

# Cutting

## Cutting Copper

Our Pulsed Fiber Lasers can be used for a variety of micro cutting applications. The high peak power and short pulses of these Lasers ensure that there is good coupling and material removal for a range of metallic (including highly reflective and conductive metals such as gold, silver and copper) as well as non metallic materials. Using this technique very thin metal foils can be cut in a single pass. Thicker Metals up to 0.5mm and more, can readily be cut with multiple passes.

The process uses a fast scanner based beam delivery with a short focal length F-Theta lens and so requires no processing gas. As the mechanism is predominantly through vaporisation there is minimal recast material and very limited heat affected zones. The high precision offered by today's scanner based systems mean that part accuracies in the order of 10microns can be achieved over fields exceeding 150mm square.

### Related Product



Visit our website to view the full product datasheet  
**redENERGY G4**



Image courtesy of Miyachi Unitek

## Application Parameters

Type	G4 20W EP-L
Power	20W
M <sup>2</sup>	1.6
Beam Ø	8mm
Scanner/Lens	10mm/163mm F - theta
Energy	WF0 0.8mJ @25kHz

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