



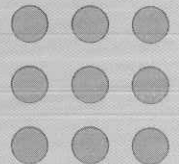
Wiedemann Division

Warner & Swasey / A Cross & Trecker Company

CENTRUM 1000/Q



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Cross & Trecker

CENTRUM 1000/Q

*Setting New
Standards for*

Productivity

Versatility

Dependability

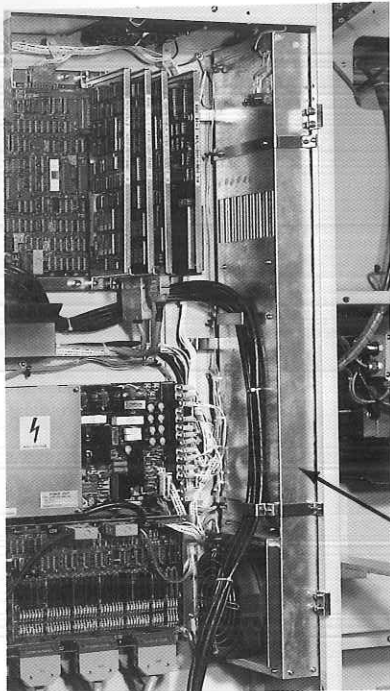
Profitability



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CENTRUM 1000/Q

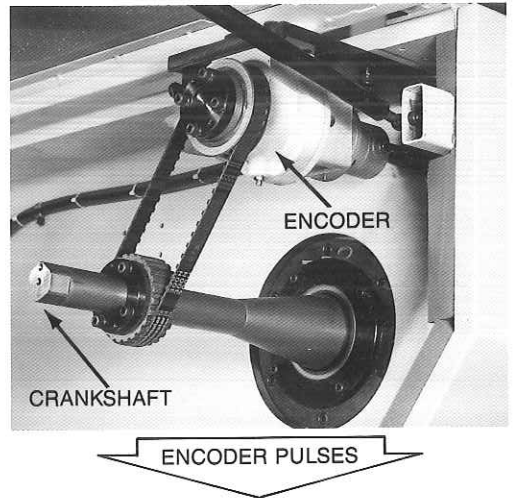
FEATURES:



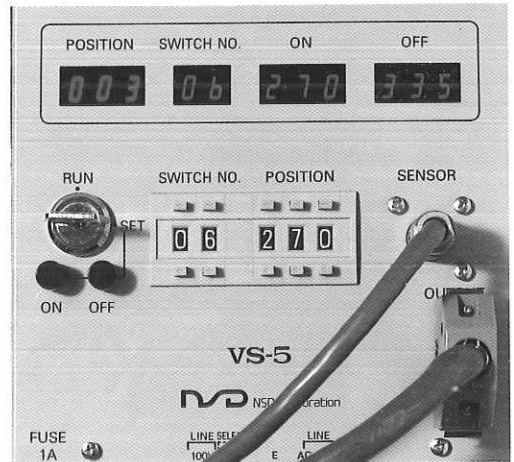
HEAT EXCHANGER

The logic section of the control is sealed against harmful shop contaminants. A heat exchanger provides interior cooling.

English language error messages keep the operator informed of machine status.



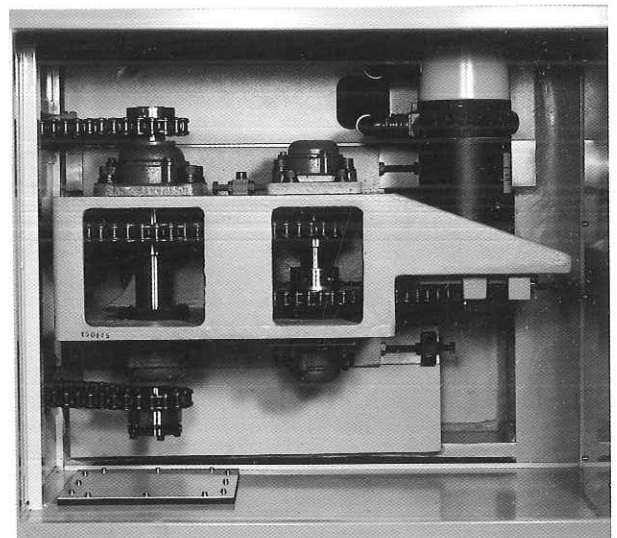
The programmable controller uses encoder pulse feedback to accurately track the rotary position of the crankshaft, thus enabling precise on-off control of both clutch and brake. Table movement between nibbling strokes can also be precisely controlled for better accuracy.



