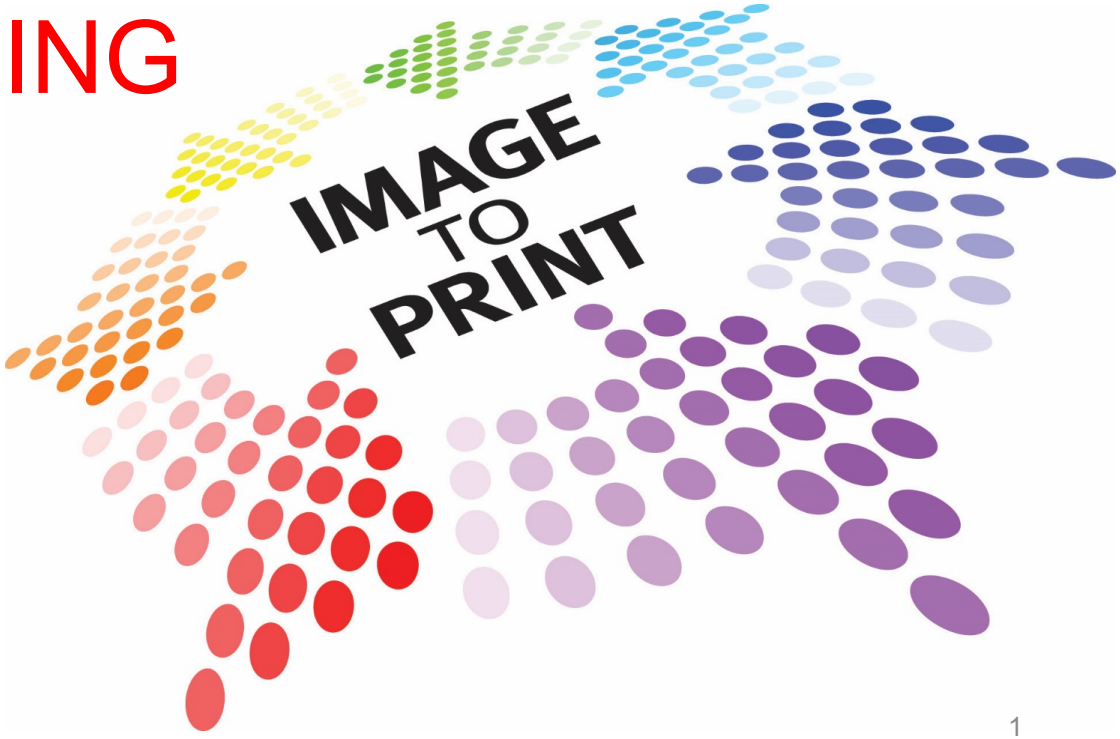
PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

03 / 04 July 2019
Istanbul, Turkey



PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

INFLUENCE OF SLEEVES ON PRINTING QUALITY & PRODUCTIVITY

Sonja Haesen
General Manager - Rossini Germany

ROSSINI

Flexo Sleeves & Adapters:

- The right adapter helps to reduce bouncing
- Invest in quality and increase your productivity
- Wrong handling causes severe costs

IMAGE TO PRINT

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Consequences of bouncing

- Reduced printing speed
- Longer set up times –
  when trying to resolve the problem
- Waste of material and time
- Risk of complaints

LOSS OF PRODUCTIVITY

IMAGE TO PRINT

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The adapter makes the difference:

Carbon fiber adapter X

at 400 m/min

Rossini Carbo Bridge

at 400 m/min

IMAGE TO PRINT

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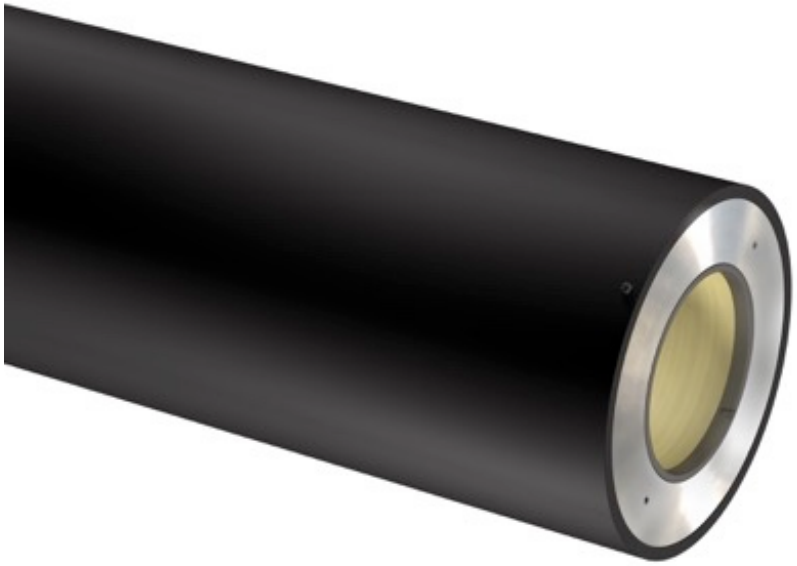
CARBO BRIDGE –
anti-bouncing adapter



- **High performance adapter with high modulus carbon fiber tube**
- For HD printing and very demanding jobs
- For high speed up to 600 m/min

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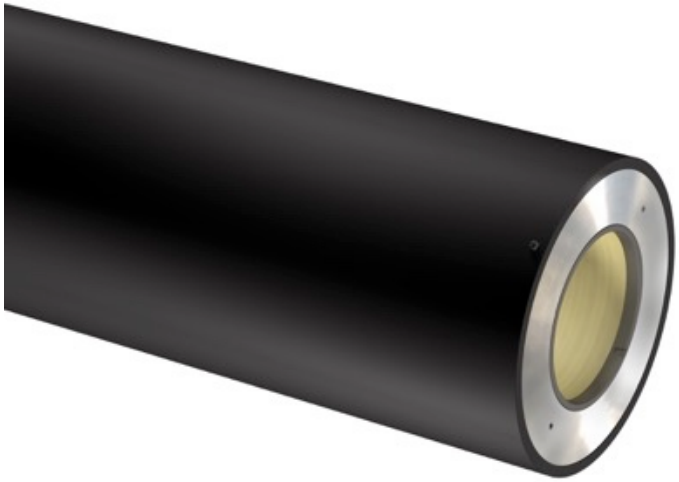
NEW SINCE 2019



FAST BRIDGE – *anti-bouncing*

- Ultra high modulus carbon fiber adapter for maximum bounce reduction
- For most difficult jobs and highest performance
- Approx. 30% higher anti-bouncing properties compared to Carbo Bridge

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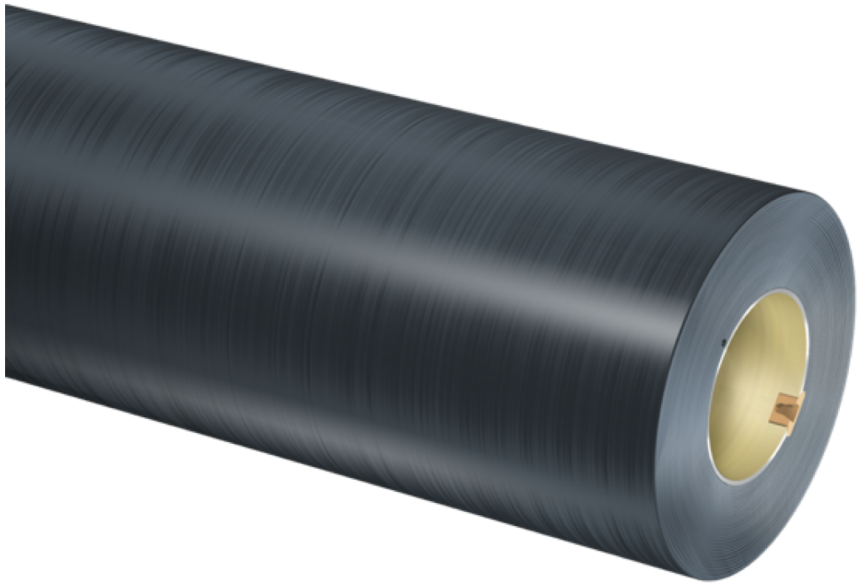
AIR CARRIER standard



- With carbon fiber surface
- For standard flexo designs up to 350 m/min
- For plate mounter and low wall thickness

