

**simec**  
**GROUP**

[www.simecgroup.com](http://www.simecgroup.com)





Laser engraved anilox  
since 1987



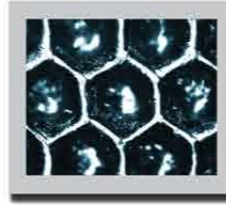
**"GOLD" Anilox Sleeve**

- Fully assembled in-house for 0 km. products
- 100% control over raw materials and production steps
- Thermally treated and inside bored aluminum tube
- Less glue needed, lower environmental impact and improved stability over time
- Anodized colored lateral rings for easy identification of the direction of installation
- Improved stability in printing both at low and at high speeds
- Re-engraving of the sleeve guaranteed up to 3 times



**Laser Engraving**

Simec production equipment range is one of the most comprehensive in the world. We can process any kind of roller up to 800 mm. diameter and 7000 mm. table length with all laser engraving technologies available. The various laser equipments allow Simec to engrave each roller with the technology the most suited for the machine and the application to which the anilox is destined.

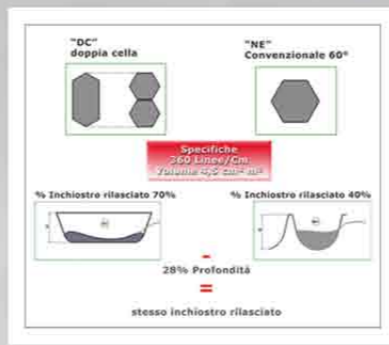


**"Leonardo NE"**

Fibre laser engravings in multi-hit and multi-beam modes for highest precision and repeatability up to 700 lines/cm and over.

**Benefici " Leonardo NE"**

- Good wall consistency and accuracy
- Reduced friction for a longer doctor blade life
- Higher cell capacity and improved ink release
- Improved reproducibility of engraving in time
- Excellent performances in process jobs



**For a proper understanding of the differences between "NE" and "DC", please find below a comparison of the two different engravings considering the same line screen and volumes:**

**"Leonardo DC vs. conventional engravings at 60°"**

Cell lengthening and different cell structure ensure great benefits in terms of ink release capacity. Printers can keep the same machine configuration in terms of lines/cm and decide whether to opt for low maintenance (keeping the same volume but reduced cell depth) or for increased color density in printing (keeping cell depth unmodified for a higher ink release - up to 30% more).



**"SprayLast Coating"**

- Great expertise and experience in Thermal Spray
- High-quality and first-choice raw materials
- Specific solutions for any type of roller and application
- Thermal Spray equipments and ad-hoc coding for each type of anilox roller
- Codified process controls to guarantee quality and repeatability over time

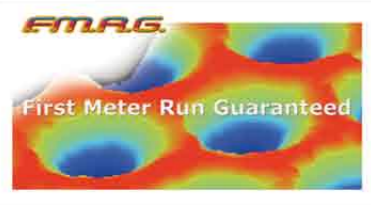


**"Leonardo DC"**

The "Leonardo DC" series is an evolution of the 60° single cell engraving (Leonardo "NE" series). The substantial difference between the two products is that, pitch being the same, the angle with respect to the roller axis is 70° and the cells are twice as long as the standard cells.

**Benefits of " Leonardo DC" engravings**

- Excellent performances with HD printing plates
- Improved ink release at high printing speeds
- Substantial reduction of ink spitting
- Improved color density in printing
- Longer life time of doctor blades
- Reduction of the "scoring line" problems
- Reduction of "Dot Gain" problems
- Cleaning operations reduced up to 50%



**F.M.R.G. "First Meter Run Guaranteed"**

Each roller processed by Simec is provided with a thorough quality certification (with 2D and 3D scanning of the anilox cells) and with a precise volume certification and Simec is the only anilox manufacturer able to do that.

This certification allows Simec to guarantee that each roller engraved fully complies with all customer's requests and ensures a good repeatability in time.

If required, this certification can be sent to the customer even before the roller leaves our premises.



**"HP"**

HPF "High Performance Flexible": this is how SimecGroup has codified the new engravings destined to the field of flexible both for new-generation and old-concept printing presses with steel rollers.

**Benefits coming for the new HPF engravings**

- Reduction of the press inventory
- Reduction of the costs for clichés
- Reduction of refurbishments due to accidental damages following mishandling
- Improved ink density in printing
- Improved dot gain
- Reduction of the problems linked to ghosting and anilox cleaning
- Reduction of the scoring line problems
- Reduced doctor blade wear



Mechanically engraved rollers  
since 1960



**• Printing**

New engraving configurations:

- Hexagonal cells
- Double cell

**• Coating**

New HF engraving configurations for:

- Flexo
- Roto

- Heavy Coating
- Lamination

"HPLL" High Performance Long Life

New engraving structures for improved distension



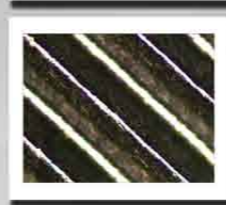
**Truncated-Pyramidal Engraving**

Screens from 10 to 220 lines/cm.  
Cell sections available: 60° - 80°  
Inclination: 45°



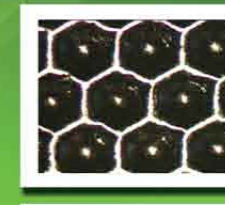
**Pyramidal Engraving**

Screens from 10 to 220 lines/cm.  
Cell sections available: 110°  
Inclination: 45°



**Helicoidal Engraving**

Screens from 10 to 220 lines/cm.  
Cell sections available: 110° - 80° spherical  
Inclination: 45° - 60° - 70°



**Hexagonal Engraving**

Screens from 10 to 220 lines/cm.  
Cell sections available: 80° - 60° - 110° spherical  
Inclination: 60°



**DC Engraving**

Screens from 10 to 220 lines/cm.  
Cell sections available: 100° spherical  
Inclination: 70°

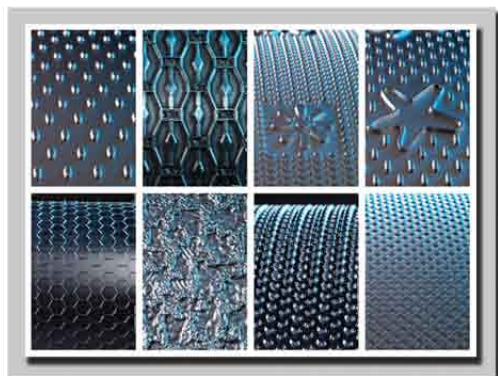


**HF Engraving**

Screens from 20 to 120 lines/cm.  
Cell sections available: 100° spherical  
Inclination: 30° - 45° - 60°

We have no size limitations we can engrave Steel - Inox - Copper - Galvanic Nickel and Brass





### Engraving Capacity

- Weight up to 20 tons
- Diameter up to 1000 mm
- Engraved length up to 7000 mm

### Engraving Technologies

- Laser - etching engraving
- Mill engraving
- 3D direct engraving technology

### Know How

- Design development
- Design service
- Lab rollers



### Tissue

- Toilet paper
- Kitchen rolls
- Serviettes
- Handkerchiefs



### Film

- Baby diapers
- Incontinence products
- Sanitary products
- Panty liners



### Nonwovens

- Spunbond
- Meltblown
- Spunlace (Wet wipes)
- Resinbond
- Airlaid



### Metals

- Aluminum
- Stainless steel
- Sheet metal



### Ultra-sound applications

- Lamination
- Welding
- Embossing



### Plastic materials

- Fake leather
- Cast
- PVC films
- Conveyor belts
- Strapping belts

