

PRODUCT INFORMATION



SERIES **AIR CENTRE**

9C Series High-Efficiency 9ir Compressors

ENGINEERED FOR SUPERIOR PERFORMANCE & ENERGY EFFICIENCY

WE BUILD A BETTER COMPRESSOR

Over a century ago, Enea Mattei created his first air compressor. By the 1950's, he recognized the unrivaled advantages that were only possible with rotary vane technology. That decision set the course for MATTEI for the next 100 years.

Of all the air compressor technologies available in the world today, ONLY Mattei's rotary vane compressor technology offers:

- Unmatched energy efficiency over time
- Unrivaled performance throughout time
- Unequaled life expectancy across time

Do you want something that will last a long time? Something that actually lowers your energy bill as time goes on? Something that improves with age like a fine wine?

Sustainability is the goal when you simply want to maintain the status quo. It is the least we can do for ourselves and our planet. That is why you want a Mattei rotary vane. It is the ONLY air compressor capable of delivering **"VANE GAIN"**.

UNBEATABLE PERFORMANCE

AC Series air compressors offer our customers the next level of sophistication. Featuring quiet {as low as 68 dB(A)} cabinet enclosures, Maestro XS electronic controllers, energy saving soft-start Wye-Delta motor starters, TEFC motors and, air-cooled aftercooler. We invite you to experience the revolution.

Mattei rotary vane air compressors are truly in a class of their own and known for their dependable operation and low maintenance. AC Series raises the bar

with unbeatable performance and energy savings with package flow rates from 129 to 292 ACFM.



Unrivaled Performance and Durability

Today, Mattei continues to leverage advancements in technology and materials to deliver Improvable Performance[™] to our customers. Our proprietary airends provide ~90% volumetric efficiency to offer you the best value in premium quality air compressors found anywhere on the planet.

Imagine "bearingless" Airends that last up to 100,000 hours (2-3 times the life of rotary screws) without needing an overhaul, unrivaled super quiet operation, and the most energy stingy designs in the industry.

It's a fact; Mattei is in a class of its own. Want to protect productivity, increase profitability, and lessen your carbon footprint?





Get More For Less

AC Series use our most advanced airend designs. Unlike typical rotary screw compressors, AC Series models use precision matched airends, direct-coupled to high efficiency motors that revolve at just 1,800 rpm, to deliver maximum energy efficiency and performance at design pressure. Thus, it is not uncommon to select a smaller HP AC Series model to meet the air demands of the customer.

For example, say you need about 250 ACFM. MATTEI can offer you our traditional 60 HP ERC Series model (260 acfm) or, we can offer you our 50 HP AC Series rated at 240 ACFM. Each produces about the same volume of air, but that 10 HP difference saves you money the moment you turn it on — that's why upgrading to an AC Series just makes sense. AC Series helps you get more air for less energy. Lower your electric bill month-after-month, year-after-year.

Get more for less. Get a Mattei.



WHY MATTEI IS YOUR BEST CHOICE

Mattei compressors are designed to give constant top performance 24 hours a day, every day of the year. Extremely rugged and reliable, AC Series is designed for outstanding performance and efficiency.

Rely on AC Series for:

- Superior ACFM/HP performance
- Unaltered performance through time
- System friendly demand adaptable controls
 - Automatic Load/No Load
 - Load matching Modulation
 - Automatic with Modulation
- No wear of the compressor's moving mechanical parts
- Compact design

- Low oil volume and consumption
- Direct coupled compressor and motor
- Slow 1,800 RPM rotational speed
- Low maintenance
- Quiet operation



SERIES **GIR CENTRE**

9C Series Air Compressors Sophisticated. Silent. Efficient.

All MATTEI air compressors retain the same heritage of innovation, durability and reliability. AC Series are highly-efficient cabinet style air compressors that raise the bar in delivering superior value, unrivaled highcapacity performance and energy efficient operation. AC Series must be compared on an ACFM basis — not based on HP. Why? Because, AC Series uses our most advanced airends to produce more ACFM per HP than typical rotary air compressors, so to do a fair comparison, you usually need to select the next smaller size. In fact, it is not uncommon to get the same level of ACFM output from the next smaller AC Series model.