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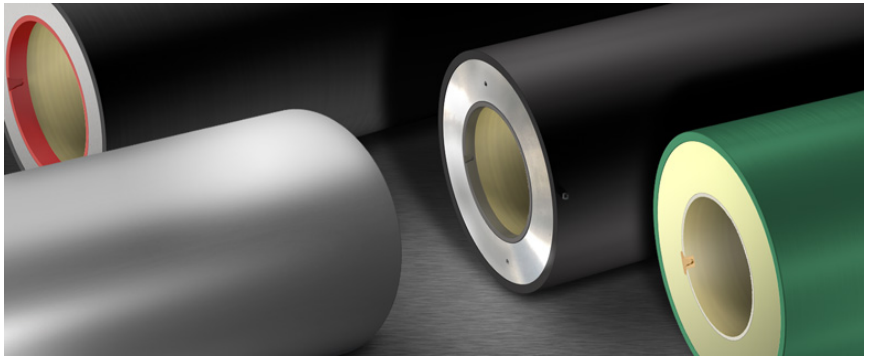
Benefits of investing in high quality sleeves & adapters



- Longer lifetime
- Reliable printing quality
- Shorter setup times
- Savings on material and machine hours
- Prevent complaints

INCREASE YOUR PRODUCTIVITY

IMAGE TO PRINT

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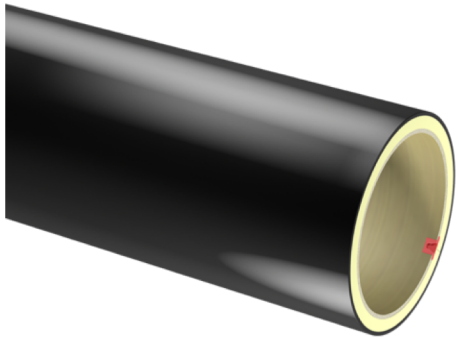
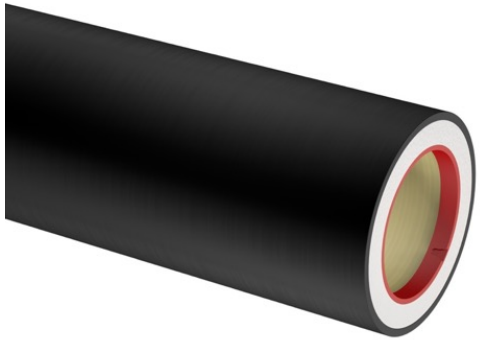
High quality plate sleeves of Rossini



Everstat Ω ***- conductive plate sleeve***

- For use with foam tape
- PU slot or protection ring at extra cost



Starcoat Light Ω – ***Top Line plate sleeve***

- **3 years warranty**
- **Maximum stability for long runs**
- For HD printing and very demanding jobs
- PU protection ring included

IMAGE TO PRINT

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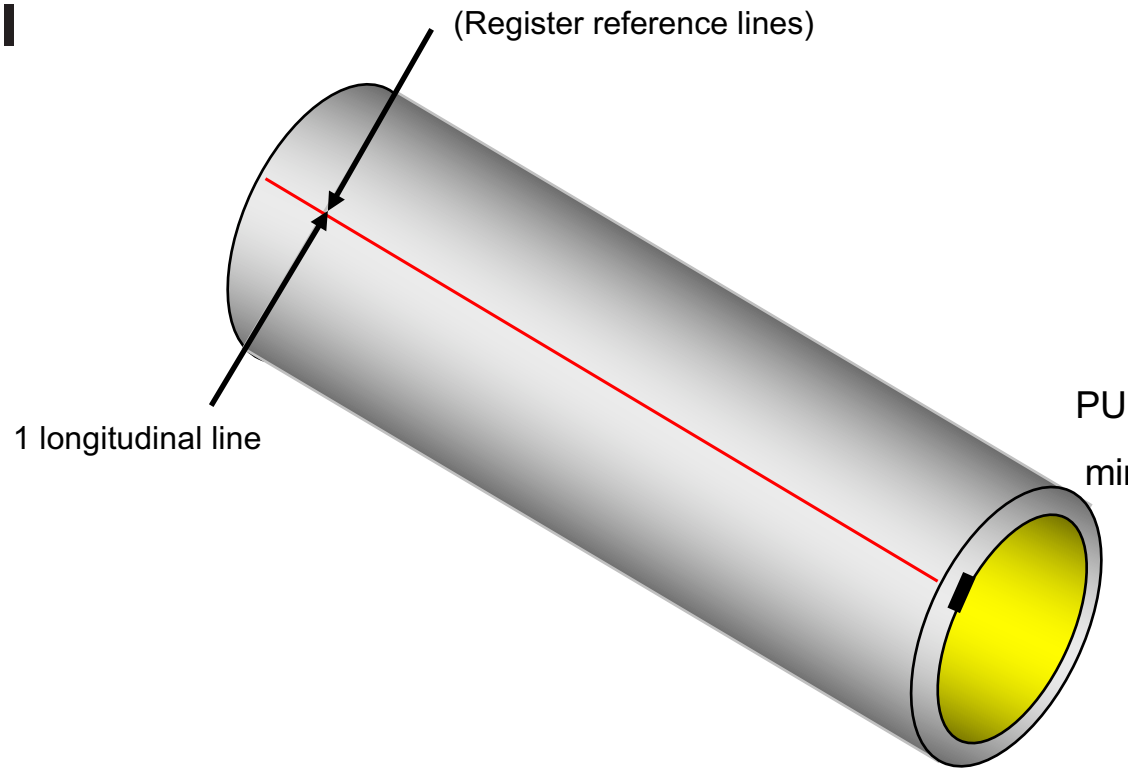
Scribelines – register slot & ring:



PU slot or ring available for

min. sleeve wall thickness

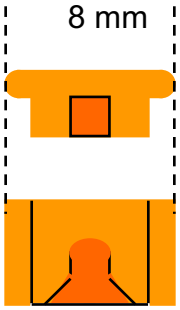


IMAGE TO PRINT

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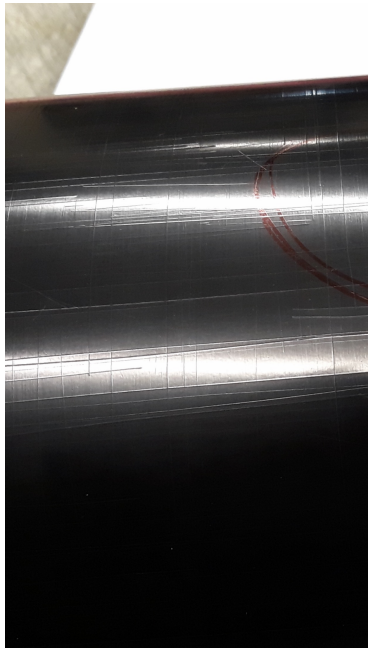
Wrong handling increases your costs



- Poor printing quality, i.e. BOUNCING (TIR problems)
- Longer set up times when trying to find the problem
- Shorter lifetime
- Waste of material and time
- Complaints

LOSS OF PRODUCTIVITY

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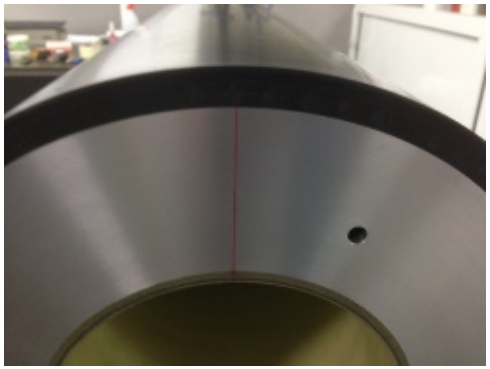
HANDLING - MOUNTING

Please handle sleeves and adapters with upmost care, as otherwise they will be destroyed or get TIR problems

- When mounting the sleeves, look at the line showing the position of the register pin
- Mount the sleeve/adapter over the air holes, wait until the air cushion has formed and then carefully position the slot over the pin



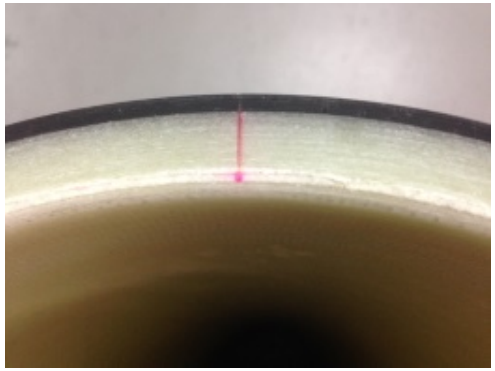


IMAGE TO PRINT

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CLEANING

Sleeves are chemically not well resistant, please be careful to clean correctly, otherwise sleeves will get swellings on the surface:

- Use mainly ethyl alcohol and max. 20% ethyl acetate for cleaning
- Use only little solvent on a cloth to clean the surface, never “bathe” sleeves in solvent
- Before mounting the tape, make sure that the surface is dry and no solvent remains underneath the tape

IMAGE TO PRINT

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PLATE MOUNTING

When cutting the tape, please **use a scalpel** and be very careful not to damage the surface of the sleeve!

IMPORTANT:

Use a **metal ruler** and press the scalpel against the ruler and not the sleeve!

IMAGE TO PRINT

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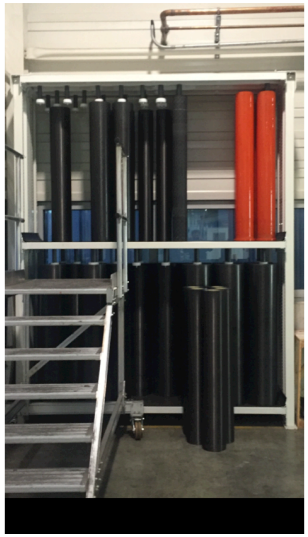
STORAGE



We recommend to store sleeves and adapters in vertical position to avoid deformation over time

Storage temperature should be 15-30° C

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Gravure impression roller sleeve:

SPEEDWELL

- Right shore hardness for your substrates
- Eliminate missing dots with ESA & the right ESAsleeve
- Importance of undercuts and surface grinding

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Shore hardness recommendations for impression rollers

70-75 Shore (A)	Flexible film
75-80 Shore (A)	Flexible film
80-84 Shore (A)	Flexible film, paper, aluminum, PVC
85-90 Shore (A)	Paper, aluminum, flexible film, cardboard

MOSTLY USED HARDNESS

IMAGE TO PRINT

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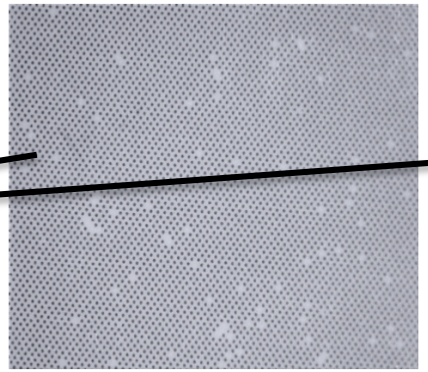
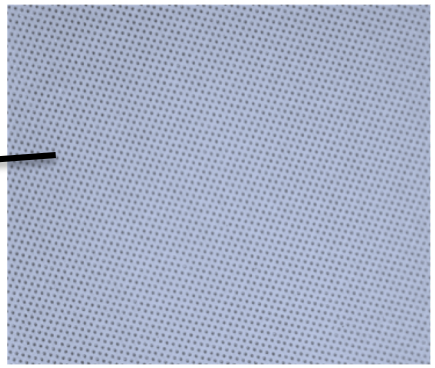
ESA Electrostatic Printing Assistance

Creates an electrostatic field in the nip area helping the gravure cylinder cells to transfer the ink to the substrate:



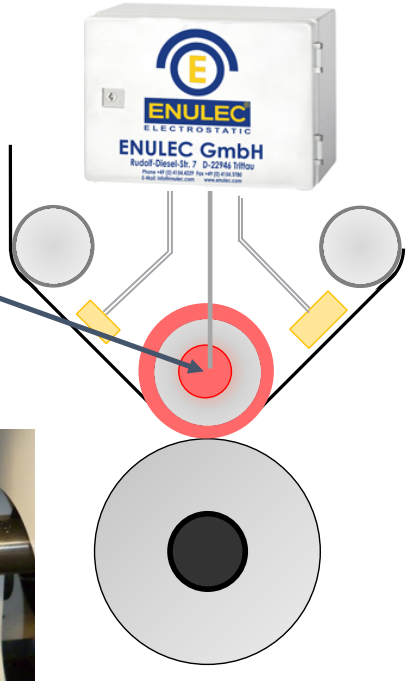
Without ESA



With ESA

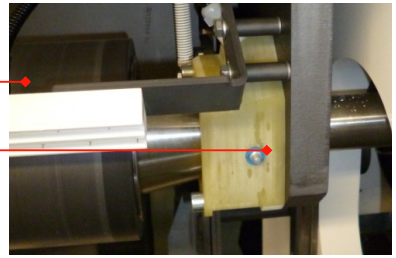
ESA system ENULEC direct charge

Direct charging of isolated impression roller with patented safety earthing technology



