

# Atlas Copco

## Adsorption Air Dryers



### MD 50-2500

88-2500 l/s / 185-5297 cfm



*Atlas Copco*



## Total capability, total responsibility

Right at the heart of your business, Atlas Copco delivers quality compressed air for superior operational capacity. From compressed air generation to point of use, you can choose from our wide range of products to create a complete compressed air system tailored to your specific needs. All Atlas Copco products are engineered to integrate seamlessly, ensuring the highest level of reliability and energy efficiency. As a result, Atlas Copco can take full responsibility for your compressed air infrastructure with a guarantee of best-in-class quality. With a global presence in over 150 countries, we can provide an unrivalled service to maintain and continually improve your compressed air system performance.

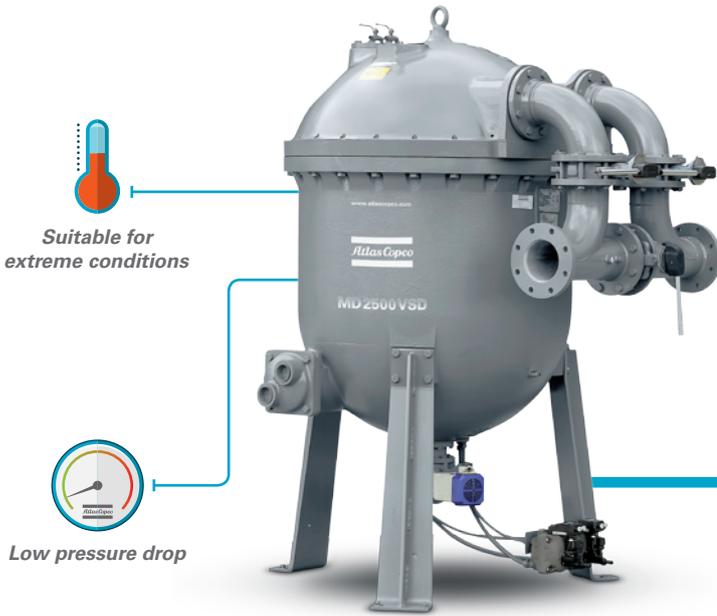
Backed by 100 years at the forefront of compressed air, Atlas Copco products offer the finest quality and efficiency. Our goal is to be First in Mind—First in Choice®. That is why Atlas Copco's pursuit of innovation never ceases, driven by the dedication to meet and exceed your demands. Always working with you, we are committed to providing the customized air solution that is the driving force behind your business.

*We are committed to your superior productivity through interaction and innovation.*

# MD, the industry benchmark for adsorption dryers

Clean and dry compressed air: it is vital to power up your busy production environment. Containing moisture, aerosols and dirt particles, untreated compressed air poses a substantial risk as it can damage your air system and end product.

Incorporating unique, patented technological innovations and extra energy-saving options, Atlas Copco's MD adsorption dryers provide you with the clean, dry air you are in need of to expand the life of your equipment and ensure the quality of your end product.



## EASY HANDLING

- Direct flange-to-flange mounting.
- Small footprint, completely integrated package.
- No need for pre- and after-filter.
- All piping and connections included as standard.
- Convenient lifting eye.
- Integrated EWD water separator.

## ADVANCED CONTROL & MONITORING SOLUTIONS

- State-of-the-art packages to increase efficiency.
- Guaranteed maximum uptime and reliability.
- Monitoring through ES system (MD dryers equipped with Elektronikon).



## DRY AIR AT ANY TIME

- Almost no energy consumption.
- Efficient water separation.
- Reliable water evacuation.
- Integrated heat exchanger.
- Electronic drain as standard.
- Low pressure dewpoint.



Elektronikon®\*



VSD\*

\* Optional according to model.



Almost no power consumption



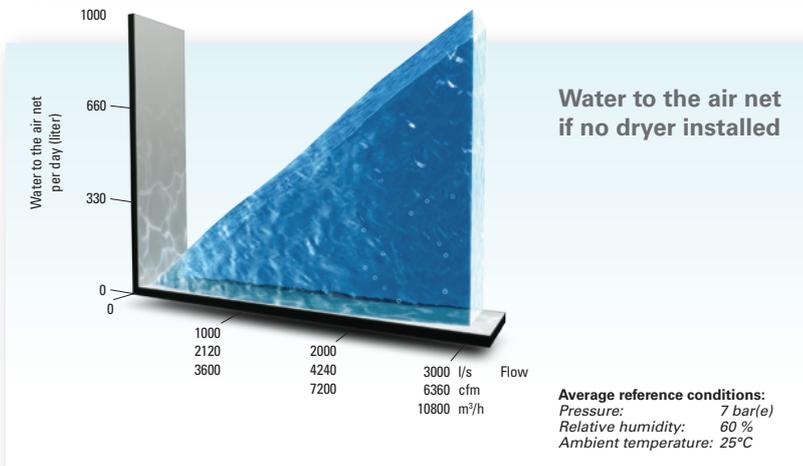
## SUPREME ENERGY EFFICIENCY

- Reduce energy costs, at any capacity!
- Extremely low pressure drop saving on compressor power.
- Highly energy-efficient.
- Environment friendly thanks to almost no power consumption.
- High efficiency heat exchanger.
- No-loss condensate drain.
- Using compression heat to regenerate the desiccant dryer rotor, the only energy needed is the power to rotate the drum, a mere 0.12 kW.

