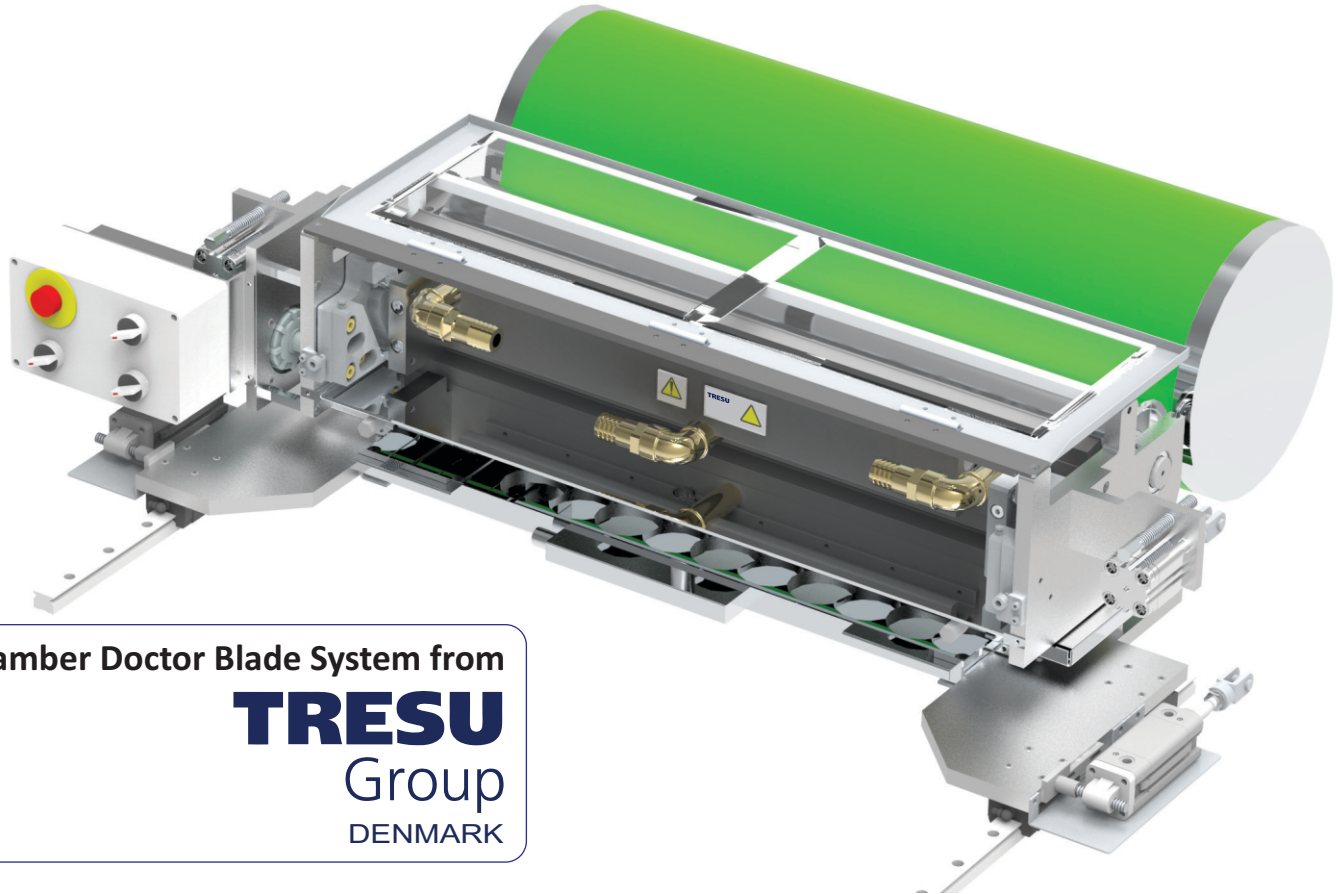


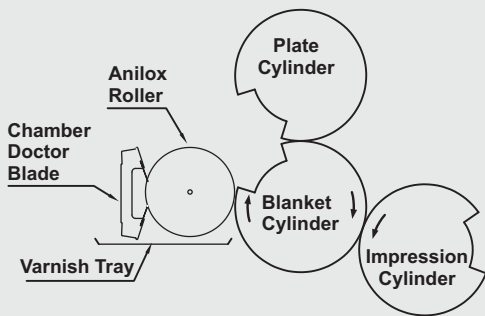
UNIQUE UV

Blanket Anilox Coater

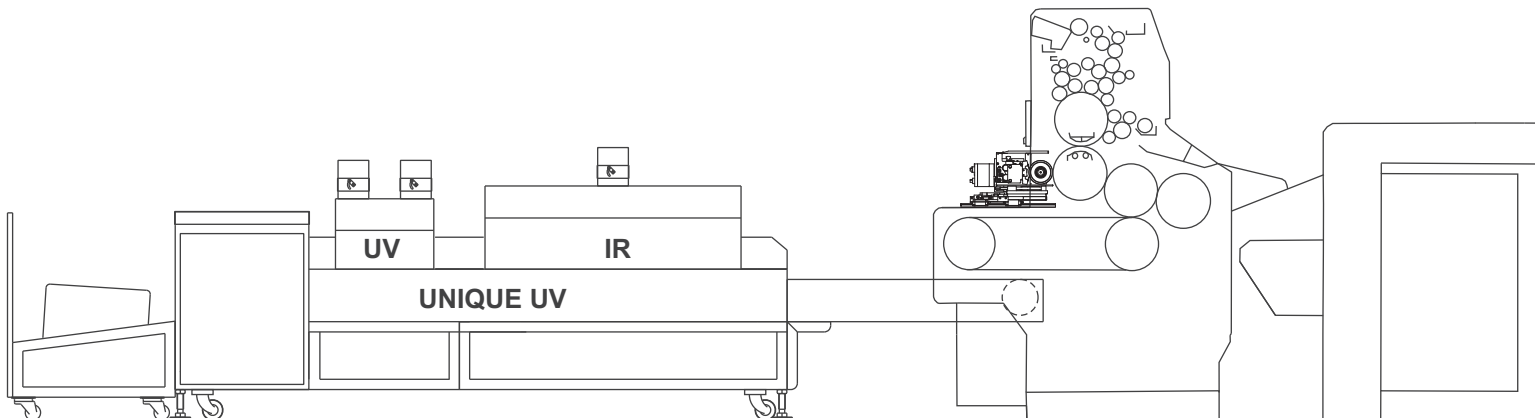
*With Chamber Doctor Blade System
for Sheet-fed Offset Printing Machine*



Chamber Doctor Blade System from
TRESU
Group
DENMARK



Offline Coating
UV Varnish Coating
Aqua Varnish Coating
Drip-off Effect Coating
Spot / Full Coating



UNIQUE UV

System

UNIQUE BLANKET ANILOX COATER is specially developed to retrofit on any Single Colour or Two Colour Sheet-fed Offset Printing Machine. It can apply Over-print varnishes, such as UV Varnish or Aqueous Varnish, and also pigmented coatings; such as pearl, metallic, and Matte coatings, which are difficult to apply with a roller coater.

