1150*1310
CMN22G-3.0	30	435	2.10	74.151	30	22	3/4"	900	1650*1150*1310
CMN22GPV-3.0	30	435	0.84-2.1	29.66-74.15	30	22	3/4"	900	1650*1150*1310
CMN37G-3.0	30	435	3.30	116.523	50	37	3/4"	1340	1900*1420*1480
CMN55G-3.0	30	435	6.20	218.922	75	55	DN32	2130	2280*1500*1990
CMN130GPV-3.0	30	435	5.4-13.5	190.7-476.7	75	55	DN40	2850	2340*2200*1900
					100	75			
CMN132G-3.0	30	435	13.50	476.685	180	132	DN40	3200	3000*1750*1900
CMN185G-3.0	30	435	19.60	692.076	250	185	DN65	4320	3200*1850*2190
CMN220GW-3.0	30	435	24.60	868.626	300	220	DN65	4450	3500*1900*2250

TECHNICAL DATA : High Pressure Two Stage (40 BAR)

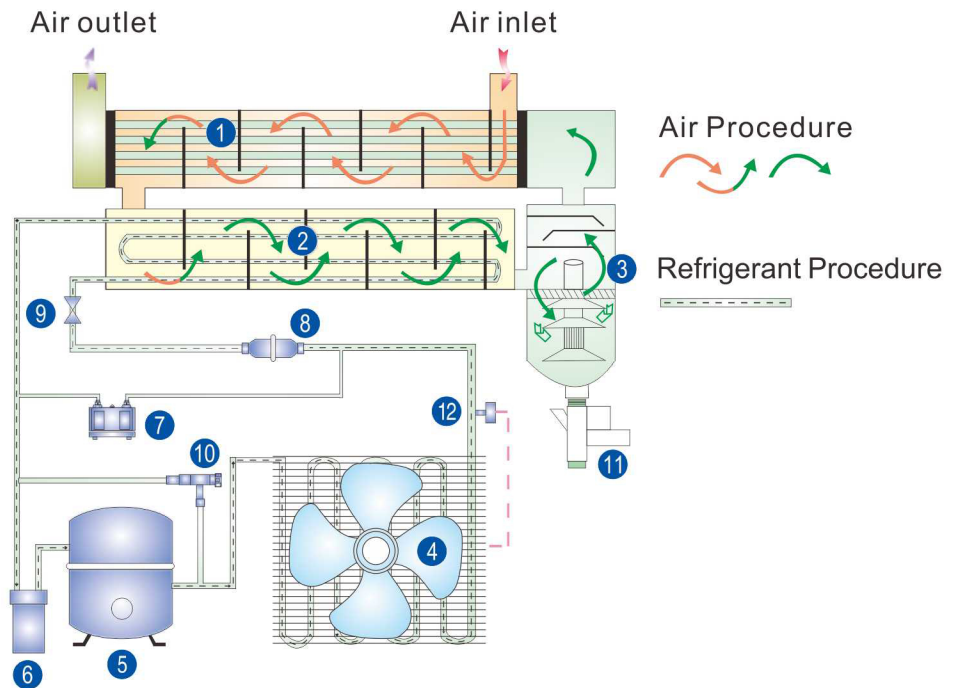
Model	Max Working Pressure		F.A.D		Motor Power		Connection	Net Weight kgs	Dimension (L*W*H) mm
	bar	psig	m ³ /min	CFM	hp	kw			
CMN22G-40	40	580	2.10	74.15	30	22	3/4"	900	1650*1150*1310
CMN22GPV-40	40	580	0.64-1.6	22.59-56.60	30	22	3/4"	900	1650*1150*1310
CMN37G-40	40	580	3.00	105.93	50	37	3/4"	1340	1900*1420*1480
CMN55G-40	40	580	5.70	201.27	75	55	DN32	2130	2280*1500*1990
CMN130GPV-3.0	40	580	4.9-12.3	173.0-434.3	75	55	DN40	2850	2340*2200*1900
					100	75			
CMN132G-40	40	580	12.50	441.38	180	132	DN40	3200	3000*1900*2250
CMN220GW-40	40	580	19.70	695.61	300	220	DN65	4450	3500*1900*2250
CMN250GW-40	40	580	23.80	840.38	340	250	DN65	4530	3500*1900*2250

- According to the standard of GB19153-2009
- Standard Power Supply: 415V/50Hz/3Ph
- Please contact us for any specification that is not within the above mentioned standards.
- Compressor Stage: Two Stage Compression
- Exhaust Temperature: Ambient Temperature + 45 °C

