FSCURTIS

NXD SERIES

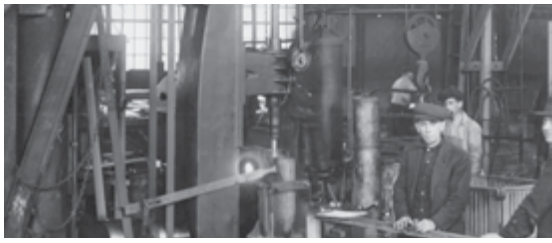


FIXED AND VARIABLE SPEED DIRECT DRIVE ROTARY SCREW AIR COMPRESSORS

45 - 185 kW

FS CURTIS
AIR COMPRESSORS







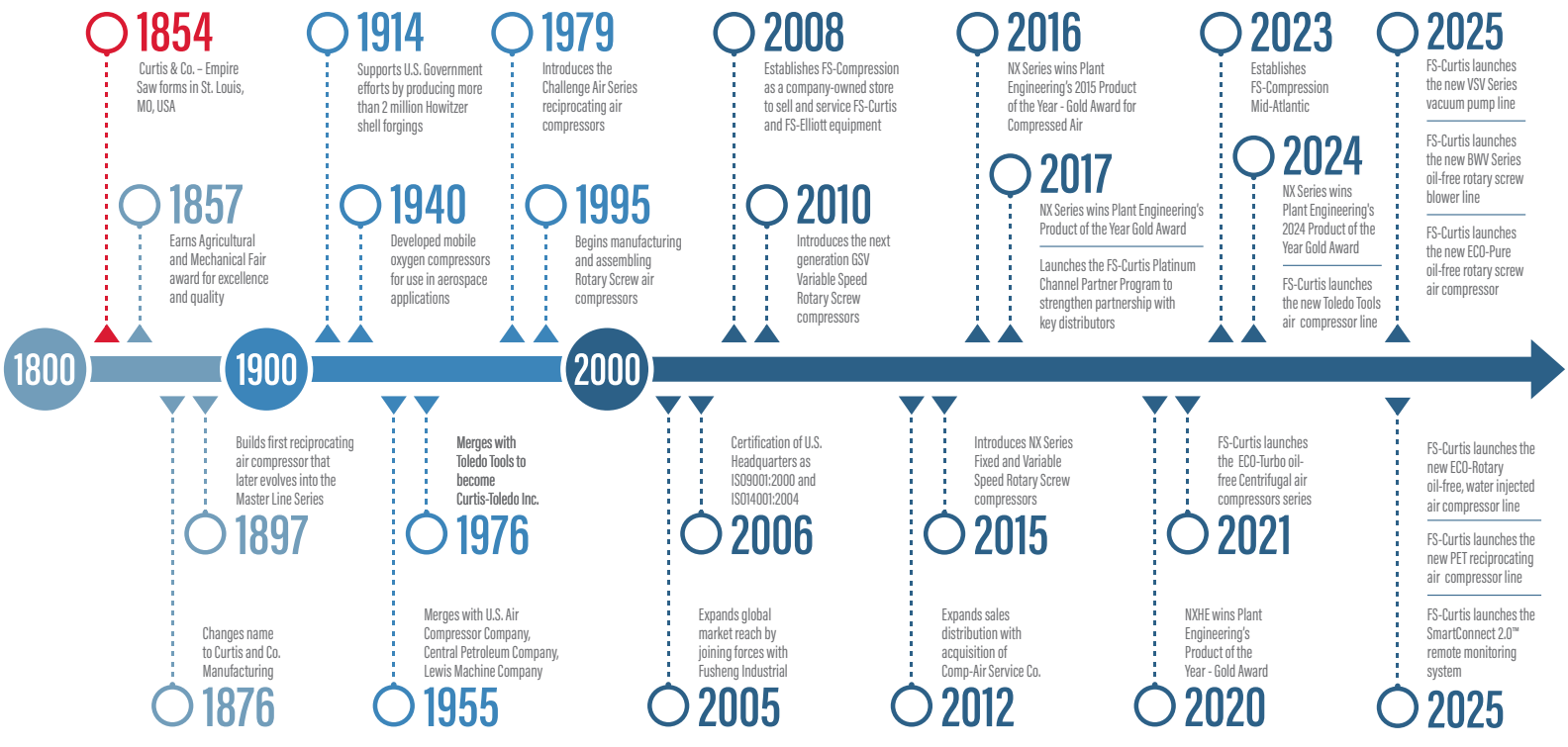
SOME COMPANIES ARE FOUNDED ON HARD WORK. OTHERS ARE FOUNDED ON IDEALS.

FS-CURTIS WAS FOUNDED ON BOTH.

