



ECO SCROLL

OIL-FREE AIR COMPRESSOR
ES04-15





**SOME COMPANIES ARE FOUNDED ON HARD WORK.
OTHERS ARE FOUNDED ON IDEALS.**

FS-CURTIS WAS FOUNDED ON BOTH.

More than 160 years ago, the FS-Curtis way of doing business was established through two key commitments: a dedication to building quality products and a dedication to responsive customer service.

Over the decades, the company and its products have evolved through innovation and new technologies. But those commitments to quality and service remain unchanged. Today, just as in 1854, FS-Curtis customers can depend on our products for reliable, long-term service. Equally as important, they can depend on getting the same from our people.

A HISTORY OF EXCELLENCE

1854

Curtis & Co. – Empire Saw founded in St. Louis, MO, USA

1857

Earned Agricultural and Mechanical Fair award for excellence and quality

1876

Named Curtis and Co. Manufacturing

1897

Built first reciprocating air compressor that later evolved into the Master Line Series

1914

Supported U.S. Government efforts by producing more than 2 million Howitzer shell forgings

1940

Designed and developed mobile oxygen compressors to be used in Aerospace applications

1955

Merged with U.S. Air Compressor Company, Central Petroleum Company, Lewis Machine Company

1978

Merged with Toledo Tools as Curtis-Toledo Inc.

1979

Introduction of Challenge Air Series reciprocating air compressors

1995

Began manufacturing and assembling Rotary Screw Air compressors

2005

Expanded global market reach by joining forces with Fusheng Industrial

2006

U.S. Headquarters certified as ISO9001:2000 and ISO14001:2004

2010

Introduced next generation GSV Variable Speed Rotary Screw compressors

2015

Introduced Nx series Fixed and Variable Speed Rotary Screw compressors

2016

Nx Series named Plant Engineering's 2015 Product of the Year - Gold Award for Compressed Air

2017

Nx Series claims Plant Engineering's Product of the Year - Gold Award 2nd year in a row



POWERFUL AND EFFICIENT ECOLOGICALLY CONSCIOUS

ENVIRONMENTALLY FRIENDLY AND HIGHLY RELIABLE

FS-Curtis ECO Scroll oil-free air compressors are ISO 8573-1 CLASS 0 certified compressors which are energy efficient, easy to operate and maintain, quiet and compact.

FS-Curtis ECO Scroll oil-free scroll compressors provide 100% oil-free air for critical applications in industries such as electronics, pharmaceutical, hospitals, printing, automotive, universities, dental applications, water aeration, food and beverage.



INDUSTRY APPLICATIONS



FS-Curtis has earned the reputation for building the most rugged industrial-duty compressor you can buy. Our professional engineering staff and factory-trained distributor network are committed to supplying you with a complete offering of the very best in compressed air equipment.

- **Electronic** - Oil-free air is needed to activate tools, control valves and actuators. Also, moving components with oil-free air is crucial as they could be compromised by residue very easily.
- **Pharmaceuticals** - Coatings are sprayed on tablets using compressed air. If oil-free compressor is not used, oil in the air would be directly deposited on the tablets causing rejections or health risks. If oily, exhaust air from automated components could contaminate the production line leading to rejected final products and possible health code violations.
- **Hospital** - Supply medical air while operating surgical tools simultaneously and cannot add toxic or flammable contaminants into the compressed air.
- **Printing** - Various automated machines that, if oil is introduced, would compromise final product.
- **Automotive/Aftermarket** - One of the most important aspects of paint application is oil-free air. It alleviates any fish eyes, streaks or any other oil carry over imperfections. If these occur, costly steps including wet sanding, stripping, sanding and even repainting, have to be taken to correct the problems. Also, no extra high dollar filtration is needed. Cleanup equipment is minimized due to the oil-free air. Due to the 100% duty-cycle, scroll compressors do not suffer catastrophic failures that occur when light run conditions are more frequent.
- **Automotive/Assembly** - For assembly line robotics and high quality paint and clear coat finishes.
- **Universities** - For lab testing in clean room environments.
- **Dental** - Needed for air tools that will come in direct contact with the patient.
- **Water Aeration** - For uses in theme parks where animals and/or humans are in direct contact with the water being aerated.
- **Food and Beverage** - Needed for fermentation, packaging, bottling, cleaning, filling and capping. Assembly line exhausts containing oil would contaminate final products.