High Quality Compressed **A**ir

Mattei compressors have an exclusive and efficient oil separating system which occurs in three stages: in the initial stage most of the oil is separated in a labyrinth in the compression chamber; the flow then enters the separator chamber where a mechanical separation takes place through speed reduction and flow deviation; the last phase occurs through the separator element.

Only 0.02% of the initial oil arrives to this final stage; this is the reason for which the average life of Mattei's separator element is 10,000 operating hours. Most importantly, this separating system guarantees a maximum oil residue of 1-3 ppm w/w in Mattei's compressed air.

How it works

Ambient air is drawn through a filter into the compression chamber consisting of a stator in which an eccentrically arranged rotor revolves at 1,800 rpm. An air intake valve automatically adjusts incoming air volume to match your control scheme. The rotor has longitudinal slots in which the vanes slide.

- 1. Pleated oversized Air Filter
- 2. Automatic intake Valve
- 3. Oil chamber
- 4. Compression chamber
- 5. Oil filter
- 6. Rotor
- 7. Blades
- 8. Coalescing separator
- 9. Air/oil cooler (radiator)
- 10. Condensate Separator & Drain

Zero-wear vanes ride on a thin film of oil and are held against the stator by centrifugal force. The air is compressed through the contraction in volume of each chamber formed by the vanes, the rotor and the stator wall. Sealing, cooling and lubrication are ensured by the oil injected into the chamber.



You Get What You Day For

It is not uncommon to get over 100,000 hours of service life out of our airends without a rebuild. MATTEI vane technology features zero-wear cast iron blades that ride on a thin film of lubricant thus, preventing wear to the blade or stator wall. The heart of the unit is the rotor which is supported by two (2) white metal Babbitt bushings and spins at only 1,800 rpm.

AC series is also friendly to your wallet and the environment. Each vane unit holds very little lubricant which saves you a small fortune on oil changes and disposal costs.

The highly efficient mechanical air/oil separation chamber delivers high quality air to the air/oil separator filter which provides up to 10,000 hours of service, and low 1-3 ppm oil carryover.

Get your money's worth. Get a MATTEI.



CAPACITY CONTROLS ADAPT TO YOUR DEMANDS

The layout and design of every air system is different. Some systems have very little air storage; some have an enormous volume of air storage. Some have small diameter air piping that is high in pressure drop; some have oversized piping to minimize pressure drop.

Thus, it is wise to select compressors with control schemes that can adapt to the demands and dynamics of your system. Mattei provides control flexibility to adapt to your system demands to help you save energy and prevent short-cycling and ambient oil misting problems created by inflexible control schemes and underutilized compressors.



Mattei Air Intake Control Valve Illustration

MODULATION OPERATING MODE AT CONSTANT PRESSURE

Thanks to a modulating proportional intake valve that supplies air at constant pressure, these compressors can even work without a receiver. With this regulation air delivery is automatically adapted to the system demand. Ideal for applications with little storage or continuous high air demands.

SERIES **GIR CENTRE**

Energy Saving Automatic Load/Off Load

Load/Off Load mode maintains line pressure within a minimum/ maximum pressure range, and the compressor may stop and restart according to air demand. "Load" initiates when the minimum pressure setting is reached and the compressor deliver 100% of its capacity. "Off Load" initiates when the maximum pressure setting is reached, and the intake valve closed and sump is decompressed to allow for a significant reduction of the absorbed power consumption. Should the pressure continue to remain high, the compressor will stop. Ideal for applications with adequate storage or large variations in air demand.

Combined On/Off Load and Modulation Regulation

This regulation allows Mattei compressors to modulate within a set pressure range (for example, \pm 4-5 psi). Should the air demand decrease, this regulation also allows the compressor to run off load

and stop, with evident energy savings. Ideal for applications with little storage and large variations in demand.



M9ESTR0^{×5}

to have everything under control

State-of-the-art computerized controller, Maestro XS automatically controls, monitors and programs the compressor's operation, and can be connected to a PC for remote control. In addition to providing all of the features found in the Maestro XS can become



master of a multi-compressor compressed air plant, thus saving on the installation of a dedicated Master controller, if connected to other compressed air packages equipped with Maestro XS controllers.

