SCREW COMPRESSORS

PARAMINA
Air Compressors Manufacturers

ABOUT US

"Six Decades of experience and specialization, together with new ideas and the proven reliability of our compressors and compressed air systems."

Founded in **1966**, **PARAMINA SA** deals exclusively with **compressed air**; driven to the **third generation** of ownership as a manufacturer of **high-pressure (420bar max.) piston air compressors**, **screw air compressors** and **auxiliary compressed air systems** suitable for **Breathing Air** as well as **Industrial applications** in

- Firefighting
- Diving & Medical Engineering
- Defense (air force, navy, army)
- Oil & Gas/H_2S protection
- **Marine & Offshore**
- Gas Industry (Nitrogen, Helium, Argon)
- Paintball & Shooting Sports
- Motorsports
- **Industrial & General-Purpose Air**

CERTIFICATES

ACHIEVEMENTS

- Robust Manufacturing based on quality, endurance and low operational cost
- Extensive and specialized knowledge of our engineers
- 3D Mechanical Design & Engineering
- Flexibility
- Personal & Direct approach to all customers
- Instant response to all inquiries
- Short & Prompt deliveries
- Rapid & Immediate service support
- Full availability of all spare parts in stock
- Low priced spare parts
- Custom design solutions according to customers' demands
- Free sales & service training in our facilities for all our partners
- Quality Management system according to EN ISO 9001:2015, certified by TUV AUSTRIA, for the entire production process, from Research & Development to Manufacturing, Sales and After Sales Services for all our air compressors and air processing equipment. We apply also an environmental system according to EN ISO 14001.
- CE & UKCA declaration of conformity by independent accredited bodies & compliance with EU & UK directives of all our air compressors and air processing equipment.
- IACS approved and certified products for marine industry
- ATEX approved and certified products for Oil & Gas industry
- Compliance with all international standards and regulations in order to reassure the final product quality and user's safety during operation. Paramina's own manufacturing products such as Compressors, Dryers, Filtration Systems, Filling Panels, Storage Systems, Air Quality Control & Measuring Systems, Safety Valves, Filling Valves, Filling Hoses, Pressure Maintaining Valves, are tested ONE by ONE individually, under strict procedures and with the latest pressure testing equipment.
- Product Liability Insurance for all our customers
- Worldwide Sales & Service network

Design Specifications

Robust Construction

- High performance screw compressors, air cooled, oil lubricated with compact cast-iron unit (encapsulated screw air end), providing leak-free operation and long-lasting performance. The compact unit incorporates: Screw air end with heavy-duty bearings and large diameter rotors, ensuring high efficiency and long service life, Intake valve, Intake Air filter, Centrifugal Air-Oil separation system with coalescing element resulting in oil carry-over less than 2 mg/m^3, Oil filter, Oil receiver, Oil thermostat, Safety valve, Maintenance valve.

Highly Efficient Cooling

- Oversized aluminum Air - Oil cooler, ensuring continuous operation even at high ambient temperatures.
- Centrifugal condensate separator with automatic drain.
- Independent cooling fan motor.

Optimal Control System

- Paramina Digital Controller drives, controls & protects the compressor, ensuring safe operation and proper maintenance.
- Safety device protecting against voltage failure & incorrect phase rotation.
- Analogue safety & operating pressure sensors
- 24V secondary voltage providing safety during routine operation
- Star/Delta Starter system
- Electric motor Class F, IP55, IE3-4, 400-440V/50-60Hz, with overload protection

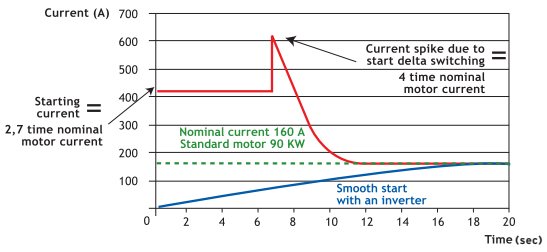
Simple Maintenance

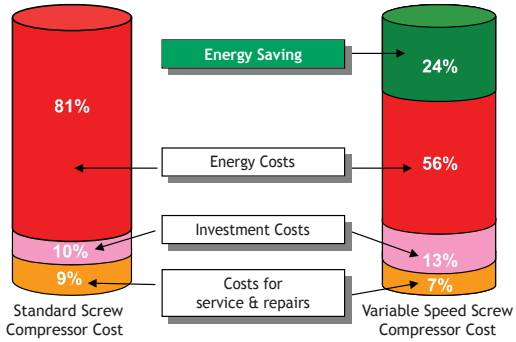
- Easy and rapid service access, through large doors (openings)

Low Noise Level / Vibration

- Silent operation through highly efficient soundproofed enclosures.
- Build-In anti-vibration control
- Automatic belt tensioning system

Working Pressure 15bar max.





