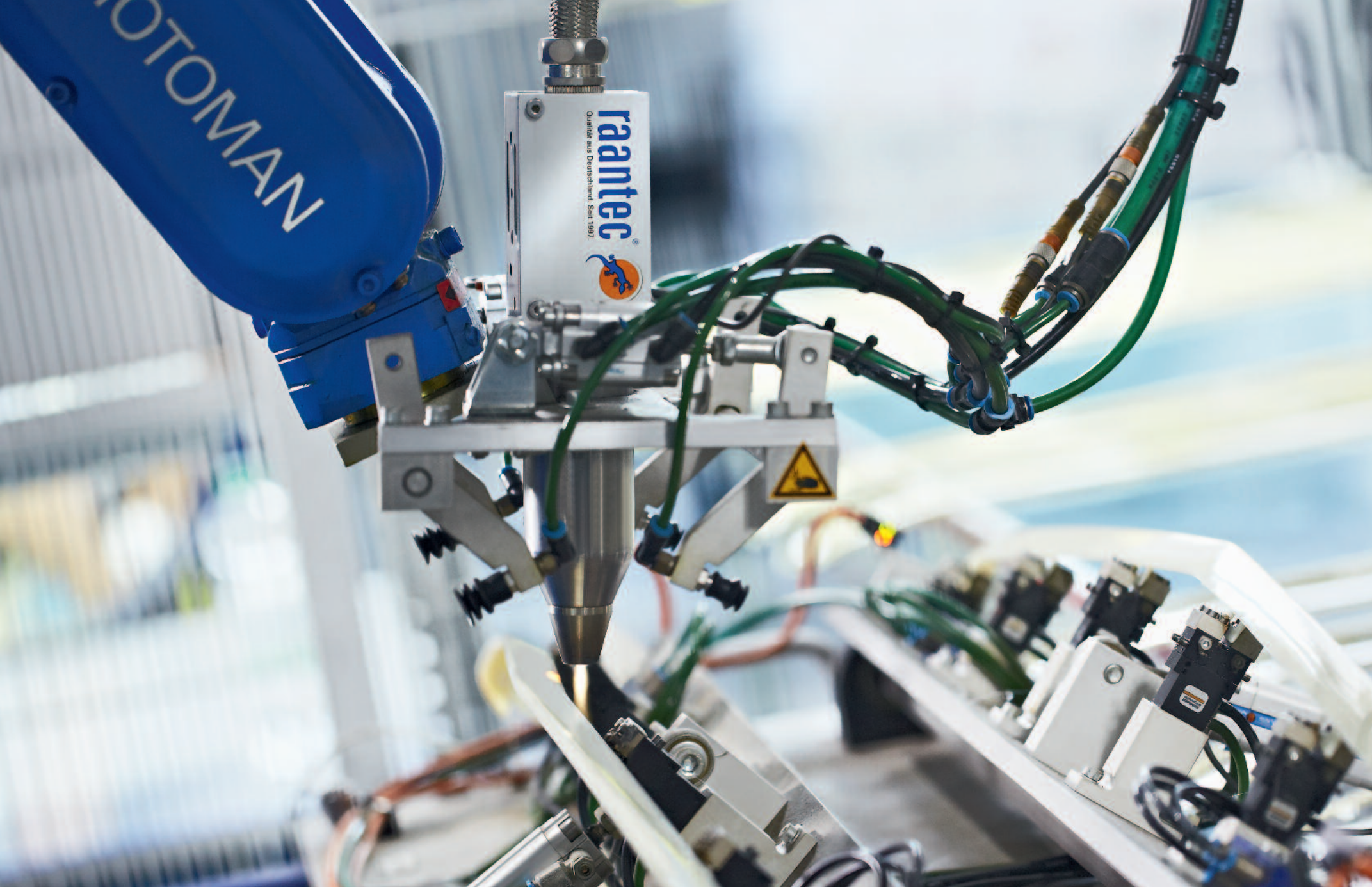




PlasmaJet®

More surface is not possible





PlasmaJet® – who discovered it?!

With the **plasma technology of raantec**, a great variety of different surface materials are given completely new properties and application possibilities.

Cleaning, dusting, degreasing, activating, bonding, varnishing, coating ...

raantec Plasma is deployed in all industries worldwide

Packaging industry
Print industry
Household devices industry
Medical technology
Electronics industry
Textile industry
Steel and semi-finished products

Automotive industry
Shipping industry
Aerospace
Rubber industry
Glass industry
Plastics industry

Plasma – modern-day witchcraft

Plasma is both feared and loved, to this very day, it is surrounded by many rumours and dark images.