REFRIGERATED AIR DRYER

OPERATION PROCESS

- Pre-cooler / Heat Exchanger
- Evaporator
- Air / Water Separator
- Air-cooled Condenser
- Refrigerant Compressor
- Refrigerant Reservoir
- High-low Pressure switch
- Dry Filter
- Expansion Valve (Capillary)
- Hot Gas Bypass Valve
- Electric Auto-Drain
- High Pressure Switch



AIR DRYER WATER COOLING SYSTEM



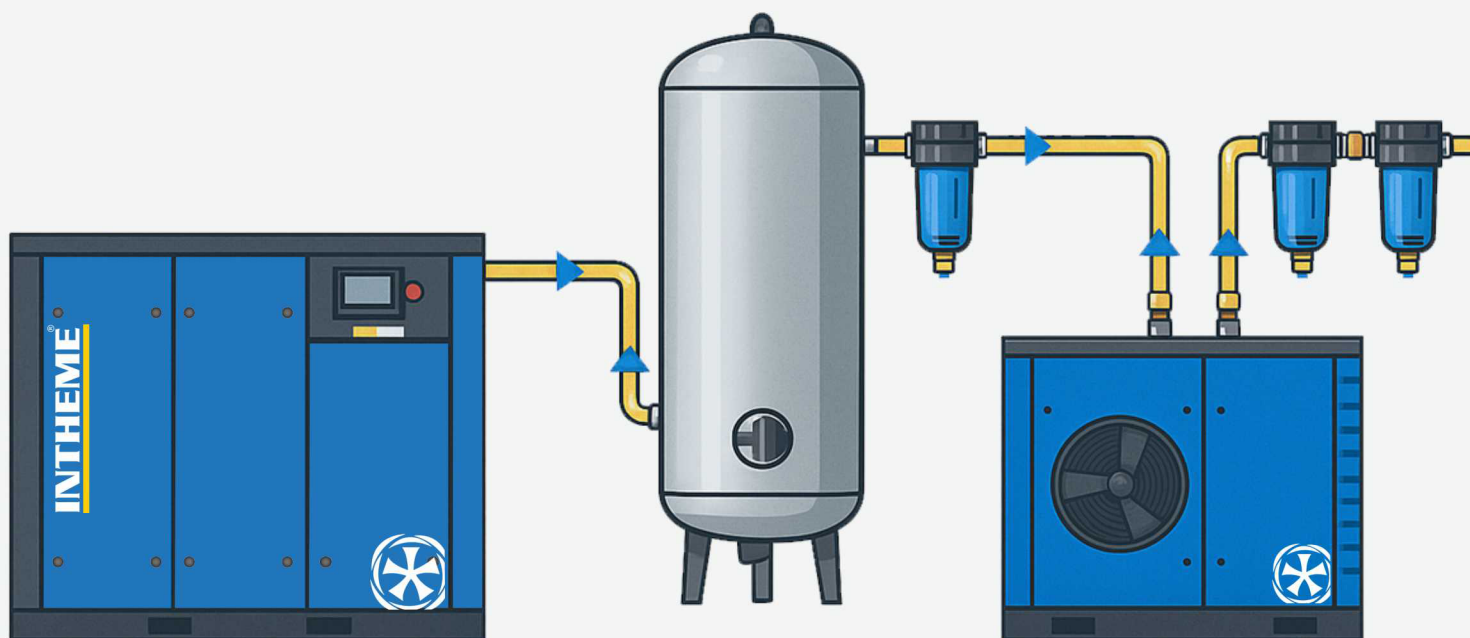
WATER COOLED AIR DRYER WORKING PRINCIPLE :

A water-cooled air dryer system is a type of air dryer that uses water to cool a condenser, removing heat from the compressed air and condensing moisture. In this system, warm, moist compressed air is first cooled by Cold water supply, then passed through moisture separator in which cold air end up losing moistures. The heat of pressurised is absorbed by water, which is circulated through a heat exchanger and carried away to a cooling tower where water get cold again naturally.

