



Formula 1  
The Sauber C36 Ferrari



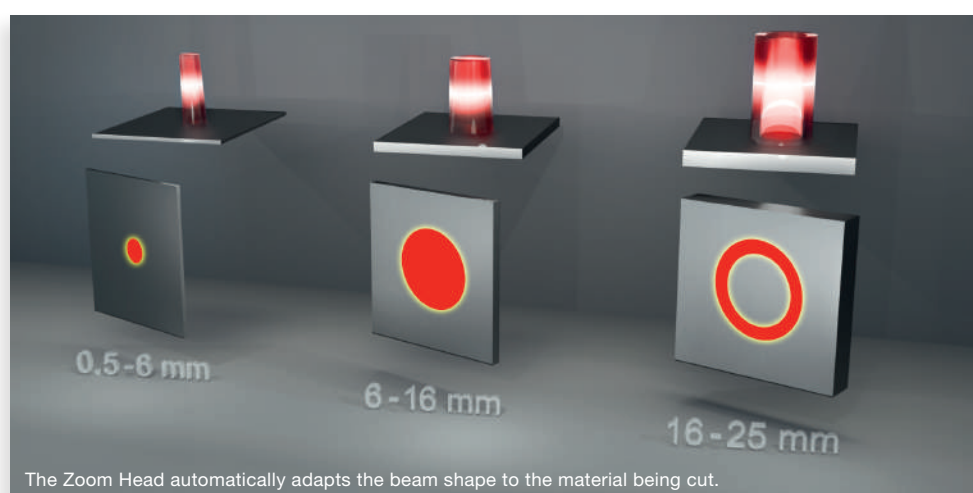
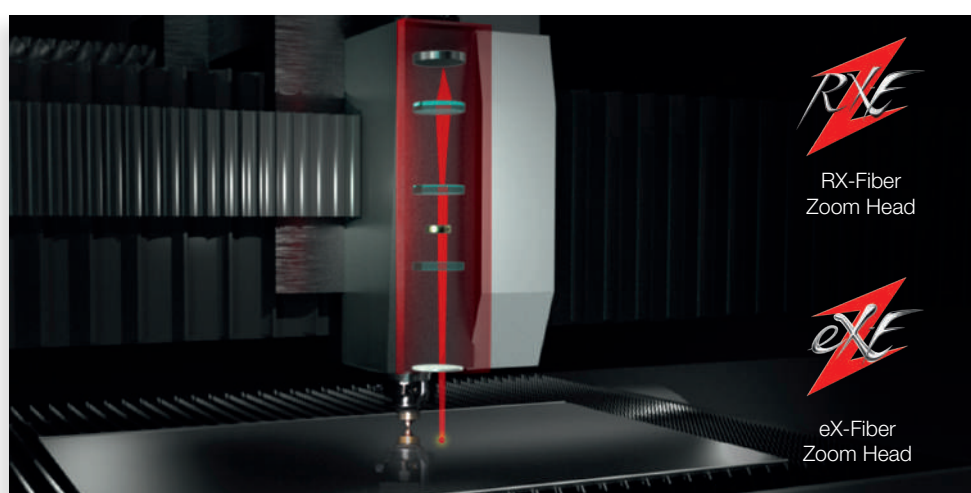
## From thin to thick and back again?

Faster than a pit stop!