Probably the best-known plasmas are the natural phenomena of lightning and polar lights. Therefore it comes as no surprise that the old sagas and myths constantly revolved around this 4th state of aggregation and its fantastic powers.

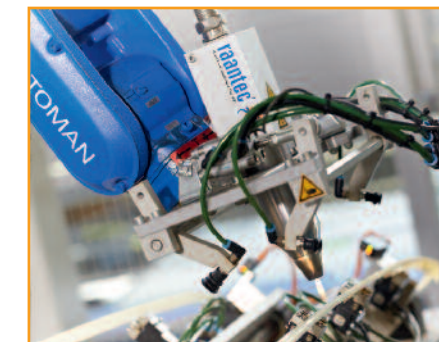
Technically produced, atmospheric plasma has advanced to an innovative, environmentally-friendly product on the foundation of physical laws.

30 years after the targeted and successful development of generators and plasma jets in Japan, we founded raantec. The market is thrilled by our continued successful developments with new technologies in our plant in Germany, and this is constantly opening up new markets.

PlasmaJet® function

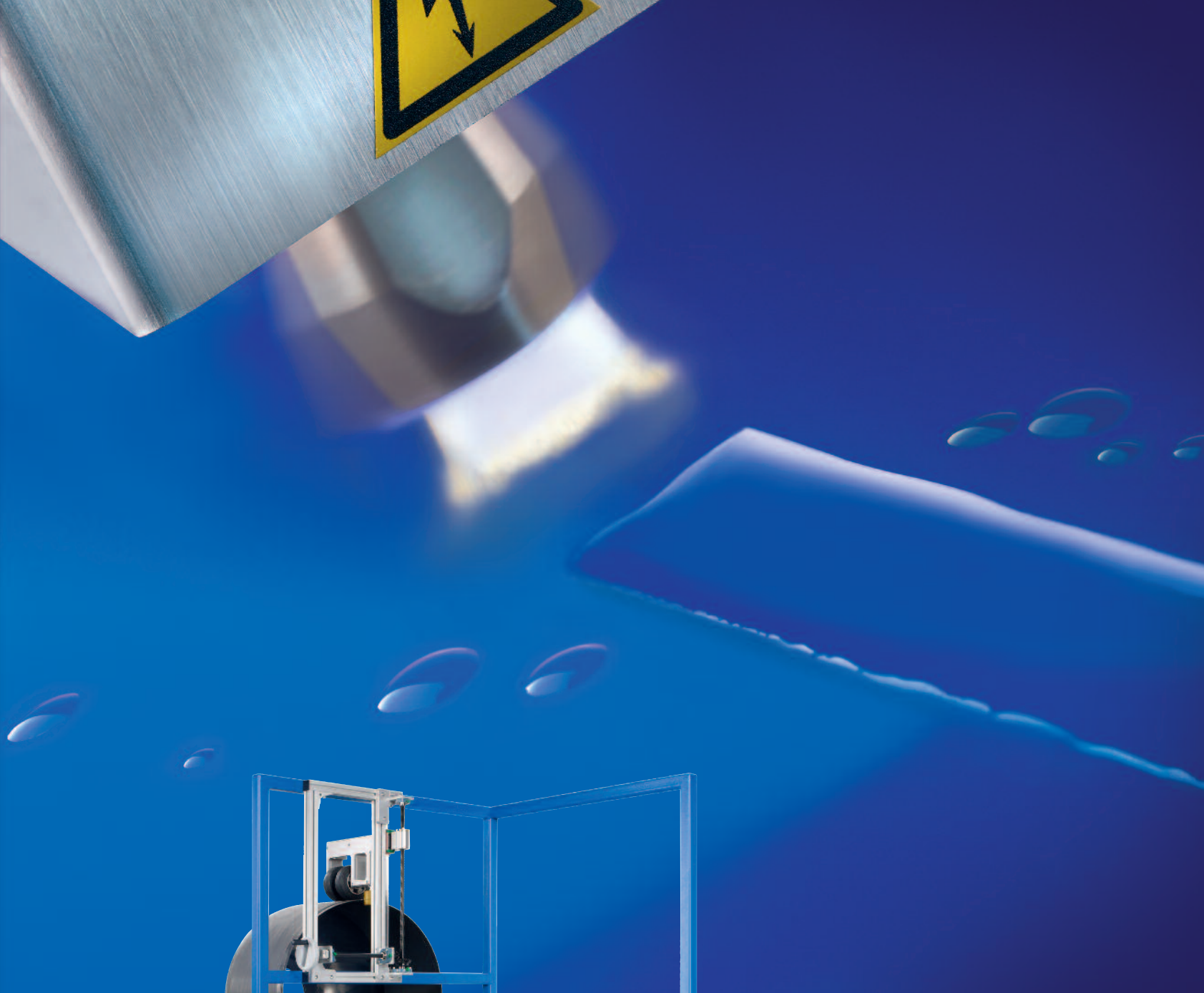
A PlasmaJet® always consists of a high-voltage generator and plasma nozzle. The plasma is created on the inside of the plasma nozzle by means of a high-voltage discharge between two electrodes. The process gas washes around the electrodes, where it then becomes plasma and, owing to its flow, escapes through a nozzle. If, for instance, the thus activated gas jet is pointed toward a synthetic surface, the wettability is increased.

