



## A Letter from the President

It is the policy of The Superior Die, Tool and Machine Company to produce products that will competitively meet the customer's quality requirements. We recognize the customer is a valuable and integral part of our organization.

The policies and procedures inherent in our quality system are intended to assure that the products produced do indeed meet the requirements of the customer. They have been developed to reflect a quality program which will attain both statistical process control and, ultimately, company wide quality control and continuous improvement in both quality and productivity. Compliance with our quality system is an integral part of our business. These policies and procedures have the unqualified support of top management.

Please take a few minutes to look through this brochure. I believe you will see that we are capable of taking a project from the very earliest stages right through to completion.

I assure you that all of us at The Superior Die, Tool and Machine Company will do our utmost to make our business relationship with you the best that it can be from a quality and service standpoint.

Richard W. Holstein  
President

Roger A. Holstein  
Vice-President

Gary A. Holstein  
Vice-President



Die, Tool Facility (614) 444-2181 • Stamping Facility (614) 443-5244



## Fairwood Facility



*From the concept to the finished product, The Superior Die Tool & Machine Company has the capability and the equipment to produce a "quality product at a competitive price with 100% on time delivery". This Mission started in 1914, and since then has produced a proud tradition and heritage within Superior's employees. Superior will always strive to maintain a continued commitment of satisfaction for our customers.*

## Marion Facility



Check out our web-site: [www.Superior-DieTool.com](http://www.Superior-DieTool.com)



# Service, Products and Customers

## SERVICES

- ◆ Machining
  - Lathe
  - CNC Milling - 10' x 20'
  - Conventional Milling - 10' x 20'
  - Weight - 75,000  
(unlimited with rigging arrangements)
- ◆ Stamping
- ◆ Die Repair Engineering Changes
- ◆ Die Construction/Tryout
- ◆ Welding
- ◆ Wire EDM
- ◆ NC Programming
- ◆ CMM Inspection
- ◆ Emergency Assist

## EMERGENCY ASSIST PRODUCTION

This plan is to help expedite the startup process in an Emergency Assist situation. Also to familiarize the customer with Superior's procedures and processes relative to any Emergency Assist request.

## PRODUCTS Best Fitted For Our Presses

(Emergency Assist, Short Term Factory Assist or Long Term)

Specializing in bumpers for light trucks / Lawn and garden / Agricultural

Quarter Panels	Brackets & Braces	Back Window	Door Inners	Bumpers
B Pillar, C Pillar	Hoods	Dash Panels	Floor Pans	
Deck Lids	Extension Rear Seat	Reinforcements	Fenders	

## CUSTOMERS (Past & Present)

ABC Companies	Jefferson Industries	Mayflower	Newman Tech	Tracker Marine
Austin Tri-Hawk	KTH	MTD Products	Shiloh Industries	TS Tech
Ford	Liberty Steel	M & J	Subaru	Visteon
Gerstenslager	Mack Truck	Navistar	Tower Automotive	Volvo Truck
Honda				

### General Motors

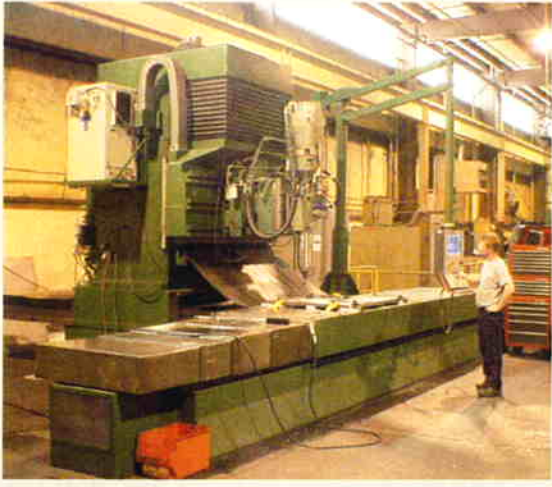
- Flint
- Lordstown
- Marion
- Pittsburgh
- World Wide
- Indianapolis
- Mansfield
- Parma
- Wentzville

