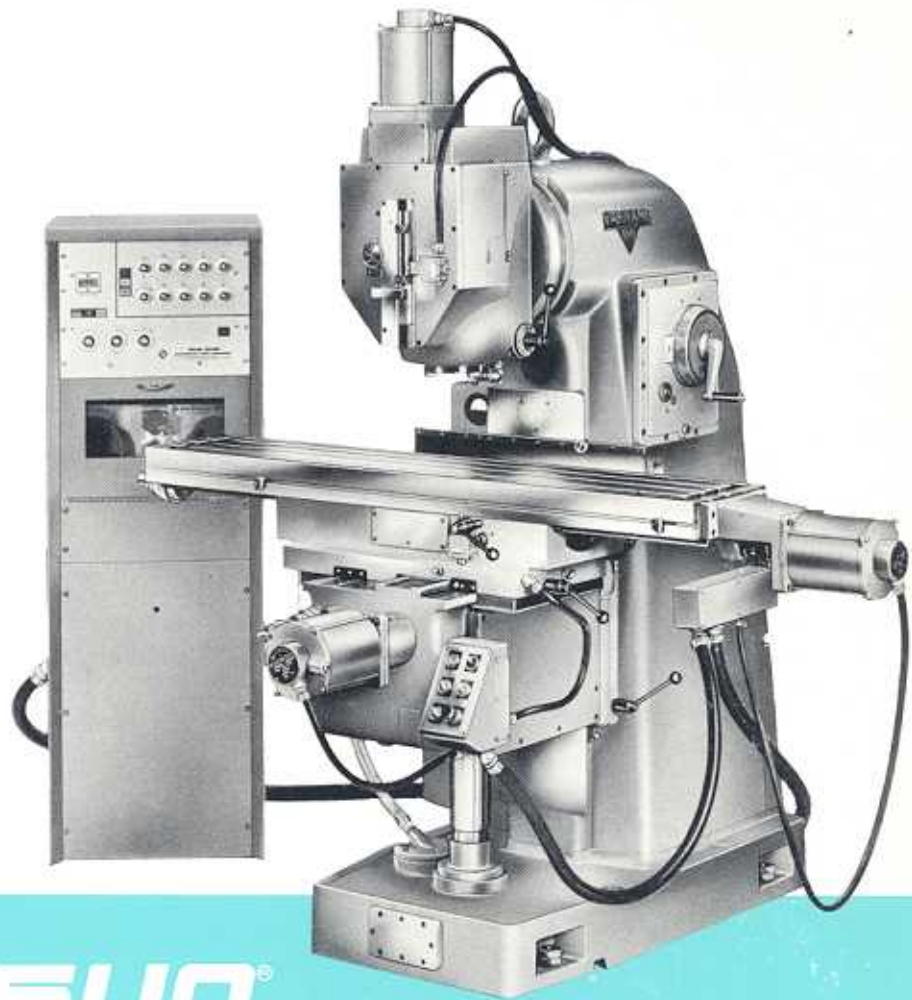




SUPERIOR ELECTRIC NEDERLAND N.V.

- NUMERICAL TAPE CONTROLS
- CONTINUOUS PATH
CONTOURING CONTROLS
- HYDRAULIC AMPLIFIER SYSTEM
- POWER SPINDLE FEEDS
- POSITIONING TABLES
- ROTARY TABLE



slo-syn[®]

NUMERICAL CONTROL EQUIPMENT

Product Guide

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slo-syn[®]

Product



SLO-SYN NUMERICAL TAPE CONTROLS

- Low-cost, two- or three-axis point-to-point N/C
- Incremental positioning system
- Adjustable high feed range
- Lo feed range adjustable from 0.75 to 18 ipm*
- EIA codes standard, ASCII optional
- Manual data input plus jog control
- Tape actuation of high feed when operating in Lo range
- True 45° positioning
- Mirror Image capability

SLO-SYN CONTINUOUS PATH CONTOURING CONTROLS

- Continuous path — no tool dwell
- Adjustable high feed range
- Lo feed range infinitely adjustable from 18 ipm* down to zero
- Incremental positioning system
- Linear and circular interpolation provide simple programming of any angle or arc
- Accept either EIA or ASCII codes
- Buffer storage
- Manual data input plus jog control
- Tape selection of two low feed ranges or high feed
- Mirror Image capability

*Feed rates based on a 5-pitch lead screw.



