

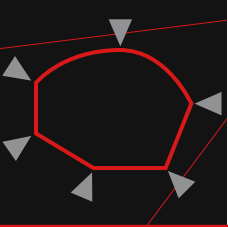
CAD-PRO 2D

 LASER PROJECTORS
for plane surfaces



placement with laser precision





CAD-PRO 2D LASERPROJECTORS.



HIGHLIGHTS.

- multicolor projection (green, red, yellow)
- fast auto-calibration
- compact housing and lowest weight
- sealed housing area for projection components
- focussing by remote control

PRECISE, MULTICOLOR PROJECTION.

CAD-PRO 2D laser projectors display outlines generated from CAD data on 3D surfaces. Based on calibration at reference points, scaling is 1:1.

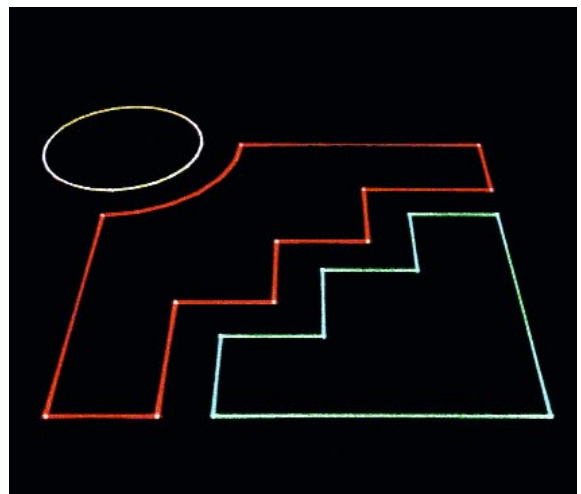
CAD-PRO 2D can be equipped with one or two laser sources. You may choose green, red or both sources for multicolored projection.

FLEXIBLE, INTELLIGENT, SIMPLE.

In day to day use, automatic functions allow fast and easy calibration. Operating errors are avoided to get highest precision and repeatability.

Easy handling and installation is guaranteed by the compact housing, low weight and an integrated swivel mount.

Large area projection is reached by connecting projectors. They can be placed facing each other or side by side. Distribution of data and load balancing works automated.

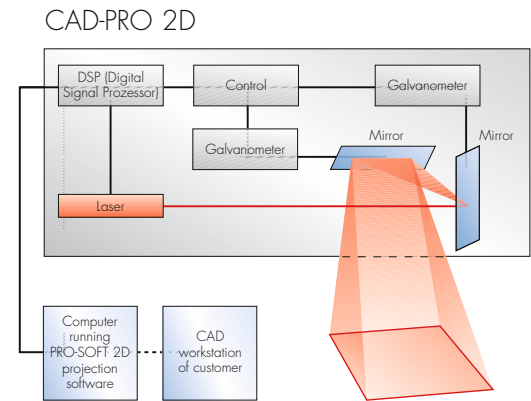


SOLUTIONS FOR YOUR COMPANY.

THE OPERATING PRINCIPLE.

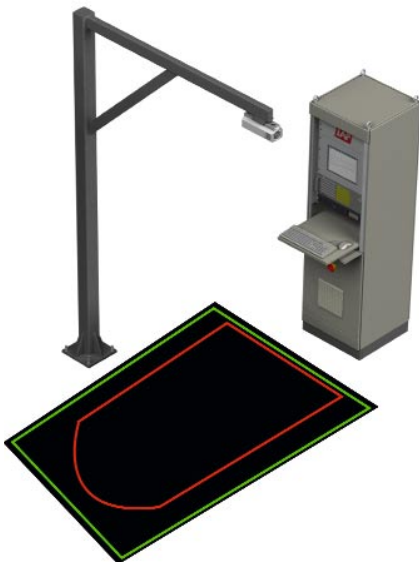
A laser beam deflected in x- and y-direction by two oscillating mirrors continuously traces the shape defined by the CAD data. The mirror drives (Galvanometers) are optimized for highest speed, accuracy and dynamic. Their movement is controlled by a digital trajectory processor. If the outline is traced more than approximately 20 times per second, it appears solid to the eye.

To achieve a projection exacting to scale, the projector software auto-calibrates by scanning the position of target marks at measured coordinates or machined reference points that are relative to the work piece. This extremely fast, automatic procedure can be repeated any time without noticeable interruption of the work flow, allowing compliance with even the tightest dimensional tolerance and quality assurance standards.



SYSTEM DESIGN.

A standard laser templating solution consists of laser projector, a computer workstation, a mechanical support for the projector, the projection surface and CAD data.



Typically, the projector is located centrally above the working surface, mounted to a roof truss or a stable support structure. If the required template cannot be projected by one single projector, you may either use several projectors or move the projector or move the projection surface. Projection areas may be separate or overlapping.

The workplace may be used stand-alone, connected to a network or connected to the COM-port of a machining center.

The work process is organized by the PRO-SOFT 2D software: input of the customer's CAD data, transfer to projector, step by step display.

The basic hardware configuration consists of a CAD-PRO 2D projector, swivel mount and a connection box for power supply and network connection. There is only one cable needed between box and projector.



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