### Magna

- Karmax
- Drive Automotive
- Eaglebend
- Bowling Green Metal Form
- Vehtek



# Machining



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# Equipment List

## Fairwood Avenue

### CNC Mills

#### Giddings & Lewis Horiz. Mill

"X" Axis 188"  
"Y" Axis 98"  
"Z" Axis 30"

#### Juaristi Horiz. Mill

"X" Axis 236"  
"Y" Axis 118"  
"Z" Axis 39"

#### Leblond Makino Horiz. Copy Mill

Working Table 114 3/16" x 39 1/2"  
Model Table  
98 7/16" x 39 1/2" x 51 3/16"  
"X" Axis 98.5"  
"Y" Axis 51.0"  
"Z" Axis 39.5"

#### Leblond Makino Vertical Copy Mill

Working Table 55" x 23 3/4"  
Model Table 21 1/2" x 23 3/4"  
"X" Axis 41 3/8"  
"Y" Axis 23 5/8"  
"Z" Axis 22"

#### Rochester Vertical Mill (High Speed)

"X" Axis 98.4"  
"Y" Axis 47.2"  
"Z" Axis 35.4

### Wire EDM

Mitsubishi DWC100H  
21" x 23" x 10" Height

### Large Conventional Mills - With

#### 3 Axis Readout

##### Bragonzi With Turn Table

48" x 60" Turn Table  
"X" Axis 78"  
"Y" Axis 65"  
"Z" Axis 60"

##### 44" x 5" Spindle

##### Cincinnati Gilbert

136" x 48" Table  
"X" Axis 126"  
"Y" Axis 60"  
"Z" Axis 36"

Spindle 30" x 4"

##### Zayer Mill - Universal Head

85" x 27 1/2" Table  
"X" Axis 73"  
"Y" Axis 40 1/2"  
"Z" Axis 38"

### Welders

Portable Spot Welder  
Arc, Stick, Tig  
Mig, Gas

### Ovens

For Weld Prep  
Heat Treat  
Die Repair

### Arbor Presses

150-300 Ton Hydraulic

### Flex Arm Grinder

(2) Portable Die Grinder

### Small Conventional Mills

#### (4) Doall Vertical Mills

#### (2) OKK Horizontal

"X" Axis 44"  
"Y" Axis 21"  
"Z" Axis 13"

(2) Lagun Vertical

### Saws

Contour  
Cut-off Hydraulic  
Abrasive Cut-off

### Forklifts

Up to 40,000lbs capacity

### Shear

Cincinnati 1 1/4" x 120"

### Boring Machines

Pratt Whitney No. 2A Jig Bore

### Die Separator

Lamina  
(2) Modern

### Weld Cell

(2) MotoMann Controller  
Spot Welder  
Manual Spot

### Grinders

Bench  
Cutter  
Profile  
Pedestal  
Surface  
Blanchard 42" Capacity

### Lathes

Time Master 30" x 120"  
Tarnow 22" x 72"  
Supermax 17" x 42"  
American 32" x 408"  
Lodge & Shipley 20.5" x 54"  
Bullard VTL 42" x 48"

### Radial Drill Press

Sass Hercules  
Cincinnati Bickford  
Carlton  
Gilbert

### Pedestal Drill Presses

5 Drill Presses

### Cranes Overhead

35 Ton Crane Machine Bay  
25-50 Ton Crane Stamping  
10-25 Ton Crane Die

### Coordinate Measuring Machines

#### Sheffield

71" x 142" Table  
48" Z Axis  
48" Y Axis  
140" X Axis  
Capps Inspection Software  
Dea Delta 4507 (New 2006)  
100" X Axis  
160" Y Axis  
100" Z Axis  
Open DMIS  
Inspection Software  
Renishaw PH10M  
Scan Prob

## Marion Road

### Mills

#### (2) Bridgeport

Vertical Mill  
"X" Axis 30"  
"Y" Axis 12"  
"Z" Axis 17"

#### Cincinnati Universal

Vertical & Horizontal Mill  
"X" Axis 42"  
"Y" Axis 14"  
"Z" Axis 19"