Variable Speed Inverter

- Saving in energy consumption.
- Smooth motor starting with zero over current.
- Continuous speed variation to achieve the exact required air volume.
- Constant network pressure (± 0,1 bar).
- User controlled selection of the network pressure (variable adjustment between 5 and 13 bar).
- Avoiding unload times (energy efficient).
- Reduction of unload cycles.
- No Load/Unload switching to ensure less stress to the machine.
- Harmonic filters and sensing protection device.
- Constant Power Factor.
- High Efficiency of the moror.

MODELS & TECHNICAL DATA

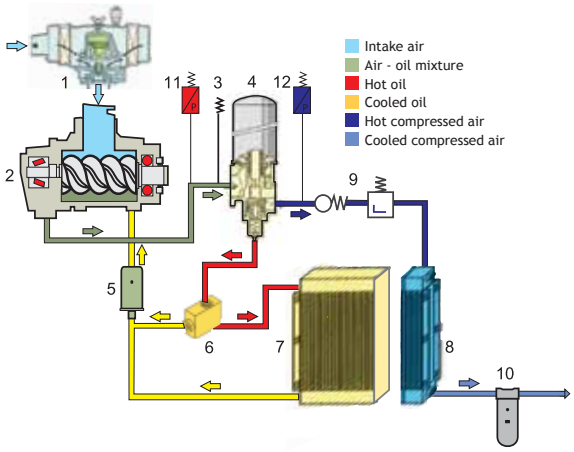
AE 4RE - 7RE

AE 11RE - 15RE

AE 18RE – 30RE

AE 30T - 45T
AE 37RE - 45RE

AE 55RE - 75RE



Flow Diagram

1 Air filter - intake valve.
2 Screw Air End.
3 Safety valve.
4 Air/Oil separator.
5 Oil filter.
6 Oil thermostat.
7 Oil cooler.
8 Air cooler.
9 Maintenance valve.
10 Water separator.
11 Safety pressure switch.
12 Working pressure switch.

FIXED SPEED (FS) & VARIABLE SPEED (VS)