SMART USER-FRIENDLY CONTROLLER

USER-FRIENDLY CONTROL INTERFACE WITH AN EASY-TO-READ DISPLAY

- Informative menus allows user to program maintenance alerts for consumables
- Warning/alarm and shutdown gives you multiple protections against damaging implications
- Real-time pressure and temperature reading for real time status monitoring
- Simple and easy to operate, much like a reciprocating compressor



Scroll vs. Rotary Screw

Many customers are opting for rotary screw compressors based on their need for low oil-carryover, low sound, and continuous-duty operation, but scroll compressors perform as well or better than rotary screws in all these areas. In addition, scrolls are not as sensitive to intermittent operation or short-cycling, and are therefore, less risky if you are unsure about your air demand. Although scrolls typically cost a little more up-front, as you can see from the chart below, a scroll can quickly pay for itself purely based on lower maintenance spend.



ES04 (5HP) Scroll Tank Mount		Typical Oil-lubricated (5HP) Rotary Screw	
Initial Investment	Suggested Retail Price \$6,293	Initial Investment	Suggested Retail Price \$5,046
5 Year Life Cycle Parts	\$200.00	5 Year Life Cycle Parts	\$1,490.00
5 Year Life Cycle Service	\$925.00	5 Year Life Cycle Service	\$2,800.00
5 Year Life Cycle Total	\$7,418.00	5 Year Life Cycle Total	\$9,336.00
SCROLL SAVES YOU \$1,918			



TECHNICAL DATA



MODEL	CAPACITY (CMM)	MOTOR	SOUND LEVEL	DIMENSIONS (BASE MOUNT)	WEIGHT (BASE MOUNT)
	8 Bars	Kw / HP	dBA	(L x W x H mm)	Lbs.
ES04	0.41	4 / 5	57	597x597x902	150
ES08	0.82	8 / 10	59	1600x750x1740	300
ES11	1.20	12 / 15	61	1022x750x1651	450
ES15	1.59	16 / 20	63		550

FEATURES AND BENEFITS

Clean, Oil-free Air

High quality air where oil-free air is critical

- Delivers ISO 8573-1 Class 0 clean & efficient compressed air
- No oil contamination

Whisper Quiet

Designed for quieter operation

- Designed to be installed in applications where quiet setting is important
- Noise level between 57 and 63 dBA
- No inlet valve knocking noise
- Ultra low vibration (5mm/s or less)

Powerful & Energy Efficient

Built to the highest levels of dependability, reliability & efficiency

- Powered by high efficient motor TEFC IE3
- Exclusive ECO-Series scroll airend
- Fixed and orbital scrolls are precisely meshed
- Centrifugal cooling fan keeps heat exchange efficient and quiet
- Check valves and safety relief valves in line to prevent back pressure to the airend
- 100% duty cycle
- Units are start/stop controlled

- Can be oversized without harm to scroll airend

Ecologically Conscious

Smart & environmentally conscious design

- Lower carbon footprint with environmentally friendly ISO 8573-1 Class 0 Air
- Unit installation in work space gives you reduced installation costs
- Promotes energy conservation by avoiding the use of oil
- Maintenance friendly
- Less moving parts results in higher reliability
- Small footprint, space saving modular design
- Easy to use electronic controller

Smart user-friendly controller

User-friendly control interface with an easy-to-read display

- Informative menus allows user to program maintenance alerts for consumables
- Warning/alarm and shutdown gives you multiple protections against damaging implications
- Real-time pressure and temperature reading for real time status monitoring
- Simple and easy to operate, much like a reciprocating compressor





CONTINUED COMMITMENT

A company history that dates back more than 160 years is a company history that, to us, is just the beginning. FS-Curtis is committed to offering a world-class portfolio of products. Through the dependability of our people and our quality-focused manufacturing, FS-Curtis will continue to be the most trusted and dependable name in compressed air serving even more markets through our ever-growing global presence.

You can count on **FS-Curtis** to approach the next 160 years by staying true to the values and strengths that are appreciated by our customers today.

A WORLD OF DIFFERENCE

The FS-Curtis headquarters in St. Louis, Missouri, U.S.A. is the anchor of a larger global network. FS-Curtis builds quality products — and a quality reputation — at locations around the world.

In addition to our manufacturing and packaging locations, a large global network of sales agents and distributors ensures that sales and service support is available around the world, day in and day out.

ST. LOUIS, MO USA (HEADQUARTERS)

PUNE, INDIA | JUNDIAI, BRAZIL | OBERHAUSEN, GERMANY | SHANGHAI, CHINA | TAIPEI, TAIWAN | PITTSBURGH, PA USA (FS-ELLIOTT)
ZHONGSAN, CHINA | BEIJING, CHINA (FUSHENG) | ZHONGSAN, CHINA (FUSHENG) | HO CHI MINH CITY, VIETNAM (FUSHENG)



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Improvements and research are continuous at FS-Curtis. Specifications may change without notice.

ISO 9001
ISO 14001

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