



MAXIMA



MAXIMA. FOR MAXIMUM PERFORMANCE & EFFICIENCY.



WE BUILD A BETTER COMPRESSOR

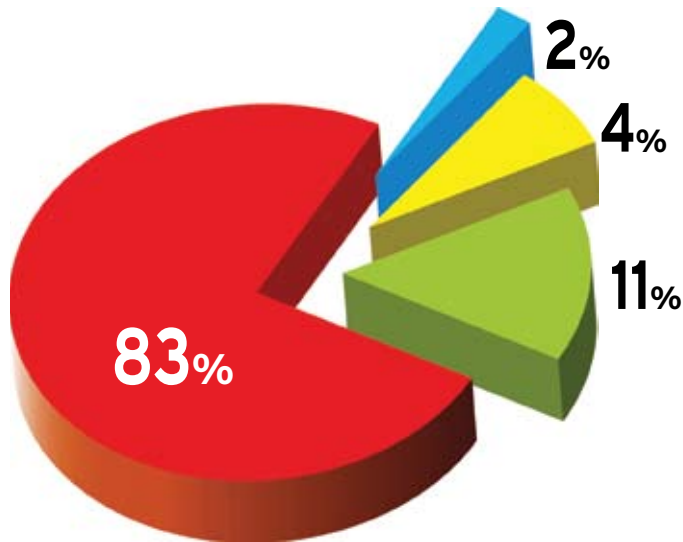
Enea Mattei believed there was a better and more energy efficient way to generate compressed air. So, he focused his engineering on the inherent advantages of rotary vane technology and engineered in:

- a) superior reliability,
- b) maximum mechanical & electrical efficiency
- c) the most compressed air generated while consuming the least amount of electricity.

In effect, Mattei redefined the process of compressing air when he invented his first rotary vane air compressor over 50 years ago.





UNCONVENTIONALLY RELIABLE, DURABLE & GREEN

Today, Mattei continues to leverage advancements in technology and materials to offer the best value in premium quality air compressors found anywhere on the planet. Imagine “bearingless” Airends that last up to 100,000 hours 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 your last air compressor first. Get a Mattei.*



THE REAL COSTS OF COMPRESSED AIR

Example: typical operating cost breakout of a 60 HP compressor. Assumes 5 year depreciation, 4,000 hours/year operation, working pressure 100 psig.

-  Energy
-  Compressor
-  Ordinary maintenance
-  Extraordinary maintenance

ENERGY COSTS

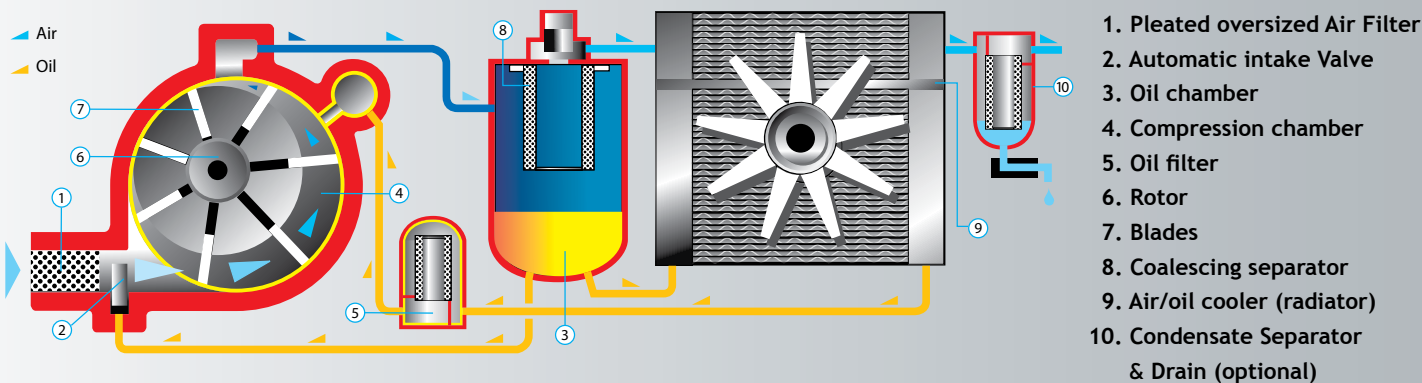
Compressed air is widely used throughout industry because it is safe, enhances productivity, and is easy to use. Compressed air generation is said to represent about 10% of all industrial electricity consumed. Air audits routinely determine that the average demands on an air system approach 70% of their nominal rated capacity.

