

**Okamoto Precision Surface Grinding Machine ----- Model ACC-12•24DX**

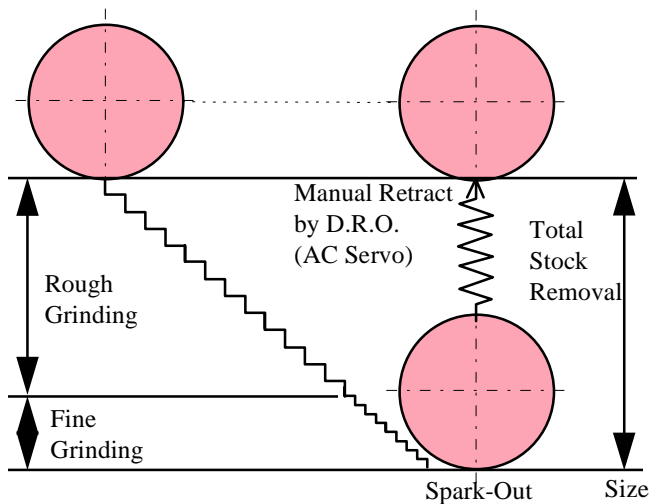
Three Axis Fully Automatic Grinding with Rough/Fine Grinding and Spark-out  
in Automatic Cycle----- Grinding Capacity 12” x 24”

**Standard Accessories**

- Fully Automatic Cycle with Rough/Fine Grinding and Spark-out in 1 Set-Up
- Okamoto MDI Controller
- Built-in Chuck Controller
- Table Parks at Right Side for Safety
- Splash Cover with Coolant Nozzle & Pipe
- Full Table Back Splashguard
- Vertical Digital Positioning Display
- Vertical Manual Pulse Generator
- Incremental Infeed
- Grinding Wheel & Wheel Adapter
- Cross Movement Lock
- Diamond Dressing Tool with Holder
- Necessary Tools & Tool Box
- Leveling Bolts with Plates
- Instruction Manual & Inspection Sheets

**Machine Features**

•**Fully Automatic Cycle with Rough/Fine Grinding and Spark-Out in 1 Set-Up** ... is controlled by MDI Control and AC servo motor with rotary encoder. With the Rough/Fine Grinding and Spark-Out, this machine is capable of excellent stockremoval rates and finishes.



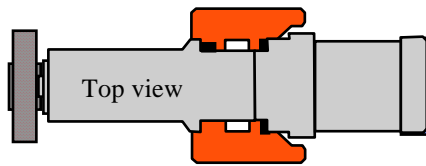
Incremental Feed Rough/Fine Grinding and Spark-Out in 1 set-up

Digital Read Out Displays in 0.00001” Increment.

Retract to Start Position utilizing the Manual Pulse Generator & Digital Read Out

Manual Pulse Generator with Increments of 0.00001”, 0.0001”, and 0.001”

- **User Friendly MDI Control** ... MDI controller is made by Okamoto and uses a unique LSI control system, and promotes easy set-up. Rough/Fine grinding and spark-out in 1 set-up.
- **Servo Driven Wheel Vertical Feeds**...accurate automatic downfeed in selectable increments from 0.00005” to 0.0015” (10 pre-set selection).
- **Vertical Position Display**...for ease of set-up. It also indicates wheelhead position in cycle.
- **Vertical Manual Pulse Generator**...w/Multipliers of 0.00001”/ 0.0001”/ 0.001”.
- **Incremental Feed Push Button** with increments from 0.00005” to 0.0015” (10 preset selection).
- **Crossfeed Limits**...proximity switches minimize over-travel to maximize productivity.
- **Double-Walled Column Construction**... H-shaped guideways with 3 tapered gibs provide the strength



necessary for heavy duty grinding and the precision for extra fine grinding.

- **Incorporated Cartridge Type Wheel Spindle**...with super precision, pre-loaded angular contact bearings, lubricated for life.
- **Extended Saddle and Table Ways** reduce overhang of the saddle and table at maximum limits to provide long effective life of the built-in accuracy.
- **Double Vee Way Table & Saddle Construction**...providing true tracking, greater table load support and longer life of built-in accuracy.
- **Built-in Chuck Control**...with variable holding power control and automatic release cycle.
- **Automatic Grinding Capabilities**...
  - Traverse (intermittent & continuous crossfeed) Grinding
  - Plunge grinding with infeed on one end or both ends of the table stroke
  - Rough and fine grind cycles.
  - Pre-set spark out passes.
- **Automatic Lubrication**...All DX Models utilize a proven Gravity Feed Automatic Lubrication System. Lubrication oil is pumped to an oil reservoir located at the top of the column and is gravity fed to all guideway surfaces and positioning screws.
- **Vertical Infeed**...driven by AC servo motor and high accuracy gear to ground precision lead screw assembly.

## **Machine Specifications**

### **Capacity:**

Maximum Longitudinal Travel	29.5 inch
Maximum Cross Travel	13.5 inch
Maximum Distance under 12" Wheel to Table Surface	13.6 inch
Magnetic Chuck Size (WxL)	12 x 24 inch
Table Load Capacity (Includes Chuck Weight)	925 lbs

### **Table:**

T-Slots (No. x Width)	3 x 0.7"
Hydraulic Feed Rate	1.0 - 82 ft/min.
Hand Feed per Revolution	1.85 inch

### **Crossfeed:**

Hydraulic Intermittent Crossfeed	0.02 - 0.8 inch
Hydraulic Continuous Crossfeed Rate	4 - 40 ft/min.
Crossfeed Per Revolution	0.250 inch
Handfeed Dial Graduation	0.001 inch

### **Wheelhead:**

Automatic Vertical Feed per Table Stroke	0.00005 - 0.0015 inch (10 settings)
Rapid Feed Rate	16 inch/min.
Manual Pulse Feed	(x.1)0.00001, (x1)0.0001 (x10)0.001 inch

### **Grinding Wheel:**

Size (DxWxB)	12x1.5x5 inch (12x1.5x3 Avail.)
Speed	1,800 rpm/60Hz.

### **Motors:**

Grinding Wheel Spindle	5 hp
Hydraulic Pump	2 hp
Vertical Rapid Feed & Downfeed	0.5 AC Servo

### **Power Supply:**

Desired Power Supply including Electro-Magnetic Chuck & Coolant System	7.5 KVA
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<b>Floor Space (LxWxH):</b>	107x 75 x 70 inch
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<b>Net Weight:</b>	5,280 lbs
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