Antistatic bar

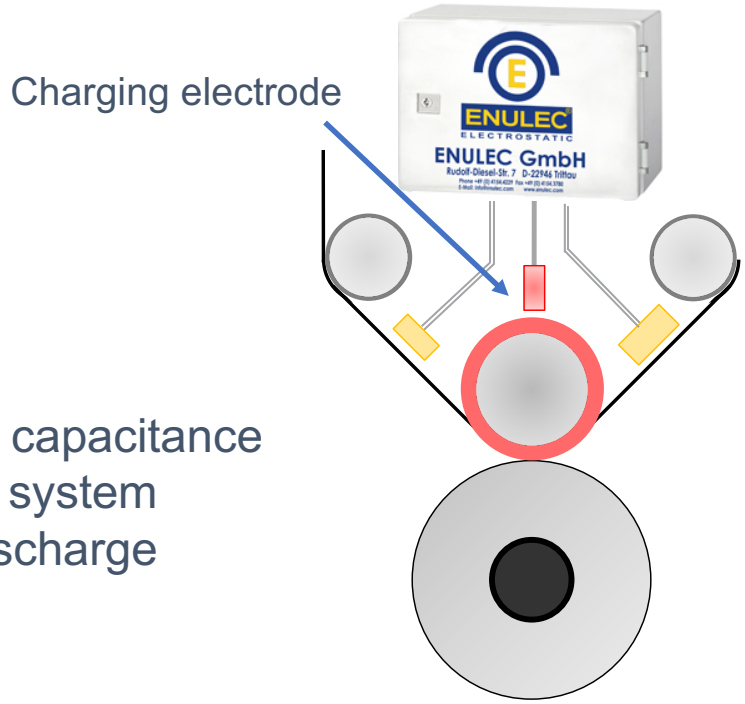
Isolated bearing



Values for ESAsleeve:
Ro 1-8 Mohm (homogenous)
Conductive sleeve core

At WORKING temperature!

ESA system ENULEC top loading



- the only European capacitance free ESA charging system
- Instant charge / discharge

Values for ESAsleeve:
Ro 1-20 Mohm
(homogenous)
Ri 1-2 Gohm

At WORKING temperature!

ROSSINI

RED & BLACK ESAsleeves
100% reliable Ro and Ri values

SPEEDWELL

Red ESA - ATEX certified

- For film, laminates and paper
- *strong in half tones*
- *Food contact certified*
- *Clean with 25% acetate and 75% alcohol*

Black ESAsleeve

- For paper, laminates and film
- *strong in full tones and for higher pressure*
- *Food contact certified*
- *Clean with 25% acetate and 75% alcohol*

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CARBOsleeve Ω – conductive sleeve

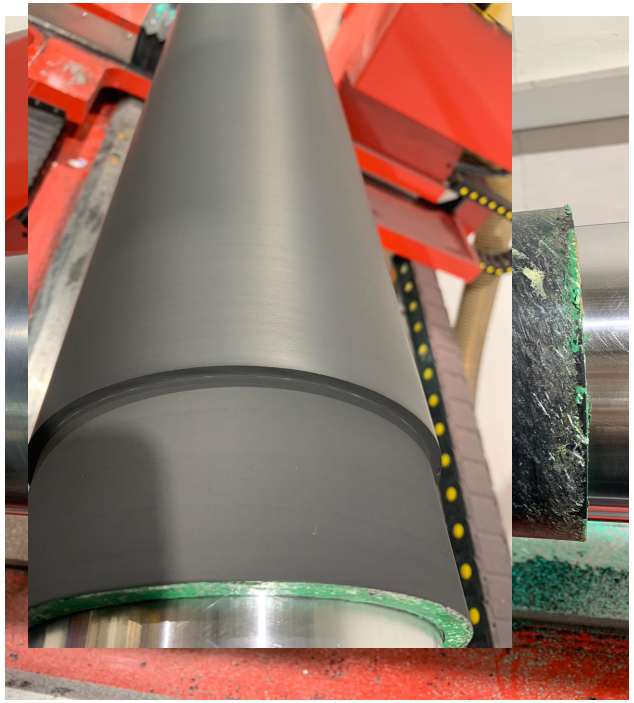
for printing metalized film, metallic inks, aluminum

