

Intec Polishing Cell with ABB Robot

Sorry, this machine is no longer available

We might be able to meet your requirements with other [Automatic Polishing & Linishing Machinery](#) machines.



Stock No	PT1029
Model	S4C Plus M2000
Year of Manufacture	21/09/2005
Serial	1020
Hp/Kw	Deburring and polishing of profiled work
Other Info	Mating belt grinding also available
Location	Shannon, Ireland
Weight (kgs)	4450kg
External Dimensions (WxDxH mm)	4300 x 2450 x 2700

Description

INTEC - ABB IRB 2400 ROBOTIC FINISHING CELL - AUTOMATIC FINISHING OF POLISHED COMPONENT



The ABB IRB 2400 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 twin wheel variable speed polishing cell has the robot and the polishing machines anchored on a stable frame and surrounded by a cabin. This provides especially favorable conditions for maximum operator safety, workplace cleanliness with dust extraction and sound dampening .

The fore cabin area is fitted with a conveniently situated OMRON plc Panelview operator interface panel and robotic control console with associated robot teach pendant.

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

All of the electrical elements required by the machine are located in a switch 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 use of polishing discs up to 450 & 1000 mm in diameter.

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

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 Ciclope polishing spindles to receive two sets of polishing mops, 1 x 450mm diameter and 1 x 1000 mm diameter with auto wear compensation and polishing compound dosing system.

The robots programming and position is corrected automatically during use according to the mop wear and the circumferential speed of the mops. It is also adapted accordingly as the mop diameter reduces in order to maintain a constant surface buffing speed.

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.

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.

Specification

Reach // Payload

IRB 2400-10, 1.55 m // 12 kg

Number of axes 6

Wall IRB 2400-10

Supplementary load IRB 2400-10

-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 2400-10

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. spee

Axis 1 150°/s

Axis 2 150°/s

The Marketplace for Surface Technology.
New and Used Process Equipment & Machinery.
Machine Datasheet



Axis 3 150°/s
Axis 4 360°/s
Axis 5 360°/s
Axis 6 450°/s



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