

**ECOGRAV SYSTEM** 



# **ROSSINI** – THE FAMILY COMPANY FOR SLEEVES AND ROLLERS

- Founded in 1928 in Milan, Italy, as manufacturer of printing rollers (first leather, then rubber covered), NOW at the 3rd generation
- TODAY: 500 employees, 8 production facilities in 6 countries on 4 continents plus 4 direct sales&service offices



Our name stands for:

- Highest quality
- Worldwide customer service
- Innovative products



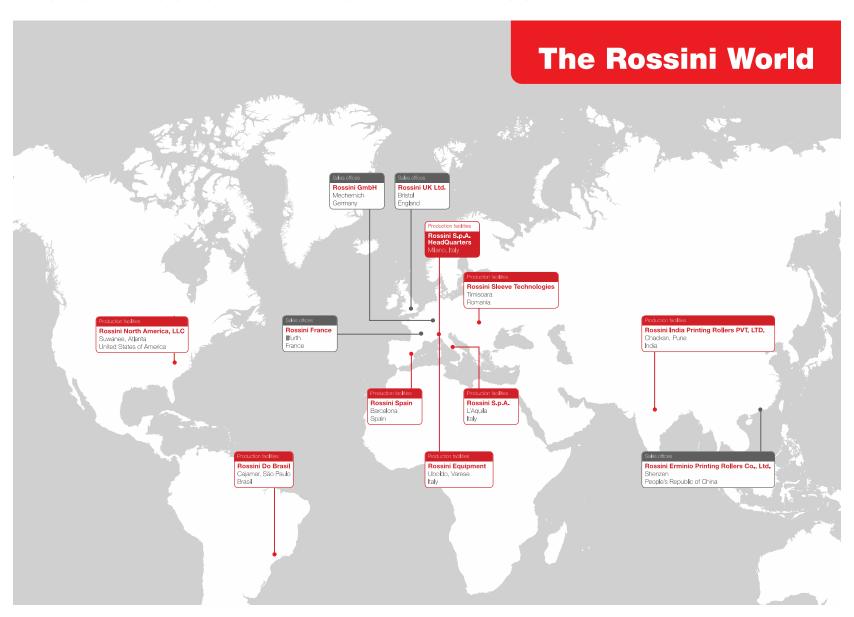
# WE PRODUCE AND SERVE OUR PRODUCTS CLOSE TO OUR CUSTOMERS MINIMIZED TRANSPORT COSTS - BETTER SERVICE – LESS CARBON FOOTPRINT

#### **8 FACTORIES**

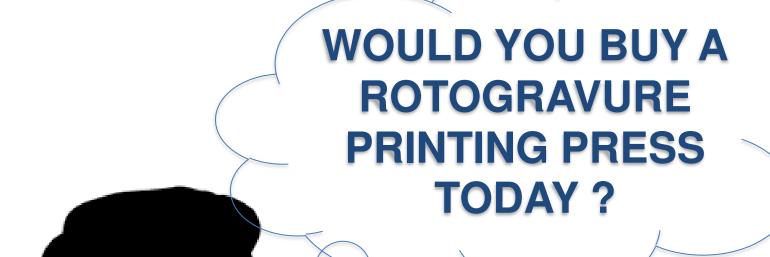
- 5 in Europe
- 1 in USA Atlanta
- 1 in South America Brasil, San Paolo
- 1 in Asia India, Pune

### 4 Direct Sales & Service offices

- Germany
- France
- UK
- China









### **R.O.I. EVALUATION**

PRODUCT REQUIREMENTS – VOLUMES, QUALITY





SPACE AVAILABILITY IN THE FACTORY –
CHANGE OF EXISTING MACHINE TO IMPROVE PRODUCTIVITY AND OR EFFICIENCY

LOCAL ENVIRONMENTAL PERMISSIONS







# PRINTING TECHNOLOGY ROTOGRAVURE



ENGRAVED COPPER LAYER

STEEL AND/OR ALUMINUM BASE

MANY STUDIES/PROJECTS ARE ACTUALLY IN DEVELOPMENT THROUGHOUT THE PRINTING WORLD WITH DIFFERENT TYPES OF COATINGS, DIFFERENT SUBSTRATES, NEW TECHNOLOGIES





### **Chrome Plating Process**

# 2002/95/CE NORM also known as **RoHS NORMS**

Restriction of Hazardous Substances Directive

We saw many postponements and «After a procedures that has taken more than five years and two REACH Committee ...» the review period for the use of

