

## COMPACT TURNKEY NITRIDING / NITROCARBURIZING SYSTEMS

The multipurpose NXK series of nitriding / nitrocarburizing systems is an economical and dependable choice for use in small scale processing as well as for general laboratory/testing purposes.

In comparison to our large-scale industrial line of NX models, these systems have a compact construction that makes efficient use of restricted floor space in a plant or shop. Available in five sizes, the furnace comes equipped with a control system and auxiliary equipment. The turnkey system is mounted on a platform for secure transport by forklift and for more practical and efficient installation. Every system is fully assembled, factory tested and certified, making on-site installation and startup quick and effortless.

The NXK series shares a number of the same superior design and operating features as our large-scale furnaces:

- Light ceramic fiber insulation for fast and efficient heating as well as cooling
- Kanthal heating elements
- Retort and all parts in contact with nitriding/ nitrocarburizing atmosphere made of refractory alloy
- Recirculation turbine for uniform temperature/atmosphere distribution
- Automatic cover lifting system
- Control system for monitoring and controlling process parameters and furnace operations
- Integrated emissions control (neutralizer)
- Automatic emergency procedures
- Complete with process control software & Nitreg® technology

## PROCESS CONTROL SOFTWARE & NITREG® FAMILY OF TECHNOLOGIES

The NITREG® family of technologies applies individualized customized processes to different applications and materials for optimum results. The process is carried out in a closed-loop circuit, which enables the control system to respond automatically to the changes in nitriding conditions that occur during the process cycle.

The control system continuously samples and analyzes the furnace atmosphere, and based on the data extracted, it adjusts the process parameters in order to maintain the preset value of the  $K_N$  and  $K_C$ .

The control software includes troubleshooting, emergency and calibration menus to aid the user in maintaining and operating the nitriding installation.



operator platform and stairway optional



NXK 412 shown above is the full-size model in the series

\* AMS 2759/12 compliance optional

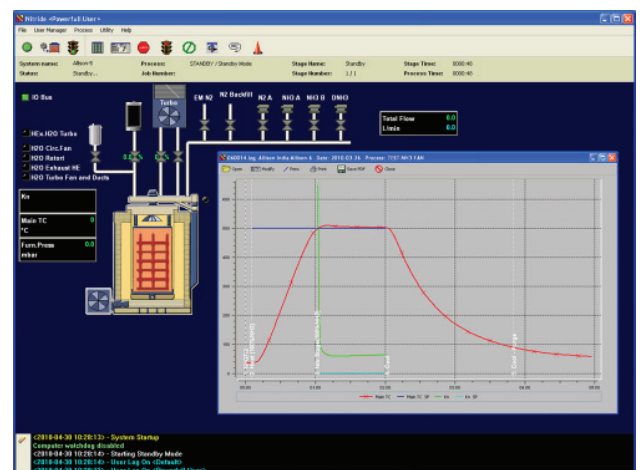
### BENEFITS

- Preconfigured & factory-tested
- Fully calibrated
- Pre-tested for metallurgical results
- Minimal space requirements
- Plug & Play
- Short startup period
- Low operating costs
- Easily moved into the heat treat facility with the help of a forklift

### OPTIONS

- Custom racking
- Operator platform
- AMS 2759/12 compliance

*Intuitive control interface contains all information on the furnace, process, and running job, etc.*



*Over 30 signal sensing points are continuously displayed on the control screen, such as temperature, flows, power output, nitriding potential, pressure, elapsed time, and many more.*

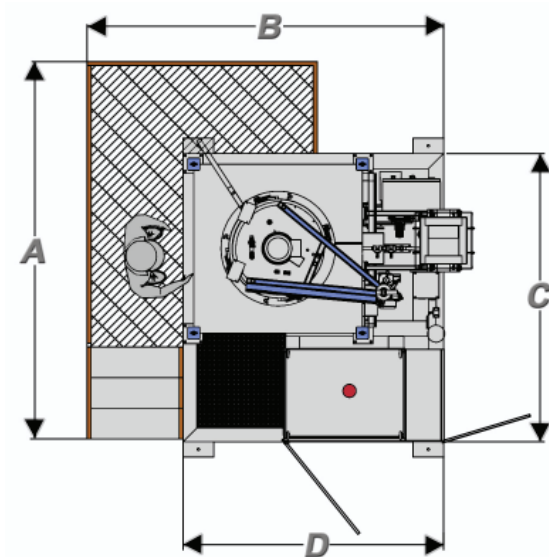
## STANDARD SIZES

*PRACTICAL  
DEPENDABLE  
EFFICIENT  
ECONOMICAL*

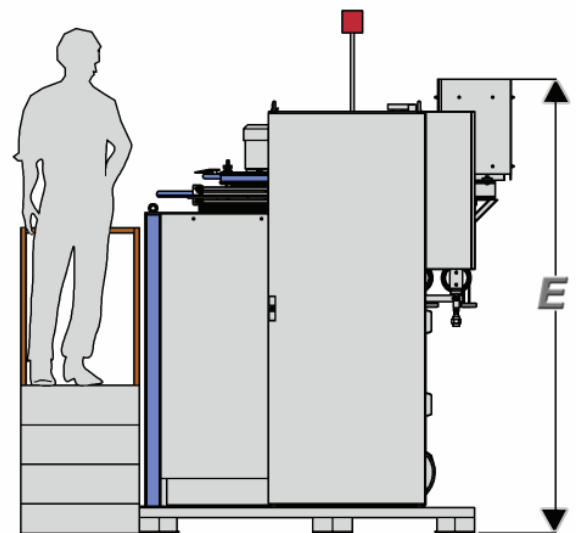


CHARACTERISTICS	NXK-409	NXK-412	NXK-609	NXK-612	NXK-812
Working Space	Ø 400 x 900 mm H Ø 15¾" x 35½" H	Ø 400 x 1200 mm H Ø 15¾" x 47¼" H	Ø 600 x 900 mm H Ø 23½" x 35½" H	Ø 600 x 1200mm H Ø 23½" x 47¼" H	Ø 800 x 1200mm H (31½" x 47¼")
Load Capacity ( max )	300 kg / 660 lbs	400 kg / 880 lbs	600 kg / 1300 lbs	800 kg / 1700 lbs	1000 kg / 2200 lbs
Max. Temperature	650 °C / 1200 °F	650 °C / 1200 °F	650 °C / 1200 °F	650 °C / 1200 °F	650 °C / 1200 °F
<b>Dimensions (footprint)</b>					
A	2460 mm / 97"	2460 mm / 97"	2660 mm / 105"	2660 mm / 105"	2860 mm / 113"
B	2325 mm / 92"	2325 mm / 92"	2525 mm / 99"	2525 mm / 99"	2725 mm / 107"
C	1880 mm / 74"	1880 mm / 74"	2080 mm / 82"	2080 mm / 82"	2280 mm / 90"
D	1700 mm / 67"	1700 mm / 67"	1900 mm / 75"	1900 mm / 75"	2100 mm / 83"
E	2300 mm / 91"	2600 mm / 102"	2300 mm / 91"	2600 mm / 102"	2600 mm / 102"
Min. Height Clearance (floor to crane hook)	3200 mm / 126"	3800 mm / 150"	3200 mm / 126"	3800 mm / 150"	3800 mm / 150"

\* For non-standard sizes, please contact Nitrex for details



TOP VIEW



SIDE VIEW

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