MD: Power-saving Excellence!

# Constant dry air at extreme low power consumption

Removing moisture from compressed air in the harshest conditions, Atlas Copco's MD adsorption dryers eliminate system failures, production downtime and costly repair and service works.

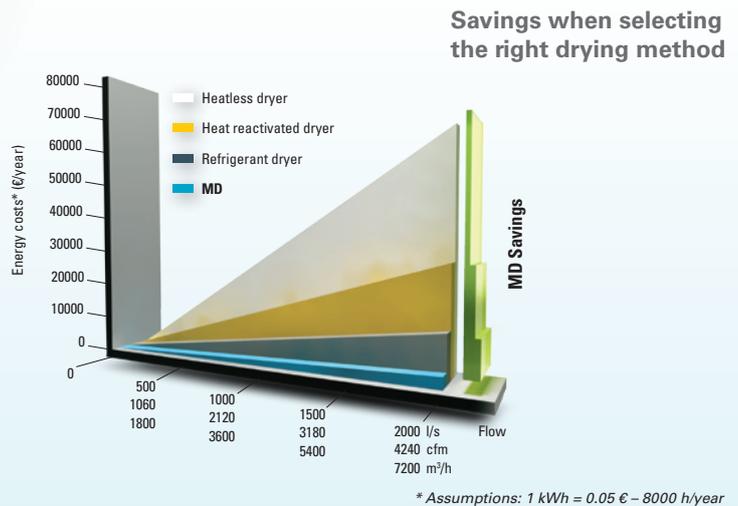


## EFFICIENT WATER SEPARATION

- Efficient condensate separator with ultimate separation efficiency even in low flow conditions.
- Reliable and effective condensate evacuation from the separation chamber via the no-loss condensate drain.

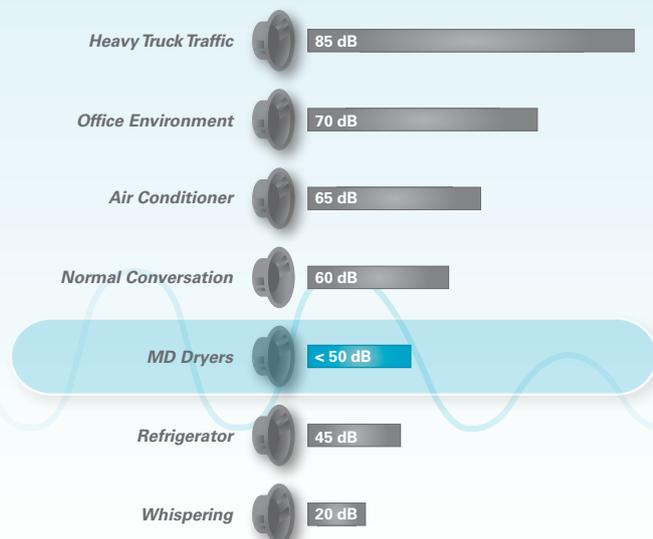
## HIGHLY EFFICIENT AT ALMOST NO COST

- The only energy needed is the power to rotate the drum, a mere 0.12 kW.
- 100% flow capacity at the output.
- Temperature, pressure and dewpoint peaks are eliminated.



## WITH CARE FOR THE ENVIRONMENT

- No depletion of materials, no consumables.
- 100% oil-free operation.
- Silent operation, sound level of less than 50 dB.
- 100% oil-free condensate, no heat vent required.
- Total absence of CFCs.



Thanks to their pioneering technology, MD dryers ensure the lowest pressure drop and lowest energy consumption for the highest possible efficiency – saving you time and money throughout the production process.



### PROVEN PEACE OF MIND

Building on Atlas Copco's know-how and years of experience with regards to compressed air solutions, the MD adsorption dryer range is tested using the most stringent methods in the industry. You can rest assured at all times. In order to obtain ISO 9001 and 14001 certification, Atlas Copco thoroughly tests its dryers during design reviews. As a result of the synergy with the compressor production facility, Atlas Copco is able to test the entire dryer range to all flows.

To further reduce any type of contamination within your process and protect your equipment, Atlas Copco presents a complete range of compressed air filters when needed. A total quality air solution for every application.