MODELS

SLO-SYN NUMERICAL CONTROL MODELS				TAPE READER	HI FEED RANGE (ADJUSTABLE)		TYPICAL APPLICATIONS
SLO-SYN NUMERICAL TAPE CONTROL (Point-To-Point)		SLO-SYN CONTINUOUS PATH CONTOURING CONTROL			WITH A 5-PITCH LEAD SCREW	WITH A 4-MM LEAD SCREW	
TWO-AXIS	THREE-AXIS	TWO-AXIS	THREE-AXIS				
NCISX24-HS50L NCISX25-HS50L	NCISX34-HS50L	—	—	loop type	50 to 100 inches per minute	1020 to 1980 mm per minute	Light Positioning Tables
NCIRX24-HS50L NCIRX25-HS50L	NCIRX34-HS50L NCIRX35-HS50L	NCCR25-HS50L	NCCR35-HT2	with reelers			
NCISX24 NCISX25	NCISX34	—	—	loop type	30 to 60 inches per minute	600 to 1200 mm per minute	Standard Milling Machines and Similar Positioning Applications
NCIRX24 NCIRX25	NCIRX34 NCIRX35	NCCR25	NCCR35	with reelers			
NCISX24-HT2	—	—	—	loop type	30 to 60 inches per minute	600 to 1200 mm per minute	Large Milling Machines
NCIRX24-HT2 NCIRX25-HT2	NCIRX34-HT2 NCIRX35-HT2	NCCR25-HT2	NCCR35-HT2	with reelers			
NCIRX25-2H2 NCIRX25-4H2 NCIRX25-6H2	NCIRX35-2H2 NCIRX35-4H2 NCIRX35-6H2	NCCR25-2H2 NCCR25-4H2 NCCR25-6H2	NCCR35-2H2 NCCR35-4H2 NCCR35-6H2	with reelers	50 to 100 inches per minute	1020 to 1980 mm per minute	Bed Type Heavy Machining Apparatus