The most inexpensive process gas is air. Outstanding treatment results can already be attained in this way.



Due to the selection of the outlet nozzles, hard to access part geometries such as, e.g. complex contours or three-dimensional bodies can be treated.

The low weight of the plasma nozzle and the flexible gas and energy input allow assembly to a robotic arm.



Oscillates in your favour

e.g.: Aviation and space industry
Apart from their surface enlargement properties, the pendulum nozzle can also be moved in all axes

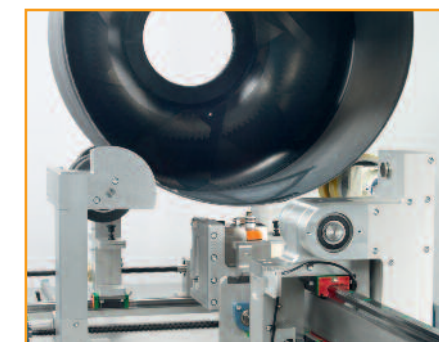
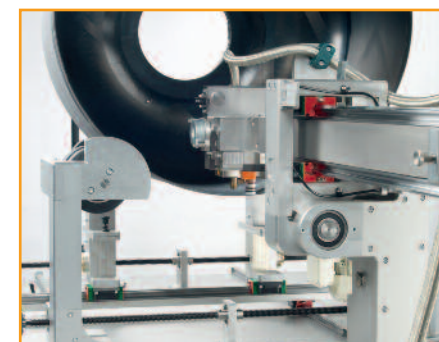
Our PlasmaJet® with pendulum nozzle
has the competitors spinning.



Rotating nozzles are technically highly sophisticated and very expensive when seen in direct comparison to our pendulum nozzles.
We do not deploy this technology.

Depending on your product and the desired properties, we use plasma nozzles in such a manner that the treated material is never activated in different ways.
We treat the surface! And – what we promise, lasts.

Main characteristic pendulum nozzle
Treatment width max. 30 millimetres



PlasmaJet® with pendulum nozzle
Special machine construction
The photos on the left demonstrate some possible uses for plasma pre-treatment with customer-specific components. In this case, it refers to the processing of round hollow bodies for the aerospace industry.





More surface is not possible

Plug in & work!

Start right away with our plug in & work, well-wrought modular design.

We do not earn any money with repairs.

All installations are modular, and thanks to their construction, they are ready for work after plugging in.

We call this system "Plug-in-&-Work". With us, you will not be in need of expensive commissioning and repairs. Ask us – we are happy to provide you with references. On the rare occasion of problems arising, our service staff is happy to be of assistance at all times. The characteristics of our generators and their operation simplicity are unique.

Main characteristics

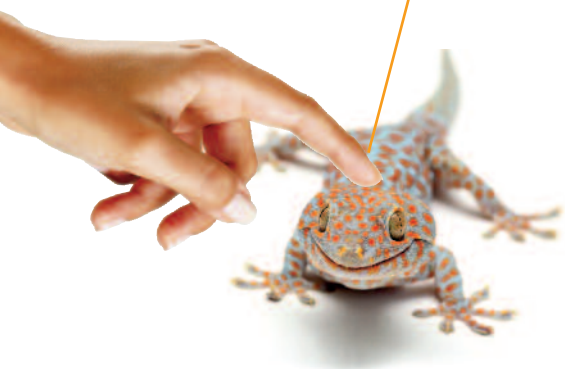
- low-noise operation
- cleartext messages
- self-diagnostics
- output control
- setpoint limitation
- continuous process monitoring
- bus capable
- RS-232 interface for the connection to a remote control
- operating storage and plenty more