### Welders

Arc, Tig, Mig & Gas  
Spot Welder with Auto Nut Feeder

### Grinders

Manual Surface  
Auto Surface

### Die Separator

Modern Hydraulics

### Radial Drill Press

Fosdick  
Clausing

### Cranes

P&H 20ton Bridge Crane

### Lathes

Jet Engine Lathe

### Saws

Doall Vertical Band  
Magna Horizontal Band

### Weld Cell

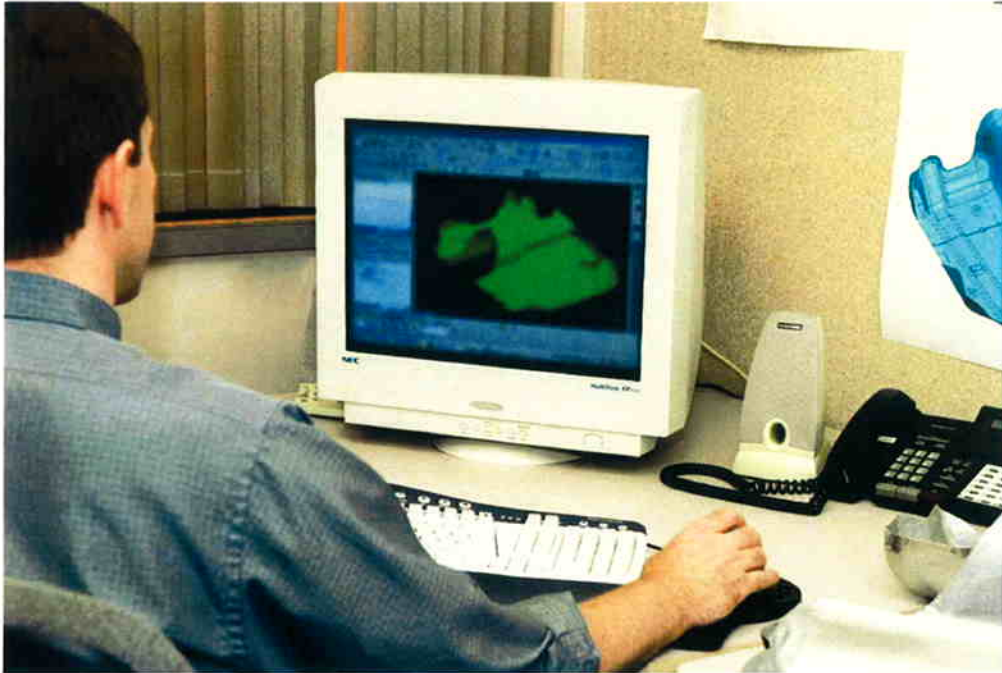
Fanuc Controller  
Robotic Spot

### Flex Arm Grinder

Portable Die Grinder

### Forklifts

Up To  
40,000lbs capacity



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## CAD CAM Department

Continuous improvement in quoting, designing, and constructing automotive and appliance dies and tools has been achieved through the application of cutting-edge technologies. Superior's design and engineering staff have married the Computer Aided Design (CAD) system to Computer Numerical Control (CNC) equipment. Reduced operating costs and increased efficiency have followed. The most important result is the ability to consistently meet or exceed customer specifications in terms of both quality and delivery.

### SYSTEMS

HP B1000 UNIX Workstation  
HP C3600 UNIX Workstation  
1150 Mhz Windows 2000 Workstation  
1200 Mhz Windows 2000 Workstation