			MAESTRO ^{xs}
	LED Display	Full text 4 lines of 20 characters	Х
		Power "ON"	Х
LER	Operation Hour Counters	Activation hours	Х
		Run hours	Х
CONTROL		Loaded hours	Х
CONT	Service Counters	Oil change	Х
		Separator Filter	Х
ECTRONIC		Automatic Restart after power failure	Х
		Time/Day Compressor Start/Stop Settings	Х
		Recordable Fault Events	20
		Alarm Coded Text with Icon based Signals	Х
		Master & Slave Multi-Compressor Capable	Х
	Compressor Networking	Cascade, Sequence, Equalization of Run Hours	Х



	ļ		Ç	Ð						
Model	Power		F.A.D.		Sound pressure level	Pipe connections	Dimensions (L x W x H)		Weight	
	HP	kW	PSIG	ACFM	dB(A)	npt	inch	inch	inch	lbs (net)
AC 30 LX	40	30	115	198	68	2"	72	38	66	1,763
AC 30 HX	40	30	145	164	68	2"	72	38	66	1,763
AC 30 HHX	40	30	188	129	68	2"	72	38	66	1,763
AC 37 LX	50	37	115	240	68	2"	72	38	66	1,830
AC 37 HX	50	37	145	199	68	2"	72	38	66	1,830
AC 37 HHX	50	37	188	169	68	2"	72	38	66	1,830
AC 45 LX	60	45	115	292	68	2"	72	38	66	2,073
AC 45 HX	60	45	145	247	68	2"	72	38	66	2,073
AC 45 HHX	60	45	188	206	68	2"	72	38	66	2,073

Available in 208, 230, 460/3ph/60hz

Models 30 through 45 available water-cooled

Working pressures: 109 psig for 115 psig version - 138 psi for 145 psig version - 180 psig for 188 psig version Note: Product is built with UL/ETL/CSA approved components. Agency approval by others.

AC SERIES PRODUCT FEATURES

Electronic Controller	MAESTRO ^{xs}	Х
	TEFC Motor	Х
	Wye-Delta Motor Starter	Х
	Constant Pressure Modulation	Х
System Adaptable Air Inlet Controls	Automatic On Load/Off Load	Х
	Combined On/Off Load and Modulation	Х
	100,000 Hour Airend Design Life	Х
	Direct-drive 1,800 rpm Airend	Х
	10,000 Hour Air/Oil Separator Filter Design	Х
	Synthetic Rotoroil F2	Х
	Zero-loss condensate drain & Moisture Separator Kit	Х
	High Efficiency Air Intake Filter Kit	Х
Optional	Integrated Heat Recovery Kit	Х

AC 30-45



ITALY - ING. ENEA MATTEI SpA Strada Padana Superiore, 307 20090 VIMODRONE (MI)

20090 VIMODRONE (MI) Tel + 39 02253051 - Fax +39 0225305243 E-mail: info@matteigroup.com - www.matteigroup.com

U.S.A. - MATTEI COMPRESSORS Inc

9635 Liberty Road, suite E Randallstown, MD 21133 Phone +1 410 5217020 - Fax +1 410 5217024 E-MAIL: info@matteicomp.com

www.matteicomp.com





UNI EN ISO 9001:2015

FRANCE

MATTEI COMPRESSEURS Phone +33 5 35 54 22 05 - Fax +33 9 72 31 68 33 E-MAIL: info@matteigroup.com - www.mattei.fr

GERMANY

MATTEI KOMPRESSOREN DEUTSCHLAND GmbH Phone +49 07191 - 933801 E-MAIL: mde.info@matteigroup.com - www.mattei-kompressoren.de

GREAT BRITAIN

MATTEI COMPRESSORS Ltd Phone +44 (0)1789 450577 - Fax +44 (0)1789 450698 E-MAIL: muk.info@matteigroup.com - www.mattei.co.uk

RUSSIA AND CIS COUNTRIES

ING. ENEA MATTEI SpA Phone +7 499 1124877 E-MAIL: mattei-rus@mail.ru

SPAIN

ING. ENEA MATTEI SpA Phone + 39 02253051 - Fax +39 0225305243 E-MAIL: info@matteigroup.com

PEOPLE'S REPUBLIC OF CHINA

Mattei (SuZhou) Air Compressors Manufacturing Co., Ltd WFOE by Ing. Enea Mattei SpA - Italy Tel: +86 512 66679986 Fax: +86 512 66679989 E-MAIL: info@matteisuzhou.cn - www.matteisuzhou.cn

REV.2