As a result, it is all too common to see oversized or misapplied compressed air systems that cost their owners an exorbitant amount of money as a result of wasted energy. Properly applied and designed air systems reduce energy costs to provide a quick return on investment to their owners.

MATTEI: EXPERIENCE THE REVOLUTION

ISO 9001 Certified since 1994, MATTEI is fast approaching our first century of unrivaled leadership in the design and manufacture of advanced rotary vane compression technology. Committed to continuous research and development, only Mattei customers realize the benefits and rewards of our exclusive revolutionary designs.

Experience low rotational speeds, sophisticated lubrication and cooling systems, exceptional reliability, unsurpassed efficiency, outstanding performance, and environmental leadership. Experience technology. Experience the revolution. Experience Mattei.



INTEGRATED PERFORMANCE OPTIONS SAVE MONEY, TIME & SPACE

REFRIGERATED AIR DRYER

Make yours a Maxima "Plus" to keep your air system dry. Add an integrated refrigerant dryer to simplify your air system and save on:

- installation costs
- space requirements

HEAT-RECOVERY KIT

The heat recovery system is integrated directly into the compressor cooling system. Before reaching the oil cooler, hot oil passes through an oil-water heat exchanger controlled by a thermostatic valve to provide water pre-heating to save energy in industrial or sanitary process applications.

MOISTURE SEPARATOR & DRAIN KITS

The condensate separator uses cyclonic action and gravity to drop liquid condensate out of the airstream. Available with Timer operated or Zero Air Loss automatic drain valves to eject the condensate.

- maximizes efficiency & reliability of dryers & filters
- protects downstream processes & equipment

OILY CONDENSATE SEPARATOR KIT

Integrate a compact & efficient oil/water separator kit that works on the principle of coalescing filtration. This system reduces oil contamination and guarantees a better quality of condensate.



MAXIMA THE BEST EFFICIENT SINGLE-STAGE

SIMPLY SUPERIOR

One of the primary aims of competing in the global economy is to minimize production costs. Industry leaders expect maximum value and profitable returns when investing in new machinery that will improve their manufacturing processes and lower their costs. As compressed air production tends to be the single largest consumer of electricity in a given manufacturing plant, to save energy and reduce maintenance costs offers real opportunities to improve profitability and thus, enhance the competitive advantage for the company.

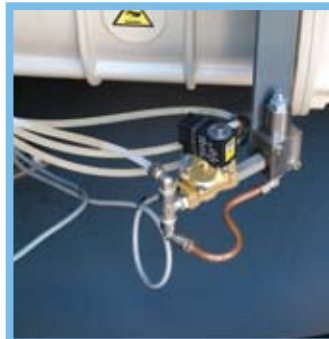
Designed to save energy and protect the environment, the **MAXIMA** rotary vane air compressor range has been engineered by Mattei to meet the requirements of manufacturers that use large volumes of compressed air in a consistent way for a long time. Maxima is best suited for high air demand applications where the production of compressed air is virtually constant throughout the day.

- **Lowest Energy Costs**
- **Easy Maintenance**
- **Airend designed for more than 100,000 hours of use**
- **Maestro Electronic Control**
- **Low Rotational Speed: only 1,200 r.p.m.**
- **Optional Heat-Recovery System**



HIGHLY EFFICIENT MOTORS

The MAXIMA Series is equipped with direct-coupled energy saving high efficiency electric motors.



STEADY AIR PRESSURE

Thanks to a modulating proportional intake valve that supplies air at constant pressure, these compressors can even work without an air receiver. With this regulation air delivery is automatically adapted to the system demand.