### SOFTWARE

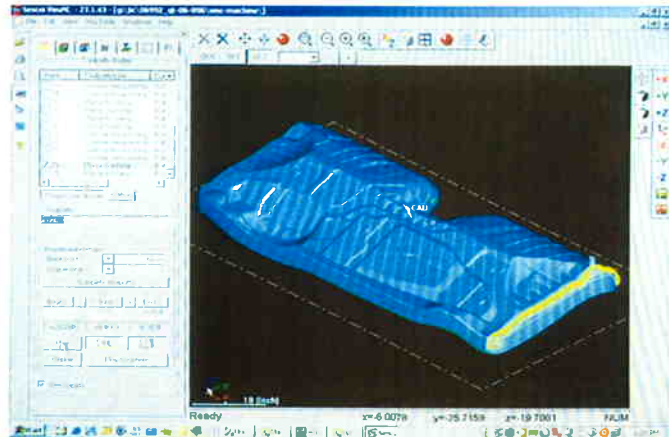
2 seats – Unigraphics NX  
1 seat – Catia V 4.2.4  
1 seat – Catia V 5  
1 seat – WorkNC V. 15  
1 seat – AutoCAD 2000  
1 seat – Acu-Carv 2000

### PLOTTERS

HP DesignJet 800

### DATA TRANSFER CAPABILITIES

Member of Auto Web  
