





30 | 37 | 45 | 55 kW

VARIABLE-SPEED DIRECT-DRIVE ROTARY VANE AIR COMPRESSORS



The **MATTEI® Rotary Vane Direct-Drive Inverter (RVDi)** advanced volumetric air compressors are engineered to raise the bar on lifecycle costs and eco-sustainability in the planetary battle against global warming.

We welcome you to experience the longest lasting single-stage, **30:55 kW**, variable-speed, direct-drive air compressors designed to deliver significant energy savings to applications with variable air demands.

RVDi Series compressors leverage the legendary durability of Mattei's proprietary "bearingless" Rotary Vane Technology in delivering a unique, rugged, and reliable energy efficient solution that delivers unrivaled performance and exceptional energy savings to the industrial marketplace.

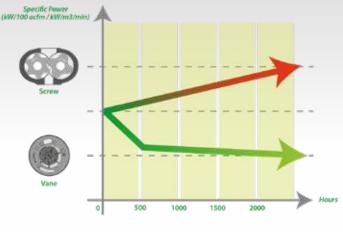
WHEN RUGGED RELIABILITY IS TANTAMOUNT

Lowest Lifecycle Costs Longest Maintenance Intervals Isolated Cooling Zone Technology



GET YOUR "VANE GAIN"

VANE GAIN = LOWER ENERGY COSTS



"Simply Different"

VARIABLE-SPEED vs. FIXED-SPEED

Want an air compressor that pays you back?

Applications with changing air demand profiles are ideal candidates for saving a lot of money in energy costs.

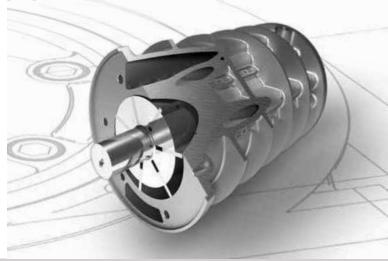
Did you know that you will spend more than 10x what you pay to buy the compressor just for electricity to run it over its lifetime?

Fully, 83% of all the money you will spend on your air compressor over its life goes to the power company just to pay the electric bill. **Discover how your company can profit from choosing Mattei's proprietary Rotary Vane Technology for your next air compressor.**

THE RIGHT MACHINE FOR THE RIGHT JOB ENGINEERED TO SLASH ENERGY COSTS

Rotary style, inverter driven, variable-speed air compressors are engineered to deliver the lowest possible energy costs when properly applied.

The general rule-of-thumb is to apply a VSD style air compressor to applications where it would be operating for extended periods of time between 40% and 70% of the rated capacity of an air compressor.



MATTEI'S EXCLUSIVE TECHNOLOGIES RVD 30i – 55i FEATURE THE LATEST IN ADVANCEMENTS

ISOLATED COOLING ZONE TECHNOLOGY

Isolated Cooling Zone Technology isolates the radiators from the rest of the components to lower cabinet temperatures and keep everything cleaner. Easy access panels allow you to quickly exhaust dirt and dust from the radiators from inside-to-outside to keep the cabinet interior clean and restore cooling performance especially in hot dirty environments.

PRESSURE VENT ACCESS PORT

Conveniently located quick-disconnect fitting to connect your blowgun and, serves as a safety pressure vent to depressurize piping downstream of the check valve when the unit is valved off for service.

REMOTE AIR INTAKE SNORKEL

Remote air intake snorkel improves performance and extends air intake filter life of the two-stage air intake filter plumbed to the outside of the cabinet. Extends filter element life and improves compression process efficiency to save you money.



XTREME COMMUNICATIONS TECHNOLOGY

IIoT Industry 4.0 ready Maestro XC, 7" touchscreen control panel includes ethernet connectivity as standard and a 4G modem as

optional. Communicates with the free Mattei Cloud to be able to deliver real-time operational and historical data globally. It can even deliver key performance data from different brands and types of controllers.

XTREME LUBRICANT RECOVERY TECHNOLOGY

Mattei's exclusive maintenance-free scavenged oil return system leverages an intelligent solenoid valve to enhance energy efficiency and slash recirculation losses while improving air quality.

RVDi 30 - 37 - 45 - 55



1. CONTROLLORE MAESTRO XC

Controllore touchscreen da 7", realizzato in linea con i requisiti per l'IoT e l'Industria 4.0, che controlla, gestisce e monitora la logica del sistema e comunica a livello globale tramite il Cloud Mattei gratuito. Disponibili di serie temporizzatori di avvio/arresto programmabili, promemoria per la manutenzione, protezione dall'inversione di fase, riavvio automatico, porta Ethernet e modem 4G come optional.



2. INTEGRATED AIREND

Legendary encapsulated compression module incorporates compressor, oil filter, hydraulic servo-controlled inlet valve, built-in oil reservoir, and thermostatic bulb in a compact leak-free design.

▶ Oil Quality Option: Let's you know exactly when to change it. Monitors, tracks and trends Total Acid Number (TAN) in real time right down to the minute so you get maximum value out of each oil change.