CHROMIUM TRIOXIDE (Cr6 - hexavalent) electrolyte

will expire by September, 2024















### **ECOGRAV**

- PU BASE TECHNOPOLYMER **DIRECTLY** CAST ON EXISTING STEEL ROLLERS
- LAYER WITH A FINAL THICKNESS OF 2 mm
- HIGH RESISTANCE TO ABRASION
- CONDUCTIVE
- POLISHED TO EXTREMELY LOW SURFACE ROUGHNESS (approx. 0.1 Ra)
- READY TO BE ELECTROMECHANICALLY ENGRAVED
- ENVIRONMENTAL FRIENDLY AND SUSTAINABLE





### **ECOGRAV**

- **TESTED** 
  - **❖ IN ROSSINI UP TO 1.000.000 [m] AT 200-250 [m/min] PRINTING SPEED**

and

- **❖** AT OEM's FACILITIES FINGERPRINT TESTS UP TO 300.000 [m] AT 300-350 [m/min] PRINTING SPEED
- PRINTING ON STANDARD FILMS (12 µm PET, 20 µm BOPP)
- **ROTO INKS** PURE ETHYL ACETATE AND MIX ETHYL ACETATE & ALCOHOL BASED **NC INKS**
- STANDARD STEEL DOCTOR BLADES









- TEST RUN IN PRODUCTION:
  - **❖ REPEATED SHORT PRODUCTION**RUNS ON FILMS AND LAMINATED
    ALUMINUM AT 200-250 [m/min]
    PRINTING SPEED
  - 7-COLOR TEST ON FILM
    - 1270 [mm] WIDE PRINTING PRESS
  - 7-COLOR JOB ON MULTI-LAYER (PE+AL)
    - NARROW WEB PRINTING PRESS



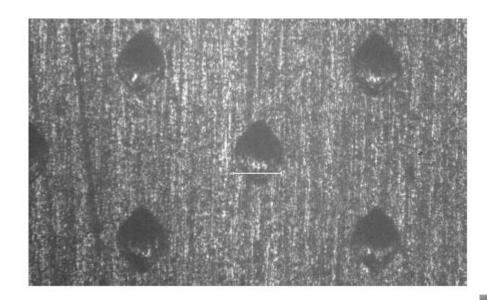
# COMPARISON OF ENGRAVED CELL SHAPE (5% SCALE) OF THE PRINTING CYLINDER TESTED AT ROSSINI

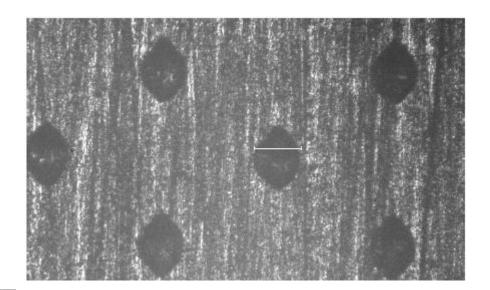
#### Initial testing conditions

Ordine cliente	ROSSINI
Nome JOB	TEST 4 COLORI
Dimensione cilindro	x
Colore	3° DOPO STAMPA
#	IN INGRESSO
>	

Final testing conditions (	'after
1.000.000 m of run)	

Ordine cliente	TEST ROSSINI 08/06/21
Nome JOB	TEST CYMK
Dimensione cilindro	594x600
Colore	3°
#	70
>	0 130° 5% SCALA





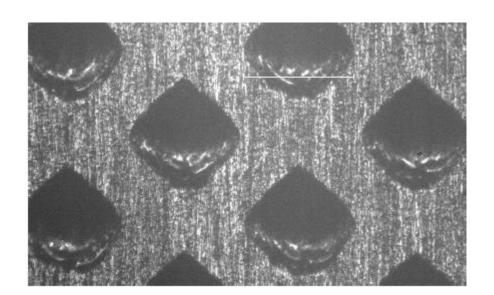
Zoom: 10X



# COMPARISON OF ENGRAVED CELL SHAPE (50% SCALE) OF THE PRINTING CYLINDER TESTED AT ROSSINI

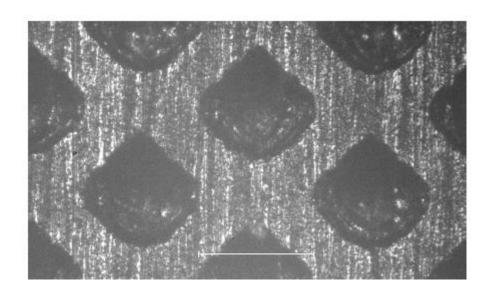
#### Initial testing conditions

Ordine cliente	ROSSINI
Nome JOB	TEST 4 COLORI
Dimensione cilindro	x
Colore	3° DOPO STAMPA
#	IN INGRESSO
>	