One-hundred and seventy 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









TRUSTED INDUSTRY

INNOVATION



POWERFUL PERFORMANCE

The FS-Curtis NXD Series rotary screw air compressors are valued worldwide for their legendary reliability and industrial performance. The innovative 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.

NXD SERIES

FEATURES AT A GLANCE

EFFICIENT DIRECT DRIVE SYSTEM

Powerful design for maximum efficiency and reliability

- Delivering more power directly to the airend.
- Fewer moving parts reduces service time and costs.
- Ensures the motor and airend run at optimal speed, reducing stress and vibration, enhances reliability

dBA SHIELD NOISE REDUCTION

Designed for quiet operation.

- Centrifugal cooling fan and compartmentalized package air flow make for extremely smooth and quiet operation
- Extra thick, laminated oil-proof sound insulation greatly reduces noise
- Can be installed in applications where a quiet setting is critical

eCOOL® TECHNOLOGY

The ultimate in system protection and reliability.

- Protects critical components from compressor-generated heat
- Intelligent component layout optimizes cooling air flow through the package and improves overall efficiency and reliability
- Extends component life and reduces downtime

QUALITY COMPONENTS

Built to the highest levels of dependability and reliability.

- Exclusive FS-Curtis air end utilizes precision cut rotor profiles to maximize efficiency
- Premium efficiency TEFC (IP55, Class F) main motor protects against dust ingression and high operating temperatures, prolonging the life of the motor
- Components are generously sized to reduce pressure drop throughout the package, increasing overall efficiency

SUPERIOR PACKAGE DESIGN

Designed for low cost of ownership and sustainable reliability.

- Space-saving design
- Pulsation-free compressed air
- 100% continuous duty
- Easy to maintain
- Controls
  - Load/Unload
  - Modulation
  - Variable Speed (8kW+)
- Energy efficiency at full load delivers more air for the money in a smaller footprint

DEMANDSMART ENERGY MANAGEMENT SYSTEM

The ideal combination of variable speed drive, controller, and drivetrain

- Greatly reduces energy consumption at part load
- Reduces lifecycle costs by limiting energy consumption

iCOMMAND TOUCH+ CONTROLLER

- 7" HMI full color touchscreen is intuitive and easy to use
- Expanded functionality for integration with higher level communication systems
- Trending and graphing capabilities
- Precisely controls and protects your compressor

THE NEXT GENERATION OF NX GEN

EXTENDED WARRANTY COVERAGE

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 and Lubricants per the required maintenance schedule, and you will have peace of mind knowing that your machine is backed by the NxGEN Warranty.

NXD SERIES

FS-SMARTCONNECT 2.0

FS-SmartConnect 2.0 is an intuitive IoT monitoring feature that continuously captures live data from the compressor. With FS-SmartConnect you can ensure optimized performance, efficiency and compressor health. The data collected from the compressor is sent to the cloud, where an online dashboard provides access to all connected devices. This cloud access offers around-the-clock monitoring, ensuring the health of your compressed air assets in real time!



- Improve production efficiency and maximize uptime
- Achieve sustainable reliability
- Monitor the health of your compressed air assets in real time
- Partner with your service provider for peace of mind
- Customer access to the cloud with customized alerts



NXD SERIES
iCOMMAND-TOUCH+



The next generation iCommand-Touch+ controller delivers improved flexibility and functionality with intuitive navigation and simple touchscreen control. The 7" HMI full-color screen displays real time information about current compressor operating status and puts complete compressor control at your fingertips!

CONTROL YOUR COMPRESSOR, **DON'T LET IT CONTROL YOU.**

Designed to help you optimize performance to save energy, limit downtime, and save YOU money!

- The full-color, 7" HMI touchscreen is large, easy to read and navigate, and features improved display resolution.
- Reduce troubleshooting time by accessing the service menu through a stored permanent password...no more calling the factory for an access code!
- Controller data and set points can easily be uploaded by USB connection directly on the iCommand-Touch+ controller...no more cumbersome SD card!
- The ability to view all VFD Drive data directly from the iCommand-Touch+ screen speeds troubleshooting and issue resolution.

