



STARLINE RBS

COMBINED KNIFE/ROLLER COATING HEAD



STARLINE RBS

COMBINED COATING MACHINE FOR FINISHING & COATING

The new Starline RBS is a multi-functional coating head offering, on the same station, any possible wet coating technology. It's designed for both direct and transfer coating operation, then to manufacture artificial leather, coated textiles and other coated materials in bobbin. With RBS it is possible to apply any kind of solvent-based or water-based resin (PVC, PU, acrylic, silicone, etc) and to work with foamed products.

A rotating turret enables to quickly and easily change the coating system as required by the production requirement.

The coating systems available on the machine are:

- thickness coating over counter-roller
- "on-air" coating (floating knife) by doctor blade (knife)
- synchro rollercoating over counter-roller
- reverse rollercoating over counter-roller
- "on-air" reverse rollercoating

These different processing technologies allow working with auxiliaries and coating pastes without limitation to their viscosity. RBS is therefore capable of processing resins ranging from "high solid" to inks, lacquers and various auxiliary in solution.

RBS flexibility of use therefore offers new opportunities that complement the traditional coating technologies:

- 1 - Coating and/or impregnation of unstable foams to get dyeing and finishing effects
- 2 - Rollercoating by engraved cylinder with lick-roll and kiss-roll techniques for tactile and visual effects
- 3 - Impregnation in reverse-roller on the whole section of the fabric or on one face only

RBS features a solid steel frame, welded for an higher torsional rigidity and a turret supporting the roller changing device. The latter can be configured to mount two engraved rollers and one doctor blade (coating knife) or two blades and one engraved roller.

The micrometric adjustment of the coating thickness is motorized, with centesimal precision and value digital display on the control panel.

The cylinder doctor blades are mounted on auto-aligning supports to assure a perfect contact and constant uniform pressure over the entire length of the cylinder. This system improves the life duration of both engraved roller and doctor blade, as well as a better precision in terms of weight of chemical deposited onto the web.

All the functions of the machine, controlled by a PLC of the last generation, are located in a large and convenient control panel that can be positioned by the operator.

General Features of the basic model:

- Solid welded steel frame,
- Rubberized counter-roller, oil and solvent resistant, hardness 85 ShA
- A/C gearmotor to drive the counter roller,
- Motorized micrometric adjustment of coating thickness, independent right/left or in tandem with digital display on control panel,
- Roller changing device, arranged to mount two engraved rollers and one doctor blade
- Working angle adjustment by manual rotation of the coating knife, ref. pict. 5
- Coating side limiters, manually adjustable either single or tandem, ref. pict 1
- Doctor blades support for synchro and reverse rollercoating,
- Colour doctor blade pneumatic driving group for a smoother movement of the blade towards the roller,
- Feeding through in front of the coating knife, ref. pict 6
- Entry idler rollers, the upper one liftable by pneumatic pistons for "on air" rollercoating, ref. pict. 8
- Idler roller or lower scraping counter-blade at the material outlet, ref. pict. 3 and 4
- Piping for the washing of the engraved roller, ref. pict. 3 and 4
- Counter-roller washing system with rubber wiping blade,
- Orientable control panel mounted with control keyboard and digital display, ref. pict. 7
- PLC controlled electric system. PLC controls right and left hand processing thickness, speed of the engraved cylinder, speed of the counter roller, line speed, working thickness of the knife, time of manual joint skip and alarm devices,
- Main electrical panel with inverters inside the machine shoulder, protection IP54
- Machine is complete with 2 coating cylinders and 1 coating knife,
- Coating height from the floor 1.025 mm – ref. drawing ROJ 26770

The machine is available in the following widths:

- o RBS 180/3, working width 1650 mm., roller width 1800 mm.
- o RBS 220/3, working width 2050 mm., roller width 2200 mm.
- o RBS 240/3, working width 2250 mm., roller width 2400 mm.
- o RBS 260/3, working width 2450 mm., roller width 2600 mm.