MAXIMA

EFFICIENCY IN COMPRESSORS



MAXIMA. THE ASTOUNDING RESULT OF CONTINUOUS R&D AND ADVANCED TECHNOLOGY

The name of this compressor was selected to evoke the essence of the incredible performance of this amazing machine. Capable of generating a volume of compressed air that rivals two-stage screw compressors, the single stage Maxima rotary vane compressor lives up to its name by delivering maximum performance from every kW of input energy. We applaud Mattei's brilliant engineers and dedication to continuous research and development. Those efforts and programs continue to relentlessly push the envelope of vane technology. The astounding result is excellent productivity and energy efficiency with specific power ratings as low as 16.19 kW/100SCFM. We dare anyone to compare MAXIMA's energy stingy performance against any other compressor. Demand Maxima for energy savings beyond ordinary compressors.

AS LOW AS 16.19 kW/100SCFM

ENERGY SAVING DESIGN

Engineering was tasked with designing vane compressor geometry that would maximize the SCFM production while minimizing the input kW energy for compression. The focus is on providing excellent quality through discriminating criteria in choosing the best materials, components and accessories. Last but not least, the compressor's rotational speed of 1,200 r.p.m. brings together a solution with high efficiency that will help you leave a smaller carbon footprint for many years to come.



MAESTRO CONTROLLER

The Maxima series is equipped with an exclusive state-of-the-art computerized controller, Maestro.

This system automatically controls, monitors and programs the unit's operation, and can be connected to a PC for remote control. If connected to other compressed air packages equipped with Maestro, the unit can become master of a compressed air plant, thus saving on the installation of a master system controller. Maestro can be interfaced via web or cellular technology to provide remote service monitoring.

UNCONVENTIONAL RELIABILITY, SILENCE & EFFICIENCY

BUY YOUR LAST AIR COMPRESSOR FIRST

Super slow operating speeds and high efficiencies are supported by direct-coupling the electric motor and compressor. The flexible coupling prevents power loss and features an elastomeric center piece that guarantees extremely noiseless $\leq 70\text{dB(A)}$ vibration-free operation. You simply cannot beat a Mattei compressor for long life and low cost of operation. Buy your last air compressor first - demand a Mattei.

- **UNCONVENTIONAL RELIABILITY**
- **AMAZING WEAR RESISTANCE**
- **SMOOTH, QUIET $\leq 70\text{dB(A)}$ VIBRATION-FREE OPERATION**
- **GREEN, ENERGY STINGY DESIGN**

Consequently

- **LOWER ENERGY COSTS**
- **LOWER MAINTENANCE COSTS**
- **LESS NOISE POLLUTION**
- **LONGER OPERATING LIFE**

MAXIMA 110

TWIN COMPRESSION SYSTEM DOUBLE EFFICIENCY

To achieve maximum performance, our MAXIMA 110 model is equipped with twin compression units that work in parallel at the same speed as all MAXIMA compressors - an incredibly low 1,200 revolutions per minute. Air delivery regulation is simple, reliable and efficient thanks to one single Servovalve assembly that balances the inlet flow to both compression modules.

LOAD ADAPTABLE COOLING

Maxima's two-speed electric fan automatically adapts the cooling air flow volume to remove the heat generated by changing plant air demands and environmental conditions. At normal operating temperatures Maxima cools the oil, air and system components at the lower fan speed, thus providing considerable energy savings. When operating conditions increase the heat load, fan speed automatically increases to provide additional cooling to support the demands of the environment.



HIGH QUALITY AIR LOW OIL CONTENT

Efficient air/oil separation reduces your cost of operation and improves your products and processes. It just makes sense. Less carryover means you buy less oil to add to the machine, and have less going downstream where it may upset your products or processes. Mattei's highly efficient air/oil separation

system features different stages and ensures exceptionally low 1-3ppm oil carryover to save you time and money. Mechanical separation removes the bulk of the oil through reduced velocity and change of direction. Final air polishing uses premium 10,000 hour rated filtration that coalesces oil aerosols into droplets, which are recycled back to the oil reservoir. The design and efficiency of the oil removal system reduces operating costs and ensures long filtration life.



