Flexo engraving
Flat & rotary embossing

www.a-k-k.de

Company network

Kesper Druckwalzen GmbH

Since 1875 experience in flexo, sleeve and embossing engraving

CST GmbH

Since 1989 experience in machine manufacturing of flat and rotary engraving units

AKK GmbH

Since 2010 experience in machine manufacturing of laser engraving systems and embossing solution for the car and floor industry.

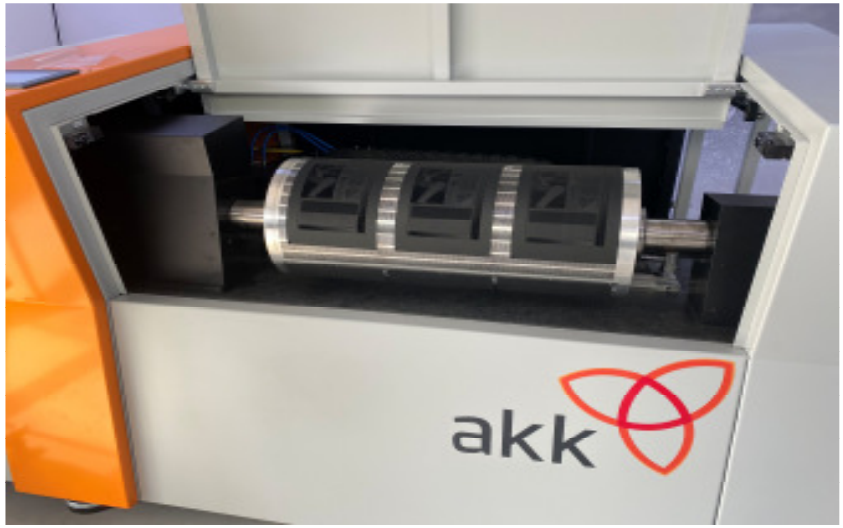
Cosmos

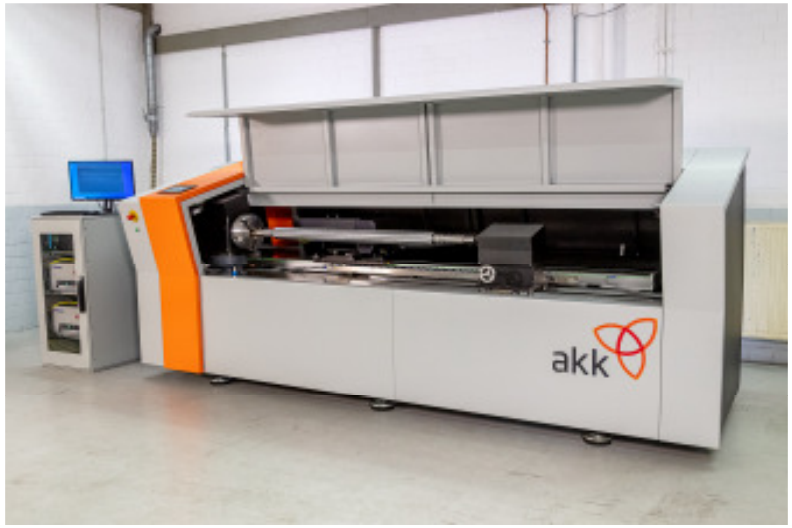
The Cosmos Laser with Fiber multi-beam technology and 5.080dpi is suitable for highest demands and effective production. The Cosmos is suitable for dry offset engraving, label printing, 3D engraving, packaging printing of epdm plates, sleeves and cylinders. With up to **5.080dpi** 200l/inch are realized. By means of a vacuum, magnetic or Twinlock cylinder the epdm plate is fixed on the cylinder for engraving. Sleeves can also be clamped optionally. Easy handling, a compact design in combination with fast and high-quality engravings characterize this engraving machine. Optionally with 500 or up to 2.000 Watt we offer you with one or two beam technology.

