

Flexible
fibre laser engraving –
From mobile to stationary.



Our laser systems offer a wide range of benefits.

Flexibility, reliability, efficiency – these are just some of the quality features that have characterised Mobil-Mark's work from the moment our company was founded. Whichever of our laser systems our customers choose, the intuitive operation of our mobile, integrated and stationary holistic laser solutions will always give you a wide range of benefits. And as if that weren't enough, Mobil-Mark also offers the full range of products, accessories and service that discerning companies expect from a premium manufacturer. We see each individual customer request as both a challenge and a motivation – and we always find the ideal solution.

› From mobile to stationary

Mobil-Mark offers the perfect laser marking solutions for all your needs. With our unique mobile systems, the laser comes to the workpiece, not the other way around. And our stationary systems are notable especially for their efficiency and fast return on investment. That's the flexibility that brings success.

› Suitable for integration

For series engraving or reproducible results, both Mobil-Mark's mobile and stationary lasers can be integrated into any production process – up to and including full automation with robots or conveyor belts. Accessories and expertise – it's all at your fingertips!

› Compatible

The open interface architecture of the Mobil-Mark device software allows for digital networking with all conventional IT systems. Maximum integration into Industry 4.0.

› Cost-effective

Long-lasting, German-made industrial quality, a comprehensive range of services and good value for money: Mobil-Mark lasers represent a great investment.

› No need for protection

Laser marking systems from Mobil-Mark are laser protection class 1 certified for operation without protective housing or protective eyewear. This reduces the need for investments and saves time and space.

› Flexible

Mobil-Mark lasers can mark nearly any material or surface without making contact. Practical all-rounders for regular use.



Mobile

Our mobile laser marking systems are true all-rounders.

They are the perfect choice for countless applications: The devices can be easily transported to the workpiece. The engraving process then takes place wherever the workpiece is – a simple and safe manual procedure performed by placing the laser head on the area that needs to be marked.

[› Page 8](#)



Integrated

A good laser slots in seamlessly with its surroundings.

That's why Mobil-Mark's custom system builders will create the perfect integrated mobile or stationary laser solution to suit any specialist requirements or environment. We are the one-stop shop for all your laser system needs, from planning to the commissioning of your dream automation solution.

[› Page 16](#)



Stationary

Flexible, powerful and efficient marking – that's what Mobil-Mark's stationary laser marking systems stand for. Our portfolio ranges from the basic system for all common marking tasks on a variety of materials to custom, high-end solutions with countless extra features, such as a rotary axis for precise marking on the curved surfaces of cylindrical objects.

[› Page 22](#)



All conventional laser marking processes

Mobil-Mark's laser systems can be used for a wide range of processes, from tempering to deep engraving.

> Carbonisation

Position laser head on workpiece, apply laser – job done! The result is a sharp-edged engraving that varies in darkness depending on the material.

> Laser engraving

The laser subjects the workpiece to a beam of intense heat. Depending on the duration of the procedure, the material is either vaporised or incinerated.

> Deep engraving

Position laser head on workpiece, apply deep engraving laser – job done! Depending on the labelling parameters, the result is a white or black engraving of varying depth.

> Coating with spray paint

Spray paint onto the workpiece, allow to dry, fuse the desired marking or logo onto the workpiece using a laser, wipe away excess paint – job done! The result is a flat, abrasion-resistant, dishwasher-safe marking in any desired design or colour.

> Black marking

For particularly dark, high-contrast marking of the surface without removing material.

> Tempering

Coloured temper marking is created by precisely heating up the workpiece point by point (the resulting oxide layers create the colour effect).

> Marking in a protective gas atmosphere

For improved corrosion resistance in laser engraving, particularly for alloy steel (stainless steel).

> Coating with PVD film

Attach film dispenser to laser head, transfer the metal layer of the film onto the workpiece using the laser – job done! The result is a flat, permanently abrasion-resistant and dishwasher-safe marking in any desired design or colour.

