# Machine Datasheet



# Bula 2 Head 450mm Polishing Finishing Cell with ABB Robot

# Sorry, this machine is no longer available

We might be able to meet your requirements with other <u>Automatic Polishing & Linishing Machinery</u> machines.



Stock No PT1035

Model MR 250.5

Year of Manufacture 2001

 Serial
 250.5-2-109-1040-01

 R.P.M.
 Variable Speed

Hp/Kw

Other Info Other similar units available from stock

Location Near Shannon Ireland

Weight (kgs) 4500kg

External Dimensions (WxDxH mm) 3400 x 2300 x 2800

## Description

BULA Model: MR 250.5 & ABB ROBOTIC POLISHING CELL - AUTOMATIC FINISHING OF COMPONENTS





Registered in England no. 1965748

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The Bula Model: MR 250.5 ROBOTIC FINISHING CELL is designed for the special requirements of deburring and polishing of profiled workpieces and molded parts – even with the most difficult of contours and materials including steel, nonferrous metals, wood, plastic etc.

The Bula twin station polishing cell has an inverted ABB robot and the 450 mm diameter polishing machines anchored on a stable frame and surrounded by the enclosure. This provides especially favorable conditions for maximum operator safety, workplace cleanliness with dust control and sound dampening enclosure.

The fore cabin area is fitted with an internal conveniently situated control console with separate robot control panel and associated robot teach pendant.

All of the electrical elements required by the machine is located in the control cabinet. From this unit, a bus system is used to link it to the robot and integrate it into a functional whole. The machine design takes the latest advances in polishing technology into account, and the system is engineered for the combined use of abrasive belts on both the contact wheels and the slack of the belt.

The Bula polishing machines takes into account the particular requirements of machined workpieces and molded parts with sleeplessly varying mop speeds, including polishing of extremely difficult contours on metal, non-ferrous metals, wood and plastics

The Bula - ABB IRB 2400 ROBOTIC FINISHING CELL is engineered for use with polishing, Scotch-Brite, deburring and bristle brushing processes.

This system uses an industrial ABB IRB 2400 robot which is equipped with a pneumatically actuated gripper to pick up the components from the dedicated loading materials parts presenter.

The components are then taken to one of the two fixed polishing spindles whereby they are manipulated in front of the rotating wheels to be polished to a repeatable high standard.

This polishing cell is equipped with a double polishing spindles to receive two sets of polishing mops, each of 450mm diameter and polishing compound dosing system.

This system gives you high performance in terms of both cycle times and accuracy.

Extremely space saving - Extremely efficient, the small footprint enables problem free implementation, even the confined cell layout and thanks to its minimal disruptive contour, these versatile all-rounders also guarantee efficient offline programming - The advantages: high adaptability and simple programming.

### ABB IRB 2400 the worlds most popular industrial robot.

IRB 2400 comprises of an optimized robot that maximize the efficiency of your polishing and belt grinding applications.

The IRB 2400 is a real hard worker. It can take additionally 35g load on axis 1 and up to 12 kg additional load on the upper arm - still keeping 100 % of its duty cycle and offers excellent motion control, large load offset and unlimited motion in all 6 axis.





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The compact design of the IRB 2400 ensures ease of installation.

The robust construction and use of minimum parts contribute to high reliability and long intervals between maintenance.

## **Robot specification**

## Reach // Payload

IRB 2400-16, 1.55 m // 20 kg Number of axes 6 Wall IRB 2400-16

## Supplementary load IRB 2400-16

-wrist end 2 kg 2 kg -rear end 10 kg 10 kg Base unit 35 kg 35 kg

### **Physical**

Dimensions IRB 2400-10 Total height 1564 mm Robot base 723 x 600 mm Robot weight 380 kg

### Performance (according to ISO 9283)

Position repeatability (RP) 0.03 mm Path repeatability 0.11-0.15 mm

### Movements

Axis IRB 2400-16

Working range

Axis 1 360°

Axis 2 210°

Axis 3 125°

Axis 4 400°

Axis 4, Option Unlimited

Axis 5 240°

Axis 6 800°

Axis 6, Option Unlimited

## Max. speed

Axis 1 150°/s

Axis 2 150°/s

Axis 3 150°/s

Axis 4 360°/s

Axis 5 360°/s

Axis 6 450°/s





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Image

**Bula Model: MR 250.5 specifications** 

Control: Windows Robot 6 Axis

Loading Capacity 20 kg Axis 6 Endlessly Rotating

Buffing Units 4 Power 4 Kw Speed Adjustable

Dimensions of polishing whee; 450 mm

Max. Width 100mm

Work Piece Clamping Pneumatic Gripper

Programming Memory Capacity 3000 Instructions

Electrical Potential 3 X 380 V / 50 Hz

Installed Power 70 A

Pneumatic Supply 6 Bar

The cell is approximately dimensions approx. 3400 x 2300 x 2800 mm

weight approx. 4500 kg

Photographs taken prior refurbishment. Our refurbishment service is not available on all machines.