SPEEDWELL

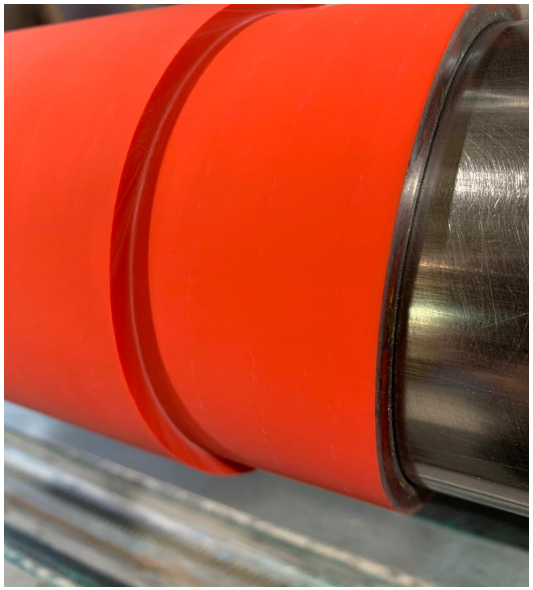
- **Neopress G STAT up to 80 Shore (A)**
  - 25 kg/Lcm
  - clean with 100% acetate
- **Neopress C STAT up to 90 Shore (A)**
  – 40 kg/Lcm
  - clean with 50% alcohol and 50% acetate
- ***High conductivity (< 0.1 MOhm)***
- *Food contact certified*