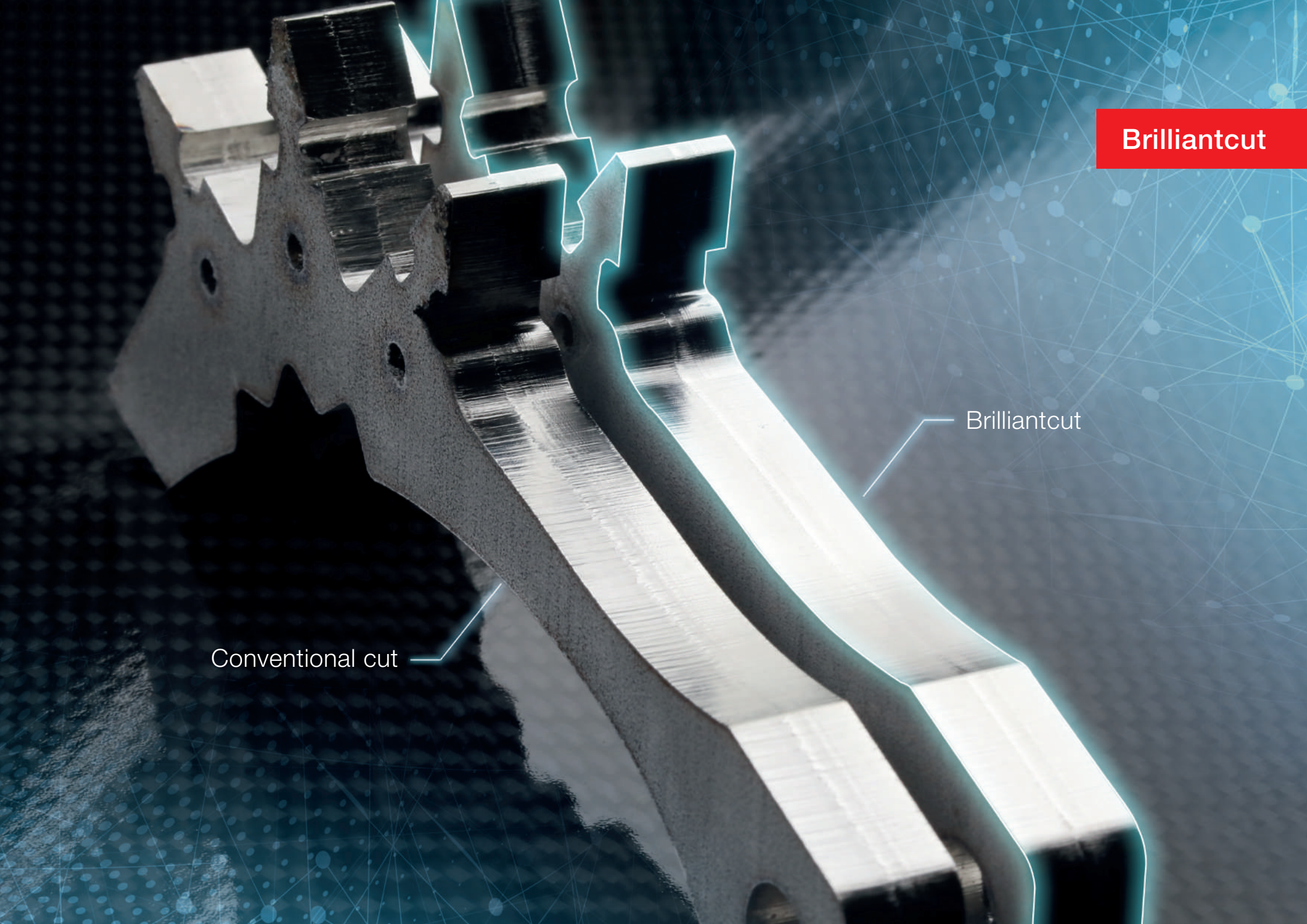
### The Zoom Head – adjustment in record time

Anyone constantly switching between sheet material of different thicknesses wants to resume cutting as quickly as possible – and without compromising on cutting quality. The Zoom Head developed by Mitsubishi Electric delivers speed and flexibility – for many years to come.

The optics are hermetically sealed to protect them from contamination during the rough and tumble of everyday operations. The only thing you notice is that everything runs smoothly.





