

ELECTROFORMING

Electroforming is a process of converting holographic image (relief) from photo-resist or plastic to metal (nickel).

The full set includes two type of processes needed two independent sets of equipment with different solution composition. They are called "unstressed" and "stressed" electroform modules.

1. Production of Master shims - transforms image from Photo-resist glass or recombined plastic to nickel copies.
2. Production of Work shims - Work shims are copies from Master shims.



Equipment:

Tank
Rectifier
Current regulator
Heater
Thermostat
Pump
Filter
Titanium bag





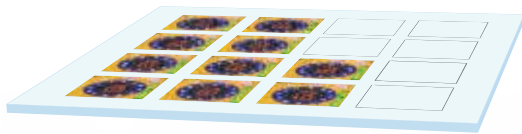
LIDOGram



MECHANICAL RECOMBINER

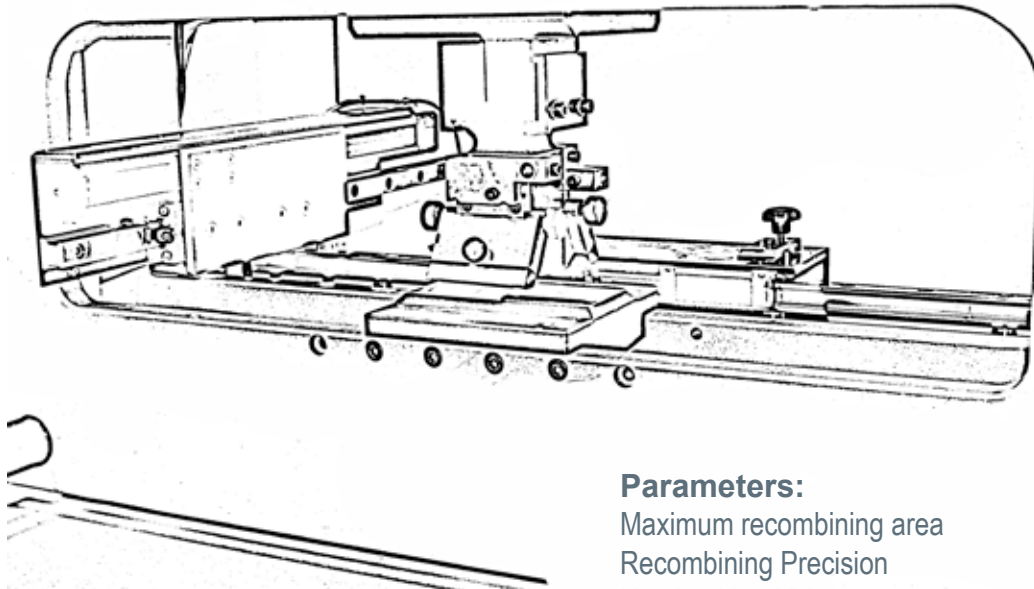
MECHANICAL RECOMBINER

The recombining machine is designed for multiply single holographic image to produce master embossing shim. A thin nickel shim is pressed into a thermoplastic material and heated electrically. X-Y step and repeat system allows the machine to operate automatically.



Systems:

- Automatic controlled X-Y table;
- Automatic hydraulic pressure station;
- Power generator with precision pulse shape control;
- Automatic N2 cleaning system;
- PC Windows control.



Parameters:

Maximum recombining area	300 x 300 mm
Recombining Precision	0.05 mm
Heating Head Diameter	35 x 35 mm

Electrical supply	380V/50HZ/4kW
Air supply	6 MPa
Weight	600 kg
Dimensions	120/120/100 cm
Power Supply Dimensions	90/90/75 cm

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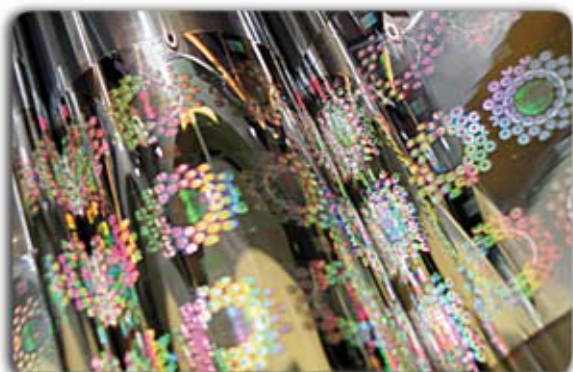