Undercut, various shoulder settings, and many other software tools simplify the handling of the machine for the operator. Hardware and software are created in our factory in Krefeld, so that we can realize the individual customer needs, e.g. to map the respective national language in the control panel. Integration into the customer's work flow is also possible. Intelligent "template handling" with AKK software and a user-friendly interface characterize our machines.

2pieceCan, Label printing, packaging, commission engraver, we supplied to all this areas already engraving solutions.

Cosmos Flexo





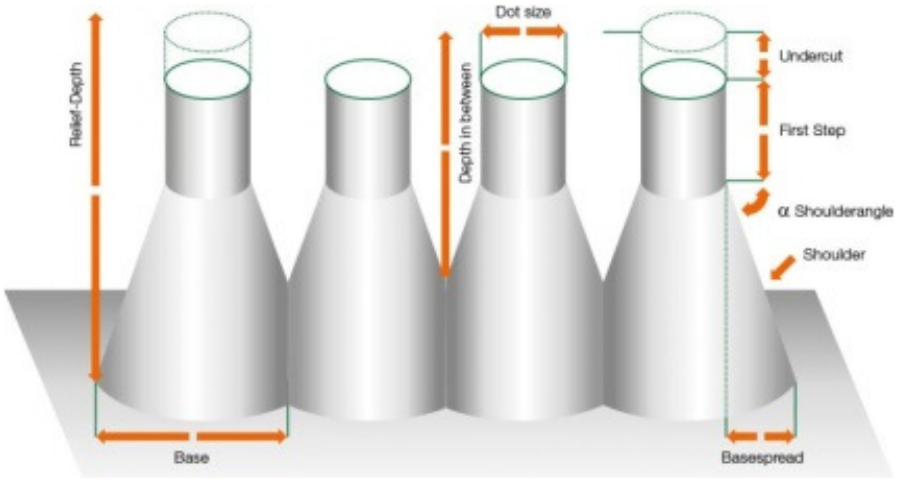
Cosmos Flexo Technology

- Touch screen on the machine
- Control panel water temperature
- different language
- easy handling

Fiber Laser:

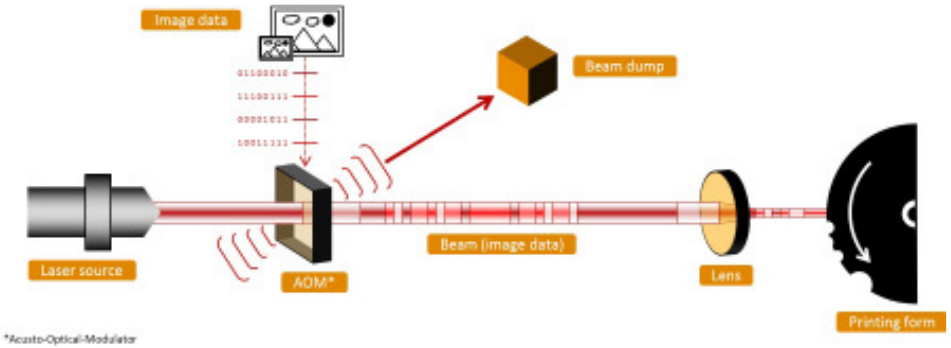
- German supplier
- IPG Fiber Laser
- each 1.000 Watt power

Cosmos Flexo undercut & shoulders



Undercut:

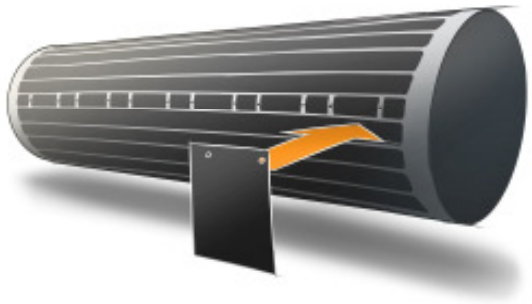
- the relief height is adjusted object-oriented in the print image
  (no crushed edges at fine points near surfaces)
- Dimensional forming of all printing elements
- Variable angles and depth
- Different „Undercut“

