

压缩机的极致水平

Summit of screw air compressor technology

高端压缩机制造企业

Manufacturing enterprise of high-end screw air compressor

Ever-Power Group

CMW系列无油涡旋空气压缩机

Cmw Series Oil-free Scroll Air Compressor



Hangzhou Ever-Power Transmission Co.,Ltd

- 纯无油
Oil-free
- 低噪音
Low noise
- 免维护
Maintenance -free
- 零排放
Zero discharge

尖端科技
The most advanced Technology
创新
Innovation



辛麦恩一直走在压缩机技术创新的前沿，继研究开发水润滑无油螺杆空气压缩机后又逐步开发了二级压缩4.0Mpa水润滑无油螺杆空气压缩机、喷油润滑4.0Mpa二级压缩机，并起草制定了JB/T 11882-2014《一般用喷水单螺杆空气压缩机》和JB/T12565-2015《中压单螺杆空气压缩机》。涡旋式无油压缩机又是辛麦恩全新设计与开发的，不同于全球任何一家结构型式的无油涡旋压缩机，其结构更合理，散热条件更好，使用寿命更长，稳定性更好，是全球唯一将压力做到1.2Mpa的涡旋压缩机企业，并将主机质保时间确定为两年。

CMN is always working for high technology of air compressor. After developing of water lubrication oil free screw air compressor, we continue develop the two-stage compression of 4.0Mpa oil free screw air compressor & 4.0Mpa micro oil screw air compressor. What's more, CMN participated the drawing up of national industry compressor standards such as JB/T 11882-2014 and JB/T12565-2015. Oil-free scroll air compressor is a new design and developed by CMN which is different from any others scroll air compressor in the world. CMN scroll air compressor more reasonable structure, good heat dissipation, longer using life, better stability, air-end 2years warranty and also we are the only one who can manufacture 1.2Mpa scroll air compressor in the global.



► 辛麦恩无油涡旋压缩机有以下特点：
CMN oil-free scroll air compressor features:

- 高精度，高刚度方形设计，寿命超长，主机质保两年；
High precision & inventive design air-end, longer service time and 2years warranty ;
- 永磁电机驱动，能耗降低10%以上；
Using permanent magnet motor, compressor efficiency is improved 10% ;
- 电机与主机直联，无联轴器，无皮带、免调整，噪音极低；
Motor is connected with air-end directly, without belt, coupling, no need adjustment, super low noise ;
- 人性化液晶显示屏，实时显示排气温度，排气压力，运行时间，提示保养维护，故障报警。
PLC controller displays discharge temperature, pressure, operation time, maintenance remain and fault alarm, etc.

► 单主机搭载型 Single air end

- 国际首创的高刚度主机
World first innovating of high stiffness air end.
- 高效率永磁电机驱动
High efficiency permanent magnet motor
- 搭载高品质不锈钢储气罐
Stainless steel air storage tank
- 独立冷却风机
Individual cooling fan
- 高效进气过滤器过滤精度 $1\mu m$
Air filter precision is $1\mu m$
- 不锈钢管路与接口
Stainless steel pipe and connection



■ 精密主机
高精度，高刚度的四方形主机设计，确保高压到1.2Mpa轻松工作，经久耐用。
Precision air end
High precision, stiffness and durable square air-end ensures pressure can reach to 1.2Mpa

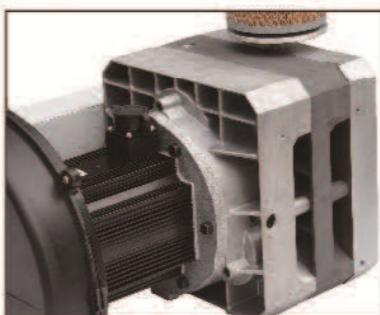
■ 低温度压缩空气
独立的冷却风扇冷却后的压缩空气接近常温，确保极低的含水率。
Low discharge compressed air temperature which near the ambient temperature after cooled by the individual fan to ensure the low pressure dew point.

■ 永磁驱动器
启动平稳，无任何启动冲击，并具有变频调速功能，耐用又节能，延长寿命。
Permanent magnet inverter
VSD soft start no current impact. Inverter adjusts motor speed automatically, save energy and long service life

■ 超级静音
设计简洁而精美，优秀的结构，先进隔音罩可以将噪音降到49dB(A)
Super quiet
Smart structure and advanced soundproof casing to reduce the noise to 49dB(A)

CMW系列无油涡旋压缩机具有简洁、高性能、超低噪音、超小体积、经久耐用等优点。

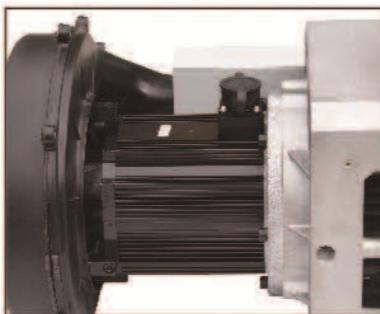
CMW oil free scroll air compressor is high efficiency, good performance, quiet, compact size, durable.



