

Marking

Marking Plastic Tags

Our range of redENERGY Pulsed Fiber Lasers can be used to mark a variety of plastics including the PTFE used for Cow Ear (animal) Tags. This identification must resist the harsh farm yard environment and be easily scanned under less than optimum conditions.

Marking on PTFE is enhanced when the plastic is formulated with industry standard additives which enhance the absorption of 1.064 micron Laser light. The mark at the right was made in less than 3 seconds and the large characters are greater than 25mm tall.

The process uses a fast scanner based beam delivery with a long focal length F-Theta lens and requires no processing gas. The use of small mirror galvo heads combined with large marking field F-theta lens allows for scan speed to operate at 6 meters per second.

The H-Type High Mode beam, combined with small input beam diameter creates a smooth bottomed wide laser pulse that eliminates hot spot burning. Coupling this large spot size (170 microns), to a low density line fill, (150 microns), enables large characters and barcodes to be very quickly dark marked.

Related Product



Visit our website to view the full product datasheet
redENERGY G4



Application Parameters

Type	40W HS-H
Power	40W
M ²	3.2
Beam Ø	6mm
Scanner/Lens	10mm / 254mm F - theta
Energy	WF0 1.25mJ @30kHz

Postcard Archive



To browse though SPI's entire library of application postcards, visit the postcard archive:

spilasers.com/appscards