> Foaming

Position laser head on workpiece, apply laser – job done! The result is a sharp-edged engraving that varies in darkness depending on the material.

> Marking mirrors

Position laser head on mirror, apply laser – job done! The result is a transparent area on the mirror, created by the removal of the mirror coating.

Mobil-Mark's laser marking devices for industrial use

Mobil-Mark lasers can do what similar devices cannot: reliably label, customise and mark nearly any type of surface or any shape of object. The unique sealing unit on the laser head is key here – it can be ideally adapted to any profile. Naturally, engraving also works on a wide range of materials.



› Ceramics

Laser marking or engraving is an ideal method for marking ceramics. The Nova-f provides the necessary precision to ensure high-quality, non-damaging labelling.



› Stainless steel

Laser engraving can mark workpieces made of all types of chromium-nickel steel alloys precisely, easily and in great detail.



› Plastic

Plastic objects of any kind can be marked with the Quasar – permanently, quickly and with abrasion-resistant results.



› Metal

Markings made on metal using Mobil-Mark lasers are guaranteed to be permanent, abrasion-resistant, non-fading, UV-resistant, food-safe and tamper-proof.



› Glass

The Quasar marking laser can be used to mark any glass object. It can even produce multi-coloured markings.



› Powder-coated materials

When laser-engraving powder-coated materials, the laser foams the layer of coating but does not remove it – ensuring that the protection provided by the coating remains intact.



› Rubber

If you need to mark rubber components clearly and permanently in a tamper-proof way, you can carry out your deep engraving or foaming procedure using the Quasar.



› Wood

Whether you want flat or depressed markings, the Quasar can be used to clearly mark surfaces of any geometry.

Mobile laser engraving

Mobil-Mark's unique mobile marking lasers come to your workpiece – not the other way round. Ideal for very large or heavy workpieces and flexible applications.



Quasar – the mobile fibre laser for small, large and bulky objects

The patented solution for highly efficient, long-lasting marking

The unique feature of the Quasar fibre laser is its patented laser protection. It allows for the direct laser marking of workpieces, without any additional protective equipment or protective housing. Unlike conventional industrial lasers, the Quasar is designed to be mobile and can be transported on wheels. This makes it possible to mark large workpieces without the hassle of needing to move them; they can be marked wherever they are located. The laser comes to the workpiece, not the other way around.

The right power class for every application

The Quasar mobile marking laser is available in three performance classes and allows for the permanent marking of metal, plastic and ceramics. The laser marking system from Mobil-Mark also makes temper marking, coating and deep engraving safe and easy. Three factors are decisive in selecting the power class of the Quasar: material/surface, engraving depth, and cycle time (duration of laser engraving). There is a choice of devices to suit everyone's individual needs – with laser powers of up to 20, 30 and 60 watts. Higher power classes are also available on request.

Advantages at a glance:

- › Ideal for your requirements
- › Patented protection system in accordance with LPC 1
- › Precise, elegant engraving
- › Flexibility thanks to mobility
- › Marking of large areas
- › Easy marking of any surface geometry
- › Simple, self-explanatory operation
- › Can be used anywhere with a power connection
- › Individually cross-linkable





Technical data

- › **Power output:**
20/30/60 W
- › **Laser diode service life:**
100,000 h
- › **Wavelength:**
1,064 nm
- › **Pulse frequency range:**
1 - 400 kHz (Q20/30), 1 - 4,000 kHz (Q60)
- › **Pulse width:**
200 ns (Q20/30), 2 - 500 ns (Q60)
- › **Laser focus diameter:**
Approx. 40 μ m (lens f = 80 mm)
- › **Marking speed:**
maximum 5,000 mm/s
- › **Weight:**
40 kg



For more info, visit:
www.mobil-mark.de/quasar

Nova-f – The special laser marking system for ceramics

A powerful laser for the ceramics industry

The Nova-f marking laser from Mobil-Mark is designed especially for ceramics. The mobile system delivers permanent and abrasion-resistant marking on ceramic bathroom fittings, industrial porcelain and tableware. The reliable marking process ensures that the sensitive surface of the material is not damaged. This unique laser engraving machine was developed specifically for precise coating with spray paints and films and deep engraving in the ceramics industry.

