

NX SERIES

DIRECT AND VARIABLE SPEED DRIVE
ROTARY SCREW AIR COMPRESSORS
45-260 KW





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

FS-CURTIS WAS FOUNDED ON BOTH.

More than 165 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

1976

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



TRUSTED INDUSTRY INNOVATION

POWERFUL PERFORMANCE

The FS-Curtis NxV and NxS Series air compressors are valued worldwide for their legendary reliability and industrial performance.

The standard iCommand-Touch controller revolutionizes compressor operations by tracking temperature, pressure, and logging critical historic data. Power efficiency is maximized with FS-Curtis' exclusive airend profile, centrifugal fan, and generously sized components - making the Nx Series ideal for large industrial manufacturing and power generation.



TECHNICAL DATA

Direct

MODEL	CAPACITY FAD (CFM)				MOTOR Kw / HP	DIMENSIONS (base mount) (L x W x H In.)	WEIGHT (base mount) Lbs.
	100 psi	125 psi	150 psi	175 psi			
NxD45	288	263	246	233	45/60	79 x 50 x 69	2911
NxD55	356	324	293	270	55/75		3035
NxD75	495	436	416	382	75/100	86 x 53 x 73	4020
NxD90	565	492	448	424	90/125		4090
NxD110	691	622	573	537	110/150	108 x 67 x 68	6613
NxD160	1038	938	826	760	160/200	114 x 73 x 77	8157
NxD185	1103	1026	927	815	185/250		8267
NxD220	1455	1356	1222	1137	220/295	154 x 83 x 83	12397
NxD260	1642	1543	1398	1300	260/340		12511

Variable Speed

MODEL	CAPACITY FAD (CFM) Maximum - Minimum			MOTOR Kw / HP	DIMENSIONS (tank mounted) (L x W x H In.)	WEIGHT (tank mounted) Lbs.
	100 psi	125 psi	150 psi			
NxV45	288.3 - 63.5	262.7 - 70.5	244.7 - 64.2	45/60	79 x 49 x 69	2911
NxV55	345.4 - 71.3	314.2 - 94.0	277.4 - 122.3	55/75		3035
NxV75	498.8 - 120.7	450.8 - 119.7	411.3 - 117.4	75/100	86 x 63 x 73	4020
NxV90	567.3 - 120.7	505.5 - 119.7	456.5 - 117.5	90/125		4090
NxV110	688.5 - 205.4	624.1 - 200.0	574.0 - 175.0	110/150	112 x 67 x 68	6767
NxV160	1030.0 - 340.0	965.0 - 333.0	838.0 - 333.0	160/215	114 x 73 x 77	8361
NxV185	1104.0 - 352.0	1031.3 - 358.0	929.0 - 349.0	185/250		8482



NX SERIES FEATURES AT A GLANCE

eCOOL® Technology

The ultimate in system protection and reliability

- Protects critical components from compressor-generated heat
- Compartmentalized air flow design and oversized aftercooler
- Extends component life and reduces downtime

dBa Shield Noise Reduction

Designed for quieter operation

- Extra-thick sound insulation reduces noise
- Can be installed in applications where dBa level is critical
- Laminated oil-proof sound insulation

Energy Efficiency & Quality Components

Built to the highest levels of dependability, reliability & efficiency

- Premium Efficiency TEFC (IP55 Class F) motor protects compressor from harsh environment
- IE3 Motors increase efficiency
- NEMA-1 electric panel

- Wye-Delta motor starter
- Hi-Efficiency air/oil separator with 1-3 ppm carryover
- 120 volt control voltage
- 100% continuous duty cycle, pulsation free air
- Energy efficient oversized cooler
- Built-in heavy duty air intake filter
- Additional heavy duty oil filter for added protection of airend bearings
- Durable powder-coat painted enclosure
- Leak-free design with o-ring seal fittings & hoses

Ease of Maintenance

Designed for low cost of ownership, easy service & little down time

- Easy access to all preventative maintenance components
- Washable cabinet pre-filter
- Controller alerts for maintenance intervals
- Differential pressure indicators for the oil filters, air filter & separator element
- Pivoting separator tank lid allows for easy element change out



NXGEN WARRANTY

Extended Warranty Program

All Nx products are backed by an industry leading warranty:

- Five-year major components warranty
- Ten-year airend warranty

Just register the machine online, Use only FS-Curtis Genuine Parts & Lubricants per the required maintenance schedule, and you will have peace of mind knowing that your machine is backed by the NxGEN Warranty

iCOMMAND-TOUCH

TAKE CONTROL OF YOUR WORLD.

With the optional iCommand-Touch, a full-color screen displays graphs which capture and track factual, real-time air usage by the hour, day, week and month. Historical data can be retrieved at any time at the touch of the screen.

Data trending keeps your finger on the pulse of your entire compressed air system.



Continuously tracks pressure, temperature, air quantity and usage to easily diagnose and optimize your plant's air system.

- *Simple Touchscreen Control*
- *Intuitive Navigation*
- *Capture Real-time and Historical Data Trending*



Trending and Graphing Capabilities

Graph information can be conveniently downloaded to SD card for historical records, troubleshooting and quality control measures.

One-Touch Status Review At A Glance:

Main Screen: Displays image of compressor with red dot indicator spotlighting issues in the system, which reduces time in trouble shooting.

