

# — Holders Technology —

## The new Generation of Diazo Film CIMTRANS D-18



CIMTRANS D-18 are advanced diazo photo tools with technical properties beyond CIMTRANS DP-II which has been in use as standard diazo photo tool all over Europe for many years.

Compared to competitive diazo tools D-18 has a number of advantages such as excellent thermal stability, higher resolution, and improved edge sharpness due to thinner, homogenous emulsion. A multi laminate bag provides better moisture protection and a convenient flap for re-sealing.

Unlike silver halide films D-18 can be handled in room light for brief periods and is processed using ammonia vapours and moderate heat < 65 °C.

CIMTRANS D-18 do absorb little heat during exposing and imaging, thus remain sizes

D-18 is sensitive to UV/violet radiation (390 nm peak sensitivity). Mercury vapour lamps are typically used for exposure.

A conventional diazo developer (e.g. HT CIMATEC TEM 22 WP) can be used for processing. Most units employ aqueous ammonia (20-23° Baumé, 22-28 % ammonia) with a chamber temperature of approx. 65 °C. The amber image colour can make a visual density determination difficult. For this reason we recommend to pass D-18 through the developer twice to assure complete development. A diazo print cannot be overdeveloped. The D-18 print can be used immediately after processing, no other finishing is required.

The dye image provides a high UV density coupled with visual see through. This feature provides opacity for resist exposures and yet allows for visual registration. D-18 features excellent dye stability which allows for multiple exposures as a photo tool.

### Technical Benefits

- Positive working diazo film
- Manufactured under DIN ISO 9000
- Room light use
- Quick and simple exposure and development
- Wide spread processing windows
- Retouchable with Kimoto Super-Pake retouching pens
- Excellent dimensional stability
- Very high resolution and edge sharpness
- Hardened image layer for multiple exposures of solvent based liquid resists
- Very high image density > 4,3 UV
- Very low see through density < 0,10 UV
- Excellent visual see through < 0,06
- Translucent image for visual registration

- Notch right hand top = emulsion side top
- Soft matting for easy processing in vacuum frame and for reducing Newton rings
- Antistatic surface
- Multi laminate, metalized bag exceeds shelf life up to 12 months

### CIMTRANS D-18-Types

- **D-18-M:** matted emulsion side, recommended for exposing liquid solder masks
- **D-18-G:** glossy emulsion side, recommended for exposing dry resists

### Economical Advantages

- CIMTRANS D-18 is very economically priced
- Easy and quick processing at room light
- Quick registration
- Long shelf life without loss of quality
- Many exposures of solder masks. Customers report of 200 and even more runs per film!

### Sizes and Packaging

Size in mm	Sheets per Box
300 x 400	100
405 x 508	100
457 x 610	100
508 x 610	100
508 x 660	50
610 x 762	50
660 x 813	50
Special sizes and rolls on request	

### Technical Data

Dmax: > 4,30 UV  
Dmin: < 0,10 UV, < 0,06 visual  
Resolution: > 1 000 lines/mm  
Gauge: 180 µm ± 4  
Colour: amber  
Shelf life: approx. 12 months at < 20 °C/ < 50 % rH

For further information please refer to "Product Usage Information CIMTRANS D-18" and "Diazo-film-Technology"

### Accessories

- Retouching pens
- Temperature labels
- Stouffer step wedges
- Hydrometer
- CIMCLEAN DTS-Dust-Transfer-Systems

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### **General safety information**

- Only use the product for applications described in the product data sheet
- The product is intended for industrial use only
- The product is not suitable for food industry
- The product must not be eaten
- In case of fire noxious fumes or smoke can be generated