Member of the AFX Data Transfer Network  
FTP Site: <ftp.superior-dietool.com>  
4mm DAT tapes  
Email: [cadcam@superior-dietool.com](mailto:cadcam@superior-dietool.com)  
CD-ROM  
CD-RW  
3.5" Floppy Disk

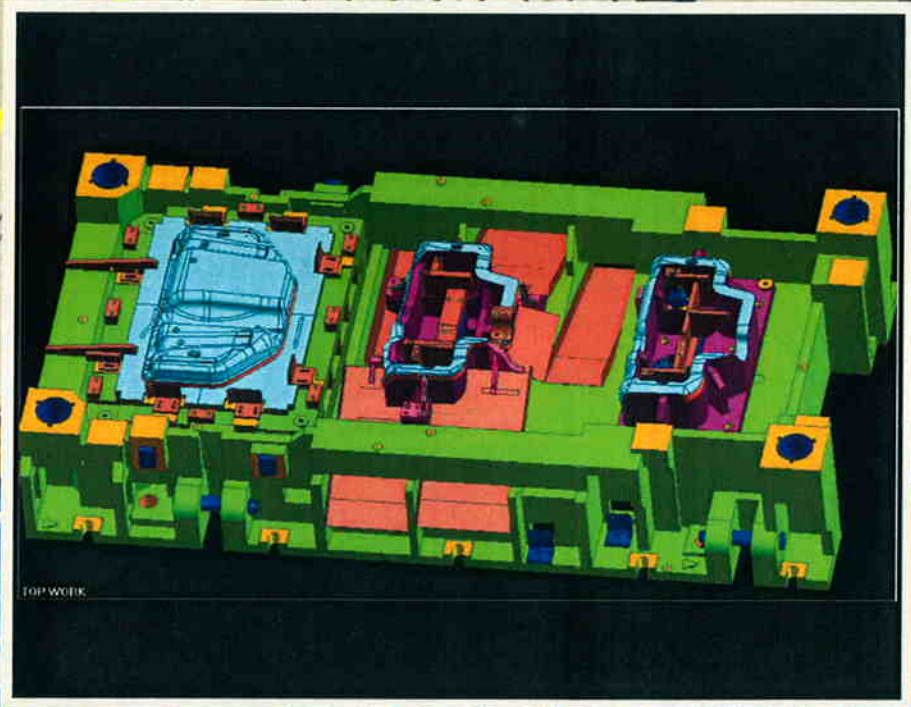
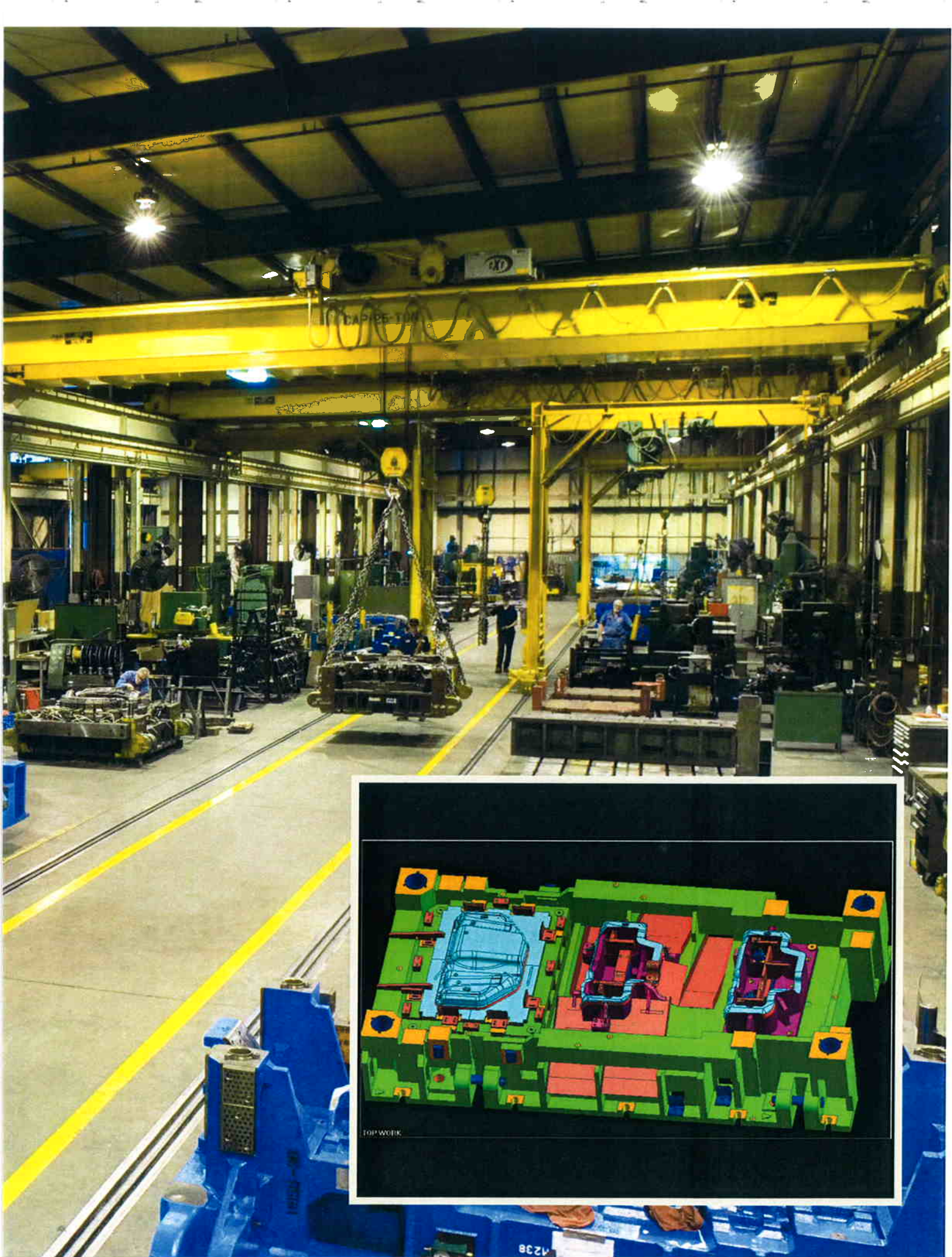