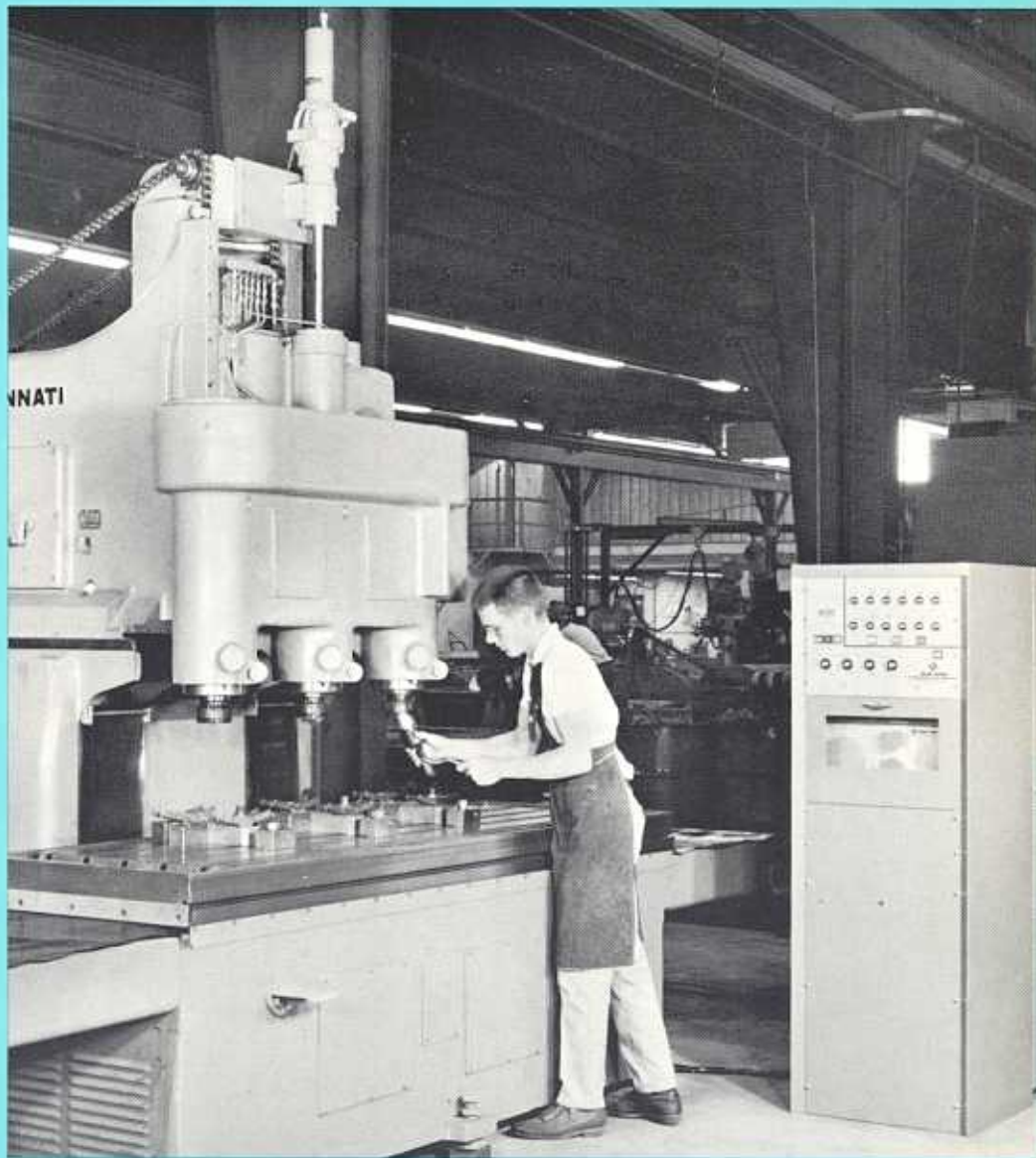
NUMERICAL CONTROL EQUIPMENT

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SLO-SYN HYDRAULIC AMPLIFIER SYSTEM

The SLO-SYN Hydraulic Amplifier system utilizes powerful electrohydraulic drive units to provide precise positioning on large machine tools with open loop control. The hydraulic amplifier drive unit consists of a constant displacement hydraulic motor, a precision valve and a SLO-SYN stepping motor. The stepping motor operates the valve to control the hydraulic motor. Torque outputs up to 1000 in-lb are possible, assuring accurate positioning without costly feedback systems required with other systems.

Controllers available with hydraulic amplifier systems include both point-to-point and continuous path contouring N/C plus pulse-to-step translators and buffered translators which can be controlled by computers and provide speeds to 1500 rpm. High speed preset indexers which allow semiautomatic control of positioning are also available.



POWER SPINDLE FEEDS

Air-actuated, hydraulically controlled spindle feeds allow tool feed and retract to be actuated manually or from tape. Models include standard and deep-hole drilling types and are offered with tape actuated depth stop turrets. All parts necessary for complete installation are supplied. Mounting kits are available for most milling machines.



SLO-SYN NUMERICAL POSITIONING TABLES

SLO-SYN Positioning Tables are complete two-axis positioners that can be used on any machine and are easily moved from machine to machine. They are offered with SLO-SYN Numerical Tape Controls or with SLO-SYN Preset Indexers. Preset Indexers are semi-automatic controllers which have manual data input.

Light duty model tables incorporate ball nut lead screws. They are intended for positioning applications not requiring heavy machining. Heavy duty tables are rugged units designed for applications requiring milling or where heavy parts must be handled. These tables have preloaded ball screws for freedom from backlash and are constructed to provide smooth operation, accuracy, high load capacity and long life.



NCR1020TPX

TYPE OF USE	TABLE MODEL	TABLE SIZE	TABLE TRAVEL		ACCURACY	REPEATABILITY
			X AXIS	Y AXIS		
LIGHT DUTY	NCR1012TPX	12" x 10"	9"	9"	±.0005" per foot per axis	within .0005"
	NCR1020TPX	20" x 10"	18"	9"		
HEAVY DUTY	NCR2618TPX	26" x 18"	20"	15"	±.0005" per axis	±.0002"



NCR2618TPX

SLO-SYN ROTARY TABLES

SLO-SYN Rotary Tables are valuable accessories for controlling angular location in automated operations. The tables are driven by SLO-SYN Stepping Motors and can be controlled by SLO-SYN Numerical Controls or Preset Indexers. Positioning resolution is .01°. The tables can be mounted either horizontally or vertically. Applications include drilling, reaming, tapping, milling, shaping, grinding, assembling, packaging, inspection and other applications where precise angular location of the work is necessary.

SPECIFICATIONS — SLO-SYN ROTARY TABLES

	TYPE 12T	TYPE 12TW
Table Diameter	12"	12½"
Weight (Approximate)	135 lbs.	225 lbs.
Positioning Resolution	.01°	
Accuracy	within 36 seconds of true position	within 30 seconds of true position
Maximum Positioning Speed	10° per second (with numerical control)	
Table Mounting	horizontal or vertical	
Rotating and Static Flatness	within .0005"	
Centerbore Runout	.001"	.0004"
Squareness of Table Surface With Vertical Mounting Surface	within .002"	within .0008" per foot
Maximum Load (Centrally Located)	Horizontal	200 lbs.
	Vertical	400 in.-lbs.
		1000 in.-lbs.



Type 12T



Type 12TW

The right to make engineering refinements on all products is reserved. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

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