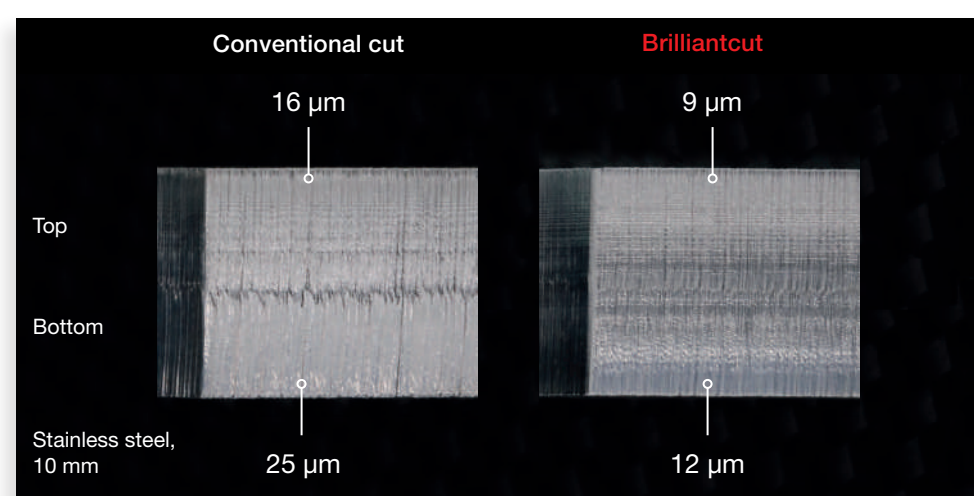


## A difference you can see and feel.

But the biggest benefit of a clean cutting surface is the saving of reworking costs.

### **Brilliantcut – 40 to 50% improved surface quality!**

The slow cross-flowing laser gas and the resultant stable discharge of the Cross-Flow laser in combination with patented beam guidance permit surface finishes comparable to those from mechanical machining. This means reworking can often be eliminated or reduced to a minimum.







Mild steel, 16 mm

## Less reworking, higher profits.

Technologies for superior results in any material quality.

### Dross Reduction (DR) control

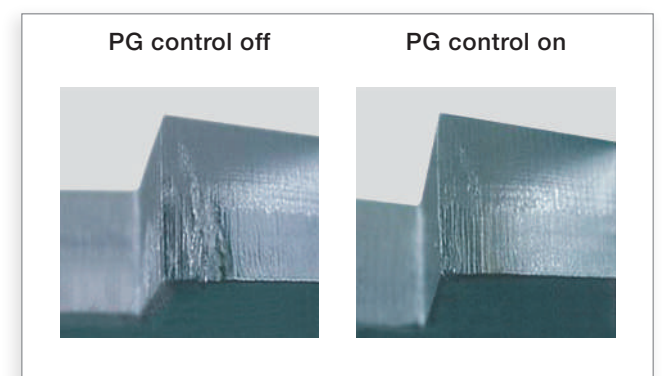
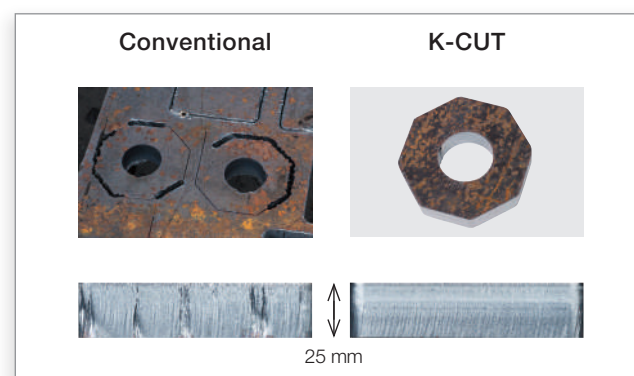
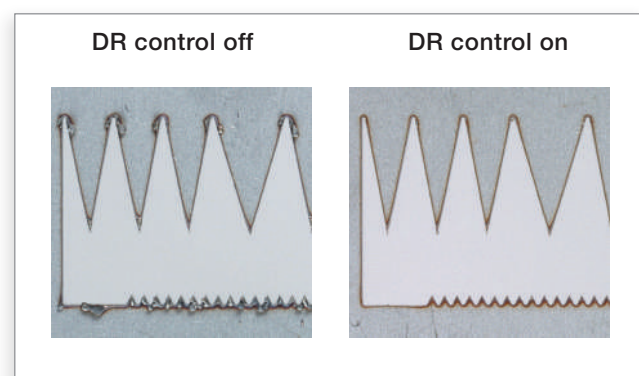
During acceleration and deceleration in corners, the Dross Reduction control measures and controls laser power in relation to cutting feed. This reduces unwanted temperature effects on the underside of the sheet material and at the end of the cut. Burr formation on stainless steel and galvanised sheet materials is therefore reduced. This results in less reworking and hence in lower costs.