ENCODER and FEEDBACK PC



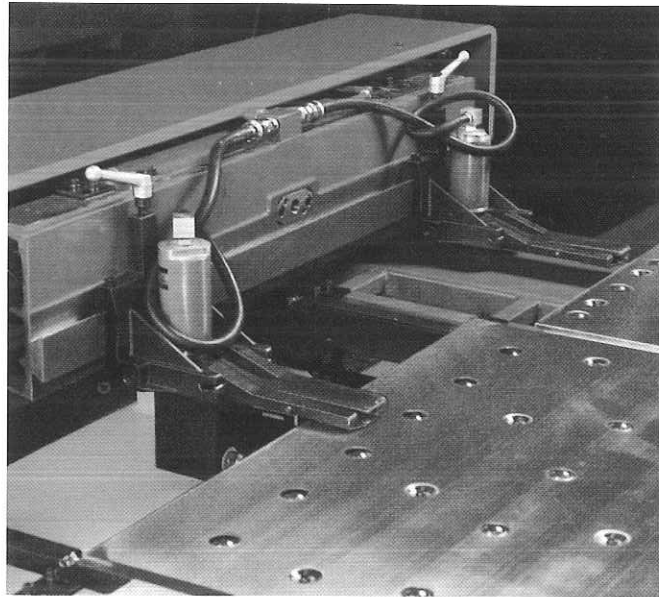
Easy to operate CNC control. "User friendly" software eliminates costly delays due to operator error. Easy to understand instructions guide the operator through machine and control setup and operation.



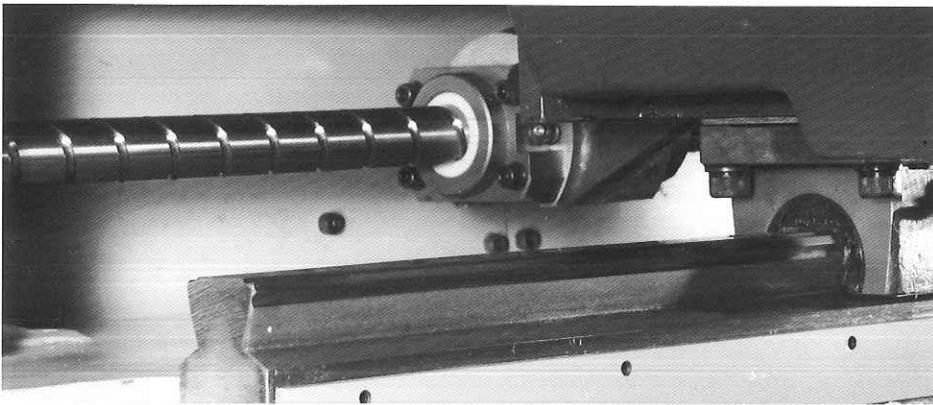
The powerful DC servo drive motor rotates the massive bi-directional turret at 30 r.p.m. for rapid turret indexing.



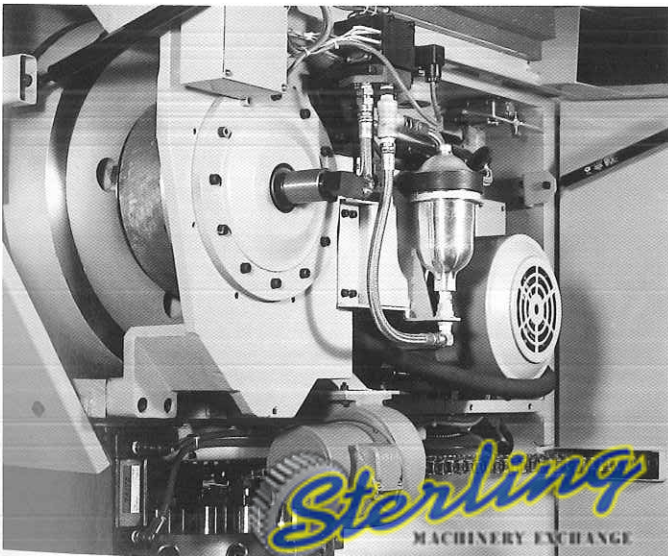
Punches and dies are quickly changed through easy-access turrets. Massive turrets provide maximum bearing surface area.



Workholders are repositioned easily using quick release handles. Workholders pass between turrets to permit punching holes anywhere on the sheet.



Matched high precision linear motion guides and bearings provide maximum rigidity with high accuracy.



Hydraulically activated clutch/brake provides quiet power while virtually eliminating disc wear.

Compact design allows efficient operation and easy access for maintenance. The Centrum 1000/Q requires a minimum of floor space.

All critical components on the press are automatically lubricated.