OPTIONALS

- Chromed steel counter-roller
- Reciprocating pneumatic paste distributor (for knife coating application) - ref. pict. 2
- Lower scraping knife to improve the resin penetration during coating "on-air" (by scraping), suggested for textile coating - Ref. picture 4
- Automatic seam jumper with seam detector (suggested for textile coating)
- Product level check sensor - Ref. picture 6
- Pneumatic synchronizing dancing roller at machine entry
- Banana roller with curving adjustment - Ref. picture 8
- Automatic side limiters for coating knife – Ref. Picture 9
- Piston pump: Max. viscosity 35.000 cps – ref. pict. 11
- Slats or strings expander - Ref. Picture 10 and 12
- Heating device for coating cylinders by diathermic oil circulation
- Explosion proof electrical plant type: AD-F Ref. CEI 64-2

FOTO 1 – PICTURE 1



FOTO 2 – PICTURE 2



FOTO 3 – PICTURE 3



FOTO 4 – PICTURE 4



FOTO 5 – PICTURE 5



FOTO 6 – PICTURE 6



FOTO 7 – PICTURE 7



FOTO 8 – PICTURE 8



FOTO 9 – PICTURE 9



FOTO 10 – PICTURE 10
CILINRO ALLARGATORE A DOGHE –
SLATS EXPANDER



FOTO 12 – PICTURE 12
CILINRO ALLARGATORE AD ELASTICI –
STRINGS WIDENER



FOTO 11 – PICTURE 11
POMPA A PISTONE –
PISTON PUMP



POSITIVE ROLLERS FOR REVERSE ROTATION:

ROLLER TYPE	capacity grams / Sq. foot portata g / pq.	capacity grams / sq meter portata g. / mq
8B	da 33 a 40	da 355 a 430
10B	da 24 a 33	da 258 a 355
10C	da 18 a 27	da 194 a 290
20B	da 15 a 25	da 162 a 269
20C	da 12 a 18	da 129 a 194
30A	da 10 a 16	da 108 a 172
30X	da 8 a 12	da 86 a 129
30C	da 5 a 10	da 54 a 108
30F	da 3 a 6	da 32 a 65
50C	da 3 a 6	da 32 a 65
55C	da 2 a 5	da 21 a 53
55F	da 1 a 4	da 10 a 43
60A	da 1 a 3	da 10 a 32

HELICOIDAL ROLLERS FOR REVERSE ROTATION

G type "REVERSE" Roller	capacity grams / Sq. foot	capacity grams / sq.meter
40G	da 2 a 5	da 11 a 54
30G	da 3 a 7	da 32 a 75
25G	da 5 a 10	da 54 a 107
21G	da 7 a 14	da 75 a 150
17G	da 10 a 16	da 107 a 172
14G	da 12 a 18	da 129 a 193

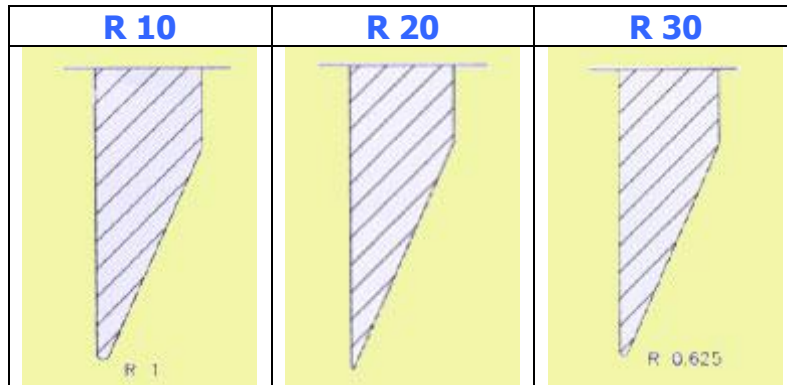
NEGATIVE ROLLERS FOR SYNCHRONIZED ROTATION:

<i>Type of roller "Synchro"</i> <i>Tipo cilindri "Sincro"</i>	<i>Capacity Gr./sq.ft.</i> <i>Portata Gr./p.q.</i>	<i>Capacity Gr./sq.mt.</i> <i>Portata Gr./mt.q.</i>
6 L	14-18	150-192,6
8 L	12 – 16	129 – 172
10 L	10 – 14	108 – 151
12 L	9 – 13	98 – 140
16 L	6 – 9	65 – 98
20 L	5 – 8	54 - 86
24 L	4 – 7	43 – 76
32 L	2 – 4	21 – 43
40 L	1 – 3	10 – 32
48 L	1 – 2	10 – 21
60 L	1	10

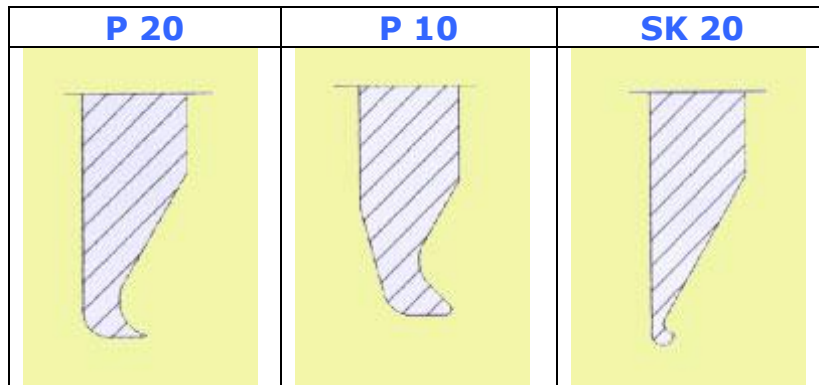
Shown capacities are purely indicative, they may vary depending on:

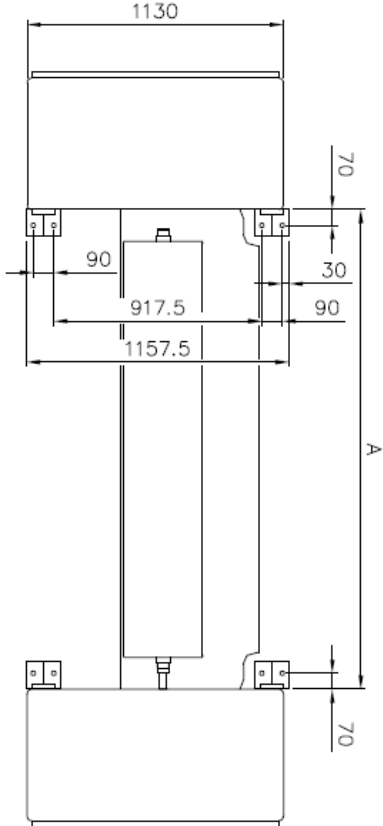
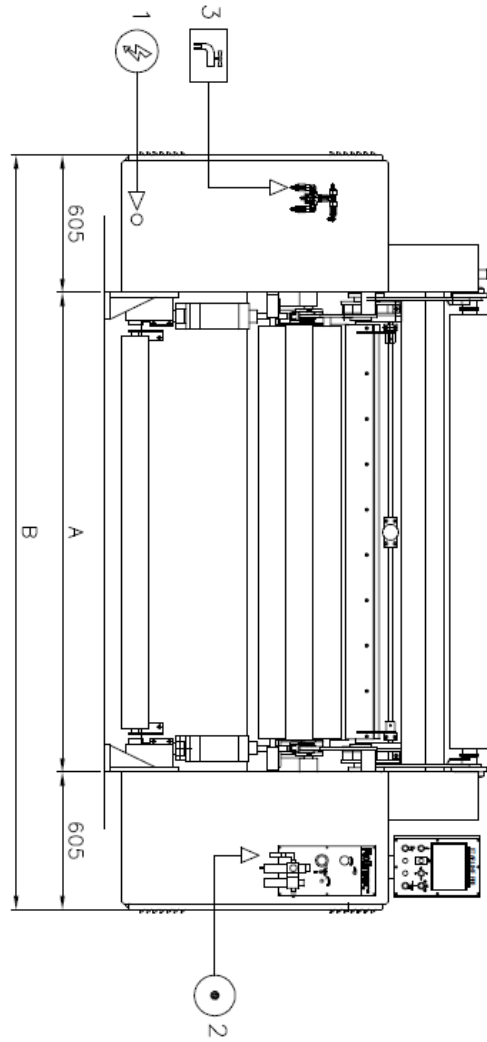
- ⇒ rotation speed of the engraved roller
- ⇒ ratio between running speed and engraved roller speed
- ⇒ type of material
- ⇒ density of the chemicals