Mobile, practical, safe and durable

The Nova-f ceramic laser was developed in close cooperation with the ceramics industry, so it is perfectly adapted to the industry's requirements. Nova-f is mobile – the compact device has wheels and can be easily transported to wherever it is needed. The laser can be used to mark any type of surface. Mobil-Mark offers precisely fitted sealing units for all individual shapes – the units can be changed in no time via a simple Plug & Play system. The MOPA fibre laser has patented class 1 laser protection, so marking can be carried out without protective equipment such as protective housing or protective eyewear. The Nova-f is designed to be particularly durable and dust-resistant in order to remain consistently reliable in the harsh production conditions of the ceramics industry. The long service life of the laser diodes – 100,000 hours – ensures that the device is built to last.

Advantages at a glance:

- › Patented protection system in accordance with LPC 1
- › Precise, elegant engraving
- › Flexibility thanks to mobility
- › Easy marking of any surface geometry
- › Unlimited job storage
- › Marking of large areas
- › Simple, self-explanatory operation
- › Can be used anywhere with a power connection
- › Individually cross-linkable





Technical data

- › **Power output:**
20 W – CW
- › **Laser diode service life:**
100,000 hours
- › **Wavelength:**
1,064 nm
- › **Laser focus diameter:**
40 µm (lens f = 80 mm)
- › **Marking speed:**
Max. 5,000 mm/s
- › **Weight:**
40 kg



For more info, visit:
www.mobil-mark.de/nova-f

Sealing units as laser protection – for every surface

Light-proof, airtight sealing of the engraving area

The unique sealing units on the laser head ensure that the laser protection class 1 Quasar and Nova-f laser engraving machines from Mobil-Mark can be operated entirely without protective housing or protective gear. The flexible rubber lips seal the engraving area, making it light-proof and airtight. This reliably ensures that no laser radiation can escape the engraving area.



For more info, visit:

www.mobil-mark.de/abdichteinheiten



Other accessories

Practical solutions for precise, convenient laser engraving

A good laser engraving system, in combination with useful accessories, can perfect the process of laser-marking components while significantly lightening your workload. Mobil-Mark now offers a wide range of accessories developed in close consultation with our customers:

- › Film dispensers
- › Touch panel
- › Laser handling system
- › Extraction and filter units
- › Barcode reader
- › Laser head holder
- › Protective gas marking
- › Laser protection housing
- › Suction foot holder
- › Vertical stands
- › Mobile stand
- › And many more...