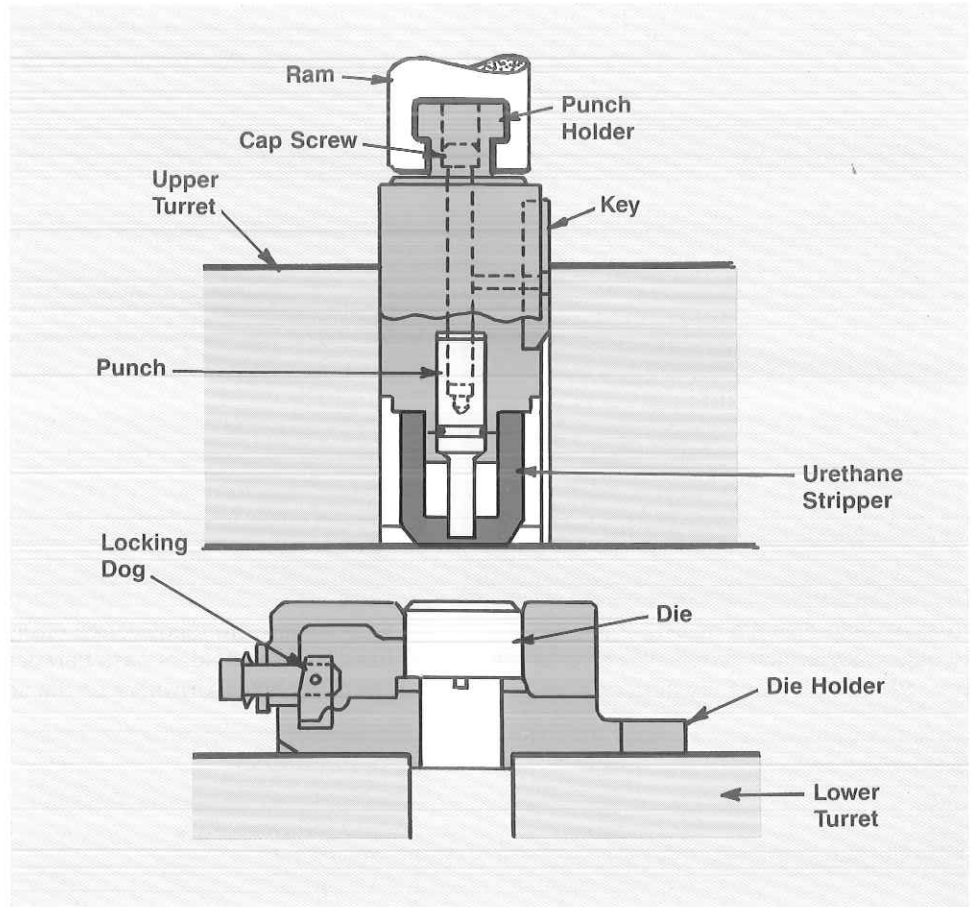


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INCREASE PRODUCTIVITY WITH THE RELIABLE WIEDEMANN TOOLING CONCEPT

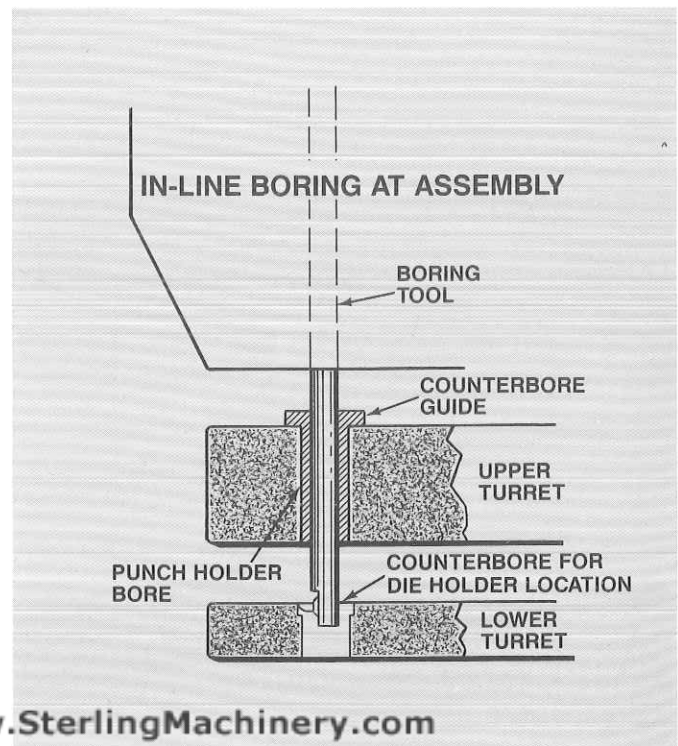
The simplicity of Wiedemann tools combined with the 20 station turret will increase your productivity by minimizing tool changing time.

The large turret capacity enables standard punches and dies to remain in the turret for consecutive job runs. Special tooling, when required, is easily and quickly loaded. Punches and dies are keyed to assure proper alignment.



With low cost, high quality Wiedemann tools you will always be able to afford the proper tool for the job.