Expanded Functionality

- The ability to view all VFD Drive data directly from the iCommand Touch+ screen speeds troubleshooting and issue resolution.
- Four (4) RS485 ports increases your ability to connect to higher level communications
- Eight (8) analog inputs and eight (8) analog outputs brings flexibility and the ability to trigger critical functions in your compressed air system based on air compressor status

Trending & Graphing Capabilities

- Real time and historical data trending keeps your finger on the pulse of your entire compressed air system
- Continuously tracks pressure, temperature, flow, and usage to easily diagnose and optimize your compressed air system
- Graphing can easily be downloaded to a USB thumb drive for historical records, troubleshooting and quality control measures

Important Features

- Auto restart (after power outage)
- Restart delay
- Remote on/off
- Remote loaded/unloaded
- Operating mode selection
- Dew Point monitoring
- Maximum Dew point warning
- Minimum Dew point warning
- Lead/Lag and sequence control of up to 6 FS-Curtis air compressors
- Calendar/time-based system operating schedule



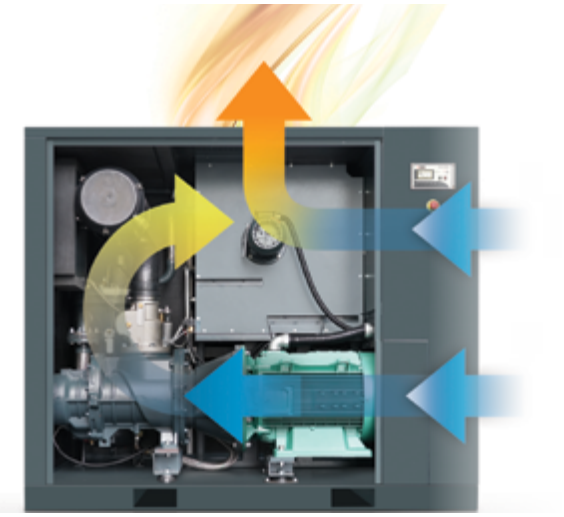
NXD SERIES

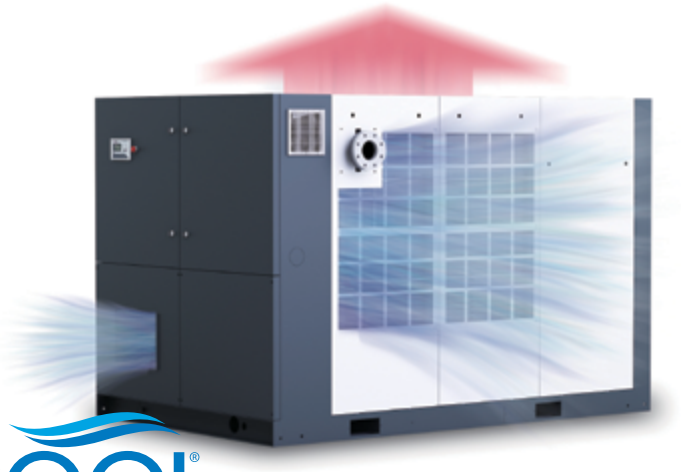
eCOOL® TECHNOLOGY

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 and improved reliability. eCool extends the life of motors, electrical components, bearings, hoses, and seals by up to 30%.





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



NXD SERIES
DEMANDSMART SYSTEM™

ENERGY SAVINGS ARE SMART SAVINGS

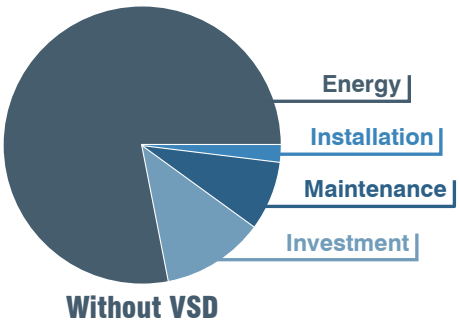
Take control of your energy savings with our DemandSmart Energy Management System! The combination of iCommandTouch+ controller, variable speed drive, and precision cut air end provides superior part load energy efficiency. This innovative design maximizes energy savings and reduces overall operating costs.

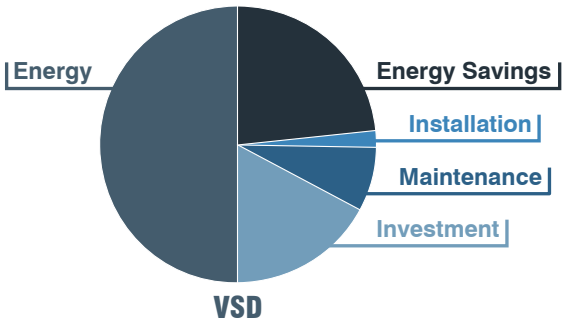
DemandSmart™
ENERGY MANAGEMENT SYSTEM

INTELLIGENT VARIABLE SPEED DRIVE

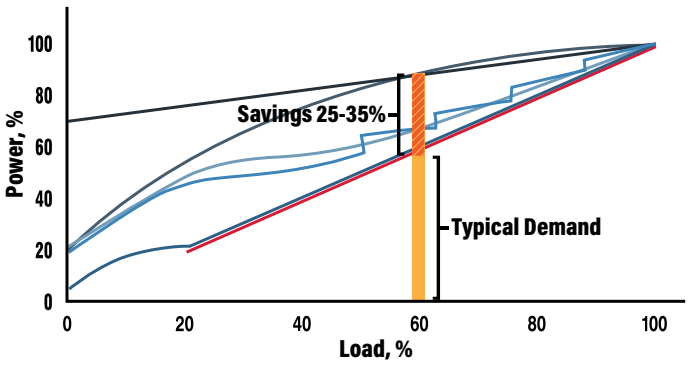
The DemandSmart Energy Management System matches power consumption to plant demand by adjusting the speed of the main motor based on changes in compressed air usage. When the demand for compressed air in your plant decreases/increases, the main motor speed decreases/increases to match power consumption to demand. Plant pressure is held within +/-1 psig and the result is the lowest possible operating costs!

