

# Videojet® Automotive Industry

Industry Laser Case Study

Countless Applications.  
One Laser Marking Solution:  
Videojet Laser Markers

## Laser.

Ink Jet.

Thermal Transfer.

Labelers.

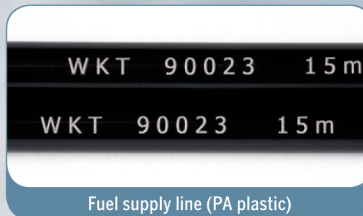
Track & Trace.

Supplies.

Parts & Service.



Plastic knob



Fuel supply line (PA plastic)



Gear



Control buttons with annealing



Auto plastic parts



Plastic housing

Videojet laser markers deliver permanent marks for a multitude of different automobile parts and materials. There is virtually no product or material which is not suitable for marking with lasers.

## Countless Applications

In addition to metal parts such as bearings, gears, fuel injectors and crankshafts, our laser markers also mark plastic components such as housings, rubber seals, profiles, switches and buttons, name-plates and labels as well as sensors and day and night design elements – automatically with permanent and high-quality markings. Marks can include 2D codes such as the ECC200 or SQR, bar codes like the EAN, serial numbers or individual content such as customer or brand logos and graphics such as wiring or hydraulic diagrams.

## Various Requirements

Our systems are particularly important within the automotive industry in connection with **product identification** and **traceability** as well as sustained logistics control. In addition all of the marks must be **easily readable** by the human eye and automatic readers, remain **durable** and be **resistant to abrasion, temperature, light and lubricants**. Our high power solid-state laser markers (Nd:YAG systems) delivers excellent marks, especially on black Polyamide (PA) fuel supply lines.

## The Industry

### Laser marked automotive products:

- Plastic fuel tanks: marked with bar code for internal defect and external warranty tracking; replaced adhesive labels which were unreliable on high temperature parts coming out of the mold
- Metal fuel tanks for commercial and agricultural vehicles: marked with regulated safety information; replaced purchased and welded-on metal nameplates to reduce cost and simplify manufacturing operations
- Engine parts (i.e., carburetors, pistons, connecting rods, etc.): direct marking of human readable and machine readable 2D matrix codes process for internal quality assurance.
- Headlamp reflectors: marked with manufacturing tracking information; more heat resistant, permanent and cleaner than ink-based marking

### Laser marking systems

- Usually apply alphanumeric and bar codes on automotive products, including 2D codes to conserve space and increase amount of information available.

**Videojet systems apply these 2D codes "on the fly" (mark wafers while they move)!**

## The Marking Solution: Videojet Laser Systems

Videojet's lasers for marking, coding and engraving are ideal for product identification needs in the automotive and automobile supplies industries. Not only do they mark all possible information and required data on products and substrates, they also apply codes in the shortest amount of time and with uncompromising quality. Videojet laser markers also deliver reliability and low maintenance - with an efficiency that pays off.

## Videojet Laser Markers for the Automotive Industries are:

### Exceptional, Fast Marking

- Videojet laser markers rank among the fastest in their classes.
- They apply high quality marks in minimum time.

### Versatile and Flexible

- Videojet laser marking systems apply the widest variety of content on countless materials. Thanks to our broad product range we are able to select the optimum laser marker for your application.
- Both moving and non-moving parts can be marked (in-line or in a workstation).
- Videojet marking lasers provide flexibility from their versatile use and simple integration - especially when production space is scarce.

### Reliable and Low Maintenance

- The marks applied by these systems are as permanent as an engraving.
- The product's lifetime, low maintenance and reliability pay off – ideal for reducing downtime.

### Secure and Traceable

- A laser mark is counterfeit-proof and protects against product piracy.
- These systems deliver perfectly readable, legible and traceable marks.

### Green Technology

- The contact-free, clean and environmental-friendly laser marking technology does not require consumables, which furthers its efficiency.

## Laser Markers Especially Suited for the Automotive Industry

### Fiber Laser Marking Systems

Videojet 7120 and 7130 - 10 and 20 Watt, pulsed laser systems. Particularly suitable for high resolution markings and integration into tight spaces.



### Nd:YAG Laser Marking & Engraving Systems

ALLPRINT DN50A - 50 Watt, diode pumped  
ALLPRINT LN100A - 100 Watt, lamp pumped  
Particularly suitable for applications where high marking speeds are required.



### CO2 Laser Markers

Videojet 3120, 3320, 3430 - 10/30/50 Watt  
Especially suited for the coding of plastics, coated metals, glass, labels and cardboard packagings.