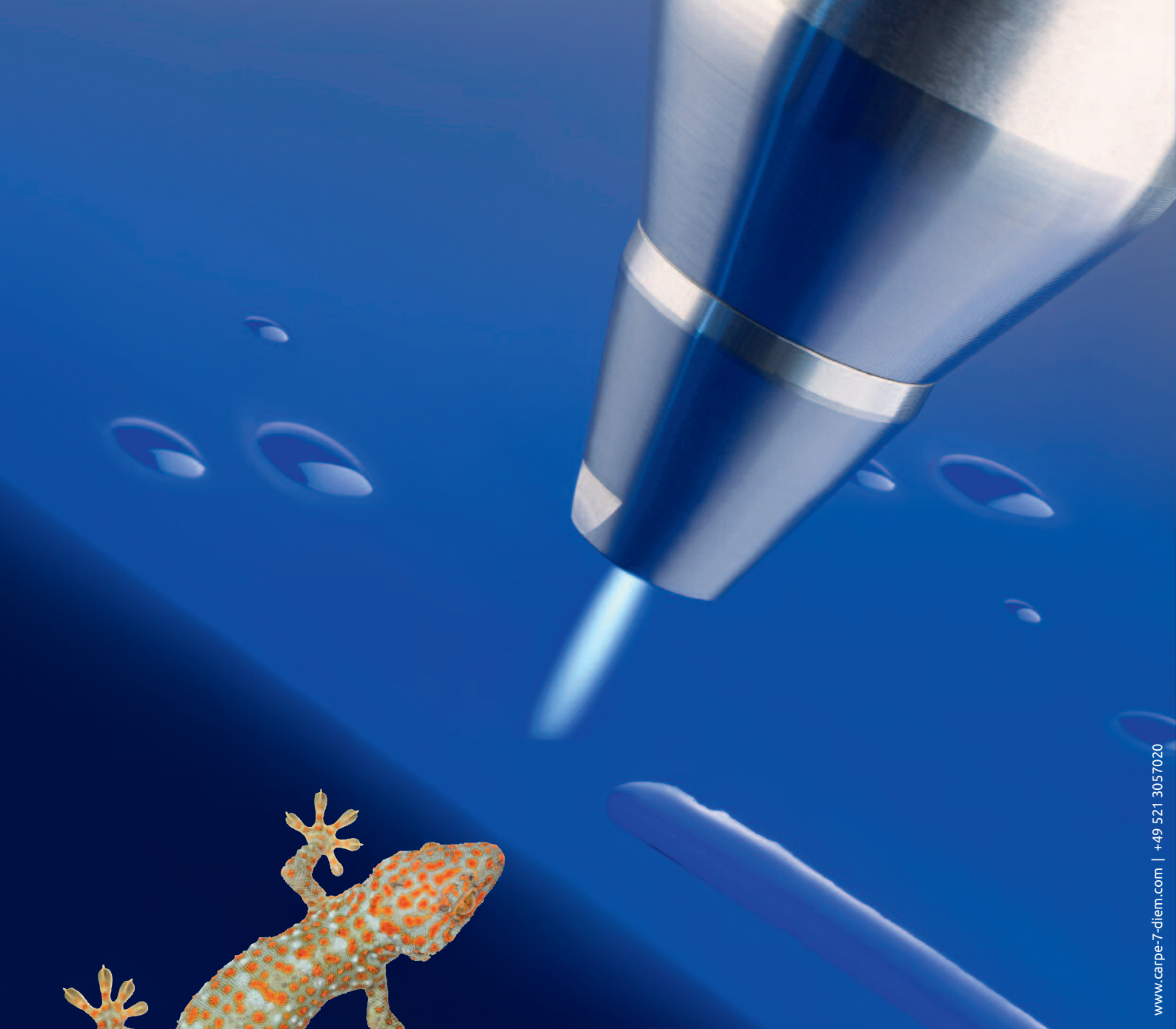
Thanks to continuous successful developments in our plant in Germany, we can build and offer modularly extendable plasma equipment in a minimum of time.

The raantec modular concept:

- for every PlasmaJet® on generator module
- individually selectable
- individually exchangeable
- expandable

Our customers acknowledge our performance, and we are in demand as a supplier of modern technology. For development and strictly confidential projects in our plant, we are accustomed to concluding the corresponding confidentiality agreements.





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