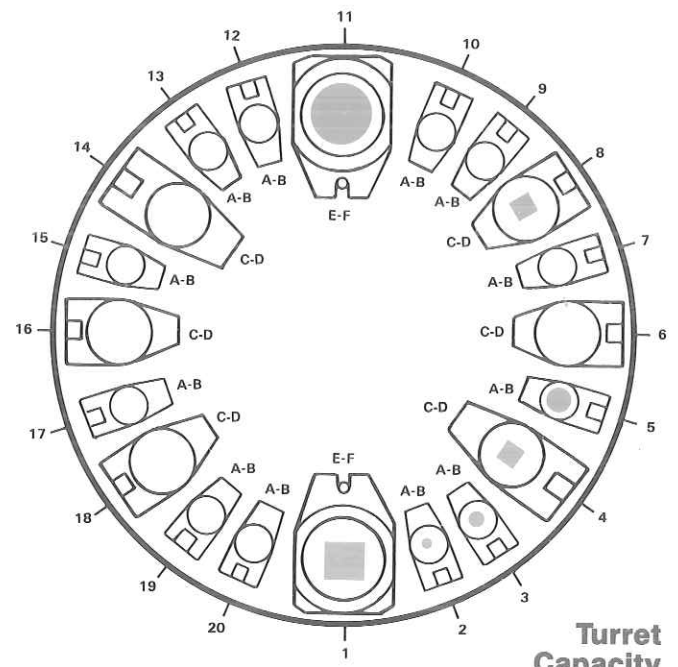
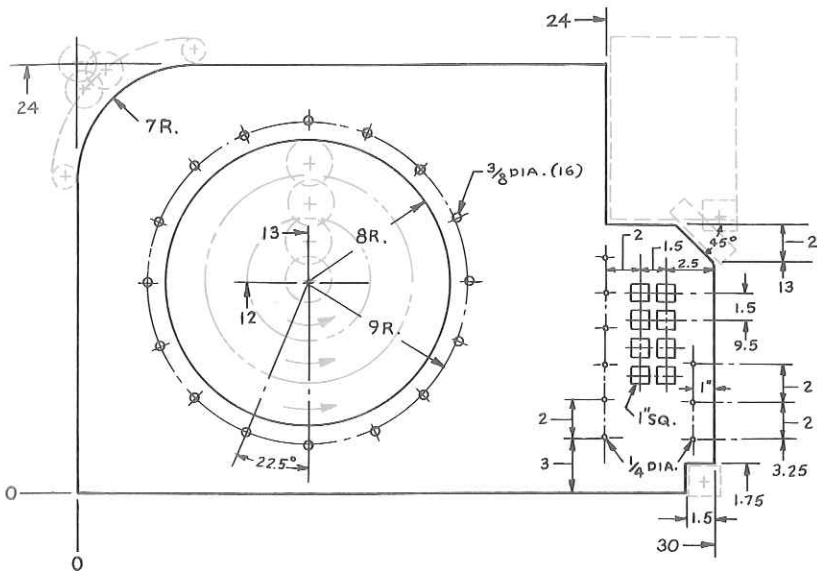
Positive alignment of punch and die holders is assured because Wiedemann line-bores the lower turret station using the upper turret as a guide.



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FROM PRINT TO FINISHED PART IN MINUTES

The easy to learn Wiedepoint program minimizes piece part programming time. Complicated parts can be quickly programmed using simple geometric commands.



Turret Capacity

This illustration shows a plan view of the 20-station lower turret. It indicates the capacity of each station. This turret layout becomes a liaison between engineering, the press and the tools. It encourages standardization of hole size, part design and tool utilization.

The capacities are identified by letter which indicate the range of tools that can be accommodated.

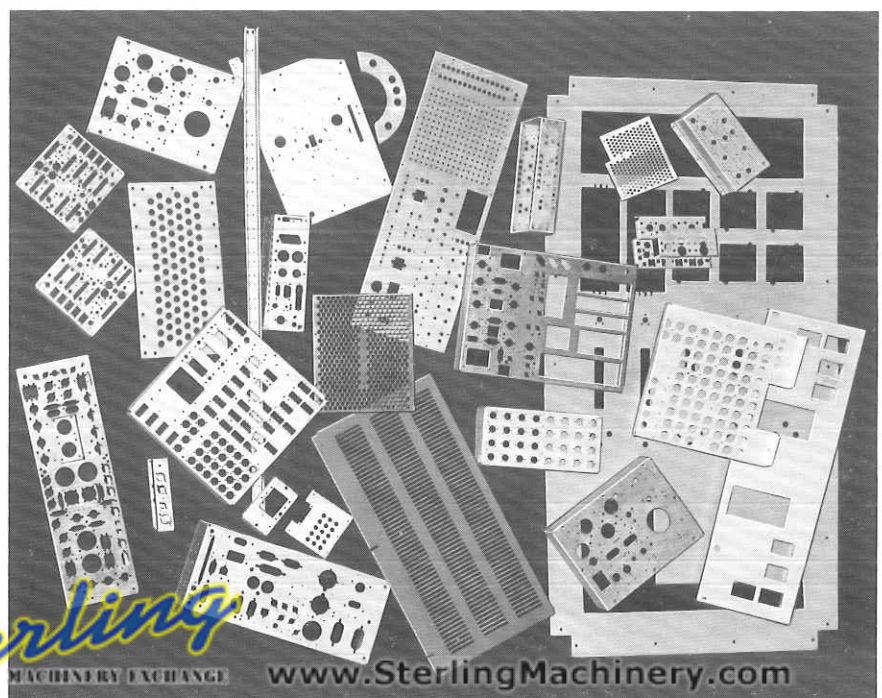
PROGRAM

```

X4Ø Y24 TØ1 MØØ
  (Load Pos.) (TØ1=1.75" sq.)
X3Ø Y24
GRD/ L 1.7Ø8 3 D 1.625 5
X3Ø -1.5+.875 Y1.75-.875
X24 Y3 TØ2
  (TØ2=.25" dia.)
INC/ U 2 5
X3Ø -1 Y3.25
INC/ U 2 2
X3Ø -2.5 Y11 TØ4
  (TØ4=1" sq.)
GRD/ D 1.5 3 L 1.5 1
MOV/ X13 Y12 TØ3
  (TØ3=.375 dia.)
BHC/ 9 Ø 16
MOV/ X13 Y12 T11
  (T11=3" dia.)
NBL/
OPN/ 16 3 .2
XØ Y24
X1.5
Y22.5
MOV/ X7 Y17 TØ5
  (TØ5=1" dia.)
NBL/
RAD/ 0 7 1 9Ø 9Ø .2
X3Ø Y15
X3Ø -2+.7Ø7 Y15 TØ8
  (TØ8=1" sq. set at 45°)
LAA/ .875-45 3
  