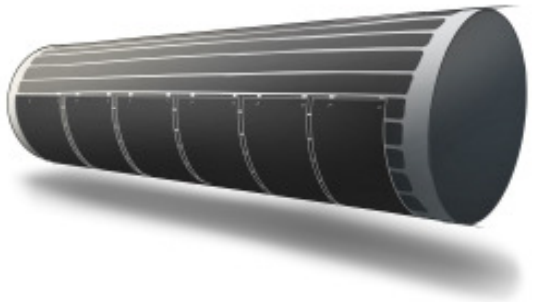


Laser function:

- Laser source: Co2 or Fiber laser
- AOM Modulator for swittching the beam to the lens (cylinder) or dump
- Lense focus the beam to 5-20µ (Fiber) and 50-70µm (Co2)
- 1-2 laser beams

Cosmos Flexo template software

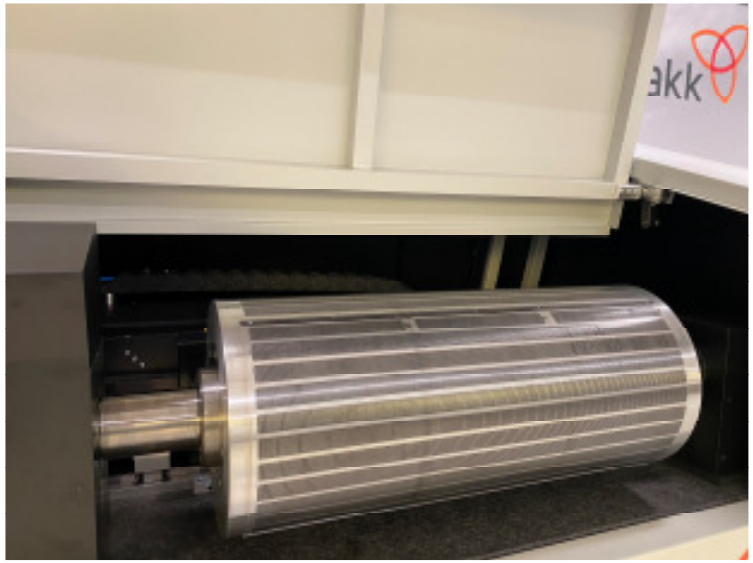


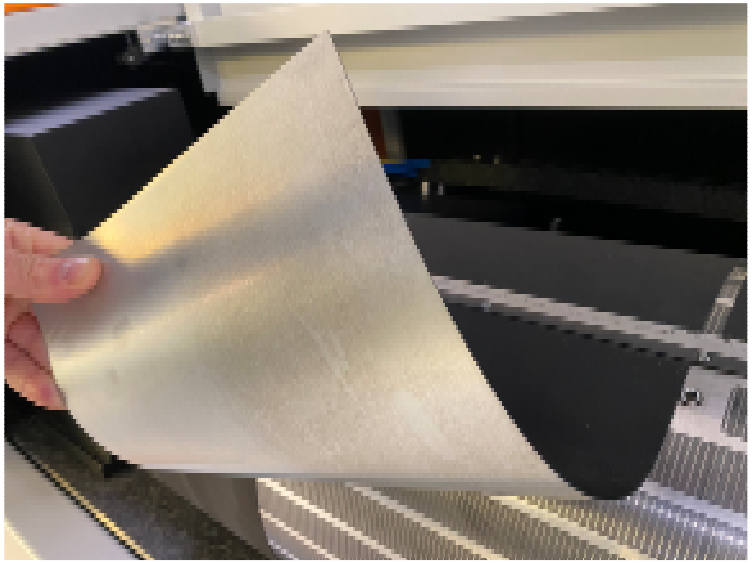


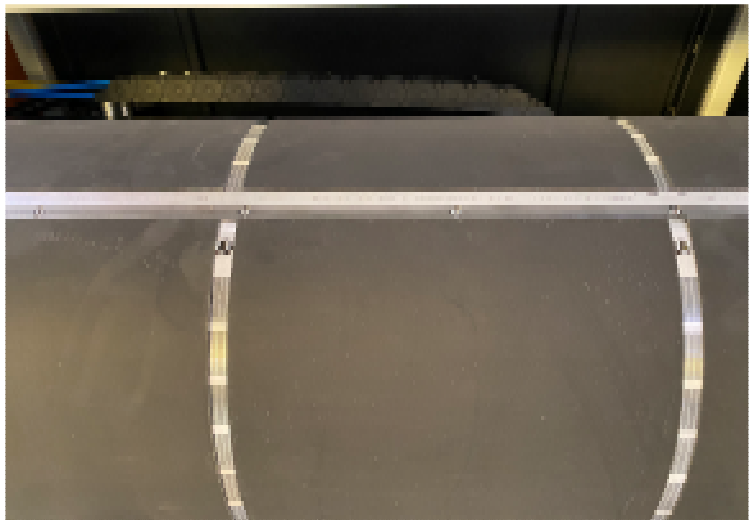
Own AKK Software: Plug and Paste

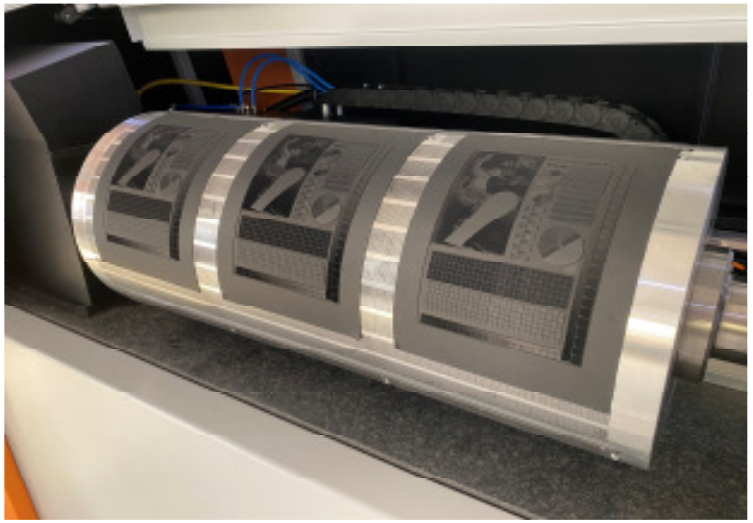
The system is supplied with a magnetic cylinder or vacuum cylinder. In combination with the positioning pins, not only the assembly in the engraving unit is optimised, but also later in the printing press, as the plates are engraved directly 100% in register.

