

## Equipment & Automation

FZE researches the latest technology and features in equipment prior to purchase. With the rapid advancement in machine technology the company avoids “overbuying” equipment that will be technologically obsolete in a few short years. In addition, availability of service personnel and replacement parts is considered prior to purchase. FZE avoids purchasing equipment from unproven manufacturers and distributors that may not have the parts or personnel to service the machines when necessary. Machine up-time and match to job specific requirements are the driving factors. The company will occasionally procure newer used equipment and has had some excellent success after a thorough review of the equipment and maintenance records.

Following is a summary listing of key equipment located within its 60,000 sq ft modern facility:

### Vertical Machining Centers

#### **-OKK 820V**

32” x 76” Table  
4-Axis Controls, 35 HP  
50 Taper – 18” Rotary 4<sup>th</sup> axis

#### **-Daewoo ACE-V500**

20” x 40” Table  
20 HP, 8,000 RPM Spindle

#### **-Daewoo DVC-500**

Twin Pallet - High Speed Index Table  
20 HP, Two 22” x 34” Pallet Tables

#### **-(6) Haas VF3**

4 Axis Controls  
12” Rotary 4<sup>th</sup> axis  
15 HP, 18” x 48” Table

**NEW**

#### **-(2) Haas MDC-500**

Twin Pallet – High Speed Index Table  
10 HP, Two 18” x 13” Tables

#### **-Haas VM-3**

40 X 26 X 25  
4 axis machining  
15 HP



### Bar Feed Lathes & Swiss T/C

#### **-Daewoo Puma 300 MSB**

3.0” Bar Capacity  
Sub-spindle w/Live Tooling  
4’ Magazine Bar Feeder

#### **-Daewoo Puma 230 MSB**

1 11/16” Bar Capacity  
Sub-spindle w/Live Tooling  
12’ Magazine Bar Feeder



#### **-Hanwha XD32/38II**

1.50” Dia Bar Capacity  
6 Axis Swiss Turning Center  
Sub-spindle w/Live Tooling  
9” Sliding Head Stock Stroke  
12’ Magazine Bar Feeder

#### **-Hanwa ML32HP**

1.25” Dia Bar Capacity

#### **-(2) Hanwa ML26HP**

1.00” Dia Bar Capacity

#### **-Hanwa ML20HP**

.75” Dia Bar Capacity  
All are equipt with:  
6 Axis Swiss Turning Center  
Sub-spindle w/Live Tooling  
8.265” Sliding Head Stock Stroke  
12’ Magazine Bar Feeder

#### **Nomura NN25YB**

25 mm Swiss Lathe  
16 tool capacity  
12’ bar feeder

#### **Nomura NN32YB**

32 mm Swiss Lathe  
16 tool capacity  
12’ bar feeder



#### **Nakamura WT-150**

Twin-spindle, Twin 24 Tool Turret  
Multi-Axis, 2” Dia x 4’ bar feeder

**NEW**

#### **Doosan TT1800SY**

Twin-spindle, Twin 24 Tool Turret  
Multi-Axis, 2.65” Dia x 12’ bar feeder

### CNC Lathes

#### **Daewoo Puma 12S**

12” Chuck, 2 Axis, 30” CC

#### **Daewoo Lynx 200**

8” Chuck, 2 Axis, 20” CC

#### **(2) Haas SL30 & SL20**

12” Chuck, 2 Axis, 30” CC

#### **Hwacheon HI-EC031**

10” Chuck, 4 Axis, 24” CC  
Live Tooling

### Horizontal Machining Centers

#### **--Okuma MA-60 HB**

28” x 24” x 24” Dual Pallet  
12,000 rpm spindle  
40 HP - 50 taper, 60 ATC

#### **-OKK HM60**

30” x 28” x 28” Dual Pallet  
10,000 rpm spindle  
40 HP - 50 taper, 60 ATC

#### **-OKK HM600**

32” x 30” x 30” Dual Pallet  
12,000 rpm spindle  
40 HP - 50 taper, 60 ATC

#### **-OKK HM80**

40” x 34” x 34” Dual Pallet  
12,000 rpm spindle  
40 HP - 50 Taper, 60 ATC



### Inspection Equipment

**-(2) Sheffield Discovery CMM’s**  
D-28 & D12

**- 14” J&L Optical Comparator**

- Granite Tables W/Ht. Gages

- Many, Many Gages



### Miscellaneous

**NEW** Cylindrical Grinder 12”Dia x 40”

(3) Vertical Broaches

(3) Horizontal Broaches

Welding & Fabricating

**NEW** Electric Stress Relieving Oven

Knee Mills, Drill Presses

Polishing Equipment

Tooling Set-up Area

Assembly / Sub-Assembly Area

Finished Goods Inventory