It consists of one Anilox Roller with Chamber Doctor Blade, Automatic Coater impression ON/OFF pneumatics, PLC based speed control and synchronising control panel, one Varnish circulation pump, one Varnish Storage Tank.

The Anilox roller is driven by a variable speed AC Servo Motor (Panasonic, Japan), which is operated by Variable Frequency AC Servo drive and Japanese make Gearbox.

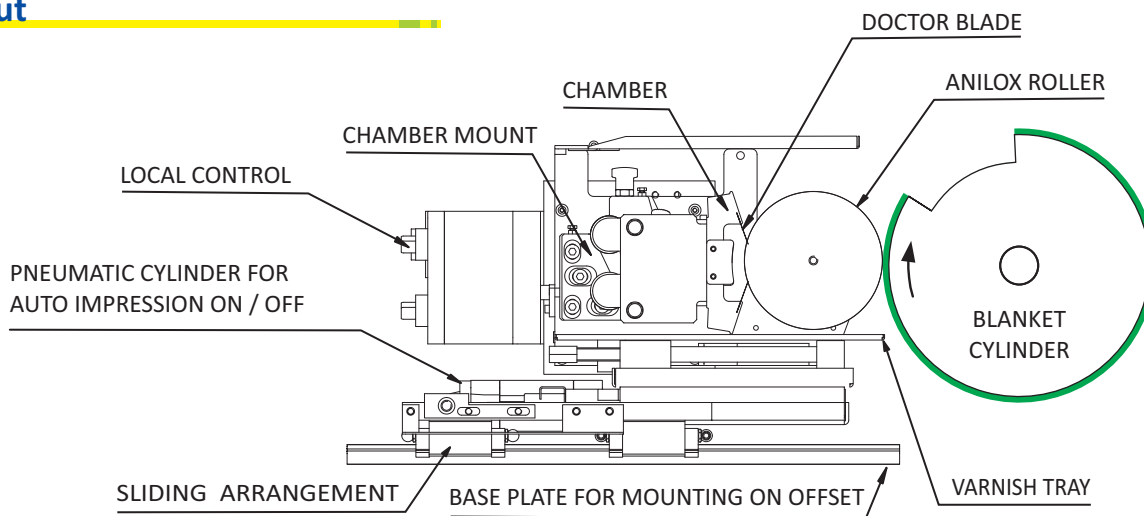
Blanket Anilox Coating system is fully controlled by PLC. Step by step settings are displayed on Touch Control HMI by PLC. This makes easy operation for first time user as well. On Power ON, coater is put in Manual mode by PLC. In this mode each and every step of setting is clearly displayed on HMI. Once all the settings are complete PLC instructs operator to select Auto mode. In auto mode, Anilox roller speed is automatically set in synchronism with blanket speed & it starts coating process.

