CAJO LASER MARKING PLATFORM FOR GEAR MANUFACTURING

CAJO GEAR MARKING PLATFORM™

The **Cajo Gear Marking Platform™** is an advanced laser marking solution specifically designed for the efficient and reliable marking of gears, gear shafts, and other precision-manufactured components.

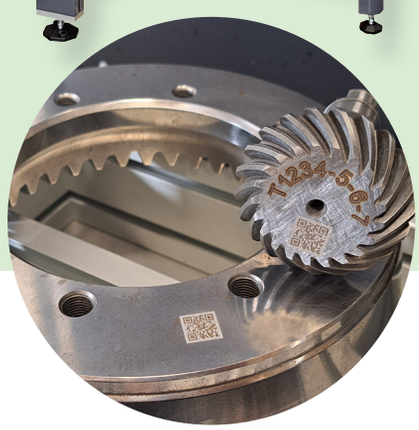
Engineered for versatility, the platform enables high-quality permanent markings on a wide range of gear products while offering exceptional ease of use and adaptability for varying production requirements.

Powered by the intuitive CajoSuite™ software, users can easily create, manage, and automate a broad range of marking content, including **alphanumeric text, serial numbers**, **product identification data**, **1D** and **2D barcodes**, **Data Matrix codes**, **QR codes**, **logos**, and **custom graphics**. The software supports seamless marking process management while ensuring traceability and product compliance requirements are met.

Designed to maximize productivity, flexibility, and operational safety, the **Laser Class 1 certified** platform is a fully enclosed, CE-marked solution that enables safe operation without the need for additional laser safety measures. Its robust industrial design, reliable laser technology, and low maintenance requirements ensure dependable performance and low operating costs throughout its lifecycle.

The Cajo Gear Marking Platform™ delivers a durable, precise, and sustainable marking solution for manufacturers seeking improved traceability, enhanced production efficiency, and a long-lasting investment in modern laser marking technology.

Choose Cajo for efficient product marking.



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The **Cajo Gear Marking Platform™** can be equipped with a variety of interchangeable jigs and fixtures, allowing manufacturers to quickly adapt the platform to different product sizes, shapes, and marking applications.

Manual feed-in station featuring a smart jig system that provides fast and flexible positioning of various shaft types, enabling precise marking regardless of orientation.

Combined with Cajo's extensive range of integrable laser marking units–from low-power systems to powerful 300 W industrial lasers–the platform provides a future-proof solution for both standalone and high-volume manufacturing environments.

- HIGH-QUALITY, PRECISE, AND PERMANENT MARKINGS
- SEAMLESS INTEGRATION FOR INDUSTRY 4.0
- LOW RUNNING COST, SHORT PAYBACK TIME
- SEMI-AUTOMATED PROCESS
- FAST AND EASY TO OPERATE
- VARIABLE TEXT AND CODING FOR FULL TRACEABILITY

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v.1.0

CAJO GEAR PLATFORM TECHNICAL DATA

Laser type	Fiber
Wavelength	1064 nm
Laser class	Class 1
Laser power	20 W / 60 W / 100 W / 200 W / 300 W
Beam guiding	High-speed optical galvanometers
Marking speed (max)	Up to 12 000 mm/s
Marking field	175 x 175 mm
Max size for the markable part	On standard configuration
Max. Height of gear wheel	150 mm (with 175 lens), placed on top of the jig table
Max. Diameter of gear wheel	470 mm (placed on top of the jig table)
Max. Height of gear shaft	590 mm (from top of the jig table surface)
Max. Diameter of gear shaft	80 mm
Max. Weight of gear component	80 kg
Cooling	Air
Power supply	110–240 V / 50–60 Hz
Power consumption:	250 W + Tailor Unit
Marking software	CajoSuite™
Servo driven Z-axis (program controlled)	Max. stroke 220 mm
Fume extractor outlet	50 mm
Dimensions and weights (H x W x L)	
Dimensions (H x W x L)	1960 x 1250 x 1100 mm
Weight	260 kg
Movable with pallet jack	
Ambient conditions	5–40 °C, Humidity (non-condensed environment) ≤95 %
Connectivity	Fume Extractor start / stop
	Foot pedal / external start
	EtherNET
Safety interlock	Duplicated safety contacts with feedback. Safety performance level PL=d.
Computer minimum recommendations	(not included in standard delivery)
Processor / Memory / Hard Drive	Intel i5 / 4 GB / 64 GB
Operation system (x64)	Windows 11
Interfaces	1 x LAN

TRADEMARK

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