## Die Construction

Superior's state-of-the-art CNC equipment plays a key role in the successful manufacturing of our customer's dies and tools.

Equally important is the role played by Superior's "Team Leader" concept. Daily communication between management, team leaders and diemakers assures reliable schedules and timely deliveries for our customers.







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# Press Specifications

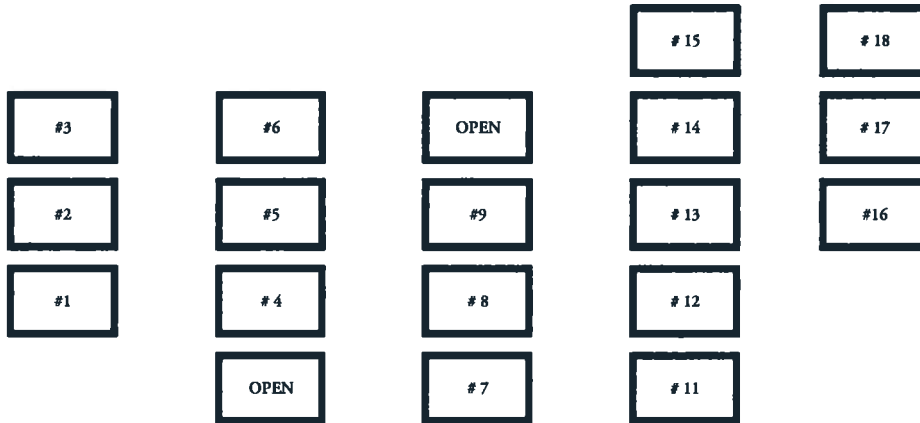
Fairwood Ave											
#	PRESS			SHUT HEIGHT WITH BOLSTER		BLST THKS	SIZE OF BOLSTER RAM		STROKE		TARGET SHUT HEIGHT
	MANUF.	TYPE	TONS	MIN	MAX		L-R X F-B	L-R X F-B	RAM	CUSH	
0	Clearing Toggle	Mech.	725	61.5" inr 60" otr	69.5" inr 68" otr	8"	126"x 80"	120"x 78"	30" inr 22" otr	NO	56" inr 54.5 otr
1	Danly	Mech.	600	46"	59"	10"	138"x 80"	136"x 72"	32"	NO	42"
2	Verson	Mech.	1300	47"	67"	10"	138"x 78"	138"x 78"	31.5"	10.5"	47"
3	Clearing	Mech.	500	36"	59"	7"	126"x 78"	120"x 74"	24"	8"	42"
4	Danly	Mech.	1000	42"	72"	17"	144"x 84"	144"x 84"	24"	7"	42"
5	Clearing	Mech.	500	36"	59"	7"	126"x 80"	126"x 74"	24"	8"	42"
6	Danly	Mech.	800	42"	72"	17"	144"x 84"	144"x 84"	30"	NO	42"
7	Clearing	Mech.	450	36.5"	72"	8"	132"x80"	126"x 78"	24"	NO	42"
8	Verson	Mech.	1300	46"	57.75"	8"	138"x 78"	140"x 78"	31.5"	8.5"	47"
9	Clearing	Mech.	500	43"	54.5"	6"	124"x 60"	119"x 58"	18"	NO	42"
10	Danly	Mech.	600	41"	72"	20"	132"x 96"	132"x 96"	32"	10.5"	42"
21	HOMRING	HYD	400	19.625"	78.75"	19.6"	138"x 86"	138"x86"	59"	NO	42"
22	HOMRING	HYD	800	19.625"	78.75"	25.5"	156"x 90"	156"x 90"	59"	15.75"	42"
23	HOMRING	HYD	800	19.625"	78.75"	25.5"	156"x 90"	156"x 90"	59"	15.75"	42"
24	HOMRING	HYD	1200	19.625"	78.74	27"	156"x 90"	156"x 90"	59"	15.75"	42"