TECHNICAL DATA : Water Cooling System

Model	Compressed Air Flow	Max. Pressure Range	Power Supply	Cooling Tower Capacity	Connection Size
	Cfm	Bar	V/Ph/Hz	TR	
WCD-10	1000	10	415/3/50	50TR	DN-150
WCD-12	1200	10	415/3/50	50TR	DN-180
WCD-15	1500	10	415/3/50	80TR	DN-180
WCD-18	1800	10	415/3/50	80TR	DN-200
WCD-20	2000	10	415/3/50	100TR	DN-200
WCD-25	2500	10	415/3/50	120TR	DN-200

COMPRESSED FLOW CHART



AIR STORAGE :

INTHEME COMPRESSOR Air Receiver is Engineered to handle the stress of Fluctuating air demands, Reduce wear and tear and Increase the life of the end use equipment.

TECHNICAL DATA : Air Receiver Tank

Model	Capacity		Max. Working Pressure Bar g	Thickness (mm)		Dimensions (mm)	
	Ltr	M3		Shell	Dish end	Height	Dia.
KE 050	500	0.5	12.5	6	6	2080	610
			16	8	8		
KE 100	1000	1	8.5	6	8	2350	762
			12.5	8	10		
KE 150	1500	1.5	8.5	6	8	2350	914
			12.5	8	10		
KE 200	2000	2	8.5	6	8	2730	1040
			12.5	8	10		
KE 300	3000	3	8.5	8	10	2570	1320
			12.5	10	10		
KE 500	5000	5	8.5	8	10	3805	1320
			12.5	10	12		



LINE AIR FILTER

DIFFERENT GRADES OF LINE FILTERS

AO Filter : Pre-filter

Get rid of the particles which bigger than $1\mu\text{m}$, also collect fluid oil and water, oil content in the air: $\leq 0.5 \text{ mg/m}^3$ (PPM) at 21°C .

AA Filter : After-filter

Get rid of the vapor, oil mist and particles which bigger than $0.01\mu\text{m}$, oil content in the air: $\leq 0.01 \text{ mg/m}^3$ (PPM) at 21°C (should prepose a AO filter)

ACS Filter : Activated Carbon

Absorb oil vapour and hydrocarbon smell, oil content in the air: $\leq 0.003 \text{ mg/m}^3$ (PPM) at 21°C (should prepose a AO filter & AA filter)



Technical Parameter

Model	Aliment Grade	CFM	M3/MIN	Thread	Bar
ILF-06		60	1.69	1¼"	16
ILF-10		100	2.84	3¼"	16
ILF-15		150	4.25	1"	16
ILF-20	P,Q,R	200	5.68	1.5"	16
ILF-25		250	7.09	1.5"	16
ILF-35		350	9.92	1.5"	16
ILF-45		450	12.75	2"	16
ILF-60		600	17.0	2.5"	16

Model	Aliment Grade	CFM	M3/MIN	Flange	Bar
ILF-80		800	22.66	3"	16
ILF-100		1000	28.33	3"	16
ILF-125		1250	35.41	4"	16
ILF-160	P,Q,R	1600	45.32	4"	16
ILF-200		2000	56.65	5"	16
ILF-250		2500	70.81	5"	16
ILF-300		3000	84.97	6"	16
ILF-400		4000	113.3	6"	16

Working Conditions :

- ⊗ Max operating temperature: $\leq 66^\circ\text{C}$
- ⊗ Min operating temperature: $\leq 1.5^\circ\text{C}$ ⊗ Max operating pressure: $\leq 1.6\text{MPa}$

Standard Configuration

- ⊗ Shell+Filter element+Auto drain(conventional type)
- ⊗ Shell+Filter element+Electronic drain(flange type)

INTHEME IOT SYSTEM

Smart Air Compressor Monitoring in Real Time



**24/7
SERVICE**



**Reduce
downtime**



**Save
energy**



**Access
live data**



**Improve
reliability**

The data captured through IOT-connected INTHEME air compressors can help customers in the following ways:

- **Predictive Maintenance:** Customers can prevent unexpected downtime with access to compressor performance data, helping them to spot technical faults across key components of compressors, including motor, belt, and oil barrel.
- **Status Overview:** Customers can reduce on-site maintenance time by monitoring the operating status of compressors installed anywhere across the globe.
- **Real-time Service:** Customers can initiate a service request, if they detect unusual operating conditions (current, temperature, and pressure), and send SMS and email messages to service technicians, thereby minimizing equipment downtime.
- **Historical Information and Data Analysis:** Customers can acquire an in-depth knowledge of their compressors by benchmarking current operational parameters with historical data.



IN THE ME
COMPRESSOR

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MAIN BRANCH - SURAT

OTHER BRANCH :

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