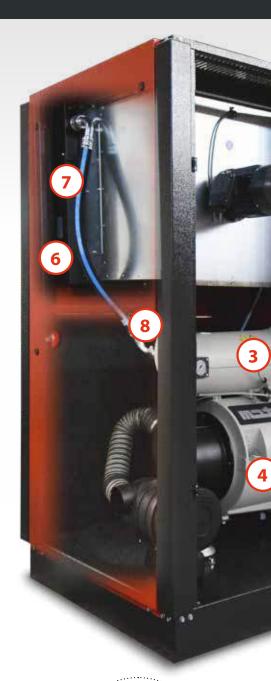
3. LONG LIFE OIL FILTER & AIR/OIL SEPARATOR

Cartridge style elements reduces filter change frequency by 50%. Oil filter rated for 5,000 hours. Air/oil separator filter rated for 5,000 hours. These last twice as long as spin-on filters limit oil carryover 1-3 mg/m3 to deliver high quality air.



4. ROTOR STATOR UNIT (RSU)

Proprietary "bearing-less compressor" features zero wear vanes, zero wear bushes, zero thrust forces. You benefit with >100,000 hours of operation, never require an expensive airend overhaul and, gain the longest airend life and the lowest lifecycle costs in the industry. It's why we say, "No Vane. No Gain."





5. DIRECT-DRIVE COUPLING

Easy-access flexible coupling ensures perfect shaft alignment, low-noise, long life, and eliminates power robbing gear or belt losses and their associated high maintenance costs.





9. INVERTER-CONTROLLED COMPRESSOR

Rugged and reliable inverter manages TEFC inverter rated drive motor speed as directed by Maestro XC to deliver smooth speed changes and maximum energy efficiency across a wide range of flow rates.



8. PRESSURE VENT ACCESS PORT

Quick-disconnect fitting allows you to depressurize the piping downstream of the discharge check valve when the compressor is valved off for service and, offers a convenient place to connect a blowgun hose to allow for optimal surface cleaning.



6. ISOLATED COOLING ZONE WITH OVERSIZED COOLERS

Rated 45°C/113°F ambient. Engineered for quiet dependable service in hostile environments. Fixed-speed radial fan with dependable IEC motor draws ambient air through rear-panel mounted oversized coolers into the Isolated Cooling Zone. Hot air is exhausted through the roof ready for disposal or heat reclamation.

► Heat Recovery Option: repurpose up to 80% of mechanical energy to pre-heat process water to 70°C/158°F.



7. EASY ACCESS SIDE PANELS

Blow the dirt out of the radiators from inside-tooutside in keeping the cabinet interior cleaner. Makes for fast easy service in hot and dirty environments.

RVDi

TECHNICAL DATA

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Model (*)	Max. working pressure	F.A.D.*	Sound pressure level	Power	Length	Width	Height		۷	Veight	
	bar	m³/min	db(A)	kW	mm	mm	mm	Standard	Plus	Energy Recovery System	Walter-Cooled

30-55 KW - RVDi SERIES SPECIFICATIONS

RVD 30i	- 7÷10	2,82 ÷ 5,03		30		1080	1885	1140	1210	1160	1090
RVD 37i		3,69 ÷ 6,59		37				1180	1250	1200	1130
RVD 45i		4,58 ÷ 8,18	66	45	2125			1260	1345	1280	1190
RVD 55i		5,19 ÷ 9,27		55				1300	1385	1320	1230

(*) Available with integrated refrigerant dryer (Plus), energy recovery system (R) or in water-cooled version (W). F.A.D. in accordance with ISO 1217, annex "C" - Sound pressure level according to ISO 2151, tolerance ± 3dB(A) - Working pressure: 7,5 bar for version 8 bar - 9,5 bar for version 10 bar - 12,5 bar for 13 bar version

OPTIONS



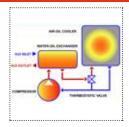
RVD 30-55 W compressors feature watercooled plate style heat exchangers.

MOISTURE SEPARATOR



Moisture separator includes electronic Zero Loss condensate drain valve with dry alarm contacts.

HEAT RECOVERY SYSTEM



RVD 30-55 R compressors incorporate integrated Heat Recovery System for process water heating. Repurposes up to 80% of mechanical energy into a maximum of 70°C/158°F hot water.

OIL QUALITY SENSOR



Real-time IIOT 4.0 ready predictive maintenance modelling of lubricant acidity to maximize lubricant lifecycles. Interfaces with Maestro XC controller to allow for remote monitoring via the free, Mattei Cloud.

IE4 PACKAGE EFFICIENCY

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IE4 motor upgrade option delivers maximum energy efficiency and lowers operating costs.

VERSION WITH INTEGRATED **REFRIGERANT DRYER**



RVD 30-55i Plus compressor models include an integrated noncycling refrigerated air dryer. PLUS models include a condensate separator with electronic zero-loss automatic drain, which is an option on all RVD i base models.



MATTEI MYCARE 6

With RVD 30-55i you can benefit from the **MyCare 6** extended warranty plan, this provides cover for 6-years of service assistance and any repair required.



Carrying out regular and correct maintenance is the simplest and best way to ensure your compressor continues to perform reliably and efficiently, avoiding faults and energy wastage. Mattei's Service Centres employ qualified service engineers and carry specific tooling and original spare parts for maintenance operations.

GET MYCARE 6 PLAN. You will benefit from monetary savings and a defined cost for easier budget planning.

MATTEI ORIGINAL SPARE PARTS

Mattei Original Spare Parts and Mattei lubricants are made to very high design standards and conform to exact technical specifications. Only Mattei original spare parts allow you to be sure of maintaining, over time, the same levels of performance, reliability and safety of your Mattei product.

- Mattei Original Spare Parts are crucial to ensure the efficiency of your compressed air equipment
- Parts are always available in stock
- They are quality tested and conform to manufacturer's specifications
- Parts are designed for Mattei's recommended maintenance intervals





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