

RCS-RB Grinding Machine

*Strong, fast and reliable grinding/buffing machines
for the printing industry*

MARKET STANDARD

Since its first introduction in 1997, the Imeas RCS-RB had become a market standard, being used by the most important companies in this Industry.

TIME SAVING

Unlike other machines used in the past, the RCS-RB uses ring-shaped abrasive belts to accomplish its tasks. The replacement of an abrasive belt requires just 3 minutes, saving lot of time and improving the productivity.

EASINESS OF USE

Essential parameters and an innovative graphical user interface (GUI) grant an extraordinary easiness of use.

The capability of saving, recalling and interchanging the working parameters reduces even more the setup and start-up time of new lines.

LOGGING

For the purpose of quality control, the software can be designed to log several working parameters, such as: working speed, motors Amps, thickness, tension and so on.

DIGITAL GAUGING SYSTEM

The machine can be coupled with a digital gauging system to record step-by-step the thickness of the out-going blanket. The information can also be used to self-adjust the machine, improving even more its capabilities.



The Imeas RCS-RB family of machines has been developed specifically to process the rubber blankets used in off-set printing machines. It is a unique machine because she is able to meet at the same time many, often contrasting, requirements:

- highest production rates
- precise thickness tolerances
- perfect, defect-free surface

The construction is based on the Imeas well proven monolithic frame concept, where heavy steel plates are welded together to provide a rigid, vibration free, long lasting machine.

Once the rubber blanket coil is placed on its decoiler/recoiler system, a series of special wrapping rolls coupled with a loading cell system control speed and tension along the whole process, assuring a smooth and precise surface.

By means of the breaking rollers it is possible to vary the wrapping angle around the contact roller in order to change from grinding to buffing operations.

The counter pressure roller provides for thickness adjustment through an Imeas patented system that grants the highest possible precision.

General Data

FRAMES & MATERIALS

- IMEAS uses only first choice materials from ISO 9001 certified companies.
- All frames are made of electro welded steel. They are stress relieved, sanded, prime-coated and painted.

MOTORS

- High efficiency motors from ABB and Siemens.
- Feeding speed is controlled by AC motors and frequency controllers.
- Installed powers in accordance with the job to be performed

CONTROL & INTERFACING

- PLC Siemens S7/300
- Easy to use graphical user interface with TFT operator panel
- Profibus™ connections by Siemens

ELECTRIC CABINET

- Main switch for insulation from the main line power
- The cabinet is manufactured in disconnecting section for easy transport
- Full cooling or conditioned⁽²⁾

PNEUMATIC PLANT

- Located on the machine back side for fully accessibility
- Emergency tank
- Lockable inlet, monometer and pressure adjustment

NOTES

1. Decoiler and recoiler are optional equipment.

2. Some of these features may be available at extra price.

IMEAS spa reserves the right to change any data without notice.

Data sheet & Comparison chart

MODEL	RCS-RB/230	RCS-RB/260
No. of working units	1 top unit	
Type of process	Dry grinding of rubber blankets coils	
Useful width (max)	2.300 mm	2.600 mm
Thickness range	0,75+5,00 mm	
Thickness tolerance	±0,01 mm	
Coil length (max)	180 m	
Coil weight (max)	1.200 kg	
Coil tension	Adjustable up to 200 daN	
Feeding speed	2,0+20,0 m/min	
Feeding motor	One 3 kW motor + 2x 3 kW on decoiler/recoiler ⁽¹⁾	
Main motor	45 kW	55 kW
Contact roll	Ø400 mm, grooved and rubberized	
Counter pressure roll	Ø240 mm, flat and rubberized w/motor control positioning	
Abrasive belt speed	12+35 m/s	
Abrasive belt width	1.750+2.350 mm	2.050+2.650 mm
Abrasive belt length	3200 mm	
Exhaust air capacity	31.600 m ³ /h	35.700 m ³ /h
Machine pass line	1.130 mm	
Machine weight	16.000 kg	19.000 kg

STANDARD FEATURES

- Electronic and manual adjustment of the working thickness
- Motorized counter-pressure roll positioning
- Long-life grease lubricated bearings
- Adjustable belt tracking photocells position for different abrasive belts widths
- Cleaning brushes at machine infeed, outfeed and for the counter-pressure roll
- Wide screen with touch panel graphical user interface
- Integrated safety systems
- Top air cleaning knife at machine out feed

OPTIONAL FEATURES⁽²⁾

- Main motors upgrade up to 65 kW
- Allen-Bradley™ PLC and control systems. Other brands available on request.
- Deionizing bars
- Custom software for logging and report