

# **MD** series

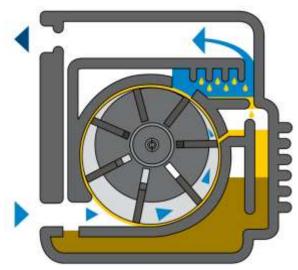
FIXED SPEED

# **Operating principle** ---

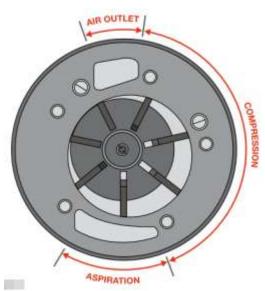
# Vane compressor as below:

#### Maximum efficiency of the air compression process, excellent reliability and low running costs; are just some of the key benefits that rotary vane technology can offer.

The vane compressor is a volumetric rotary compressor that consists of a stator cylinder in which a rotor is mounted off-centre but parallel to its sides. The rotor has slots in which the vanes are free to slide: centrifugal force keeps them in contact with the sides of the stator during rotation. The rotary vane compressor, thanks to its **simple construction**, offers remarkable advantages, first among them being **greater volume yield** because the vanes are in constant contact with the inner wall



of the stator and form a perfectly airtight seal with no leaks along the wall thanks to a continuous film of oil. In this type of compressor no axial



thrust is generated so the side surfaces of the rotor are not subject to wear and thus no rotating bearings or thrust bearings are needed. The vanes, too, because of the special way they are made have practically **Unlimited life.** 

Behind the success of NAILI compressors there is thus **extreme** reliability, long life, quiet operation and simplicity of

**maintenance.** Design is important too: compactness and clean lines, together with harmonious shapes, give NAILI compressors an image of robustness and ease of use.

## **MD** Series Cutting-edges ---

**Lower wave of Starting Current:** When the air compressor starts up with a single unit sequence, the starting current fluctuation is significantly reduced so as to avoid the severe impact of the starting current of high-power machine on the production (electricity) network system, and is conducive to the maintenance of the production system.

**BACKUP security:** Double Airends design, BACKUP to make sure one of them can be operating during of other down in daily production, more security and more economical way to keep production running!

More flexible setup of loading: For production needs, compressor's air flow and working statue can be adjusted according to actual need;

**Linkage control:** When air flow demand of compressor decreases, it can be operated under low load, with one full load and one unloading; In the case of even lower air consumption, one on and one standby can be provided, which not only greatly saves energy efficiency, but also provides additional guarantee for production.

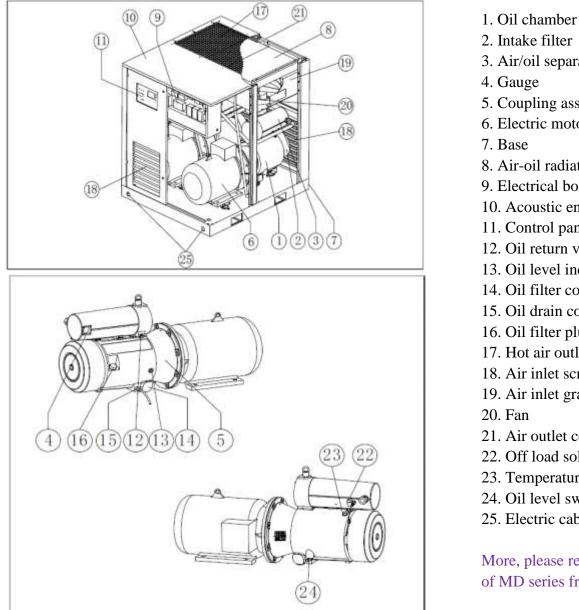
# **MD** Series Specification ---

Model		Unit	MD75	MD90	MD110
Ambient temperature		°C	0-45	0-45	0-45
Relative humidity		%	0-90	0-90	0-90
Free Air Delivery	7bar	m <sup>3</sup> /min	14.20	17.00	21.60
	8bar	m <sup>3</sup> /min	13.60	16.56	20.00
	10bar	m <sup>3</sup> /min	11.32	14.00	17.80
	13bar	m <sup>3</sup> /min	9.60	11.76	14.40
Air discharge Temp(higher than ambient temp)		°C	5-10	5-10	5-10
Oil carryover		PPM	1.5	1.5	1.5
Drive method			Direct	Direct	Direct
Rotational speed		(r.p.m)	1475	1475	1480
Oil System capacity		L	19*2	19*2	19*2
Air outlet size			DN65	DN65	DN65
Dimensions	Length	mm	1800	1800	1800
	Width	mm	1560	1560	1560
	Height	mm	1700	1700	1700
Weight		kg	1500	1700	1900
Electric starting			Star-Delta	Star-Delta	Star-Delta
Electric motor power		KW	37*2	45*2	55*2
Insulation class			F	F	F
Enclosure class			IP55	IP55	IP55
Service factor			1.2	1.2	1.2
Power supply		V/Ph/Hz	380/3/50	380/3/50	380/3/50
Supply wire min section		mm <sup>2</sup>	120	120	120

#### Motor of voltages will be available according to your request, so please confirm with us in advance!

### **MD** Series configuration ---

Parts list of MD series



- 2. Intake filter
- 3. Air/oil separator
- 5. Coupling assy
- 6. Electric motor
- 8. Air-oil radiator
- 9. Electrical box
- 10. Acoustic enclosure
- 11. Control panel
- 12. Oil return valves
- 13. Oil level indicator
- 14. Oil filter cover
- 15. Oil drain cock
- 16. Oil filter plug
- 17. Hot air outlet grate
- 18. Air inlet screen
- 19. Air inlet grate
- 21. Air outlet connection
- 22. Off load solenoid valve
- 23. Temperature switch
- 24. Oil level switch
- 25. Electric cable hole

More, please refer to Part instruction of MD series from us

MD series, use latest version of MAM860, for more information, please contact us for User manual of controller



**MD** Series Wiring diagram ---

