

BV6600 RECTIFIER WAFER BEVELLER



The Epak Electronics Ltd BV6600 Rectifier Beveler is designed to create a profiled edge on a rectifier wafer. The machine uses two Comco Accuflo micro abrasive blasters to process parts from 40mm to 150mm in diameter.

Two blast nozzles adjustable in X,Y, Z and (x-axis) with one nozzle motorized for the cutting of shallow angle face bevel and one 'fixed' nozzle for positive bevel.

Settings adjustable for spindle speed, motorized y-axis travel, speed and number of cycles (or blast time for 'fixed' nozzle #2), blast timer for nozzle #1 , selection of nozzle #1, nozzle #2 or nozzle #1 and nozzle #2.

The system includes two Comco AF10 Accuflo abrasive blasters that sit next to the machine. On the rear of the main machine cabinet is an extract port for connecting to a suitable dust extractor.

The main machine occupies a bench area approximately 600mm wide by 680mm high and 802mm deep (for the base machine). Some space will be required for the two AF10 blasters and an extra 300mm on the right hand side if the optional camera system is ordered. In addition, the monitor is designed to sit on top of the machine and this will add an extra 410mm to the overall height.

The abrasive blast area is enclosed so that very little dust will escape with the correct extraction flow. The two side doors allow access to precisely adjust the nozzle height and position accurately on the mechanical stages. Course adjustment can be made inside the main blast chamber to position the nozzle angle, height and distance from wafer.

Safety interlocks prevent the machine from being run when the blast chamber or the arm adjustment doors are open. Whilst abrasive blasting is in progress, if there is a drop in vacuum pressure or if the blast cabinet is opened, the BV6600 will stop the cycle to prevent any harm or safety to an operator.

The whole system requires clean, dry air for the Comco Accuflo Blasters. A 230v, 50Hz power supply for the BV6600 is required. A vacuum is required for operating the chuck vacuum. A dust extractor is also required to remove abrasive from the blast chamber during operation.

Specification:

600mm wide by 680mm high and 802mm deep (for the base machine).

ENCLOSURE

Steel & Aluminium

Clear acrylic door 545mm (wide) x 205mm (high)

Upper clear acrylic viewing panel 545mm (wide) x 335mm (deep)

Angled front viewing panel 545mm (wide) x 70mm (high)

Extract duct 126mm diameter OD.

Interlock Vacuum Switch

CONTROL

Start / Reset button

Stop button

Vacuum button

Program and selector buttons (via Vision 230 HMI)

Two 3 Pin XLR Connectors to AF10 units for blast on/off control

Noise Level: BV6600 – 64.5dB @ 1m when running blast cycle. If dust collector is sited next to the BV6600 the noise level when running will reach 84.2db @ 1m.

CONTROL PARAMETERS

Vision 230 HMI LCD with program and menu buttons allowing setting of following parameters:

Blaster Modes: 3 (Nozzles 1+2, Nozzle 1 only, Nozzle 2 only)

Number of motorized nozzle cycles 1 to 9999

Spindle Speed: 10 to 400 rpm

Cycle Steps: Half or Single Cycle

Arms Forward, Back To Set Positions

Manual Jog For Motorized Stage

Motorized stage maximum travel 12.7mm

Motorized stage speed 10mm/min to 70mm/min

Blaster 1 Time or Cycles (calculates time based on distance & speed)

Blaster 2 Time 1s to 9999s

I.P. Address

Subnet Address

Gateway

INTERLOCKS

Blast Chamber Door

Left arm fine adjustment door

Right arm fine adjustment door

Vacuum Pressure:

SYSTEM REQUIREMENTS

Power 220v / 50Hz 1 ph

Compressed air supply - 1.4 to 7 bar 20 to 100 psi for pneumatic arm control

Clean dry air supply up to 125psi for Comco AF10 series blasters

<200ppm moisture

<10ppm oil

<5 micron particulate

2 x Comco AF10-2CE Accuflo abrasive blasters - to 125 psi.

Tank capacity (Tall tank version tank capacity 9kg).

Powdergate™ equipped.

Dust extraction system

Vacuum

OPTIONS

110v 60hz version