```

NUMBER OF STATIONS	STATION SYMBOL	STATION RANGE
12	A-B	Up to 1" (25 mm) dia.
6	C-D	Over 1" (25 mm) to 2" (51 mm) dia. *
2	E-F	Over 2" (50 mm) to 3" (76 mm) dia. *

* With appropriate punch/die holders



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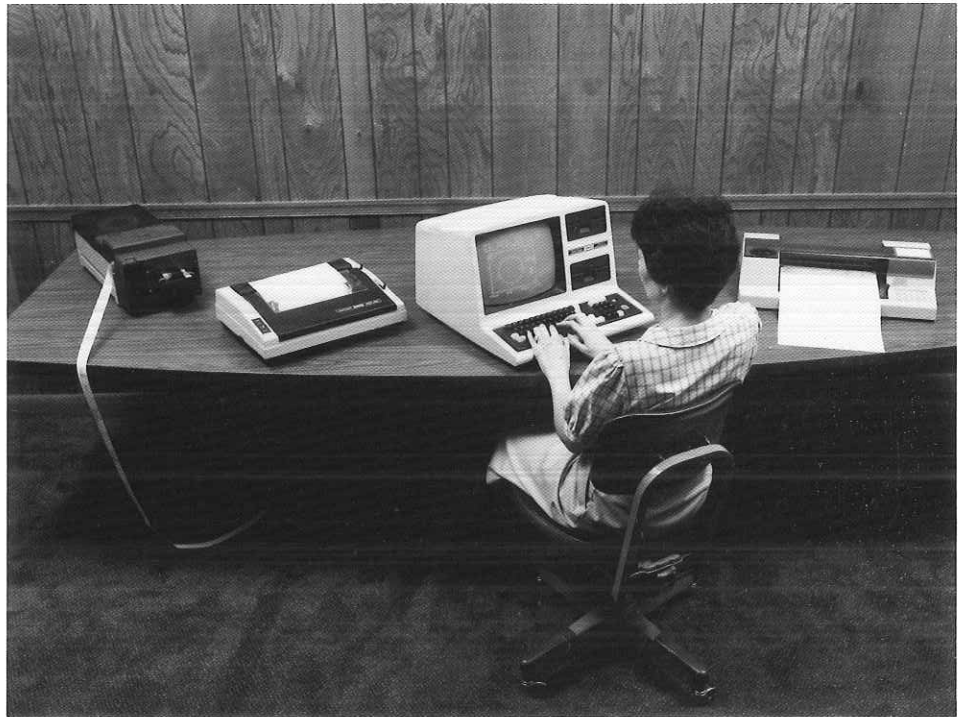
CENTRUM 1000/Q

COMPUTERIZED MANAGEMENT SYSTEMS

- Reduce programming time
- Reduce programming errors
- Minimize costly machine downtime due to programming errors
- Maximize machine utilization with optimized part programs
- Eliminate need for tape storage