Marion Rd											
#	PRESS			SHUT HEIGHT WITH BOLSTER		BLST THKS	SIZE OF BOLSTER RAM		STROKE		TARGET SHUT HEIGHT
	MANUF.	TYPE	TONS	MIN	MAX		L-R X F-B	L-R X F-B	RAM	CUSH	
1	Clearing	Mech.	800	40"	52"	9"	120"x 72"	120"x 72"	24"	10"	40"
2	Clearing	Mech.	500	42"	54"	5"	120"x 72"	120"x 72"	24"	NO	40"
3	Verson	Mech.	300	20.5"	32.5"	3"	120"x 60"	120"x 60"	18"	NO	30"
4	Verson	Mech.	1000	36"	50"	10"	120"x 72"	120"x72"	24"	8"	40"
5	Clearing	Mech.	500	42"	54"	5"	120"x 72"	120"x 72"	24"	NO	
6	Clearing	Mech.	500	42"	54"	5"	120"x 72"	120"x 72"	24"	NO	
7	Clearing	Mech.	1200	40"	48" 52" otr	11"	120"x 72"	120"x 72"	30" 22" otr	16"	42" 49" otr
8	Verson	Mech.	500	40"	48"	5"	108"x 60"	108"x 60"	8"	6"	40"
9	Verson	Mech.	500	28"	44"	5"	120"x60"	120"x60"	20"	6"	40"
11	Clearing Toggle	Mech.	750	47.5" inr 44.5" otr	62.5" inr 59.5" otr	8"	108"x 60"	108"x 60"	33" inr 22" otr	NO	52" inr 49" otr
12	Wilkens Mitchel	Mech.	500	18"	36"	4"	84"x 52"	84"x 52"	20"	8"	36"
13	Wilkens Mitchel	Mech.	500	18"	36"	4"	84"x 52"	84"x 52"	20"	NO	36"
14	Wilkens Mitchel	Mech.	500	18"	36"	4"	84"x 52"	84"x 52"	20"	NO	36"
15	Wilkens Mitchel	Mech.	500	18"	36"	4"	84"x 52"	84"x 52"	20"	NO	36"
16	Clearing	Mech.	250	21.5"	33.5"	3"	84"x 54"	84"x 54"	12"	6"	30"
17	Clearing	Mech.	500	35"	42.75"	5"	120"x 72"	120"x 72"	7.75"	NO	36"
18	Clearing	Mech.	600	26"	60"	6"	120"x 72"	120"x 72"	16"	6"	36"



# Press Layout

## Marion Road Press Layout



## Fairwood Mech Press Layout



## Hydraulic Press Layout





# Management Commitment and Quality Policy

In order to remain competitive in our industry, it is necessary to continually improve our overall performance. In order to do this, we must make use of our greatest asset, our people, to find ways to improve our quality, productivity, and thereby, our profits.

We believe that the best way to structure the effort to accomplish our stated goals is through the consistent application of our quality system procedures.

Our quality system is designed to be compliant with the ISO/TS 16949:2002, a quality standard recognized world-wide by the automotive industry, as well as, all customer specific requirements as identified on the Master Document List.

Our system will remain focused on customer satisfaction, both internal and external. It will involve everyone in the organization. It will focus on each of our processes and require us to measure and improve the output of those processes.

We feel that these principles are reflected in our revised quality policy stated below.

**We will identify and satisfy all customer requirements and will effectively communicate these requirements to the entire organization.**

**We will comply with the requirements of our quality management system and with procedures established to ensure that we work in a safe environment.**

**We will continually improve the effectiveness of the quality management system, as well as that of all our processes, products and services.**

**We will involve people at all levels of the organization in making these improvements.**



## Xspect CMM Machine



Check out our web-site: [www.Superior-DieTool.com](http://www.Superior-DieTool.com)