Most important feature: In Impression-off condition of offset, Anilox roller is retracted 5 mm away from blanket by pneumatic cylinder. However Anilox roller is kept rotating. This avoids drying of Varnish on Roller and in Tray. This is great help in case of Water based varnish coating. As soon as operator puts offset in Impression-ON then coater again makes contact with blanket and starts coating. This is automatically controlled by PLC.

Wash process step can be selected in Manual mode by simply touch of HMI screen. In this step entire coater unit is pneumatically retracted away from blanket cylinder. This makes enough space between blanket and roller for easy cleaning of blanket / Anilox roller or blanket changing.

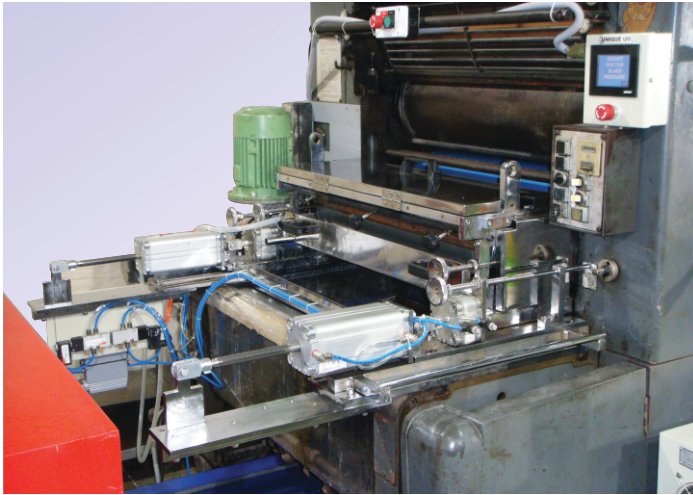
Coater unit is mounted on Guide rails & Linear bearing blocks. This makes its movements smooth and free from vibrations.

Layout

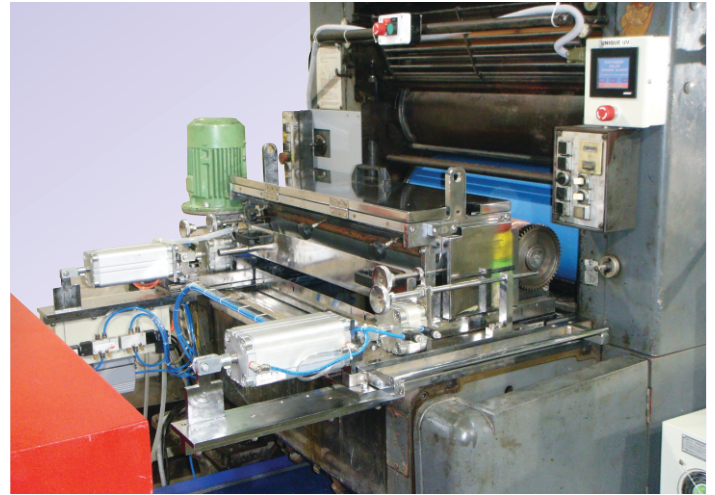


Salient Features

- TRESU, Denmark make Chamber Doctor Blade System.
- This contains varnish in closed reservoir and avoids evaporation of solvent in coating, if any; and also avoids dust.
- Uniform thickness of coating achieved.
- Easy Touch Control Console for operator.
- Avoids Orange peel effects.
- Accurate Spot coating by using Photo-polymer plate on blanket cylinder.
- Easy replacement of Anilox roller for different coating thickness, if desired.
- Easy setting of Doctor Blade for Doctor Blade for cleaning / replacement.
- Anilox Roller touches Blanket only when printing unit impression pressure is ON .
- Anilox Roller and Blanket contact impression ON and OFF mechanism is controlled by Pneumatic cylinders with fine adjustment.
- Anilox Roller's contact with Blanket can be fine-tuned by individual controls at both ends of roller. This is to be adjusted only once the system is mounted on press.
- Automatic retractable coating unit. Quick cleaning / changing of Anilox roller / blanket.
- Easy retraction of Coating unit allows Offset machine use for conventional printing in Coater retracted position.
- Firm base plate mounting with strong fasteners on the machine body.
- Coater parts are made of Anodised Aluminium for long life performance. Varnish Trays & Tank are made of Stainless Steel.