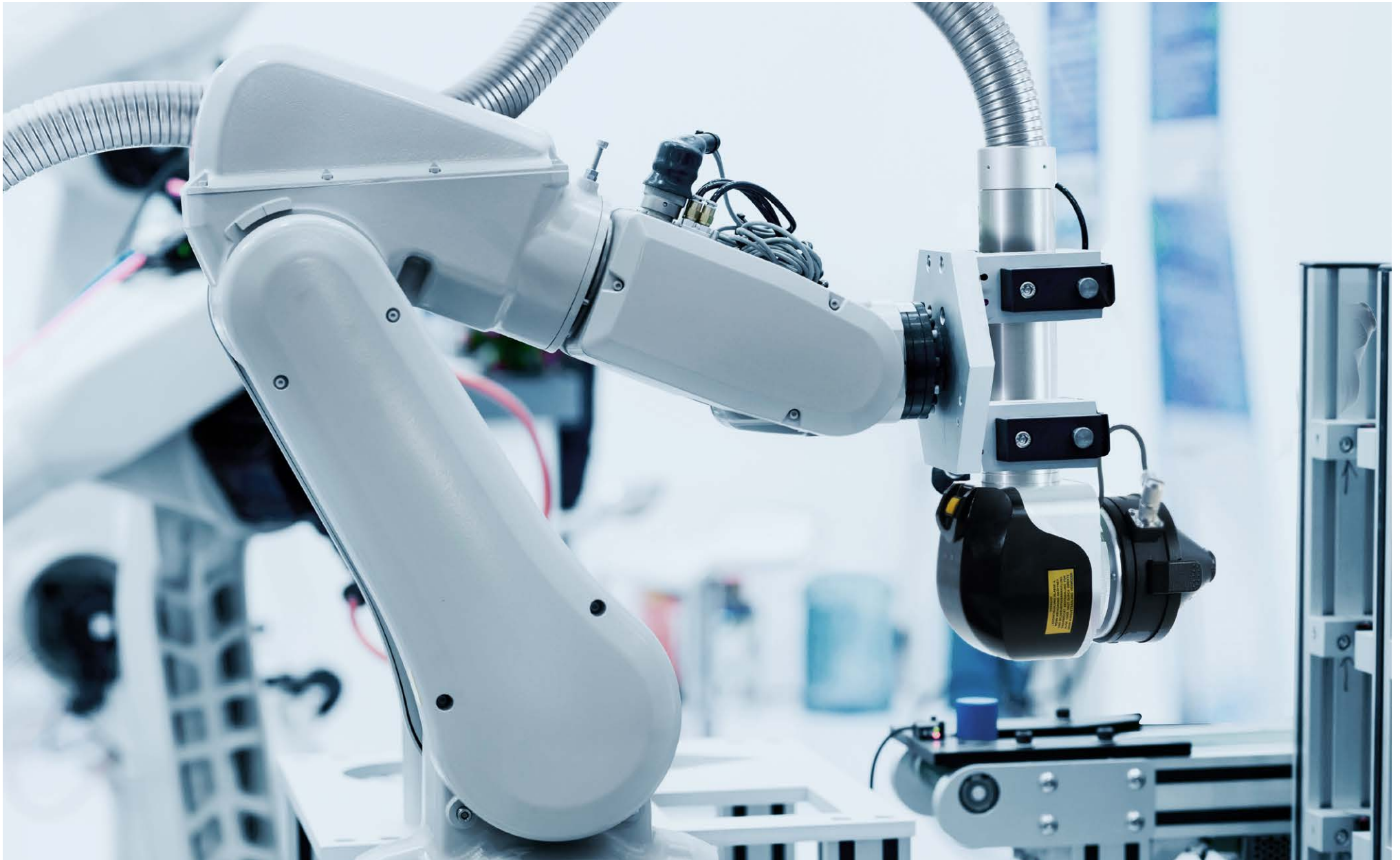
For more info, visit:

www.mobil-mark.de/en/laser-engraving-machines/accessories



Integrated laser engraving

A strong link in your process chain – thanks to their outstanding flexibility and the custom solutions Mobil-Mark creates, our mobile and stationary laser marking systems can be integrated seamlessly into your production workflow.