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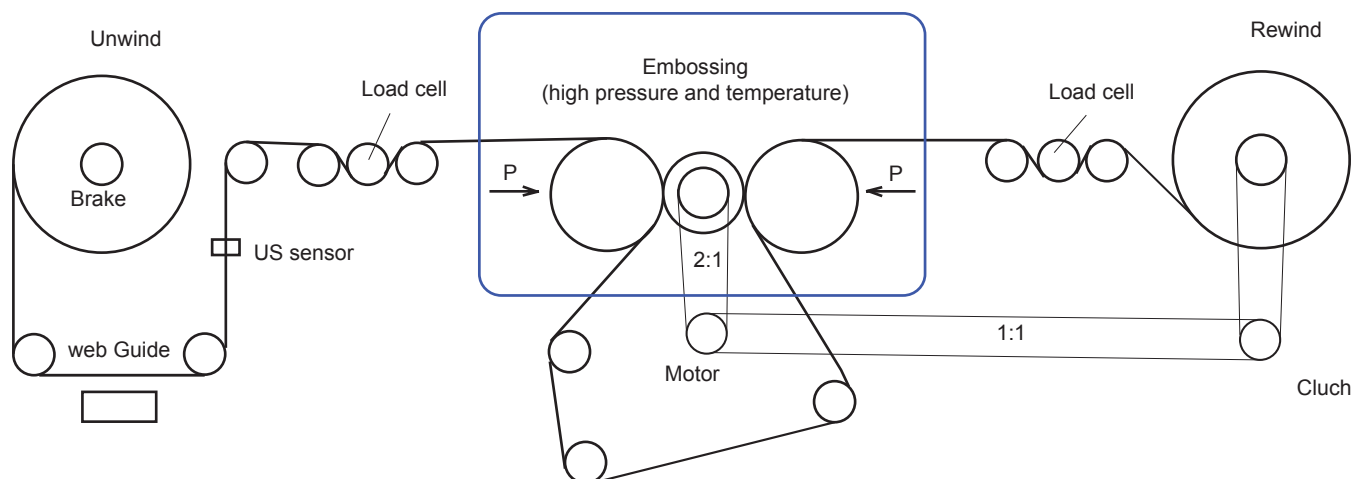
NARROW WEB EMBOSSE

NARROW WEB EMBOSSE



Embossing unit - 3 rolls (hard or compliant set)
Automatic tension control
Automatic control of between-frames distance
Automatic web-guiding
Automatic heating control
Pneumatic 3"/76mm unwind and rewind shafts
Splice detector

Maximum web processing speed	30 m/min
Maximum roll width	300 mm
Maximum roll diameter	450 mm
Foil thickness	12-100 mic



Electrical supply	220 V, 6 KW
Air supply	6 MPa
Weight	750 kg
Dimensions	200/75/130 cm

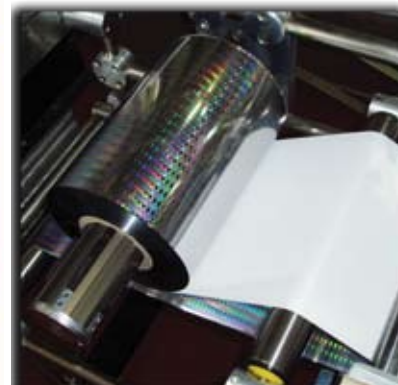
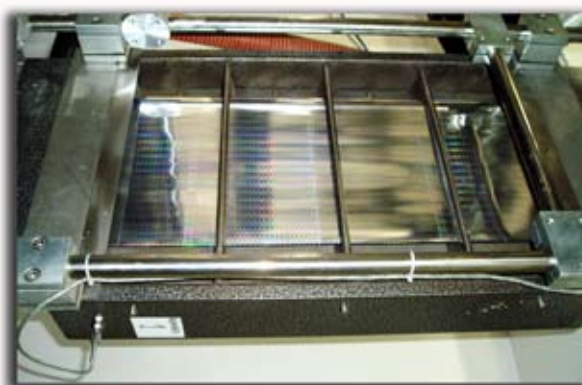
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COATING EQUIPMENT



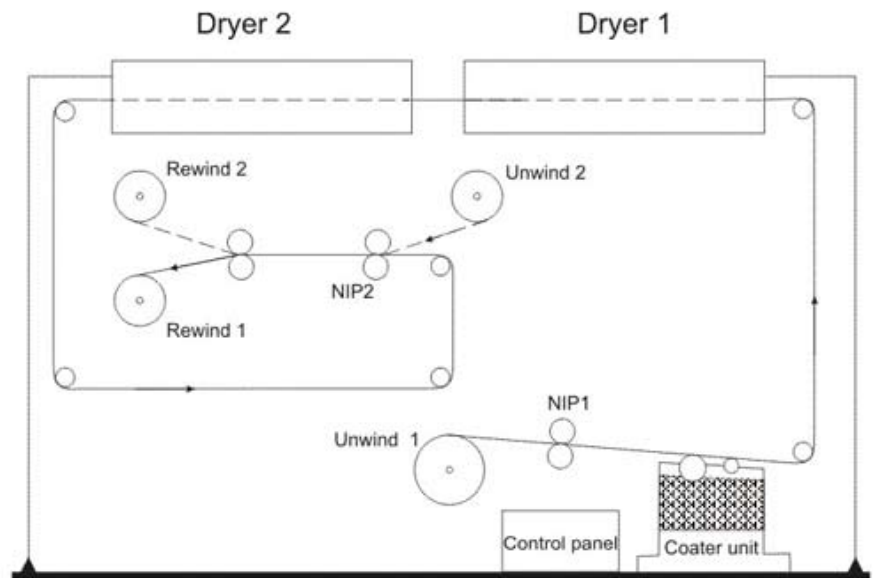
COATING EQUIPMENT

Equipment for applying surface adhesive coatings
on to reel substrates.
Explosion proof performance.