Cosmos Flexo plate mounting 2pieceCan

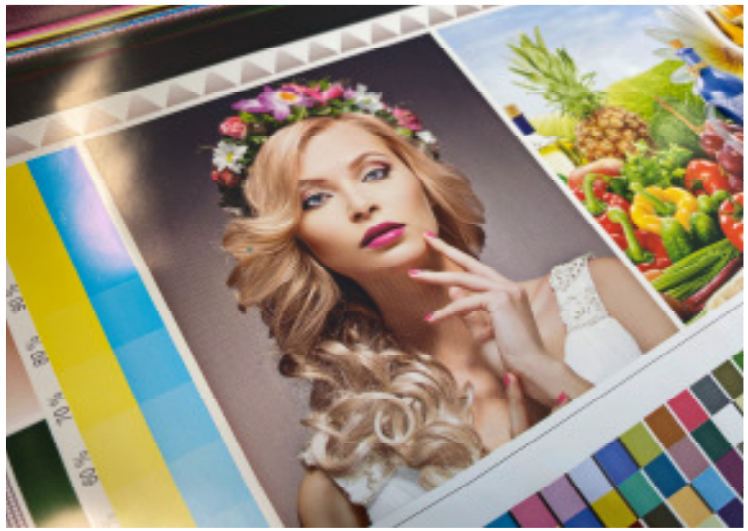








Cosmos Flexo prints



Cosmos Flexo compare process steps

STEPS	POLYMER TECHNOLOGY	EPDM TECHNOLOGY NEW
1	DTP workstation	DTP workstation
2	Back side exposure	Plate mounting directly on printing adapter
3	Mask exposure	3D engraving
4	Main exposure	Washing with water, ready for printing machine
5	Developing and washing	
6	Dry plates	
7	UVA surface hardening	
8	UVC surface hardening	
9	Cutting plates	
10	Register holes	
11	Plate mounting on printing adapter	
12	Ready for printing machine	

More effective and faster than the Polymer!