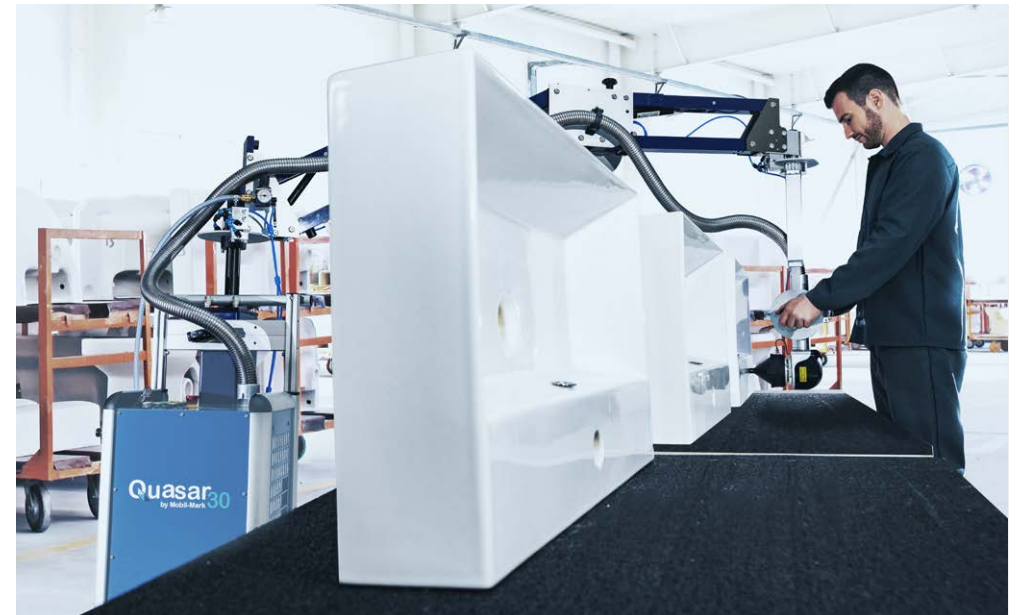
The mobile Quasar as part of an automation system – A successful integration

When integrated into a custom automation solution, the Quasar mobile marking laser unlocks the full extent of its unbelievable capabilities. One of the most striking benefits this solution offers is that the Quasar does not require any additional safety measures when laser marking. This means that the device can be put to use in a production environment without any additional safety precautions, allowing it to work in tandem with a robot, for example.



Marking in a matter of seconds

Thanks to its unique sealing units, the mobile Quasar can be robotically controlled without any additional protective housing or double gate, carrying out the required marking work with precision and at high speed.



Efficient ceramics production

Since ceramics production is a field where efficiency is key, the Nova-f ceramic laser is a great choice for such applications thanks to its flexible automation capabilities and the ability to be used without additional protective housing or shielding.



Advantages at a glance:

› **Maximum efficiency, even for laser marking as part of your process chain**

Mobil-Mark will ensure that your mobile or stationary laser engraving system slots seamlessly into your production workflow.

There's no such thing as can't!

› **Individual consultation and solutions for all your needs**

Mobil-Mark's custom systems engineers are highly experienced experts. If you want to integrate a marking laser into your production environment, they will analyse the situation, advise you, plan the process and implement the most cost-effective and technologically appropriate solution – from semi-automation to seamless integration into an assembly line.

› **Open system for use in any IT environment**

All the programming and control software used on Mobil-Mark marking lasers features open interface architecture. This means:

The engraving systems can be integrated into existing IT environments to any degree required, thus allowing maximum customisation for your application.



For more info, visit:

www.mobil-mark.de/integrierte-lasergravur

The stationary Strasor as part of an automation solution

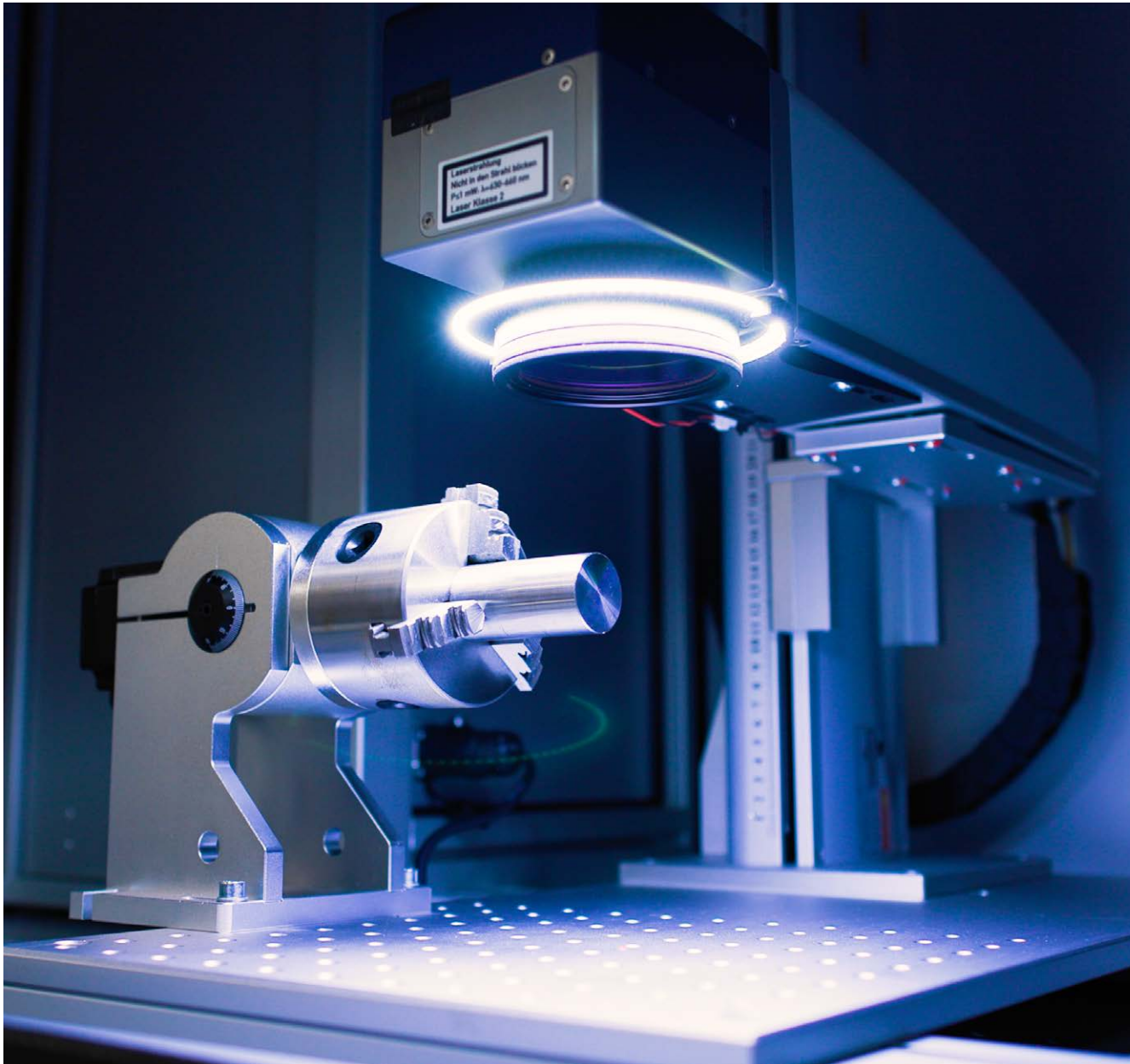
Marking during non-stop production

When it comes to maximum marking efficiency as part of a production chain, Mobil-Mark's Strasor stationary laser marking system is the ideal solution for situations that don't require marking of particularly large, cumbersome or heavy objects (which are better catered to by Mobil-Mark's mobile solutions). When combined with an automation solution, the stationary Strasor can provide top-level performance in any situation where small parts need to be marked, different focal positions are required, or objects with complex geometries need to be labelled, for example.

The perfect assembly line assistant

If you need to laser-mark objects as part of a non-stop production process, our stationary laser is the perfect choice. Its housing, which features an automatic double gate, can be customised to rout the conveyor directly through the laser cabin, allowing the workpieces on it to be marked precisely, reliably and at high speed. Whatever you need Mobil-Mark's experts will find the right solution for you.





Advantages at a glance:

› **Maximum efficiency, even for laser marking as part of your process chain**

Mobil-Mark will ensure that your mobile or stationary laser engraving system slots seamlessly into your production workflow. There's no such thing as can't!

› **Individual consultation and solutions for all your needs**

Mobil-Mark's custom systems engineers are highly experienced experts. If you want to integrate an engraving laser into your production environment, they will analyse the situation, advise you, plan the process and implement the most cost-effective and technologically appropriate solution – from semi-automation to seamless integration into an assembly line.