Nx SERIES WITH VSD LIFE CYCLE COSTS OVER 5 YEARS

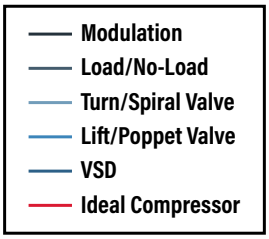




- The DemandSmart Energy Management System is anchored by a time proven and robust direct coupled drive arrangement
- Main motor speed varies to match plant compressed air demand, thereby matching power consumption to compressed air requirements at any given moment
- Part load power consumption is greatly reduced compared to other common control methods such as load/unload and modulation
- System air quality is enhanced with the DemandSmart Energy Management System by stabilizing your plant pressure to within +/-1 psig, virtually eliminating artificial demand
- Built in DC choke protects against harmonic disturbances and eliminates the need to source additional power corrective devices



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



NXD SERIES

TECHNICAL DATA

FIXED SPEED

MODEL	MOTOR kW / HP	CAPACITY FAD (CFM)				SOUND LEVEL dB(A)	DIMENSIONS L x W x H in.	WEIGHT lbs.
		100 psi	125 psi	150 psi	175 psi			
NXD45	45 / 60	288	263	246	233	72	78.7 x 49.2 x 68.9	505
NXD55	55 / 75	393	354	304	275	74	95.3 x 57.4 x 72.8	5191
NXD75	75 / 100	504	468	435	378	74	95.3 x 57.4 x 72.8	5456
NXD90	90 / 125	553	492	448	424	78	85.8 x 52.4 x 72.8	4090
NXD110	110 / 150	761	703	616	557	78	115.7 x 67.3 x 68	7055
NXD160	160 / 200	1038	938	826	760	78	114.2 x 73.2 x 76.6	8157
NXD185	185 / 250	1103	1026	927	815	78	114.2 x 73.2 x 76.6	8267

VARIABLE SPEED

MODEL	MOTOR kW / HP	CAPACITY FAD (CFM)			SOUND LEVEL dB(A)	DIMENSIONS L x W x H in.	WEIGHT lbs.
		100 psi	125 psi	150 psi			
NXD45	45 / 60	288 - 64	263 - 71	245 - 64	72	78.7 x 49.2 x 68.9	3060
NXD55	55 / 75	345 - 71	314 - 94	277 - 122	74	78.7 x 49.2 x 68.9	3070
NXD75	75 / 100	499 - 121	451 - 120	411 - 117	76	85.8 x 52.4 x 72.8	3770
NXD90	90 / 125	567 - 121	506 - 120	457 - 117	78	85.8 x 52.4 x 72.8	3770
NXD110	110 / 150	689 - 205	624 - 200	574 - 175	78	115.7 x 67.3 x 68	6767
NXD160	160 / 200	1030 - 340	965 - 333	838 - 333	78	114.2 × 73.2 × 76.6	8361
NXD185	185 / 250	1104 - 352	1031 - 358	929 - 349	78	114.2 × 73.2 × 76.6	8482



CONTINUED COMMITMENT

A company history that dates 170 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.

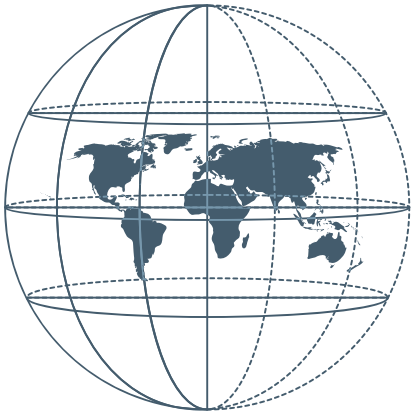


You can count on **FS-Curtis** to approach the next 170 years by staying true to the values and strengths that are appreciated by our customers today.

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.



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bsi ISO 9001 Quality Management Systems CERTIFIED

CAGI Compressed Air & Gas Institute PERFORMANCE VERIFICATION PROGRAM

COMPRESSED AIR CHALLENGE SPONSOR

CORPLITERATURE: FSL-NXD45-185_ BROCHURE_REV1

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

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