

Laser Line

FIBER LASER ENGRAVER

Our newest product is the Fiber Laser Engraver for Flexo. Engraving resolutions up to 5,080 dpi with 1–2 beams give our customers new possibilities to engrave flexo plates, sleeves or cylinder with up to 200 Lpi. As well a CO₂ laser for flexo and screen engraving is available.



COSMOS LASER FLEXO

Easy handling, compact design, fast and high-quality engravings: This is what distinguishes our Cosmos Laser Flexo. With either fiber laser or CO₂ technology with multi-beam technology, the machine is suitable for dry offset engraving or label printing as well as 3D engraving and packaging printing of EPDM plates, sleeves and cylinders. 100 L/cm can be realized with up to 5,080 dpi.

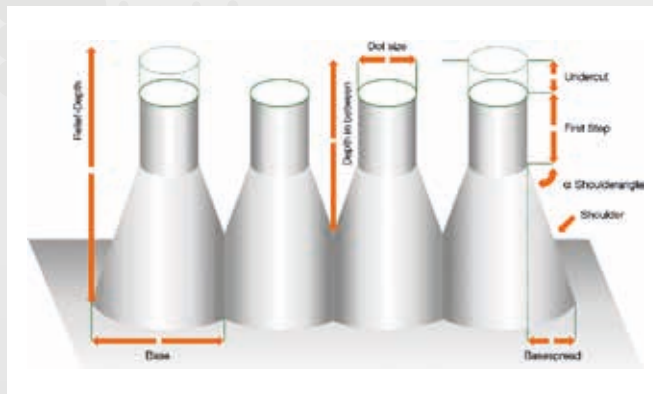
We have the right machine version for every customer: with up to 2000 watts, with single or double beam technology. For customers who want to engrave silicones or other non-fiber materials, we offer powerful Sealed CO₂ laser that produces fine engravings up to 2,540 dpi. Like all our laser

engraving machines, this is equipped with an acousto-optical modulator (AOM). With this technology, the finest engraving results can be achieved at high switching speeds.

Undercut, variable shoulder settings, the intelligent Easy Template software, a user-friendly interface and many other software tools simplify the handling of the machine. Individual requirements, such as the integration of the respective national language into the control panel, can also be implemented.

COSMOS LASER SCREEN

The Cosmos Laser Screen shows new possibilities of screen engraving. With a resolution of up to 2,540 dpi, our screen engraving is suitable for the highest demands and effective production. The highlight of our system: No external gas is required. This significantly reduces operating costs compared to conventional systems.



Cosmos Flexo Packaging



High performance products

You prefer, we provide.

OUR COMPANY NETWORK



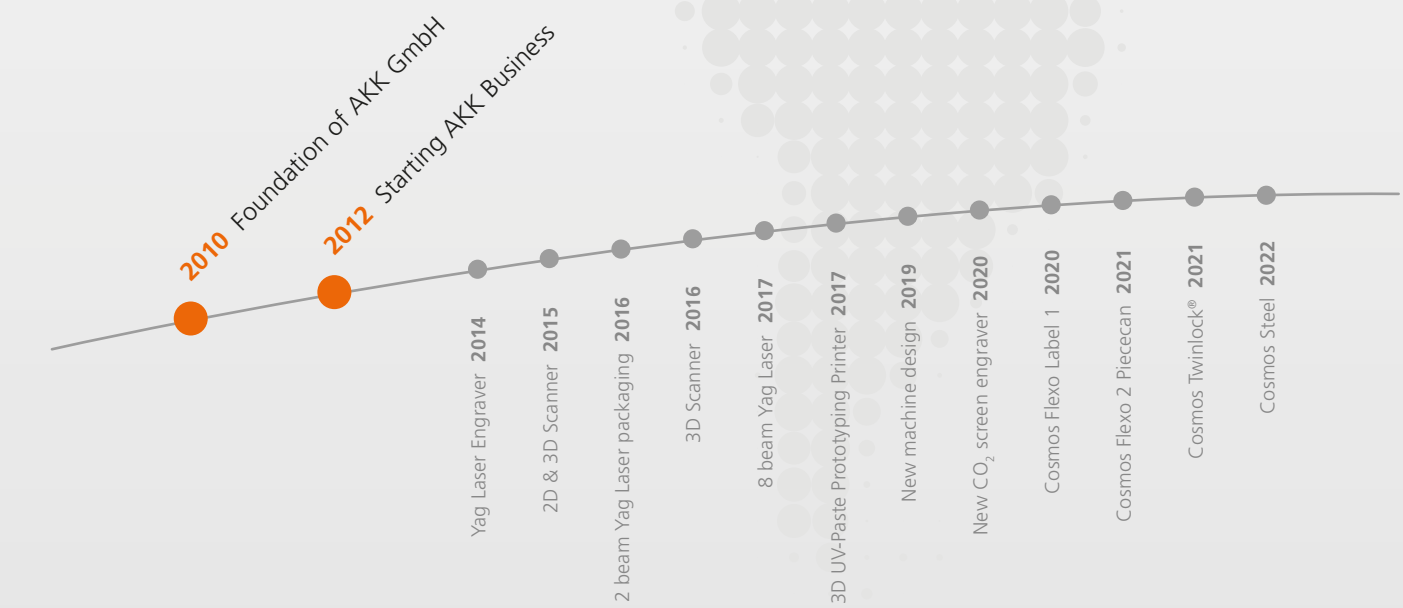
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About