SAVE ENERGY. SAVE MONEY.

	Energy savings (TWh/year)	CO ² emission reduction (Mtons/year)
Reducing air leaks	12.8	5.2
Overall system design	3.6	1.5
Recovering waste heat	3.2	1.3
Speed regulators	3.0	1.2
All other measures	7.8	3.2

Multiple areas to save money exist within a compressed air system: recycle waste heat, reduce air leaks, dry and filter the air stream, keep filters and radiators clean. Clean air reduces product rejects to save you time and money. It's simple. Reduce energy costs and reduce the size of your carbon footprint. Improve profitability by managing the following areas for added savings.

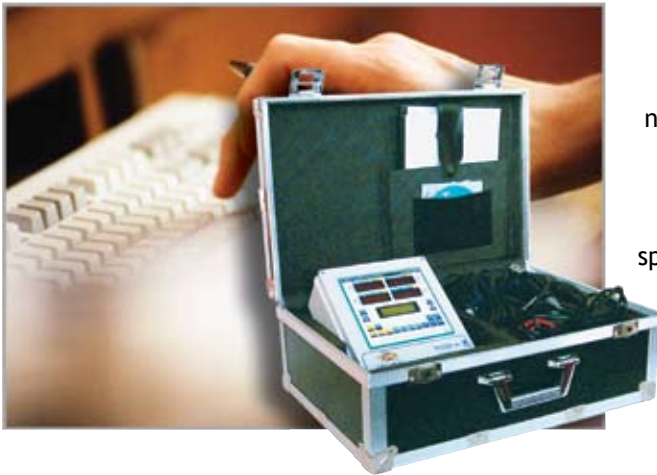
- Quality of the cooling system
- Waste heat recovery
- Reduction of air leaks
- Maintenance quality

EVALUATE SYSTEM DEMANDS

It is very important to know the exact air needs of the user. Monitor and measure system demands with data logging equipment to gather information to help you understand where your greatest opportunities for savings exist. Armed with that information, a plan can be developed that focuses on the best approach to maximize your system performance and energy saving potential. The measurement and documentation of your air demands and energy consumption are essential to identify system changes or investments that may offer you the most benefits. There is no best compressor in absolute terms, but the best combination between specific compressed air needs and your compressed air system can always be found.



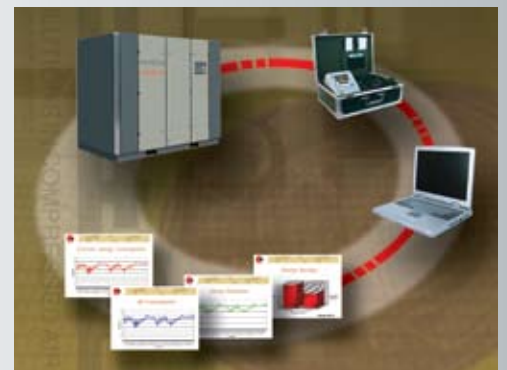
Mattei Intelligent Energy Management



For this reason and with respect to the ever-increasing worldwide environmental awareness that links energy savings and pollution reduction, Mattei has developed a system to help determine the nature and patterns of compressed air requirements for an installation in terms of air delivery, pressure and type of control regulation.

A Mattei Intelligent Energy Management analysis documents a specific window of time for a customer's current installation. On the basis of the data recorded an air demand curve and an annual energy cost is calculated and then used as reference to offer a solution which will not only satisfy the needs of the customer in terms of compressed air but also allow for more efficiency and savings in annual energy costs.

