

## DFD-651 Specifications

### Cutting Section

X-axis			
	Cut Speed	0.1 to 450 mm/sec	.004 to 17.7"/sec
	Cutting Range	210 mm	8.27"
	Work Width Setting Range	0 to 203.2 mm	0" to 8"
Y-axis			
	Index Step	.0001 mm	
	Cutting Range	210 mm	8.28"
	Positioning Accuracy	.003 mm or less/210	0" to 8"
y-axis			
	Maximum Stroke	26 mm	1.02"
Z-axis			
	Max Stroke Length	25 mm	1.0"
	Travel Resolution	.00025 mm	
θ-axis			
	Maximum Rotation Angle	380° (320° CW 60° CCW)	
	Motor Resolution	0.66 s	

### Section

Mechanism	
Bearing	Air Bearing
Motor	DC Brushless motor
Rotating Speed Range	6,000 to 60,000 RPM
Output	1000 W

## Microscope Section

Microscope	2 Objects, 2 Cameras, single lens microscope	
Magnification	On Low Mag :37x (on the Monitor)	
	On High Mag :375x (on the Monitor)	

## Utilities Section

<b>Power Requirements:</b>		
Input Voltage	Three-phase, 200VAC±10%	
Power Frequency	50-60 Hz	
Grounding	The Machine Must be properly grounded	
Maximum Power Consumption	5.2 kVA	

<b>Air Requirements:</b>		
Supply Pressure	0.5 to 0.6 MPa.G	72.5 to 87PSI
Filtration	.00001mm/99.5% or higher	
Residual oil content	0.1 PPM Wt/Wt	
Atmospheric dew point	-15° C or Less	-5° F
Connection port	Rc (PT) 3/8" female	
Maximum Consumption	378 l/min	13.34 CFM

<b>N2 Requirements:</b>		
Supply Pressure	0.5 to 0.6 MPa.G	72.5 to 87PSI
Connection port	Rc (PT) 3/8" female	
Maximum Consumption	216 l/min	7.63 CFM

### Water Requirements:

<b>Wheel Coolant:</b>		
Pressure	0.3 MPa	43.5 PSI
Water Temperature	Room Temp + 2° C	Room Temp + 4° F
Connection Port	Rc (PT) 3/8" Female	
Flow Rate Setting Range	1.0 to 12.0 l/min	0.26 to 3.17 GPM
<b>Spindle Coolant</b>		
Pressure	0.2 MPa	29.0 PSI

<b>Water Temperature</b>	Room Temperature	
<b>Connection Port</b>	Rc (PT) 3/8" female	
<b>Consumption Flow Rate</b>	3 l/min	0.79 GPM
<b>Cleaning Water</b>		
<b>Pressure</b>	0.3 MPa	43.5 PSI
<b>Connection Port</b>	Rc (PT) 3/8" Female	
<b>Flow Rate Setting Range</b>	1.0 l/min	0.26 GPM
<b>Water Drainage</b>		
<b>Connection Port</b>	Duct Hose 50 mm ID	1.97" ID
<b>Duct</b>		
<b>Duct Capacity</b>	5.0 m <sup>3</sup> /min or higher	
<b>Connection Port</b>	Duct Hose 100 mm ID	3.94" ID
<b>Main Dimensions</b>	1350 W x 1168 D x 1235 H	53.15 x 46 x 48.6"
<b>Machine Dry Weight</b>	1300 kg	2866 lb