AKK GmbH was founded in 2010. We joined long term laser engraving experience by a consolidation of the team's knowledge of CST GmbH and Kesper Druckwalzen GmbH. Like our philosophy "you prefer, we provide" we find together with our customer the right way of investment. The AKK product portfolio covers any kind of solution to engrave or produce embossing cylinders, plates or molds. Different ways of engraving such as direct laser engraving, etch resist paste, or transfer wax process are provided for each customized application. To fulfill our product

range for the embossing we offer a high quality 3D scanner. For Prototyping we offer machines with up to 1,800 dpi for texture printing. 4 pico liter drops can be printed up to 100 layers. Our newest product is the Fiber Engraver for Flexo special designed for the 2 piececan and packaging business. Engraving resolutions up to 5,080 dpi with 1–2 beams give our customers new possibilities to engrave flexo plates, sleeves and cylinders with up to 200 Lpi. As well a CO₂ Laser for Flexo and Screen Engraving is available. AKK templates and software to improve your process.





EPDM technology

THE COSMOS FLEXO WORKFLOW COMPARED TO THE POLYMER TECHNOLOGY

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!



Elaborate, non-standardized board production based on water. Large consumption of energy resources.



Standardized plate production with repeatability guarantee. Chemical-free and low energy resource consumption.



Cosmos Flexo



- PRODUCTION**
- ✓ Standardized digital plate production
 - ✓ No fluctuations within the plate production
 - ✓ Extremely hard-wearing sheet material
 - ✓ Significantly less waste
 - ✓ Very low cleaning and maintenance costs (approx. 5 minutes per day)
 - ✓ Printing personnel can procedure clichés printing plates themselves
 - ✓ Manufacturing process free of toxic materials
 - ✓ Production of low-cost, high-quality printing plates
 - ✓ Lower total production costs EPDM vs. polymer

- ENVIRONMENT**
- ✓ No use of hazardous substances
 - ✓ No polluting exhaust gases during production
 - ✓ No waste to be disposed of after use
 - ✓ No chemical cleaning agents necessary
 - ✓ Lower CO₂ consumption during production compared to the polymer plate process



Precise engraving without mounting

LESS REJECTS. LESS TIME. RESOURCE SAVINGS.

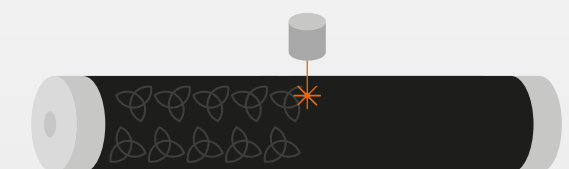
Step 1

The EPDM plate is glued directly onto press adapter. The precise mounting of the plate after the engraving process is no longer necessary.



Step 2

The engraving is done directly in register in the Cosmos Flexo Laser. The plate prints directly with a perfect fit. No further registration necessary.



Step 3

Cleaning of the impression cylinder adapter with EPDM engraved plate in the washing machine only with water. Filtering of coarse particles, residual water harmless.



Step 4

Ready for printing! The plate is reusable, storable and can be disposed eco-friendly (household waste).