IMAGE TO PRINT

Grinding and undercuts



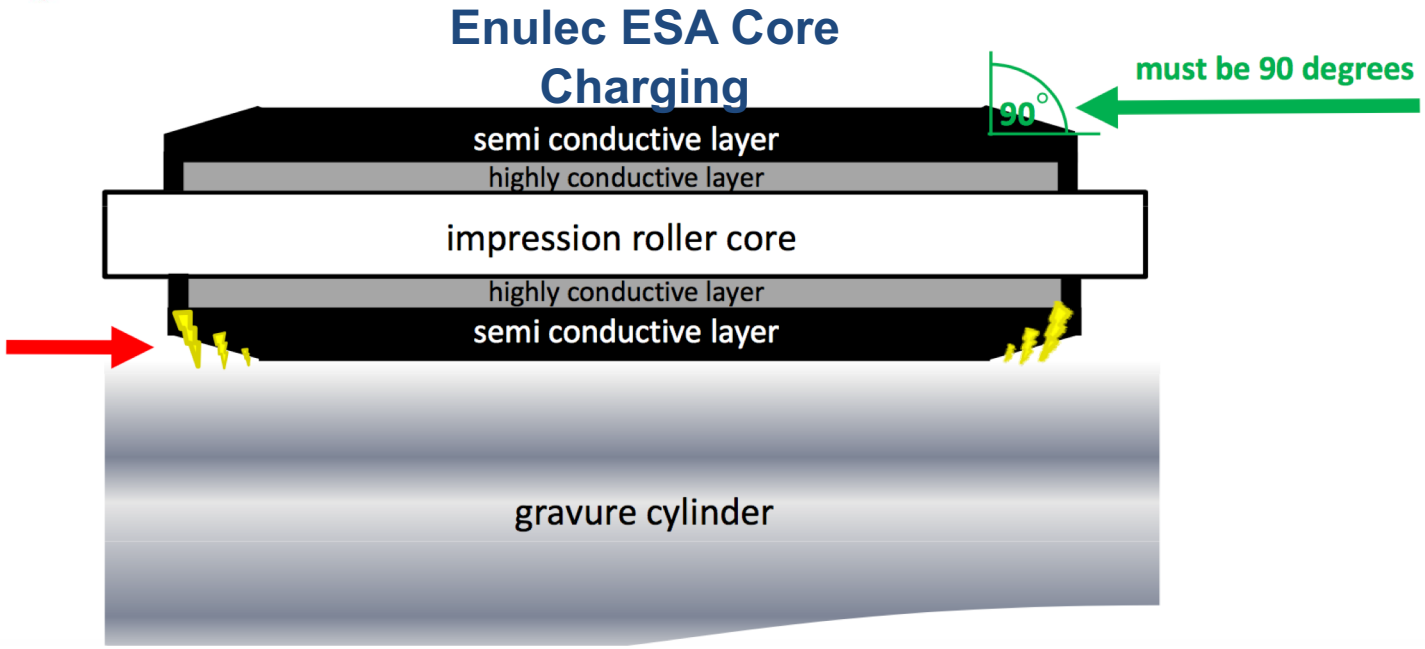
Sleeve after grinding



Undercut rubber 2 x 5 mm shorter than the substrate

1. To improve the printout
2. To prevent ink from accumulating on the rubber

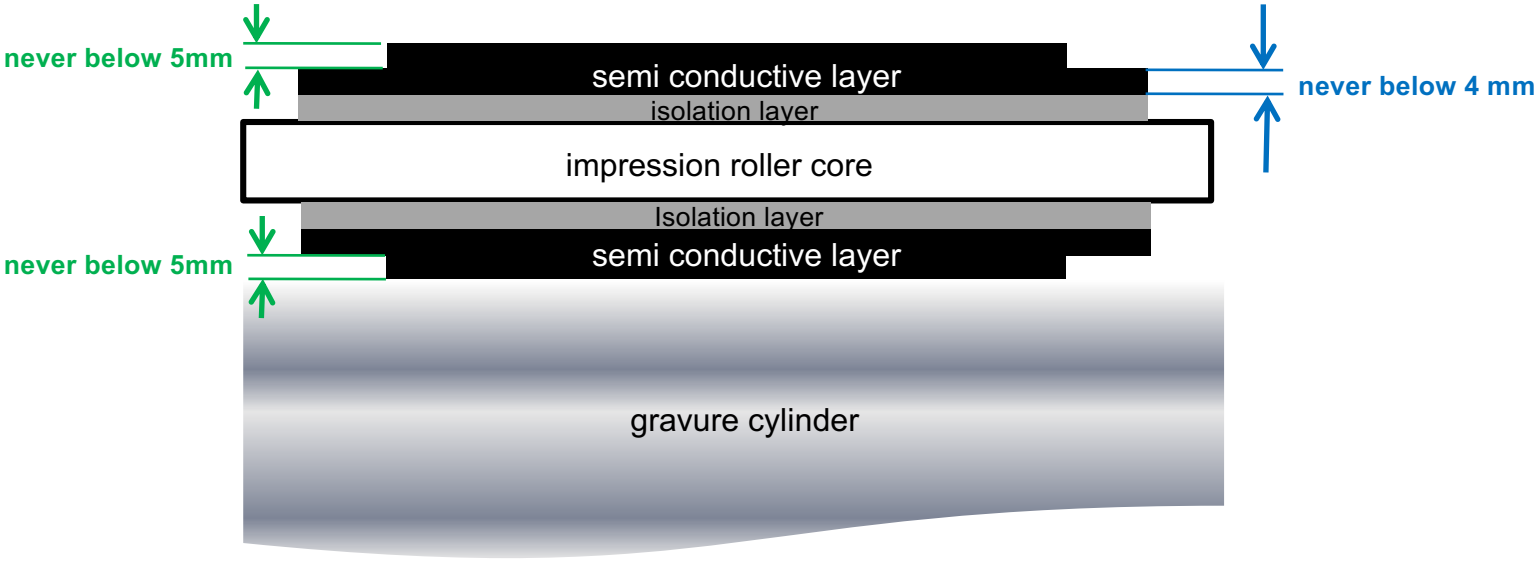
Wrong undercutting on ESA rollers!



very safe

Correct undercutting on ESA rollers !

Enulec ESA Top Loading



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Be flexible and grind your sleeves & rollers in-house:

Rossini PRIMA PLC

- User-friendly automatic grinding machine
- especially designed for efficient grinding of rubber rollers and sleeves

IMAGE TO PRINT

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Your partner for high-quality products and service

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