### K-CUT

Not all sheet material is of the same quality. With K-CUT you can also cut lower-quality materials with good cutting results.

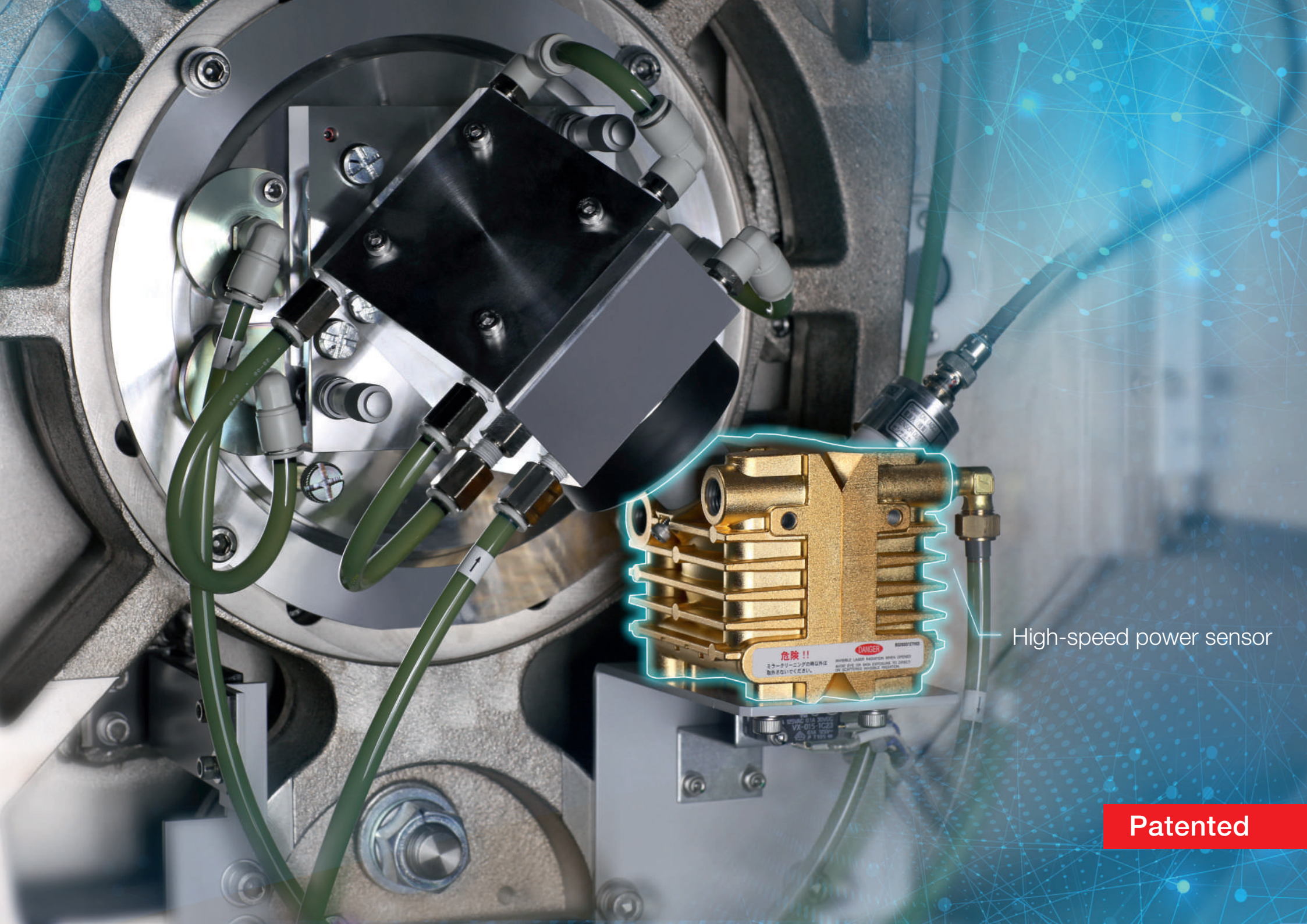
### Plasma-Guard

For complicated geometries in thick stainless steel. The predictive adjustment of machine parameters on sharp corners prevents the development of plasma from the outset. This way you get sharp corners – even on thick stainless steel – entirely without burrs.