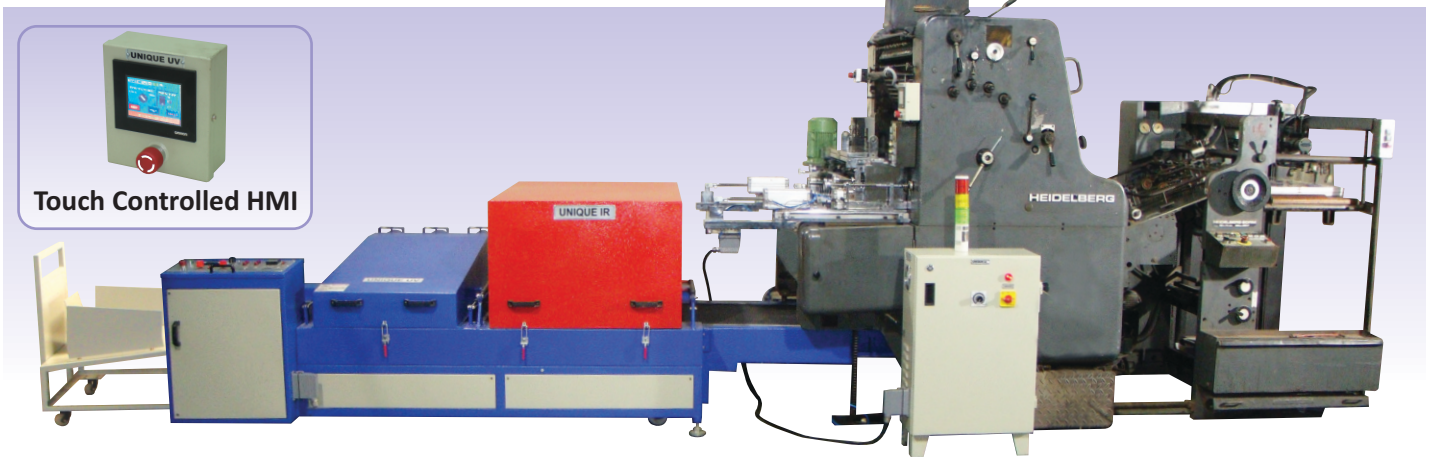


Coater inserted for coating process.



Coater retracted for blanket replacement or cleaning.

Typical Installation



Specifications

Offset printing machine size (inches.)	19"x25-1/2"	20-1/2"x29-1/8"	25-1/4"x36"	28-3/8"x40-1/8"
Offset printing machine size (cms.)	48 x 65	52 x 74	64 x 91.5	72 x 102
Offset printing machine model (Recommended)	SORK/Z	SORM/Z	SORD/Z	SORS/Z
Maximum Coating width of Anilox roller (cms.)	65.4	72.4	89.4	102.4
Anilox Roller	Chrome plated steel			
Speed	7000 imp / hr (max.)			
Drive	Independent AC motor with Variable frequency AC drive			
Speed control	Automatic, Linear speed of Roller is in synchronism with blanket			
Roller to Blanket contact	Pneumatic			
Varnish Circulation Pump	Air Operated Double Diaphragm Pump			
Electrical power supply	3-phase + neutral + earth, 415 V, 50 Hz, AC			
Electrical power consumption of Coater	750 Watts (1 HP) approx.			

- Blanket Anilox Coater is supplied duly fitted 1 Chrome plated Anilox Roller. Optional: Additional Chrome plated Anilox Roller or Ceramic coated Anilox Roller is available against specific order.
- Varnish handling system: 1 set of Stainless Steel tank for Varnish Storage, 1 Peristaltic Pump & Flow control valve / faucet is provided with this Coater. Optional: Additional Tank, Pump, Pipes & Faucet can be ordered for different types of coating.
- Blanket Anilox Coater can be custom-built to retrofit on offset machine other than above mentioned model / size. Please contact us with press details.

Buyer's scope: 1. Air-compressor - 1 hp (min.), 6 bar pressure.
 2. Compressed & Filtered Air supply pipe connection from Compressor to Coater.

Blanket Anilox Coater can also be retrofitted on Two-colour offset printing machine having low-pile delivery. Drip-off Coating process can be successfully done off-line with this arrangement. The "Drip-off" coating technology is a special coating application method which creates matt-gloss effects.