## Final testing conditions (after 1.000.000 m of run)

Ordine cliente	7224 ROSSINI 08/06/21
Nome JOB	YEST CYMK
Dimensione cilindro	594x600
Colore	3°
#	70
>	0 130° 50% SCALA







#### **ECOGRAV**

- HIGH IMAGE DEFINITION
- **MEASURED** CONSTANT INK DENSITY
- REAL ROUND DOT
- HIGH EFFICIENCY OF **INK**RELEASE OUT OF THE CELLS
- CONTINUOUS COLOR
  GRADIENT FROM 1 TO 100
  AFTER NEW CURVE
  CALIBRATION

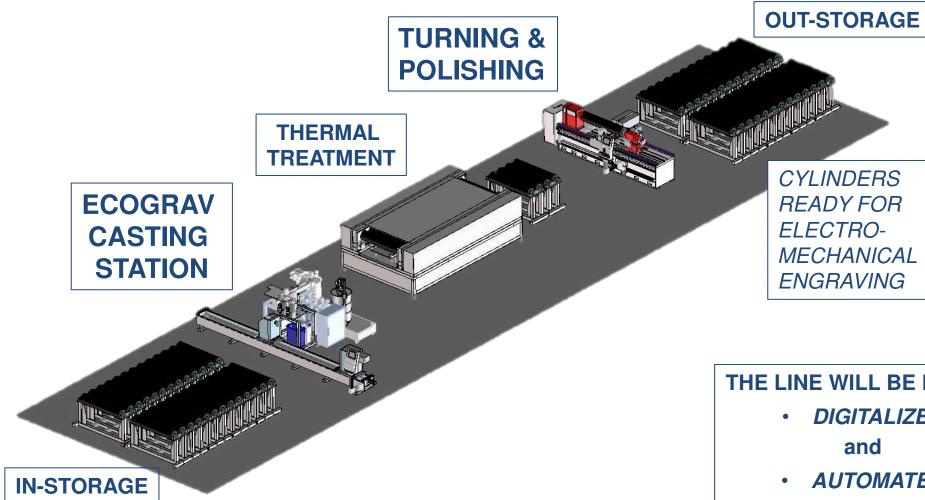




### **ECOGRAV 4C PRINT**

- CONTINUOUS COLOR
GRADIENT FROM 1 TO 100
AFTER NEW CURVE
CALIBRATION WITH EXCELLENT
RESULTS IN THE MINIMUM
RANGE





**ECOGRAV SYSTEM** ROSSINI SOLUTION **PROVIDER** 

#### THE LINE WILL BE FULLY

- DIGITALIZED
- **AUTOMATED**





#### **NEXT STEPS**

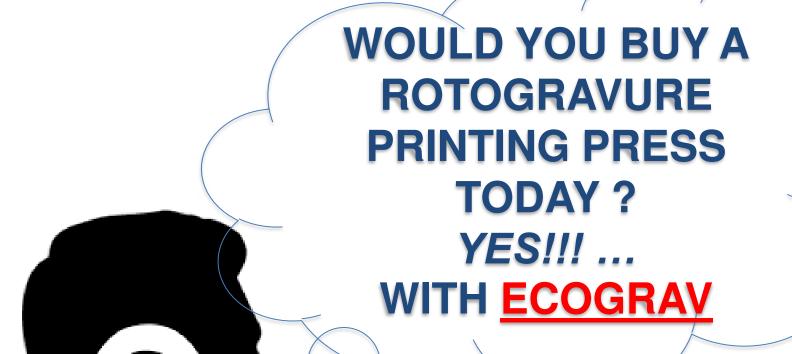
# CONTINUATION OF PRINTING TESTS IN ROSSINI AND AT OEM's FACILITIES

 OPTIMISATION OF THE ENGRAVING CURVES

**CONTINUATION OF PRODUCTION RUNS** (REPEATED ORDERS)

INSTALLATION OF THE PILOT LINE AT ROSSINI





THANK YOU!
www.rossini-spa.it