Cross-Flow laser





## Different beam length, different results.

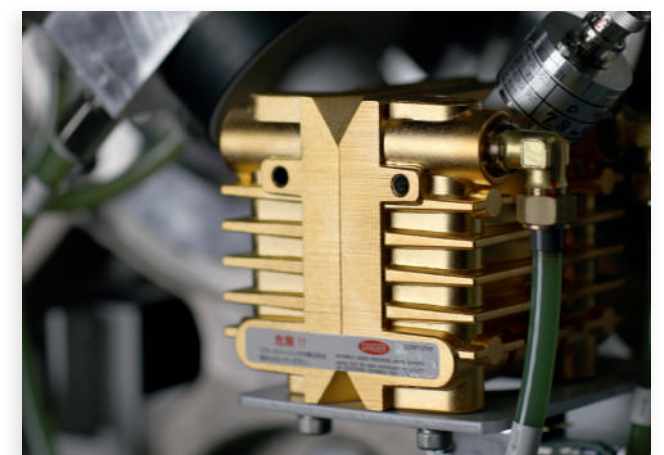
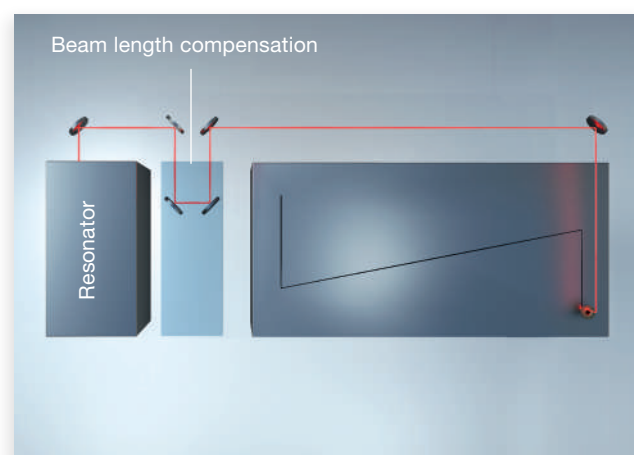
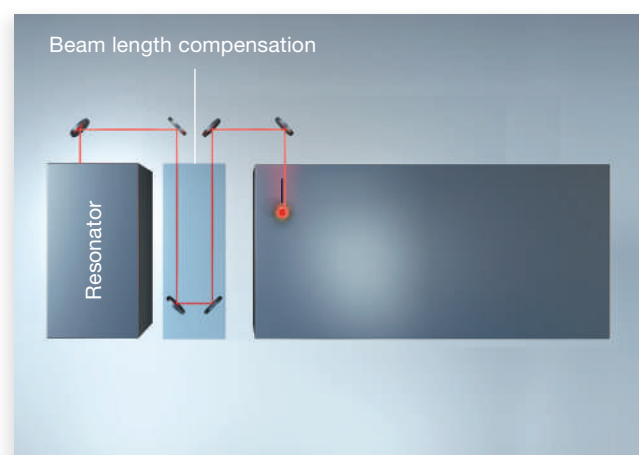
Constant beam length, constant results – that's what you expect of Mitsubishi Electric.

### System with constant beam length

A missing beam length compensation soon finds expression in differences in cutting performance on the table. If the results top rear and front right differ, this is not only annoying but also costly. Each Cross-Flow laser from Mitsubishi Electric comes with constant beam length – just as it has to be. Before you buy a laser cutting system, you should play safe and test the constancy of cutting quality on all four corners of the cutting table.

### High-speed power sensor

The high-speed power sensor from Mitsubishi Electric monitors laser power in real time. It ensures that actual laser power deviates less than  $\pm 1\%$  from the target value and thus permits the processing of strongly reflective materials such as aluminium and copper.



Cross-Flow laser

*Of course the beam has to stay constant – but why isn't this always standard?*