高刚度主机
Stiffness air-end



永磁驱动器
Permanent magnet motor is driven by inverter



高效永磁电机，IP65防护等级，F级绝缘，效率94%以上。
Efficient permanent magnet motor, IP65 protection level, F insulation level, efficiency more than 94%



采用不锈钢接口
Stainless steel connection



纯净的不锈钢储气罐
Purity stainless steel air tank



人性化控制面板
Intelligent PLC controller

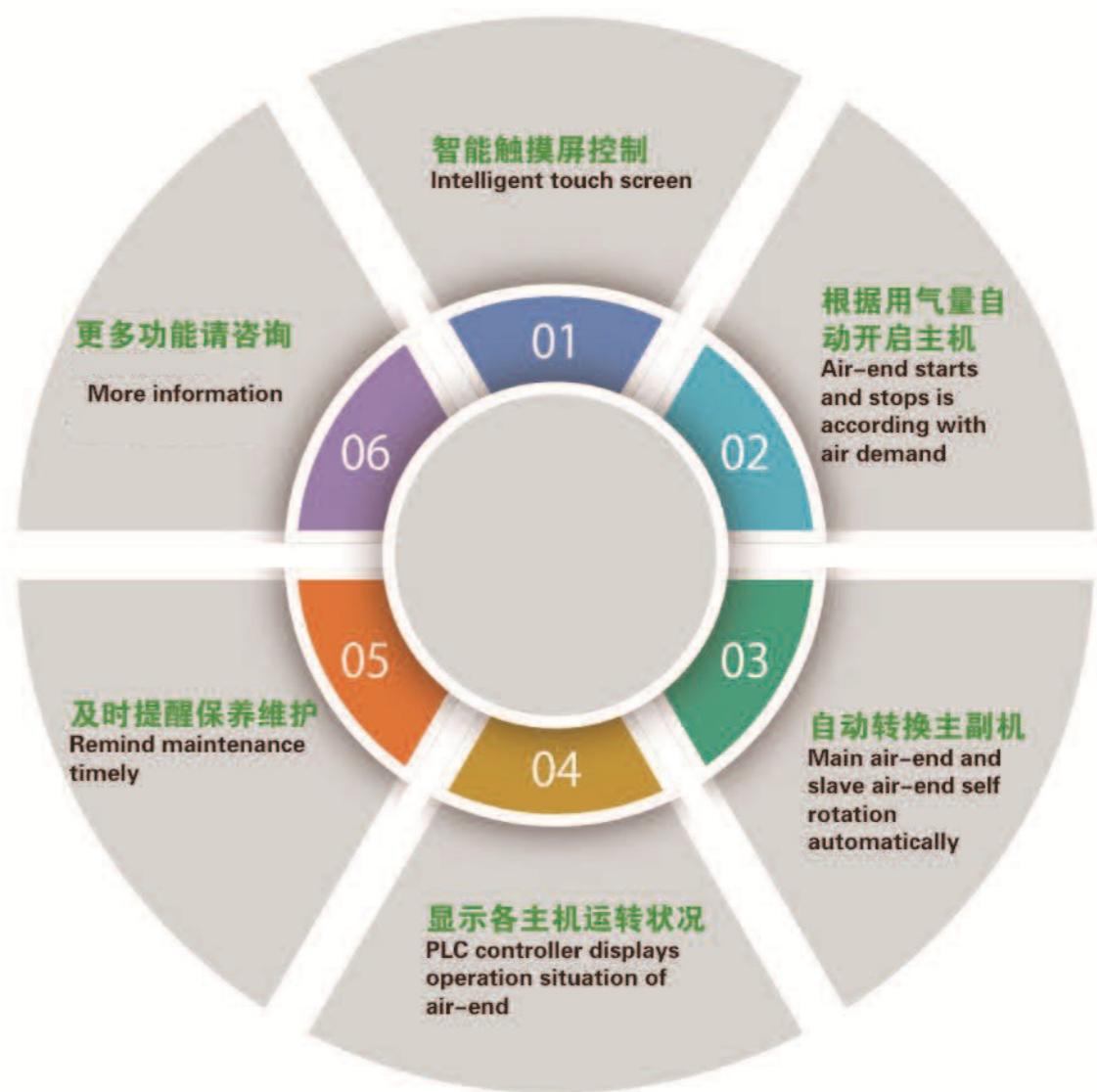
▶ 多主机搭载型
Multi air-ends



■ 灵活多变
Flexible

■ 多主机模块化组合设计
Multi air-ends modular design

■ 搭载2~4台压缩主机，充分考虑多种使用情况，实现最佳运转节能又省电，根据用气情况自动开启主、副机，并自动轮换主、副机，延长整体使用寿命，最大限度地实现节能。
2~4pcs scroll air-end built in one. To save energy, we consider many kinds of using situation, and set main air-end and slave air-end start, stop and self-rotation automatically are according with the air demand. Maximum prolong the compressor service time and save the energy cost.