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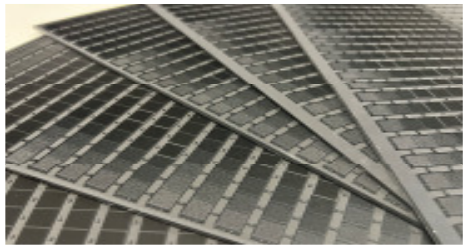
Cosmos Flexo compare process steps



Material:	Photopolymer	EPDM
Types:	Many types / colours	Few types and colours
Developing:	Chemicals	No chemicals
Running time:	100%	300% - 500%
Storage:	2 months	18 months
Cleaning:	High risk of damage	Low risk of damage
Sharpness:	®®®®®	®®®®®
Waste:	Toxic material	Normal waste
Energy 1m²:	40-60 kWh	20 kWh

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Flexo becomes green…

EPDM material less Co2 emmissions

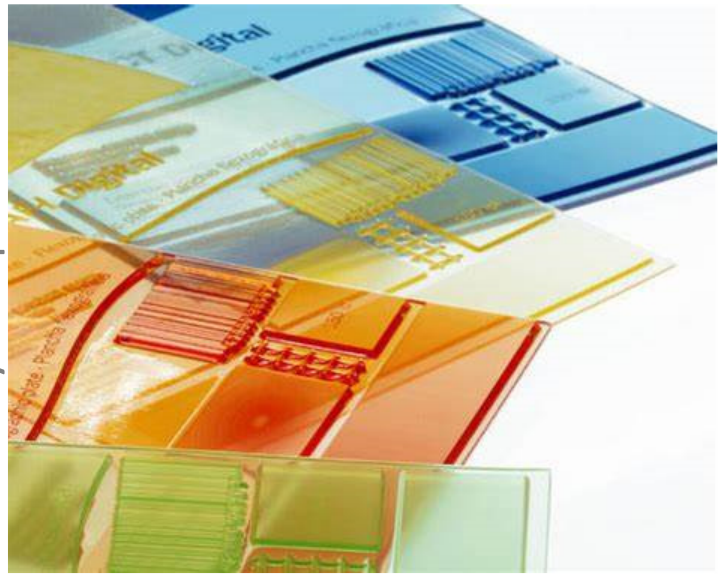
No toxic material = house waste

Fume extraction no toxic dust

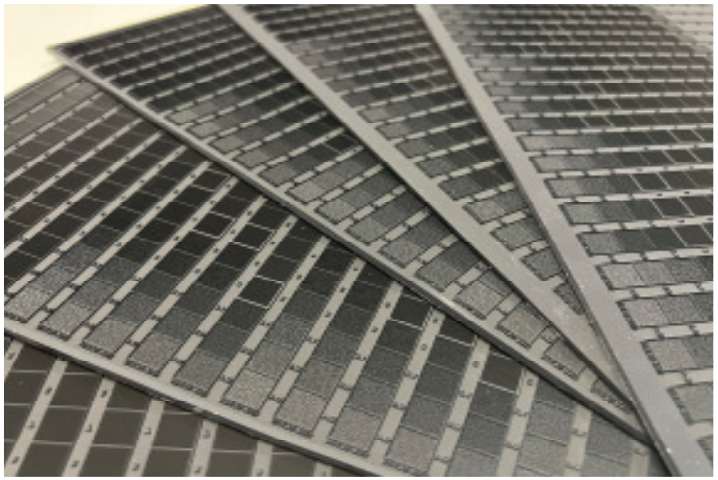
No release of softeners

Lower energy consumtion

Polymer plates



EPDM plates



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