Model	Working Pressure		Capacity @ nominal pressure		Motor Power		Air Outlet	Noise Level	Dimensions (mm)						Weight
									FS			VS			
	bar	psi	m3/min	cfm	kW	Hp	inch	dB (A)	L	W	H	L	W	H	Kg
AE 4RE	8	116	0.65	22.95	4	5.5	G 1/2"	65	810	660	1400	810	660	1400	215
	10	145	0.47	16.59											
	13	190	0.37	13.06											
AE 5RE	8	116	0.90	31.77	5.5	7.5	G 1/2"	65	810	660	1400	810	660	1400	241
	10	145	0.72	25.42											
	13	190	0.52	18.36											
AE 7RE	8	116	1.23	43.42	7.5	10	G 1/2"	67	810	660	1400	810	660	1400	252
	10	145	0.95	33.54											
	13	190	0.84	29.65											
	15	220	0.68	24.00											
AE 11RE	8	116	1.78	62.83	11	15	G 3/4"	68	1040	660	1400	1040	660	1400	328
	10	145	1.54	54.36											
	13	190	1.25	44.13											
	15	220	1.00	35.30											
AE 15RE	8	116	2.36	83.31	15	20	G 3/4"	69	1040	660	1400	1040	660	1400	345
	10	145	2.05	72.37											
	13	190	1.65	58.25											
	15	220	1.40	49.42											
AE 18RE	8	116	3.23	114.02	18.5	25	G 1 ½"	71	1250	850	1650	1250	850	1650	539
	10	145	2.72	96.02											
	13	190	2.26	79.78											
	15	220	1.75	61.78											
AE 22RE	8	116	3.70	130.61	22	30	G 1 ½"	72	1250	850	1650	1250	850	1650	570
	10	145	3.13	110.49											
	13	190	2.72	96.02											
	15	220	1.90	67.07											
AE 30RE	8	116	4.80	169.44	30	40	G 1 ½"	73	1250	850	1650	1250	850	1990	645
	10	145	4.26	150.38											
	13	190	3.70	130.61											
	15	220	2.80	98.84											
AE 30T	8	116	5.25	185.33	30	40	G 1 ½"	72	1250	850	1650	1250	850	1990	723
	10	145	4.34	153.20											
	13	190	3.71	130.96											
AE 37T	8	116	6.31	222.74	37	50	G 1 ½"	73	1250	850	1650	1250	850	1990	740
	10	145	5.48	193.44											
	13	190	4.70	165.91											
AE 37RE	15	220	3.50	123.55											
AE 45T	8	116	7.21	254.51	45	60	G 1 ½"	74	1250	850	1650	1250	850	1990	810
	10	145	6.45	227.69											
	13	190	5.40	190.62											
AE 45RE	15	220	4.90	172.97											
AE 55RE	8	116	9.40	331.82	55	75	G 2 ½"	75	1950	1020	2200	1950	1020	2200	1222
	10	145	7.72	272.52											
	13	190	6.64	234.39											
	15	220	5.90	208.27											
AE 75RE	8	116	12.20	430.66	75	100	G 2 ½"	76	1950	1020	2200	1950	1020	2200	1306
	10	145	10.70	377.71											
	13	190	8.86	312.76											
	15	220	7.60	268.28											

** Allowed ambient temperature: 0 - 45 °C*

Air Dryers

Refrigerated with unique design and new aluminum heat exchanger, ensuring a simple, reliable and maintenance free solution for dry and clean air. Dew Point: +3 °C

Adsorption, heatless or heat regenerated for totally dry compressed air - absolutely free from condesnsation. Dew Point: -20 °C to -70 °C.

Coalescing Filters

Highly efficient compressed air filters, designed to remove particles, oil, oil vapor and odour down to 0,01 micron and 0,003 mg/m^3.

- Differential pressure manometer.
- Anodising treatment.
- Automatic condensate drain.

Air Tanks

High-Resistant air tanks, CE certified according to European directives.

- Painted or Galvanized
- Manometer & Safety Valve
- Manual & Automatic Condensate drain.

Oil/Water Separators

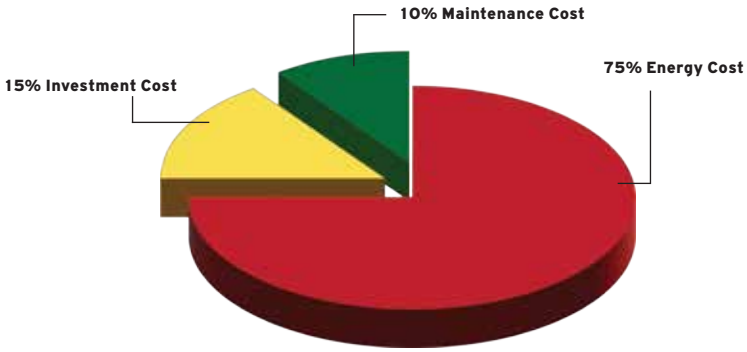
Separation and collection of condensate lubricant according to European directives for environmental protection.

Compressed air system installation diagram

WORLD-CLASS COMPRESSED AIR AUDITING & ENERGY SAVING MANAGEMENT SOLUTIONS

Do you know the cost of compressed air?