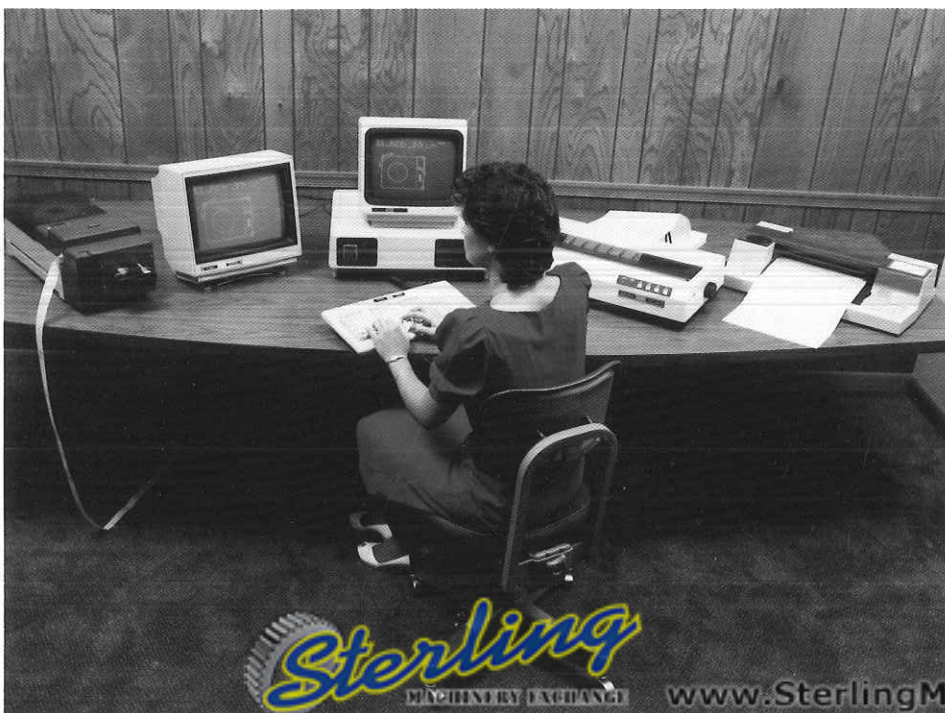
ABACUS X Features:

- Easy to use "menu driven" command input
- Optimization: automatic or operator interventive, including projected machine cycle time
- High resolution CRT graphics
- Printer graphics
- Automatic multiple piece part generation including automatic "shake and break"



- Part and pattern rotation to any angle
- Part mirroring
- Automatic tool path compensation for punching and nibbling
- Automatic repositioning for oversize sheets
- Automatic or operator selective tool station assignment

- Continuous path profile definition
- Automatic "Y" axis mirroring for over-width blanks
- Tapes in short form geometric language when applicable
- Complete and powerful text editor
- Plotting option capabilities:
 - Workholder safety zones
 - Windowing
 - Graphing
 - Scaling
 - Multi-color (6 colors)
 - Turret station numbers
 - "X" and "Y" coordinates
 - Optional irregular tool shapes



ABACUS 2000 Features:

All of the above Abacus X features PLUS:

- Interactive color graphics
- Dual screen
- 10MB hard disk system
- 512K memory
- IBM/PC* compatible software

Abacus software © Machine
Tool Programming

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CENTRUM 1000/Q

SPECIFICATIONS

Punching Capacity:

3" Dia in .125" mild steel
(75mm Dia in 3t)

Press Drive Motor:

5 H.P.

Throat Depth:

41.3" (1050mm)

Table Travel:

X Axis - 40.5" (1030mm)
Y Axis - 40.5" (1030mm)

Table Sheet Capacity: Before Re-Positioning

40" x 40" (1 M x 1 M)
40" x 80" (1 M x 2 M)
with repositioning

Maximum Sheet Weight:

110 lbs. (50kg.)

Ram Stroke:

1.2" (30mm)

Clearance - Stripper to Die:

.875 (22mm)

Turret Capacity:

20 Stations

Tooling Style:

Wiedemann style 112 or 114

Approximate Machine Weight:

13,400 lbs. (6100kg.)

Approximate Machine Dimensions:

Floor Space - 117" x 138"
(3,000mm x 3,500mm)
Press Height - 77" (1950mm)
Table Height - 38" (965mm)

Electrical Power Requirements:

15 KVA (Peak)
-20 Amps at 460 volts, 3 phase -

Air Supply Requirements

3.5 CFM at 70 PSI
(0,1 cu meters at 5 bars)

*Air Supply Required for Index
Pin Cylinders, Workholders and
Automatic Lubrication Only.
Clutch/Brake are Hydraulically
Activated.*

Maximum Table Traverse Speeds:

X Axis - 2000"/min (50m/min)
Y Axis - 2000"/min (50m/min)

Hit Rates:

Continuous nibbling modes
.2" (5mm) moves 350 SPM

Intermittent Mode:

Axis Move	Hits/Min.
1" (25mm)	200
2" (50mm)	170
3" (75mm)	155
6" (150mm)	130
10" (250mm)	100

Traverse Speed Override:

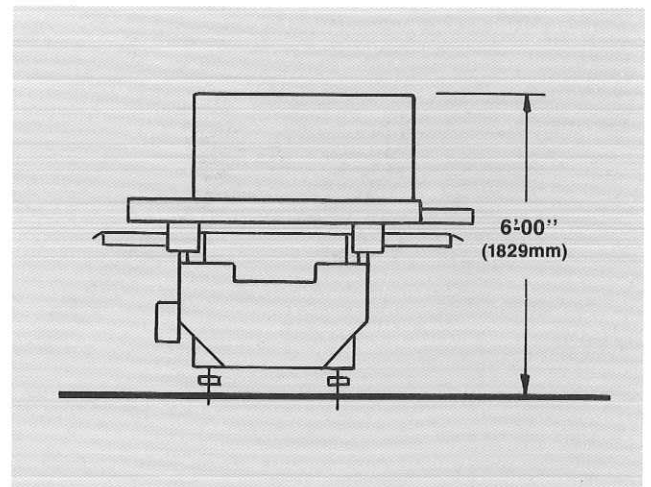
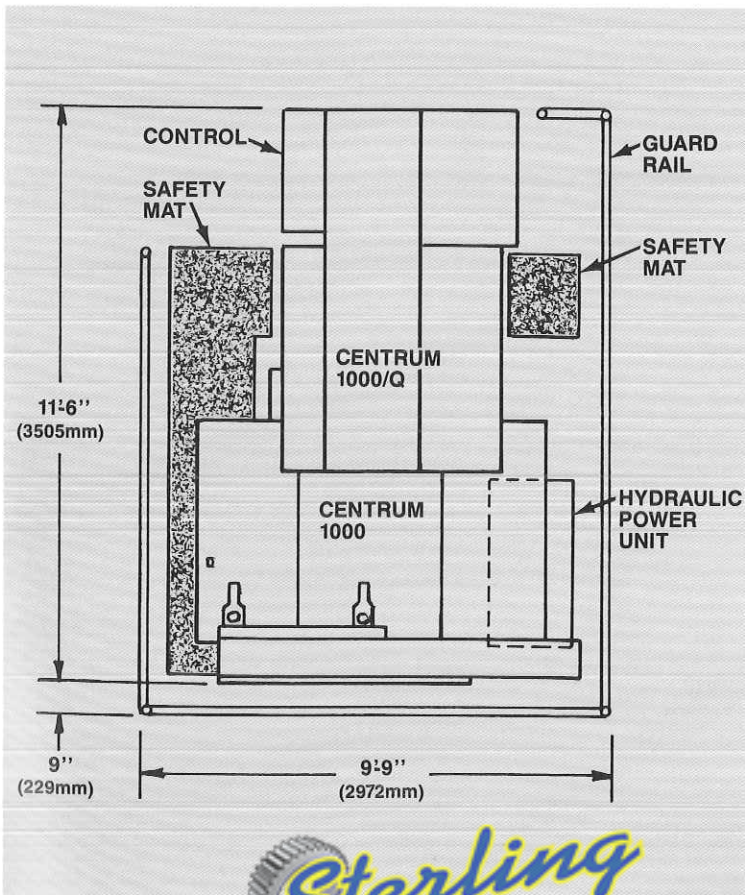
Provided at the controls: 100%/50%

Punching Accuracy:

± .005" (0,125mm)

Turret Rotation:

Bi-Directional DC Servo Drive 30 R.P.M.



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THE CENTRUM 1000/Q

PRODUCTIVITY CENTER WILL ADD A NEW DIMENSION TO YOUR FABRICATING PRODUCTIVITY AND EFFICIENCY

A Centrum 1000/Q Productivity Center can be **expanded** and **retrofitted** to meet your present and future requirements.

Un-manned operation is now an **Affordable** reality

For **Less** than the cost of many "Stand-Alone" turret punch presses

having similar capabilities to the Centrum 1000/Q you can now own An **Automated Punching Cell**.

- Process up to 5 different parts - **Automatically**
- **Automation - Simplicity - Dependability - It All Adds Up to Maximum Productivity and Profitability**

Like the Centrum 1000/Q the automated cell is simple, dependable easy to program and operate:

- Select up to five piece part programs from CNC memory.
- Key in material thickness of each part.
- Key in number of piece parts to be produced
- Place material on load tables
- Push cycle start button



Wiedemann is a single source supplier for all your automation needs from basic loaders/unloaders to unmanned flexible fabricating systems that include, for example, right angle shearing, forming and welding as well as sorting, automated warehousing and computer/software systems.