3台以上主机机型采用触摸屏控制器
Air compressor with 3 more air ends will be using touch panel controller



▶ 设备配套搭载型
Individual air-end set



电动大巴供气解决方案
Electric bus



高铁动车供气解决方案
High-speed train



精密机床供气解决方案
Precision machine tool



精密喷涂涂装解决方案
Precision spray production line



医疗器械设备供气解决方案
Medical apparatus

- 超静音型设计
Super quiet design
- 简单便捷的无油涡旋压缩机
Simple and convenient
- 可以轻松搭载于各种需要压缩空气设备上。
Air-end set can be match with any devices which need compressed air
- 无油：机组不需要任何润滑油
Oil-free: no need any lubrication oil
- 稳定可靠：只要每年加一次油脂
Stable and reliable: oil grease is added one time per year
- 耗材少：唯一耗材只有空气过滤芯和密封环
Low consumable cost: only air filter and sealing element are consumables

无油涡旋空气压缩机工作原理

Working principle of oil-free scroll air compressor

空气的压缩过程是通过静涡旋盘和动涡旋盘的相互运动来实现的，空气从机头的侧面进入，动涡旋盘将压缩腔封闭，随着动涡旋盘的运动，空气被逐渐地压缩。压缩空气从静涡旋盘的中心排出。这个过程被连续不断地重复，实现了压缩空气连续无波动地输出。

Air compression processes which is realized by the movement of rotor and stator. The air is sucked from the side of air-end, rotor seals the compression chamber and air is compressed gradually along with rotor movement and compression chamber become smaller. Compressed air is discharged from the center of stator. This is a continuous processes, the discharged compressed air is smooth and no fluctuation.



动涡旋盘按照1-4的顺序运动，吸入的空气在动涡旋盘和静涡旋盘咬合形成的月牙形压缩腔内被逐步缩小体积进行压缩，最后从静涡旋盘中心部位的排气口排出。

The movement of rotor refer figure 1-4 (suction - compression - exhaust). The suction air is gradually compressed in the smaller and smaller compression chamber due to rotor and stator movement, at last the compressed air is discharged from the center discharge hole.

CMW系列无油涡旋空气压缩机技术参数

Technical parameters for CMW series Oil-free scroll air compressor

型号 Model	马达输出功率 Motor power		压力范围 Working pressure	产气量 F.A.D	噪音 Noise	压缩空气 出口管径 Connection	重量 N.W	外形尺寸 Dimension
	kW	HP						LxWxH mm
CMW2.2-0.8	2.2	3	0.2-0.8	255	49±3	1/2"	132	670×630×945
CMW3.7-0.8	3.7	5	0.2-0.8	415	52±3	1/2"	150	720×680×1050
CMW4.4-0.8	2.2×2	6	0.2-0.8	510	52±3	1/2"	150	800×650×1020
CMW7.4-0.8	3.7×2	10	0.2-0.8	830	55±3	1"	185	880×720×1120
CMW11-0.8	3.7×3	15	0.2-0.8	1245	58±3	1"	300	1450×900×1150
CMW15-0.8	3.7×4	20	0.2-0.8	1660	61±3	1"	350	1450×900×1150
CMW2.2-1.0	2.2	3	0.2-1.0	215	49±3	1/2"	132	670×630×945
CMW4.5-1.0	4.5	6	0.2-1.0	410	52±3	1/2"	150	720×680×1050
CMW4.4-1.0	2.2×2	6	0.2-1.0	430	52±3	1/2"	150	800×650×1020
CMW9-1.0	4.5×2	12	0.2-1.0	820	58±3	1"	185	880×720×1120
CMW13.5-1.0	4.5×3	18	0.2-1.0	1230	61±3	1"	300	1450×900×1150
CMW18-1.0	4.5×4	25	0.2-1.0	1640	61±3	1"	350	1450×900×1150
CMW3.0-1.2	3	5	0.2-1.2	210	49±3	1/2"	135	670×630×945
CMW4.5-1.2	4.5	6	0.2-1.2	360	52±3	1/2"	150	720×680×1050
CMW6.0-1.2	3×2	8	0.2-1.2	420	52±3	1/2"	150	800×650×1020
CMW9-1.2	4.5×2	12	0.2-1.2	720	58±3	1"	185	880×720×1120
CMW13.5-1.2	4.5×3	18	0.2-1.2	1080	61±3	1"	300	1450×900×1150
CMW18-1.2	4.5×4	25	0.2-1.2	1440	61±3	1"	350	1450×900×1150