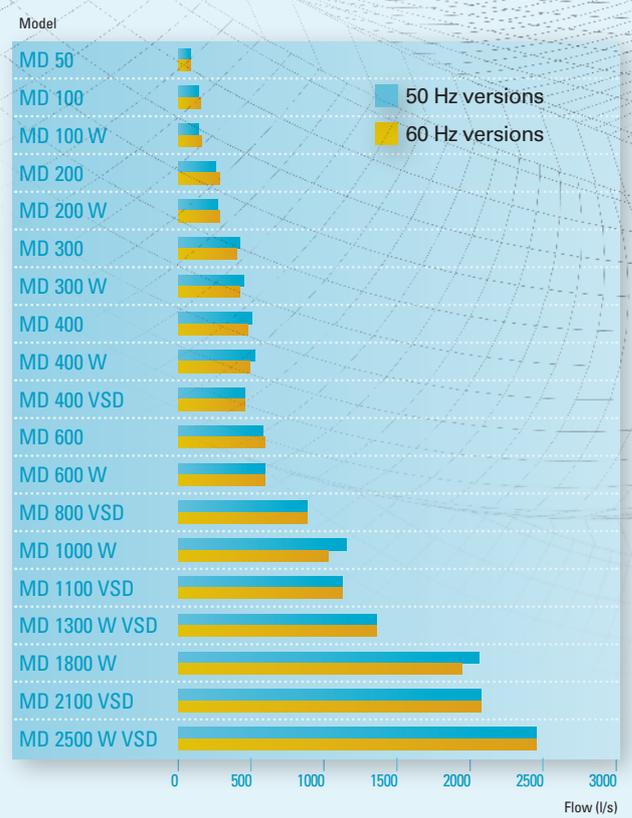


### BUILT FOR ENDURANCE

- Designed using state-of-the-art tools and facilities.
- Based on years of extensive research and continuous development.
- Manufactured using the most advanced production line and methods in the industry.



1. Hot unsaturated air
2. Regeneration area
3. Ejector
4. Hot saturated air
5. Cold saturated air
6. Flanged connections
7. Cold dry air outlet



# Supreme energy and cost savings

Keeping a firm grip on costs is one of your main concerns. Atlas Copco's adsorption dryers stand for important energy savings all day, every day, year in, year out.

Taking technology to a whole new level, the MD dryers achieve maximum cost savings, allowing you to conduct a truly efficient energy reduction strategy.

## Maximum energy savings, at any capacity!

### EXTRA SAVINGS AT PARTIAL LOAD!

- **Extremely low pressure drop** reducing energy consumption of the air compressor.
- The only energy needed is the power to rotate the drum, a mere **0.12 kW**.
- **Heat exchanger technology** for supreme energy savings.
- No waste of compressed air thanks to **no-loss** condensate drain.
- **VSD** (Variable Speed Drive) exactly matches the rotation speed of the drum to the flow delivered by the connected VSD driven compressor in order to ensure an optimal dewpoint at every variable capacity condition (option for MD 800-2500).



### ALMOST NO ENERGY CONSUMPTION



Whereas other desiccant dryer types can consume up to 15% of the compressed air, the MD dryer guarantees 100% flow capacity at the output

# Specifications

MD	COMPRESSOR
MD 50	ZT/ZR 18-37
MD 50 VSD	ZT/ZR 50 VSD
MD 100	ZT/ZR 45
MD 100 VSD	ZT/ZR 50 VSD
MD 200	ZT/ZR 55-90, ZT/ZR 75-90 VSD
MD 300	ZT/ZR 110-145
MD 400 VSD	ZT/ZR 132/160 VSD
MD 400	ZT/ZR 160, ZT/ZR 200*
MD 600	ZT/ZR 200**, ZT/ZR 250-275
MD 800 VSD	ZT/ZR 250/315 VSD

\* For 10/10.4/12/13 bar(e) versions.

\*\* For 7/8.6 bar(e) versions.

The MD series is specially designed for use with the industry standard Z series of oil-free compressors. Together they form the optimal combination for top quality dry air at low running costs. The flange-to-flange hook-up design greatly facilitates installation, and all connection parts and bypass components are included in the package.



ZR 315 VSD-FF

DRYER	OIL-FREE COMPRESSOR	DIMENSIONS (MM/IN)		
		H	W	L
MD 1000 W	ZR 300-425	1809/71"	1346/53"	1163/46"
MD 1100 VSD	ZR 400 VSD	1879/74"	1346/53"	1163/46"
MD 1300 W VSD	ZR 500 VSD	1879/74"	1346/53"	1163/46"
MD 1800 W	ZR 450-750	2076/82"	1699/67"	1289/51"
MD 2100 VSD	ZR 700 VSD	2235/88"	1699/67"	1289/51"
MD 2500 W VSD	ZR 900 VSD	2235/88"	1699/67"	1289/51"

ZT: air-cooled

ZR: water-cooled

W: water-cooled

VSD: Variable Speed Drive

For more technical data, see separate ZT/ZR brochures.



ZT 90 VSD-FF  
with integrated MD dryer



ZR 700 VSD with external  
MD 2100 VSD dryer



In order to be First in Mind—First in Choice® for all your compressed air needs, Atlas Copco delivers the products and services that help increase your business' efficiency and profitability.

Atlas Copco's pursuit of innovation never ceases, driven by your need for reliability and efficiency. Always working with you, we are committed to providing you the customized quality air solution that is the driving force behind your business.



**Never use compressed air as breathing air without prior purification in accordance with local legislation and standards.**