This special coating effect is possible because of the properties of specially formulated two types of overprint Varnishes. These two varnishes have different characteristics, specially the different surface tension of both products. When these different coatings are applied wet-on-wet and then cured; enable a graphical effect.

The simultaneous application of spot matt varnish and full size Glossy varnish results in a spot coating job without the need of a Photopolymer-plate (Flexo-plate) which is expensive to make and needs long time to register.

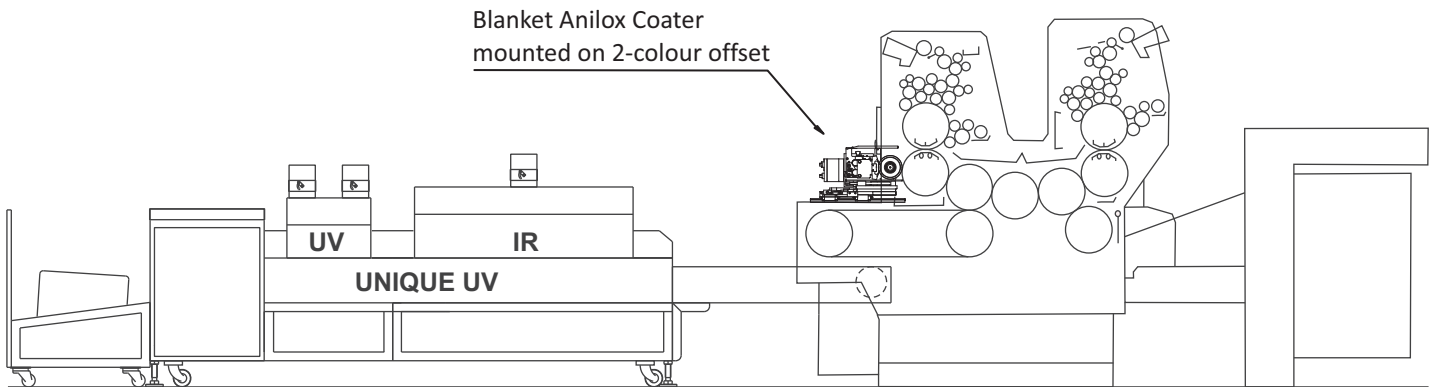
The advantages of Drip-off effect coating method:

1. Cost efficient and time saving method for spot coating jobs.
2. Possibility to produce finest lines, signs and letters through the matt-gloss difference properties, which are not achievable with a Photopolymer-plate.

To produce the special "Drip-off effect" coating offline, following machine configuration is recommended:

Offline Drip-off effect coating :

1. Two-colour Offset Printing Machine.
2. UNIQUE UV BLANKET ANILOX COATER.
3. UNIQUE UV Conveyorised UV Curing Machine.



Process steps:

First printing unit is used to apply a special Matt UV print varnish to the areas that are to have a matt appearance. The areas which are to appear glossy need to be omitted on the Printing Plate. On Printing Plate, Image area is the area which should look matt. (If PS plate is used, then it is baked in PLATE BAKING OVEN, before mounting on plate cylinder.)

Next, the Coater is used to apply a full-area UV high-gloss coating wet-on-wet or wet-on-dry using one Inter-deck UV System. (Using UNIQUE UV BLANKET ANILOX Coater, through Blanket of second print unit)

UV Gloss coating repels (drips off) the areas which were previously given a matt coating. This gives matt effect on these areas and gives the remaining areas a glossy effect.

Recommended Special UV Varnishes for Offline Drip-off effect coating:

First print unit: Ink duct coating	Drip-off Matt UV
BLANKET ANILOX COATING unit on second print unit	High Gloss UV

Disclaimer: All brands of other organisations mentioned in our catalogue are duly respected. The Models of offset machine mentioned in the catalogue are property of Heidelberg, Germany. They are for mere reference and no claim is / will be made by us for any benefit.

Factory & Registered Office



Manufactured by :

UNIQUE UV AND LIGHT PVT. LTD.

Plot. No. 6, Opp. Dattani Industrial Estate,
Off. Western Express Highway, Near Prakash Dal Mill,
Vasai Phata, Vasai (E), Maharashtra - 401210, INDIA.

Phone : +91-88305 83400 | email : uniqueuv@gmail.com
 : +91-88305 83433 | : info@uniqueuv.com
 : +91-88508 69620 | website : www.uniqueuv.com



Note: **UNIQUE UV** is continually developing better designs and therefore reserves the right to change or amend product or Technical details without prior notice.