Profiles of coating knives (scraping, "on air", floating knife)



Profiles of coating knives (thickness coating)



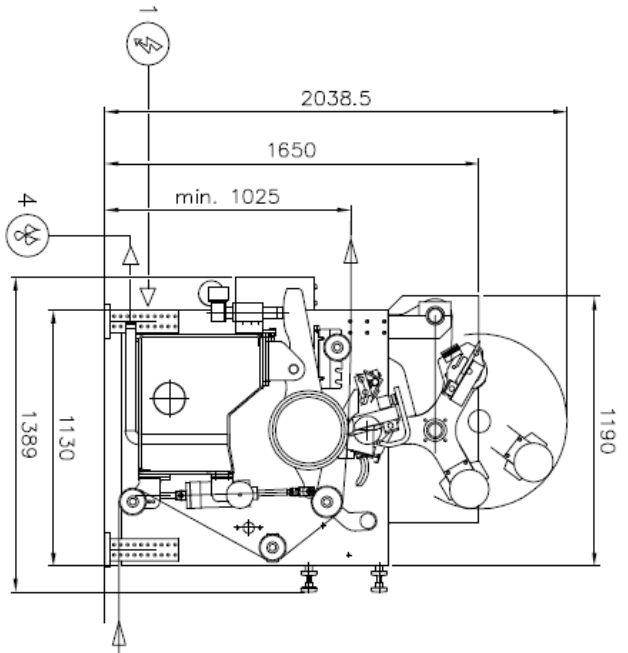


MODELLO MACCHINA MACHINE	LUCE MACCHINA MACHINE	A	B	VELOCITA' DI LAVORO WORKING SPEED	VELOCITA' RIVOLTO CYLINDER SPEED	POTENZA INSTALLATA POWER	POTENZA ASSORBITA POWER
STARLINE RBS	1800	2115	3325	min. 1 m/min	min. 1 m/min	3,90 kw	2,93 kw
STARLINE RBS	2200	2515	3725	max. 50 m/min	max. 90 m/min		
STARLINE RBS	2400	2715	3925				

Dimensioni per dimensioni (larghezza e profondità) senza indicatori di riferimento
 Specifications for size and depth dimensions without reference indicators
 Dimensionen für Abmessungen (Breite und Tiefe) ohne Referenzindikatoren

TOGLIERE EVENTUALI TAGLIENTI	
02	13/02/09 Aggiornamento vista in pianta, tabelle e servizi
01	07/05/07 Aggiornamento sezione
00	02/08/05 CREAZIONE
REV.	DATE
MATERIE - MATERIAL	
DESCRIZIONE - DESCRIPTION	
REVISIONI - REVISIONS	
SCALA - SCALE	
SCHEMI DI - DRAWING BY	
CODICE FINITO - FINISHED CODE	
SCHEMI DI - DRAWING BY	
REV.	

- | | | |
|---|--|---|
| 1 | | AUMENTAZIONE BATTERICA
EL. POWER SUPPLY |
| 2 | | ARIA COMPRESSA
COMPRESSED AIR |
| 3 | | AUMENTAZIONE IDRICA
WASHING WATER |
| 4 | | SCARICO ACQUA SPORCA
WASHING WATER WASTE |



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Gemata

ROJ26770

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