Systems:
Foil unwind-rewind system
Coating unit
Drying system

Foil unwind-rewind system:

Two Unwind units with pneumatic brake control
Two Rewind units with pneumatic clutch control
Two pneumatic operated NIP units
Automatic core Chucks
Web speed display
Web width 305 mm
Maximum foil speed 25 m/min
Explosion proof electric main drive
Control panel



Drying system:
Hot air drying system – 2 or 4 channel
Supply fan
Exhaust fan
Control panel
Hot air proof hose
2 chill rolls

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LIDOGRAM

SLITTING REWINDING MACHINE



Reversible rewind
Slitting type: share and razor
Tension control: manual and automatic
Web-guiding system
Splicing table
Inspection table
Label & length counter
Flag detector
Pneumatic coreholders

Parameters:

Maximum web processing speed	80 m/min
Maximum roll width	330 mm
Maximum unwind roll diameter	750 mm
Maximum rewind roll diameter	12-100 mic
Minimum slit width	10 mm
Core diameter	3"
Electrical supply	220 V, 3 KW
Air supply	6 MPa
Weight	400 kg
Dimensions	200/100/180 cm

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LIDOGRAM



FOIL-STAMPING MACHINE

FOIL-STAMPING MACHINE

The conventional printing press **HEIDELBERG Cylinder**

is converted into foil-stamping equipment.

The equipment is suitable for:

1. Hot stamping with pigment and pattern holographic foils;

Parameters:

Maximum sheet size	56/77 cm
Maximum press area	50/70 cm
Maximum foil roll width	70 cm
Maximum foil roll length (12 mic)	300 m
Maximum work speed	2000 sheet/hour

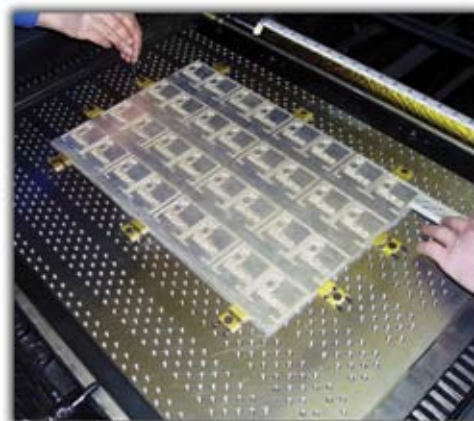
Foil system:

Up to 4 foil pull system

Precision tension control

Wrinkle removal rolls

Hologram-registration system with precision tension control



Electrical supply	380 V, 15 KW
Air supply	6 MPa
Weight	6000 kg
Dimensions	360/190/160 cm