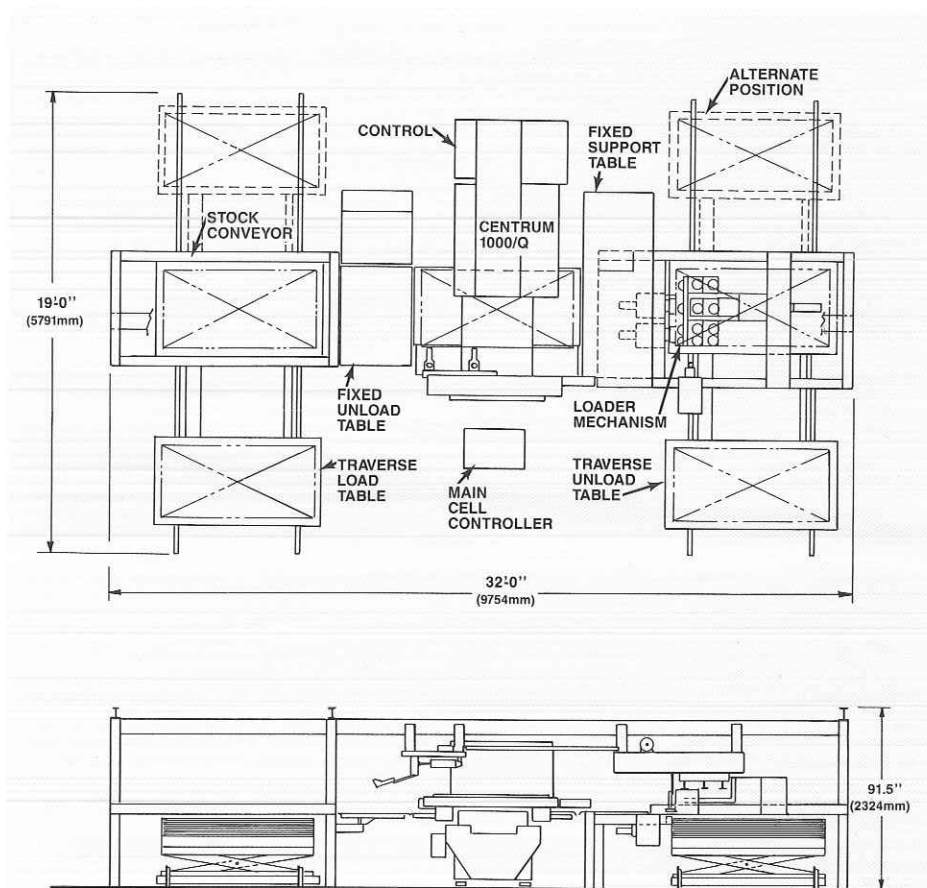
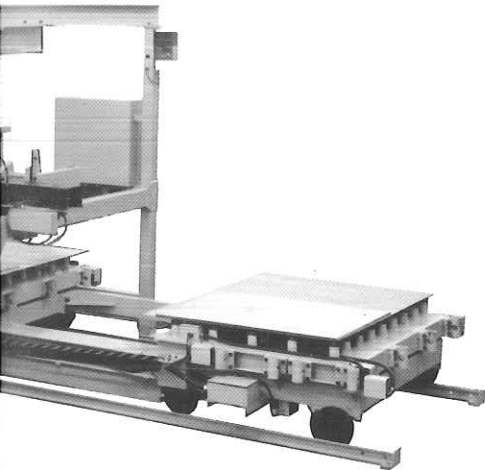
Specifications are subject to change without notice.
For clarity, guards and some safety features may have been removed from some equipment depicted in this publication.

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Then watch the Centrum 1000/Q productivity center produce parts for you - un-manned.

* All this and it's **Retrofitable**. You can actually "grow into" automation. Take delivery of a basic Centrum 1000/Q now and we can retrofit the automated cell when your requirements justify the increased productivity.



Centrum-1000/Q Productivity Cell Specifications

Maximum Sheet Size:	40" x 80" x .125" (1000mm x 2000mm x 3mm)
Minimum Sheet Size:	12" x 31.5" x 22 ga. (300mm x 800mm x 0,8mm)
Maximum Sheet Weight:	110 Lbs. (50 kg.)
Maximum Weight/Table:	4400 Lbs. (2000 kgs.)
Max. Stack Height (Incl. Pallet):	7.875" (200mm)
Load/Unload Traverse Speed:	1575"/Min (40M/Min)
Load/Unload Cycle Time: (With Staged Sheet)	22 Seconds
Maximum Number of Different Parts:	5
Number of Load Stations:	2
Number of Unload Stations:	2
Part Selection:	Sequential in Order of Program Input
Sheet Separation:	Magnetic Fanning
Double Sheet Detection:	Programmable by Material Thickness
Electrical Power Supply:	10 KVA
Air Supply:	3.5 cu. ft. 80 PSI. (.1 cu. Meters 3,7 Bar)



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* Tradename of IBM Corporation

† ABACUS 2000 software is Machine Tool Programming



The Cross & Trecker Companies



The Cross Company

*Flexible and high-volume transfer
lines/systems and special machines.*



Kearney & Trecker Corporation

*Machining and milling centers, controls,
flexible manufacturing cells and systems,
and machine renewalment.*



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*Automated material-handling
systems and foundry systems.*



W & S Turning Division

*Cylindrical-parts manufacturing equipment
for modules, cells, and systems.*



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*Cylindrical, centerless, and disc
grinding systems.*



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*Dimensional measurement products from
gages to coordinate measuring machines.*



Wiedemann Division

*Automated sheet metal fabricating
systems: punching, plasma arc and laser
contouring, shearing and forming.*



Machine Remarketing Corporation

*Supplier of previously owned CNC
metalworking equipment.*



Cross & Trecker Credit Corporation

*Financing for equipment purchased
from the Cross & Trecker companies.*

AFFILIATE:



Murata Warner Swasey

*Builder of W & S-designed turning
machines, CNC punch presses and shears*

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