› **Open system for use in any IT environment**

All the programming and control software used on Mobil-Mark engraving lasers features open interface architecture. This means: The engraving systems can be integrated into existing IT environments to any degree required, thus allowing maximum customisation for your application.



For more info, visit:

www.mobil-mark.de/integrierte-lasergravur

Stationary laser engraving

Simple to use, with high-end quality, and efficient for its entire service life – every variant of the Strasor stationary fibre laser provides top-quality labelling and safety on any surface imaginable.



Strasor – The power station for high-efficiency laser engraving

The Strasor stationary marking laser from Mobil-Mark represents maximum efficiency in laser marking. Even the Basic version of the system provides everything you could ask for from a professional, durable, industrial-standard laser marking system. From a comprehensive software package without any hidden costs to a perforated raster plate for on-site workpiece holding and a high-powered, brand-name laptop – with the Strasor, you can start marking straight away without any configuration work. Just Plug and Play!

The Strasor is at home in any environment.

The Advanced variant comes with an incredibly adaptable stationary marking laser, and can be customised to suit any individual needs. To cater to customers with these kinds of requirements, Mobil-Mark offers a comprehensive range of accessories and attachments to allow precise markings for any application – such as the optional rotation axis, which enables the user to mark the curved surfaces of cylindrical objects with pin-sharp clarity.

Advantages at a glance:

- | | |
|--|---|
| › Powerful entry-level model | › Cost-effective use |
| › Practical, self-explanatory and sturdy | › Protection system in accordance with LPC 1 |
| › Compatible with existing infrastructures | › Plug and Play – ready for operation on delivery |
| › Flexible | › Ergonomic |



Strasor Basic

Strasor Basic or Strasor Advanced?

We offer two variants to suit your marking needs. The Strasor Basic is the perfect entry-level model for simple marking jobs. For more challenging applications, on the other hand, look no further than the Strasor Advanced version of our marking laser. The Strasor Advanced offers a range of additional equipment and functions not provided with the Basic model:



	Strasor Basic – For simple marking requirements.	Strasor Advanced – For demanding marking tasks.
Equipment	Compact solution with stand-alone extraction unit for your workbench	Additional, spacious underbench cabinet with three lockable drawers, laptop holder, pull-out workpiece surface and built-in extraction unit
Power	Powerful 20-watt fibre laser	30 and 50-watt fibre lasers (MOPA version with higher power of up to 250 watts available on request)
Dimensions	1170 x 890 x 990 mm	1170 x 890 x 1810 mm (incl. underbench cabinet)
Door	Manual door	Automatic door (door opens electrically in 1.6 seconds to minimise cycle times)
Marking area size	Standardised at 110 x 110 mm for small to medium objects	175 x 175 mm for large objects (optional)
Axis	Electric Z-axis with 450 mm travel distance	Rotary axis for circumference marking and additional autofocus for Z-axis (optional)

Technical data

- › **Electrical connection values:**
230 V/100 V (single-phase), 50/60 Hz, 10 A
- › **Max. workpiece size:**
900 x 350 x 420 mm
- › **Max. workpiece weight:**
75 kg
- › **Z-axis travel distance:**
450 mm
- › **Average laser power:**
20-50 W (depending on model)
- › **Wavelength:**
1,064 nm
- › **Laser protection class:**
1 in acc. with DIN EN 60825-1
- › **Laser wavelength:**
1064 nm
- › **Focussing lens:**
f = 160 mm
- › **Depth of focus:**
±3 mm



For more info, visit:
www.mobil-mark.de/strasor

How investing in a Mobil-Mark laser system pays off

Our laser for every application

Our laser marking systems don't just stand out for their cutting-edge technology and the incredible versatility they offer their users – they're affordable, too! Read on to find out where you can optimise your processes and save money on logistics, consumer costs and production efficiency. And while we've got plenty of excellent selling points to offer, we prefer to let the numbers speak for themselves – extrapolated from practical customer experience.

