

ROTACOAT[®] 326 Q Red

One-component rotary-printing emulsion for textile and wallpaper printing

ROTACOAT 326 Q Red is used for the engraving of rotary printing screens by conventional film, wax and ink-jet, BlueRay laser or DLE CTS systems. It has excellent flow properties, is mild in odour with very good resolution and reproduction of details. After heat-curing, it shows excellent resistance to all commonly used printing pastes. ROTACOAT 326 Q Red can be used for laser engraving.

SENSITIZING Not applicable as ready for use.

SCREEN PRE-TREATMENT Before coating the nickel rotary screen with ROTACOAT 326 Q Red, we recommend to degrease/ pre-treat it with ARCACLEAN NOVO, so that the photoemulsion has good adhesion to the nickel screen.

COATING Standard preparation for machine coating:

Single squeegee respectively immersion coating from top to bottom, coating speed 12-15 cm/ min:

1000 g ROTACOAT 326 Q Red
200-300 g water

Double squeegee coating from top to bottom:

1000 g ROTACOAT 326 Q Red
0-50 g water

The exact quantity of water to be added has to be adjusted to the individual coating method (e.g. type of squeegee, coating speed etc.) and printing job. Before coating, allow the lacquer to degas for at least 2-3 hours.

DRYING The coated rotary screen is dried approx. 40 min. at approx. 30-40°C in a dust-free drying cabinet with air exchanger. Do not expose the coated and dried nickel rotary screen to daylight or any other UV-light before exposure.

When using ROTACOAT 326 Q Red as laser engraving lacquer, the coated nickel rotary screen can be dried at room temperature or at higher temperatures (max. 70°C) in a drying cabinet. Do not dry at temperatures exceeding 80°C in order to avoid formation of bubbles.

ENGRAVING

A. Engraving by exposure:

Expose the coated and well-dried screen to blue actinic light in the wave length range of 320-380 nm. Best results have been achieved with metal halide lamps.



Owing to the high number of parameters that can influence on exposure time, no absolute values can be stated. Optimum copying results can only be achieved by trials (step exposure).

Developing: After approx. 5-10 min. in a water bath of 15-20°C, rinse with clear water or develop in a developing machine. After developing and drying, heat-curing should be done as described in paragraph „HARDENING/ HEAT CURING“.

B. Laser engraving:

The dried rotary screen” is being cured as described in paragraph “HARDENING/ HEAT CURING and can now be engraved with laser. The frequency and energy setting of the laser-engraving machine depend on the lacquer type and the emulsion thickness. They have to be adjusted in a way that the lacquer burns-off completely. For optimal resistance during printing the screen has to be exposed completely before curing.

**HARDENING/
HEAT CURING**

The well-dried screen (drying cabinet!) is heat-cured for 60 min. at 180°C. Ensure an even and uniform temperature in the curing oven (+/- 5 °C).

Before heat curing, ROTACOAT 326 Q Red can be decoated with PREGASOL products. Ask ARC for further information.

RETOUCHING

For retouch works, retouching lacquers of our ESTELAN programme can be used. For repair works on the screen, whilst in the printing machine, we recommend using the extremely fast-drying one-component lacquer ESTELAN 440.

NOTICE

The printing resistance of a rotary screen depends on many different parameters, e.g. surface of the nickel rotary screen, dilution of the laser lacquer, curing conditions etc. Furthermore, in practical work, a large variety of printing media and printing machines are in use, which cannot be included completely in our preliminary tests. Therefore, we ask you to order samples of this photoemulsion, so that you can conduct your own trials under local working conditions. This is the best way to establish that our products meet your requirements. We accept responsibility for consistent screen quality only under our working conditions.

COLOUR

Red

VISCOSITY

Approx. 2200 mPas (Rheomat RM 180, MS = 33, D = 100 s⁻¹, 23°C)

**SAFETY ADVICE/
ENVIRONMENTAL
PROTECTION**

When working with ROTACOAT 326 Q Red, especially during drying, heat-curing and engraving, ensure good ventilation of the working area.

Please see further information given in the Material Safety Data Sheet.

STORAGE

1 year (at 20-25 °C and in closed original container). Protected against frost.