# CMM Inspection Services

## Equipment

1994 DCC Dea Delta 4507

\* 2006 Installation & System Upgrade

Open DMIS Software

\* UG, IGES, STEP Compatible

Renishaw PH10M/TP20 Programmable Probe

Renishaw SP25 Scanning Probe



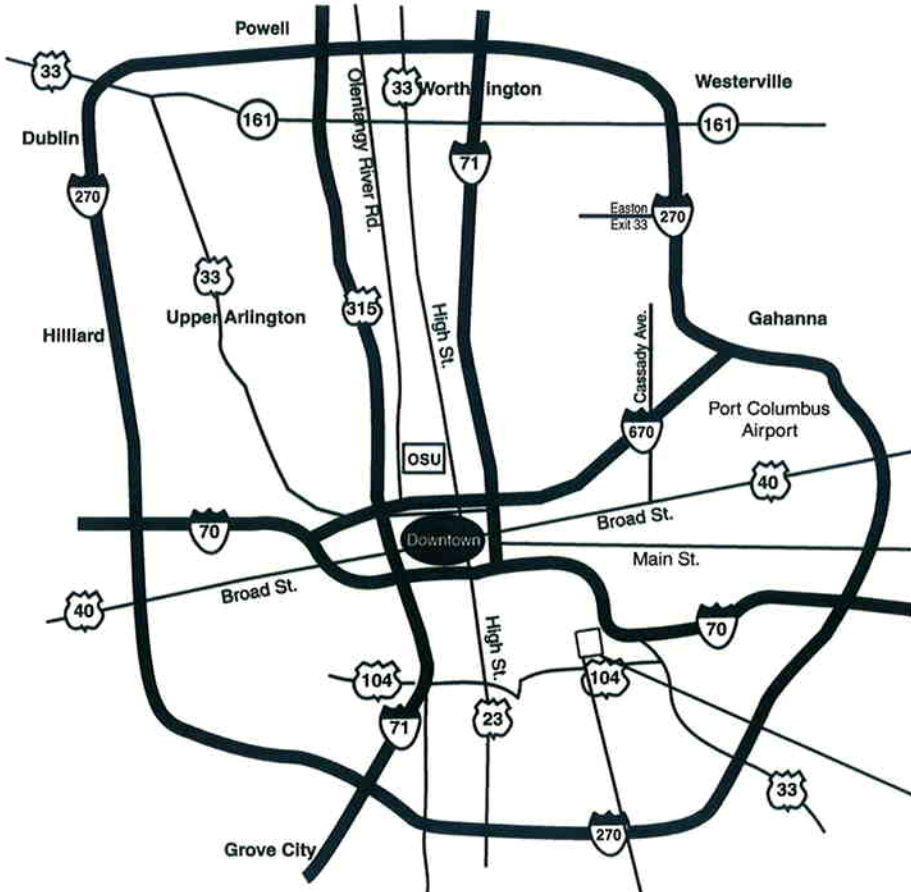
## Certifications

ISO9001-2000 with Design

TS16949:2002 without Design

## MACHINE SPECIFICATIONS

Travel		
X	Y	Z
100 in.	160 in.	72 in.
2540 mm	4060 mm	1825 mm
Accuracy		
X	Y	Z
+/- .00039 in.	+/- .00055 in.	+/- .00016 in.
+/- .0100 mm	+/- 0.0140 mm	+/- .0040 mm
+/- 10 micron	+/- 14 micron	+/- 4 micron



## Directions

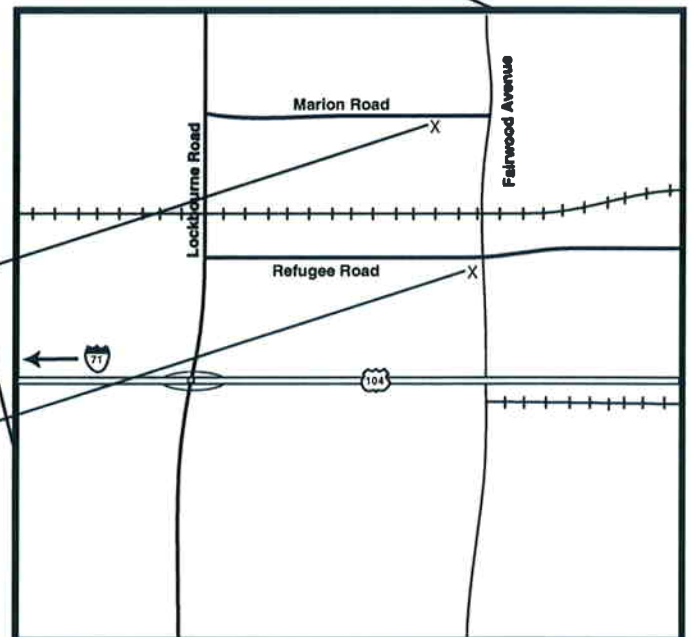
From I-71 south, exit at Frank Road (Rt. 104)  
Take 104 east to Lockbourne Road exit  
Turn left (north) onto Lockbourne

### For Fairwood Facility:

2301 Fairwood Avenue • (614) 444-2181  
Turn right at 2nd traffic light  
onto Refugee Road  
Facility is at SW corner of Refugee Road  
and Fairwood Avenue

### For Marion Facility:

1405 Marion Road • (614) 443-5244  
Turn right at 3rd traffic light  
onto Marion Road.  
Facility is 1/3 mile on right



### For Marion Facility:

1405 Marion Road

### For Fairwood Facility:

2301 Fairwood Avenue

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