The whole M.I.E.M. process is guaranteed by the use of specific recording instruments and an exclusive software developed for Mattei. The first step in order to execute a correct energy analysis is to gather all useful information on the compressed air plant, like air delivery and pressure, and therefore to record all electrical values for each compressor. Unlike other systems on the market, the recorded values include tension, current, and power factor. Once the on site data has been recorded, the data is elaborated by the M.I.E.M. software. At this point Mattei will formulate different hypotheses for the substitution of the existing machines and simulate the operation of these proposals respecting the existing operating conditions. The results of the simulation with new machines from the Mattei range are elaborated to produce a report of the performance and economic advantages of the proposal.



TECHNICAL FEATURES

Model	Electric Motor Power		Free Air Delivery (*)	Max. Working Pressure	Sound Pressure Level (**)
	HP	kW			
MAXIMA 30	40	30	243	115	65
MAXIMA 55	75	55	477	115	67
MAXIMA 75	100	75	611	115	69
MAXIMA 110	150	110	825	115	70

Working pressure: 109 psig

(*) F.A.D. in accordance with ISO 1217:1996, annex "C"

(**) According to PN8NTC.2.3; value measured at 1 m distance

PLUS VERSION

INTEGRATED REFRIGERATED DRYER

Dew Point 38 °F

Refrigerant R404A

OPTIONAL

CONDENSATE SEPARATOR AND DRAIN KIT

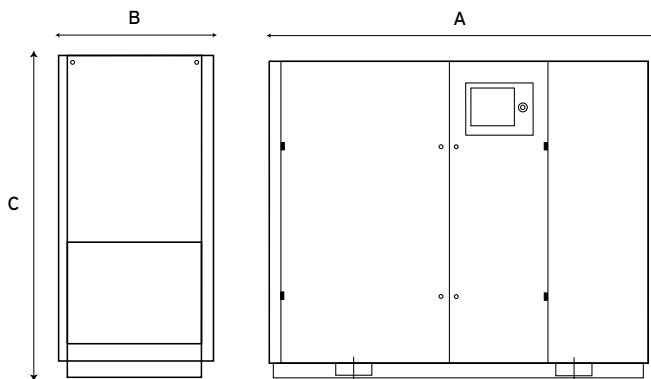
HEAT-RECOVERY KIT

Recoverable heat 80% of shaft power

WATER-OIL SEPARATOR

Max oil content < 5 ppm

DIMENSIONS - WEIGHT



MAXIMA (PLUS)		30	55	75	110
A	inches	72	85	85	93
B	inches	38	47	47	55
C	inches	66	74	74	78
Weight	lb.	2,028 (2,238)	3,858 (4,233)	4,299 (4,674)	5,952

Mattei Compressors, Inc. reserves the right to change or replace the data contained in this publication, without notice.



COMPANY
WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
= ISO 9001:2001 =

www.matteicomp.com

U.S.A.

MATTEI COMPRESSORS Inc
9635 Liberty Road, Suite E
Randallstown, MD 21133
Phone +1 410.521.7020
Fax +1 410.521.7024
e-mail: info@matteicomp.com

ITALY

ING. ENEA MATTEI SpA
Strada Padana Superiore, 307
20090 VIMODRONE (MI)
Tel + 39 02253051 - Fax +39 0225305243
e-mail: info@mattei.it

FRANCE

MATTEI COMPRESSEURS Sarl
Tel +33 1 60081212 - Fax +33 1 60085252
e-mail: info@mattei.fr

GERMANY

MATTEI KOMPRESSOREN DEUTSCHLAND GmbH
Tel +49 7151 5002560 - Fax +49 7151 5002565
e-mail: info@mattei-kompressoren.de

GREAT BRITIAN

MATTEI COMPRESSORS Ltd
Tel +44 (0)1789 450577 - Fax +44 (0)1789 450698
e-mail: info@mattei.co.uk

RUSSIAN FEDERATION

ING. ENEA MATTEI SpA
Tel +7-495-739 41 90 - Fax +7-495-739 41 90
e-mail: mattei@inbox.ru

SINGAPORE

ING. ENEA MATTEI SpA
Tel +65 6741 8187 - Fax +65 6741 6826
e-mail: mattei@singnet.com.sg

Member

