

Models

982-6 & 982-10

- ✓ 2 Inch Spindle
- ✓ 6 and 10 Inch Y Travel

984-6, 984-10 & 984-14

- ✓ 4 Inch Spindle
- ✓ 6, 10 & 14 Inch Y Travel

Physical Dimensions

HEIGHT

59" (1500 mm)

DEPTH

47" (1200 mm)

WIDTH

38.7" (985 mm)

47.2" (1200 mm) Model 984-14 only

WEIGHT

990 lb (450 kg)

1,030 lbs (468kg) Model 984-14 only

Cutting Axis (X)

DRIVE

DC Servo, lead screw, air bearing

TRAVEL

11.3" +/-0.050" (292.1 mm +/- 1.27 mm)

14" +/- 0.050" (335 mm +/- 1.27 mm Model 984-14 only)

MINIMUM SPEED

0.0001"/sec (0.0025 mm/sec)

MAXIMUM SPEED

15.62" sec (396.75 mm/sec)

RESOLUTION

0.00015" (4 microns)

Index Axis (Y)

DRIVE

Micro-stepper, lead screw air bearing

TRAVEL

6.2" +/-0.050" (160+/-1.27 mm) Models 982-6 and 984-6

10" +/-0.050" (254+/-1.27 mm) Models 982-10 and 984-10

14" +/-0.050" (355+/-1.27mm) Model 984-14

RESOLUTION

0.000032" (0.80 micron)

ACCURACY

Open Loop

+/- 0.0001" (+/-2.5 microns) Models 982-6 and 984-6

+/- 0.0002" (+/-5 microns) Models 982-10 and 984-10

+/- 0.0004" (+/-10 microns) Model 984-14

Closed Loop (option)

+/- 0.00004" (+/-1 micron) Models 982-6, 984-6

+/- 0.00008" (+/-2 microns) Models 982-10, 984-10

+/- 0.00016" (+/-4 microns) Model 984-14

Vertical Axis (Z)

DRIVE

Micro-stepper, lead screw, Cross Roller Bearing

TRAVEL

1" +/-0.050" (25.4 mm +/-1.25mm)

2" +/-0.040" (50.8 mm +/-1 mm optional)

RESOLUTION

0.000032" (0.80 micron)

REPEATABILITY

+/-0.0001 (+/-2.5 microns)

Rotary Axis (Theta)

DRIVE

Micro-stepper

SPEED

90 degrees at 2.5 seconds

ROTATION RANGE

0 to 170 degrees

RESOLUTION

4 arc seconds

REPEATABILITY

+/-6 arc seconds

Spindle (Blade Diameter 2" /4")

TYPE

Air Bearing, water cooled

MINIMUM SPEED

4,000 rpm

MAXIMUM SPEED

40,000 rpm/30,000 rpm

MAXIMUM OUTPUT POWER

1,400 Watts/1,700 Watts

SPEED PROGRAMMABLE INCREMENT

140 rpm/100 rpm

Optics

MONITOR

9" monochrome

CAMERA

CCD

TARGETING SYSTEM

Electronic crosshair

OPTICAL MAGNIFICATION

X100 (x150, x200 optional for both the 982 and 984 models)

ILLUMINATION

256 programmable levels, 2800 Lux maximum

RESOLUTION

+/-0.0001" (+/-2.5 microns between two video lines)

Utilities

AIR

PRESSURE

80 psi (5.4 atm)

65-70 psi (4.6-4.9 atm) for 982 saw types.

PRESSURE TOLERANCE

+/-5%

DEW POINT

10 degrees C at 6.8 atm (50 degrees F, 100 psi)

TEMPERATURE

20+/- 5 degrees C

OIL MIST REMOVAL

99.9% minimum

FILTRATION LEVEL

0.3 micron or better

CONNECTION

1/2" Imperial-Eastman Poly-Flow tubing 88-P-12 or equivalent

FLOW RATE

10 scfm

Water

TYPE

DI or tap water

PARTICLE SIZE

25 Microns maximum

PRESSURE

40 psi (2.7 atm) - 100 psi (6.7 atm)

FLOW RATE

40 US gal/h (150 liters/h maximum)

TEMPERATURE

Room temperature +/- 1 degree C

Spindle Water

TYPE

DI or tap water

PARTICLE SIZE

25 Microns maximum

PRESSURE

40 psi (2.7 atm) - 100 psi (6.7 atm)

FLOW RATE

16 US gal/h (57 liters/h maximum)

TEMPERATURE

Room temperature +/-1 degree C

VACUUME LEVEL

610 mm Hg

Electrical

VOLTAGE

200VAC - 240VAC (+/-10%, Single Phase)

FREQUENCY

50 OR 60 Hz (+/-3 Hz)

POWER CONSUMPTION

3,000 Watts

CURRENT

15A