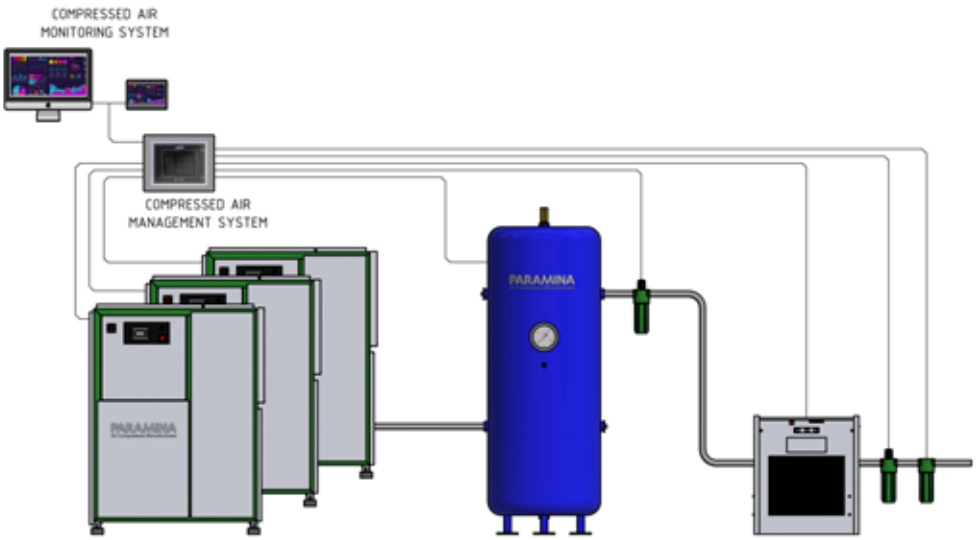
Researches in industries all over the world have shown that Energy is the largest cost associated with compressed air, equal to **75%** of the total cost of ownership of a typical rotary screw air compressor.



We Measure and Analyze the performance, health and efficiency of the compressor & entire compressed air system, regardless of its size, brand or age.

We Measure Quickly and efficiently Pressure, Voltage, Current & Flow and calculate productive power and unproductive power relating of the compressed air system.

We provide Compressed Air energy saving Management solutions that enable your organization to **reduce energy costs and its environmental footprint**, regardless of the brand and age of compressors you use. **By the combined use of Variable Speed Controlled (Inverter) compressors, energy savings of up to 60%** can be achieved.



HISTORY

1966 **Birth of PARAMINA**

1973 PARAMINA pioneers the first use of an adjusting screw compressor on a tractor (5 m³/min, 8 bar).

1981 PARAMINA is the first company in Greece to begin the manufacture of screw compressors.

1995 PARAMINA commences the production of high pressure breathing air compressors (40-350 bar).

1997 One of the first Greek Companies, but worldwide as well, to start the quality management procedures for the certification of ISO 9001 and CE.

2002 PARAMINA extends its screw compressor series, up to 110 KW.

2003 PARAMINA began with great success to export its products in the international market.

London Dive Show

2004 PARAMINA installs variable speed technology (inverter) to the whole range of screw compressors and develops the most contemporary energy saving systems for any compressed air system installation.

2005 PARAMINA moves to the new factory aiming to further development of its products and services.

2007 PARAMINA extends its high pressure compressor series, with the new model Cyclone, 24-36 m³/h – 350 bar.

2010 PARAMINA manufactures high pressure refrigerated dryer "CRYO", 36 m³/h – 350bar max.

2012 PARAMINA increases the maximum working pressure of its high pressure compressor models Typhoon & Cyclone, up to 420 bar.

2013 PARAMINA begins the production of new high pressure piston gas compressors suitable for Nitrogen(N_2), Helium (He), Argon (Ar). Mistral, Typhoon & Cyclone Gas series, from 6.6 m³/h to 36 m³/h – 350bar max.

2014 New entrance in our product range, Paramina Humidity Control device – including humidity sensor & digital monitoring unit.

2015 PARAMINA launches the new "Force" in our high pressure compressor series, Notus model, 10 m³/h – 350bar max.

2016 PARAMINA celebrates its 50year anniversary

2019 Newly designed Typhoon compressor models, Tropical series specialized for high ambient temperatures, increased humidity and contaminated environment. Electric & Diesel version, 19,2 m³ /h – 350bar max.

2021 PARAMINA proudly enters deeper in the oil & gas market with our new ATEX Cyclone Silent 24 Electric compressor model 24 m³/h -350bar max, specifically designed for explosive environments

2022 PARAMINA introduces new breathing air compressor model Cyclone Classic 24 Diesel, 24 m³/h -350bar max.

CE 0437

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