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MULTY-FUNCTIONAL MACHINE

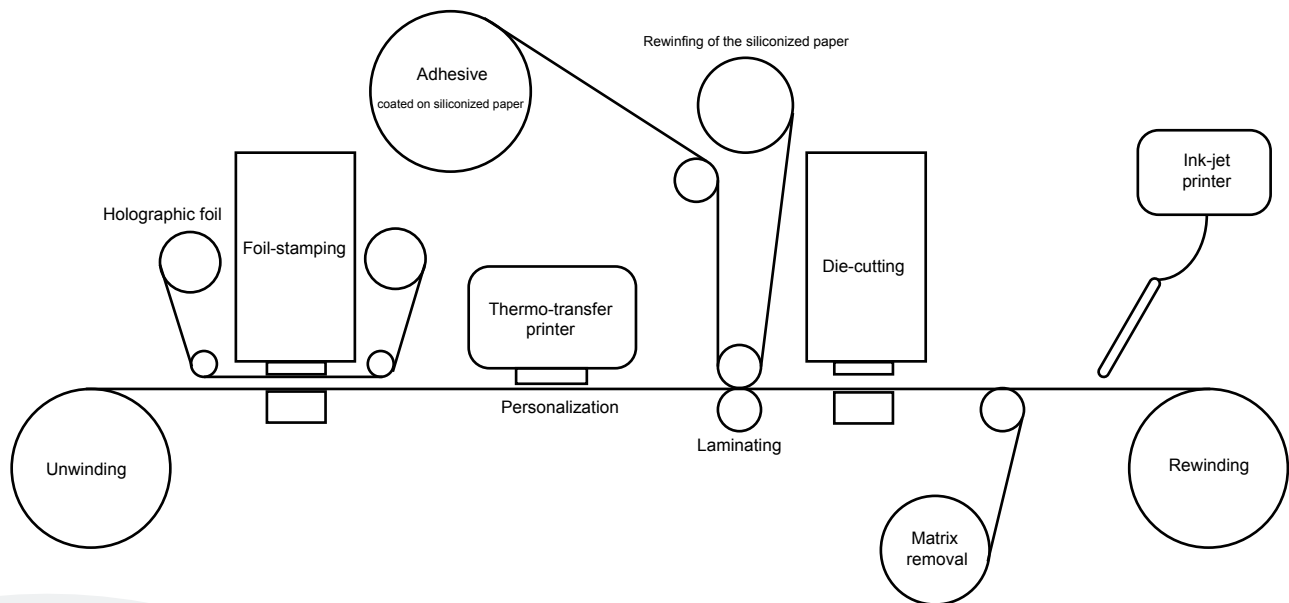
MULTY-FUNCTIONAL MACHINE

Functional units:

Foil-stamping
Die-cutting
Laminating
Automatic Unwinding and Rewinding
Matrix removal
Thermal transfer and Ink-jet printing



Web width	120 mm
Roll diameter	400 mm
Work speed	up to 4 000 cycles/hour

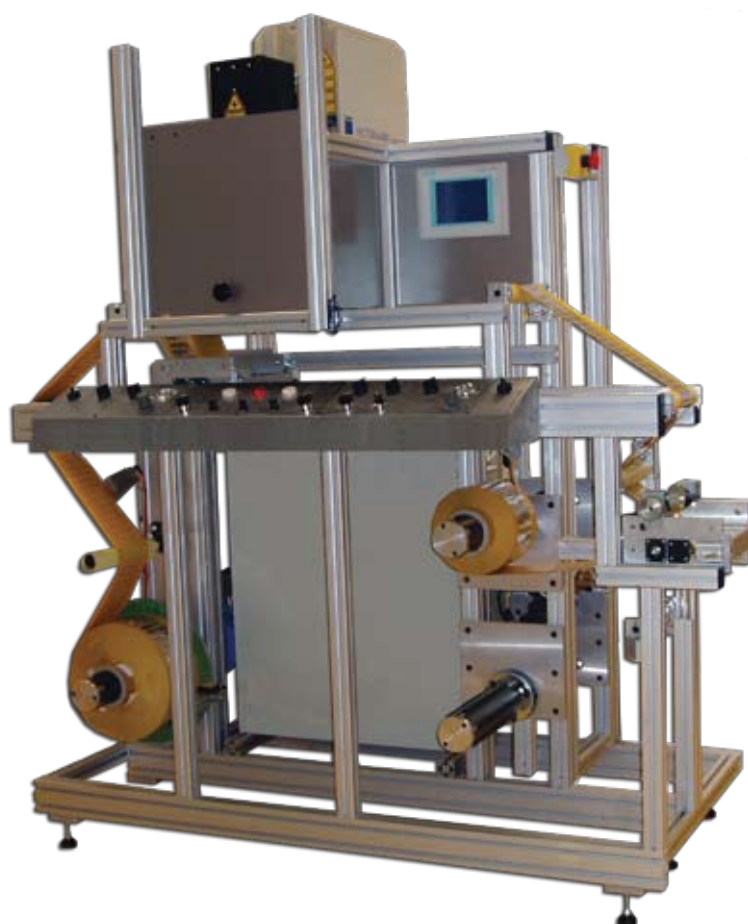


Electrical supply	220 V, 2.2 KW
Air supply	6 MPa
Weight	900 kg
Dimensions	300/150/180 cm

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LIDOGram



LASER-MARKING SYSTEM

LASER MARKING SYSTEM

Automatic positioning
Automatic tension control
Automatic web guiding
Splicing table
Slitting unit
Two rewind unit



Parameters:

Marking field	180 mm x 180 mm
Max. marking speed	1 frame/s
Marking on the fly	up to 6 m/s
Maximum web width	210 mm
Maximum roll diameter	360 mm
Air expanding shafts	3"

Machine dimensions (mm)	1700 x 1100 x 1900
Weight	300 kg
Power Supply	6 kW, 380 V, 6 MPa

Laser:

Diode-pumped solid state	Nd:YVO4
Wavelength	1064 nm
Pulse frequencies	0 - 100 kHz
spot size approx.	40 µm
Focus depth	2 mm
Scanning head	180mm x 180 mm
Focus length	254 mm
Safety marking camera	
Protective filter (1064 nm)	
Dimensions	I 665/ 200/297 mm / 28 kg

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