Why Mobil-Mark is worth the investment for you:

› Long service life

thanks to excellent German-made industrial quality.

› Improved manufacturing efficiency

thanks to faster production compared to conventional marking methods.

› Reduced logistics costs

thanks to Mobil-Mark's unique mobile laser systems, which allow workpieces to be marked wherever they are located.

› No complex, expensive protective housing required

› No additional investments in industrial safety required

as all relevant safety standards are already met.

› Improved employee satisfaction

thanks to ergonomic device design and practical functions.

› Elimination of previous consumption costs

for conventional marking processes – for example, stains, paints and wear-and-tear parts such as marking stamps are no longer required.

Sample calculation from a satisfied Mobil-Mark customer

Requirement:

Clear marking of internal broaches from tool shop

Previous marking method:

Etching with stencils and acid

New marking method:

Laser engraving with Quasar 60 from Mobil-Mark

Marking costs per internal broach:

100 internal broaches per day on 220 working days

Expenditure	Previously	With Mobil-Mark
Amortisation	€0.05	€0.50
Consumables	€0.75	€0.04
Set-up costs	€0.40	€0.03
Personnel costs	€5.00	€0.20
Total	€6.20	€0.77

87% Lower overall costs

About us

World-class laser marking systems – made in Germany

Mobil-Mark's devices can be easily transported to the workplace. And the patented laser technology is unique – users do not need to wear protective equipment, and no protective housing is required for the laser, either. The practical design and intuitive, self-explanatory operation also mean users require minimal training to use the device. Mobil-Mark offers the full range of products, accessories and service that discerning companies expect from a premium manufacturer. We see each individual customer request as both a challenge and a motivation – and we always find the ideal solution.

Industrial lasers of the highest quality, for the highest-quality results

Based in Ulm, Germany, Mobil-Mark GmbH has been developing and producing customisable laser marking systems for industrial and commercial applications around the globe since 2003. Mobil-Mark is an independent sister company of DENIOS SE, a global specialist in industrial supplies based in Bad Oeynhausen, Germany. The company employs experienced engineers and technicians with comprehensive expertise in lasers, headed by Managing Director Manfred Klatt.

Unparalleled technology with unbeatable benefits

Alongside Mobil-Mark's stationary marking lasers, our mobile devices also offer a unique range of benefits: They are mobile, universally applicable and can mark or engrave surfaces made of nearly any material. Additionally, no protective laser housing is required, and users do not need any personal protective equipment (PPE). These mobile marking lasers are the only ones of their kind in the world.



2-year warranty

Place your trust in premium-quality products.



On-site training

Tailored to meet your needs.



Individual consultation

from experts.



Maintenance and spare parts service

available upon request at any time.





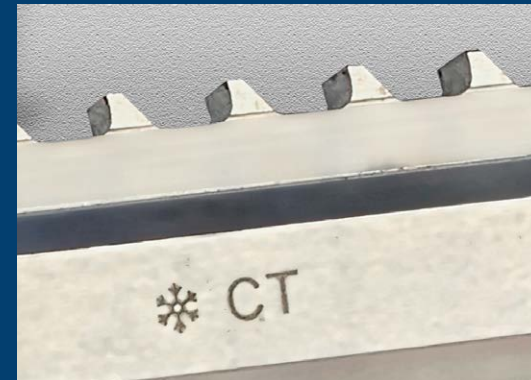


Customers
who benefit from
Mobil-Mark lasers



Really good product, user-friendly,
great handling and great
consultation from Mobil-Mark.

Rudolf Gebauer | MTU Aero Engines AG





Performs and handles as expected, and operation is so easy we completed with our introductory training in just a few hours!

Roy David | Sunnen AG



Mobil-Mark GmbH

In der Wanne 55
89075 Ulm, Germany

Tel. +49 731 40 700-601

Fax +49 731 378 12 30

kontakt@mobil-mark.de

www.mobil-mark.de

Follow us:

