

SVAC[®]

GLOW PLUGS & BRAKE HOSE

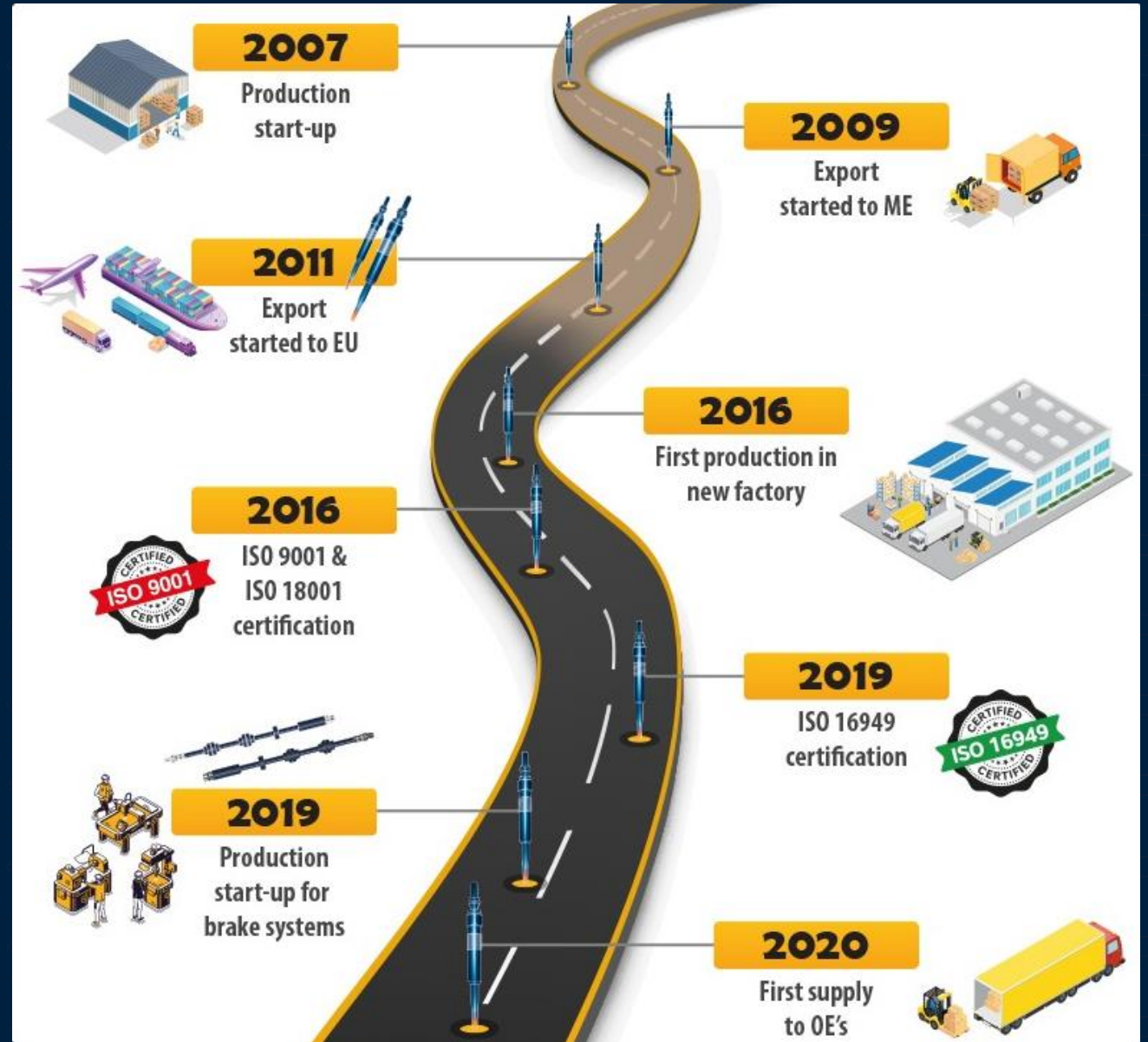


- **Company**
- **Vision/Mission**
- **Production**
- **Products**
- **Design and Analysis**
- **Referances**



Company Profile

- Founded in 2007
- Located in Konya-Turkey
- Production of;
 - Glow Plug
 - Brake Hose
- 2000 sqm. production area
- 70+ employees – 12 White Collar
- Production for OES & Aftermarket Companies





Vision

Ukde Engineering Ltd.sti. customer satisfaction, continuous improvement quality team work, social compliance with technological advances and a leader in the sector with an understanding based on sharing to be an organization, “Vision” has acquired.

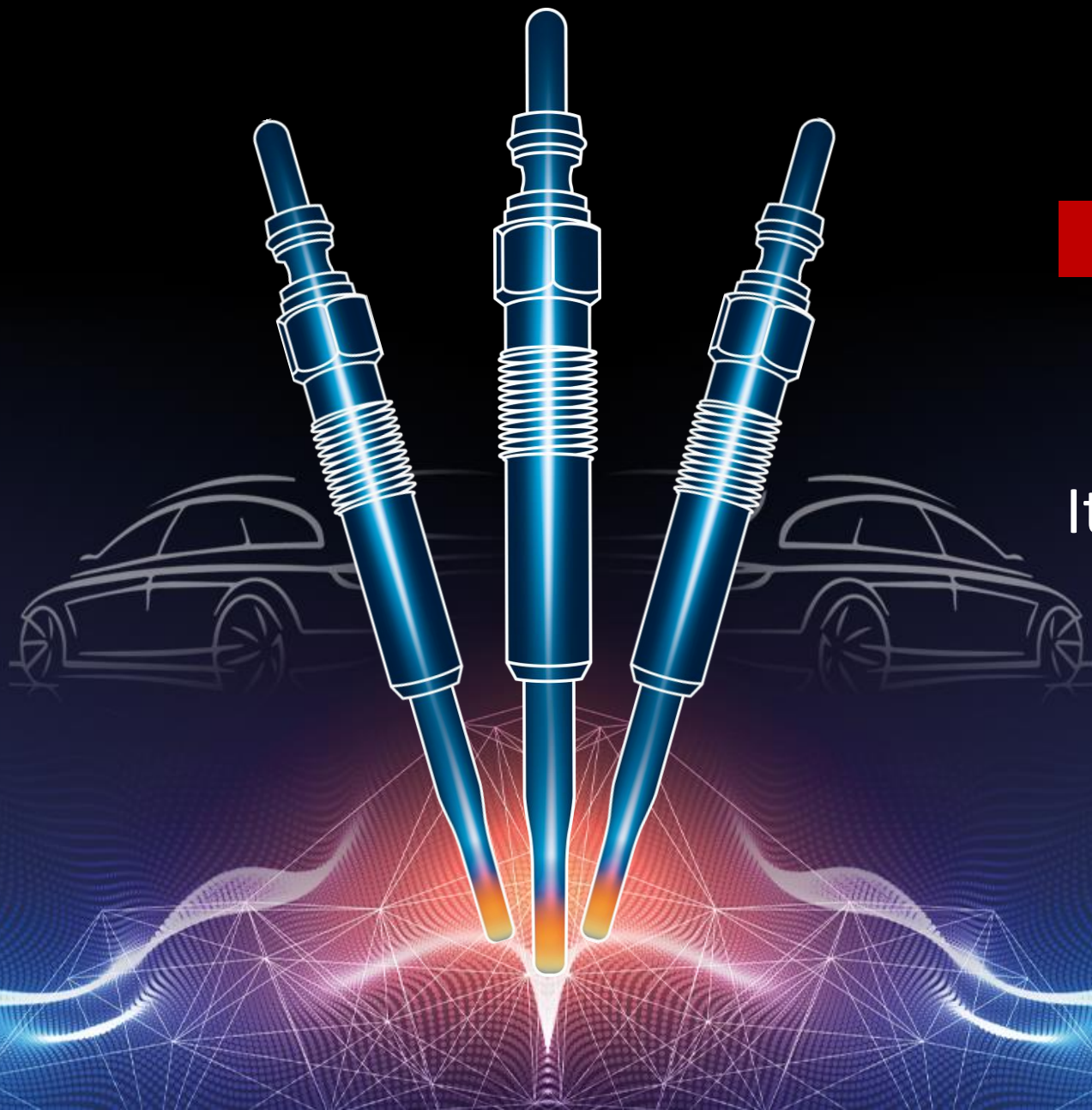
Mission

Within the framework of this vision we have identified to our customers, to our staff, to our country to be a source and value creating organization. We got ourselves “Mission”.

Product Range

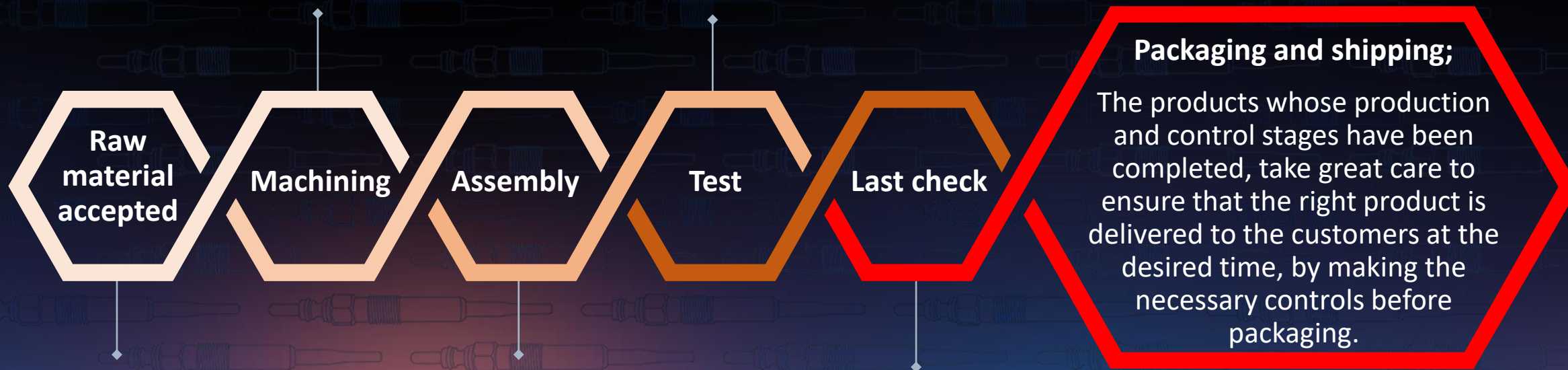
SVAC Glow Plugs Portfolio

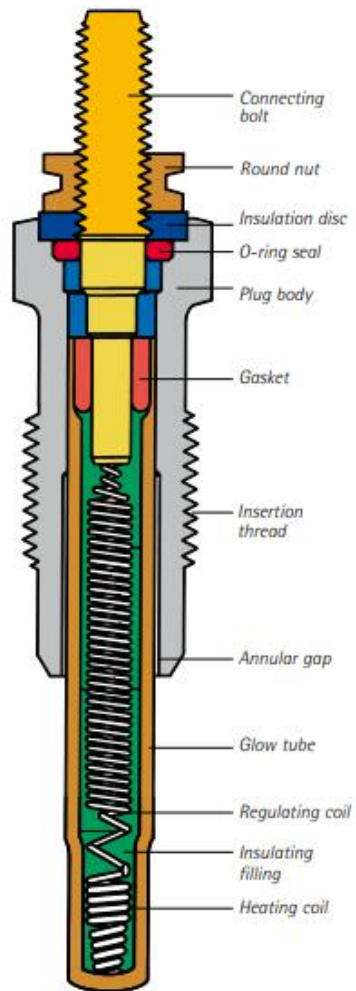
It has 220 kind of glow plugs for
Passanger and Light
Commercial Vehicles.



All about the glow plugs

Production Steps





Design of a self-regulating,
fast-heating.pencil type glow plug.

Requirements on a modern glow plug;

- **FUNCTION**

- During pre-heating, a high current initially flows via the connecting bolt and the regulating coil to the heating coil. The latter heats up quickly, causing the heating zone to glow. Glowing quickly expands – after 2-5 seconds, the heating rod glows up to near the plug body. This additionally increases the temperature of the regulating coil that has already been heated up by the current. Then, the electrical resistance increases and the current is reduced to a point where it cannot cause any damage to the glow rod. Overheating of the glow plug is thus not possible. If the engine is not started, the glow plug will be switched off by the glow time control unit after a certain stand-by time.

- **SHORT HEAT-UP TIME**

- Glow plugs must provide a high temperature within as short a time as possible to assist with ignition – and they must maintain this temperature regardless of the ambient conditions, or even adjust the temperature depending on them.

Reliable start even at temperatures of -30 °C

Extremely fast heat-up time: 1,000 °C are reached in 1- 2 seconds

Low power requirement (in particular important for engines with 6 or more cylinders)

Higher functional reliability

Controllable temperature for pre-, intermediate and post-heating



Numerous diagnostics functions

immediate stable idling and well-controlled load take-up

Minimised pollutant emissions

Specifically designed for diesel engines with direct injection

On-board diagnostics-enabled

Causes of failure in pencil type glow plugs

In warm and dry weather, a diesel engine will start even if one glow plug is defective and only the other plugs preheat. In such an event, there will usually be increased pollutant emission and possibly also knocking during start, however, the driver will not consciously notice these signs, or will not know how to interpret them. There will be a unpleasant surprise once the weather becomes cold and clammy, and the first night frost sets in: the "heating contribution" to the diesel engine fails to function, and the engine will at best start with difficulty and produce smoke- most probably, however, nothing will work at all. Below is a list of typical damage and the related causes. In most cases, it will be possible to correct a fault using this diagnostics aid.



HEATING ROD WITH FOLDS AND DENTS

Causes:

Coil interruption due to

- a) operation at too high voltage, e.g. jump start
- b) too long power supply due to a stuck relay
- c) impermissible post-heating when engine is running
- d) use of a non post-heating glow plug

Corrective action:

- a) Jump start only at the voltage of the on-board power supply.
- b)/c) Check preheating system, replace glow time relay.
- d) Install post-heating glow plugs.



HEATING ROD PARTIALLY OR FULLY MOLTEN OR BROKEN OFF

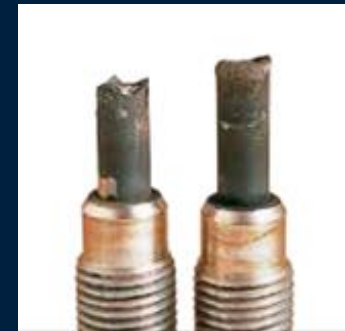
Causes:

Overheating of the heating rod due to

- a) beginning of atomization too early
- b) coked or worn nozzles
- c) engine failure, e.g. because of piston jamming, valve breakage, etc.
- d) dripping nozzles
- e) seized piston ring

Corrective action:

- a) Set injection timing point accurately.
- b) Clean or replace injection nozzles
- c) Check fuel jet profile.
- d) Overhaul or replace injection nozzle
- e) Ensure piston rings can move freely



Warehouse and shipping;

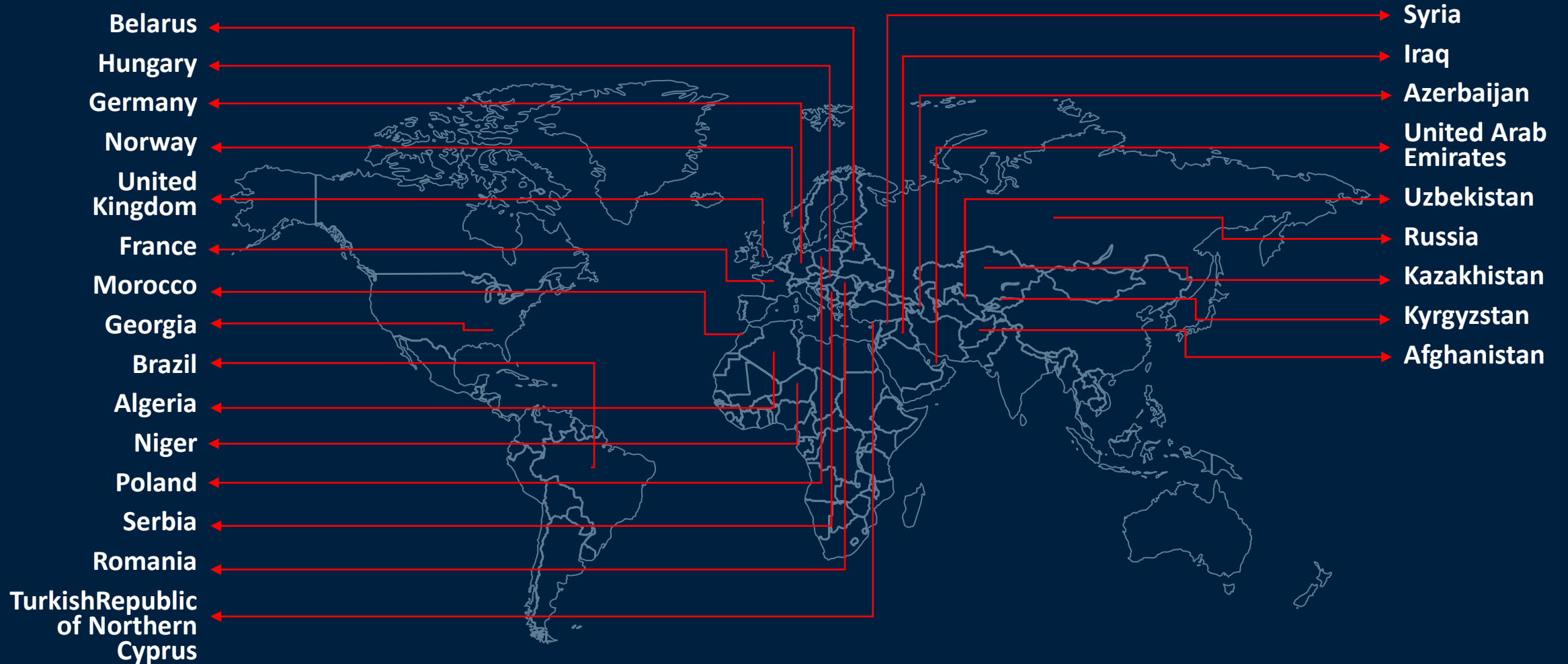


Our current products are actively controlled by our expert team during all working days. Our team, consisting of a total of 13 personnel, can ship a mixed order of 200 different products within the same working day.

In addition, we would like to state that we produce in our customers' own ablations.

Companies that I can give you as a reference;

- Armtek (Russia)
 - Kamoka(Poland)
 - Maxgear(Poland)
 - Group Auto (Moldova)
 - BusMarket(Ukraine)
 - Ridex GmbH (Germany)
- and many more...



The background of the entire slide is a repeating pattern of glow plugs and brake hoses, rendered in a light blue/teal color against a dark blue background. The pattern is dense and covers the entire area.

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Thank you...