

SA150 SURFACE ABRADER



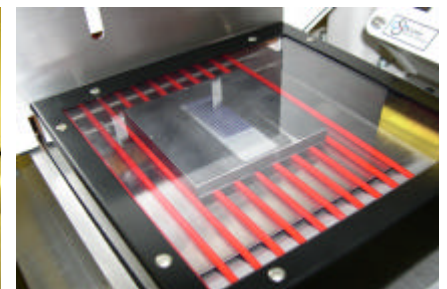
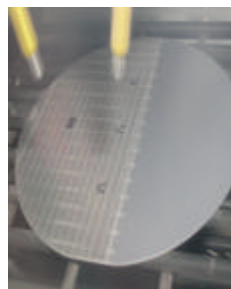
The SA150 Surface Abrader is a system to provide uniform cleaning or abrading of the top surface of parts. Parts are carried on a 150mm wide belt through a closed blast chamber where two micro abrasive nozzles sweep across the top surface of the parts. A Comco Powerflo PF2400 or Directflo DF1400 is integrated into the system to control the abrasive blast functions.

The SA150 is a compact free-standing system using a 600mm long conveyor made up of a large number of round abrasion resistant polyurethane belts. The conveyor surface is 1100mm above the floor, with operator loading parts to the left of the blast chamber and unloading to the right.

The cleaning or abrading effect will vary, depending on a number of factors including: type of abrasive media, air pressure, speed of the nozzle sweep, the belt index step, height of nozzle above surface, and the number of passes across the part. The process can handle very delicate parts by the selection of soft abrasives and operating at a lower air pressure. The height of the nozzles will also affect the area of the part to be covered with each pass. Positioning the nozzles so they just overlap at the surface provides a uniform finish without streaks or lines.

Uses for the SA150 include : cleaning the back side of silicon wafers, etching optical filters, MEMS and micro-fluidic devices through photo resist masks, cleaning pads on hybrid circuits, removing slag from capacitor chips before termination, cleaning solder mask from PCB's, and texturing connector insulator surfaces prior to bonding.

The SA150 Surface Abrader is available in continuous belt feed or precision stepping belt models. A system to meet your specific requirements can also be configured. Contact us for further details.



COMCO INC Micro-abrasive Blasting Systems
for Surface Preparation & Texturing, Parts Cleaning,
Deburring, Mold & Die Cleaning, Conformal Coat Removal
www.epakelectronics.com

SA150 SURFACE ABRADER SPECIFICATION

Machine Frame dimensions Approx 800 x 800 x 1000 High
(operating)

CONVEYOR

150mm wide x 600mm long.
Pulleys 50mm diameter
Belts Polyurethane 4.5mm diameter on 10mm pitch
Speed 15mm/sec
Step length Adjustable by operator 1mm to 50mm

INDEXING HEAD

Swept length 0 to 170mm
Approx speed 250mm/s full stroke
Two nozzle head, Height adjustable 0 to 100mm

ENCLOSURE

Steel
Glass Viewing Panel 275mm x 150mm (255mm x 140mm glass protector tear offs)
LV Lighting 12V 15W
Extract duct 120mm diameter OD.
Interlock Air flow Switch
Part sensor

CONTROL

Jog Backwards and Forwards
Run
Stop
Reset
Program and selector buttons (on HMI)
Program RUNNING indicator lamp
Program COMPLETE indicator lamp
GUARD OPEN/VAC OFF indicator lamp
Cooling 1 x Fan 1 x filtered inlet
Outlet 1 x Shuco 240V 50Hz 0.5A for PF2400/DF1400
Connector PF2400 unit for data transmission

CONTROL PARAMETERS

HMI two line LCD with program and menu buttons allowing setting of following parameters

Indexing Mode Conveyor index distance 0.3mm to 50mm
Max component size 150mm x 150mm x 20mm
Head traverse speed 1 to 250mm/s
Head traverse distance 0 to 170mm
Number of passes of head per index step 1 to 99
Start position offset
Reprocess Steps 0 to 99

INTERLOCKS

Leading edge sensor. PNP
Abrader Low Powder (PF2400 only)
Abrader Fault (PF2400 only)
Abrader Running (PF2400 only)
Extraction `ON` and Guard Closed

SYSTEM REQUIREMENTS

Power 220v / 50Hz 1 ph
Clean dry air supply
Up to 340 SLM for PF/DF Series Blasters
<200ppm moisture
<10ppm oil
<5 micron particulate
Comco PF2400-2CE Production Blaster - to 140 psi.
Tank capacity 4.5 kg. Tall Tank version tank capacity 9kg. With "Quick Fill" system. Powdergate™ equipped.
Dust extraction system

OPTIONS

1 to 3 nozzle holders available (2 nozzles on std system)
Precision Nozzle Holder with vertical angle adjustment.
110v 60hz Version
Belt end sensor

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