Pressure: Continuously tracks pressure range by day, week and month. This allows quick identification of pressure variations that affect plant operations.

Temperature: Real-time monitoring and trending of critical oil temperature enable early identification of potential shutdown and downtime.

Air Quantity: Monitors cubic feet of air usage, pinpointing peak production or down times in your operation.

Usage: Tracks how long machine is on, off or in standby. This allows you to analyze usage factor in your plant based on the operation of your compressor.

Maintenance: Tracks and displays hours of usage of critical components—oil filter, inlet filter, air/oil separator and motor—and timetable for replacement and/or maintenance.

Air Circuit & Oil Circuit: Quick diagnosis of key component operation within the air and oil circuit

eCOOL® TECHNOLOGY

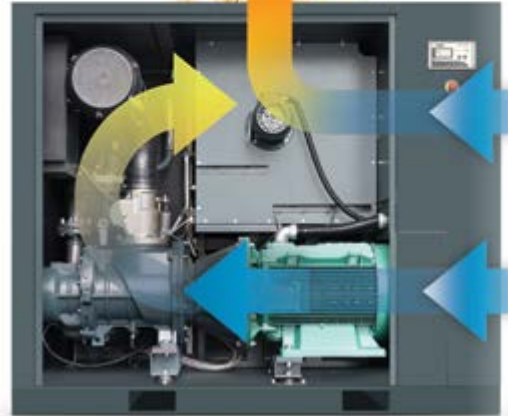
DIRECT & VARIABLE SPEED ROTARY SCREW AIR COMPRESSORS 45-260 KW

A COOL INNOVATION

Compressors generate heat. FS-Curtis' exclusive eCOOL technology provides protection from heat and reduces thermal stress.



By combining smart compressor layout with intelligent component selection, eCOOL technology maximizes cooling airflow for greater energy efficiency, improved reliability and increases service life up to 50% longer for motors and electrical components and up to 30-50% longer for bearings, hoses and seals.



eCool technology maximizes cooling airflow for greater energy efficiency, improved reliability and extended service life.



DemandSmart™

ENERGY MANAGEMENT SYSTEM

ENERGY SAVINGS ARE SMART SAVINGS

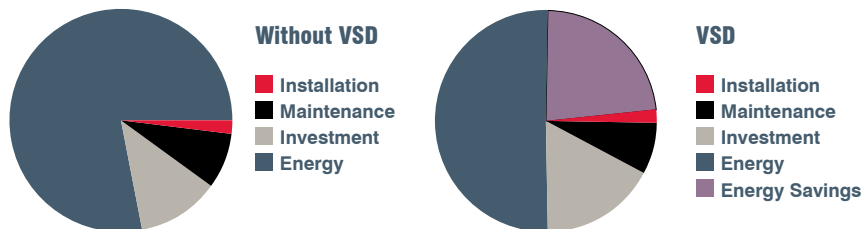
Take control of your energy savings with our optional DemandSmart™ Energy Management System, which includes the controller, variable-speed drive, and air end to create greater overall efficiency. This innovative design maximizes energy savings and reduces overall operating costs.

INTELLIGENT VARIABLE SPEED DRIVE

One of the ways the DemandSmart system in Nx Series compressors maximizes energy savings is with a variable speed drive (VSD). The VSD allows you to match your energy usage to current system demands, eliminating the need to overpressure the system, so you'll save money by not wasting energy.

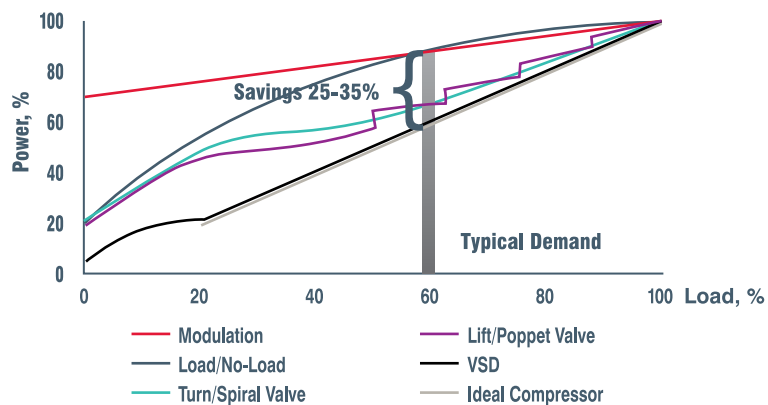
In addition, the soft starting capability of FS-Curtis' VSD reduces inrush current requirement, decreasing your power demand — and, of course, increasing your energy savings.

Nx SERIES WITH
VSD LIFE CYCLE
COSTS OVER 5 YEARS



- The VSD — time-proven directly coupled design — offers faster response and greater operational efficiency
- Variable operation slows airend speed, which lowers energy costs and reduces noise
- Matching the operating speed with changes in demand reduces component wear
- With DemandSmart technology, the VSD enhances quality by stabilizing air pressure at 1 psi increments
- Built-in DC choke protects against harmonic disturbances and eliminates the need to source additional corrective devices

ENERGY SAVINGS WITH VSD
COMPARING LOAD/NO-LOAD
POWER CONSUMPTION



CONTINUED COMMITMENT

A company history that dates back more than 165 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 165 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.

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