

<b>Application report Engraving</b>	V-Nr:	A-Nr:	date: 2010-12-13
Application engineer: Naoya Koga			
Task: Welding & Cutting rod			
Customer: Prot-X International Inc. JAPAN		Sales: Naoya Koga	

## Laser

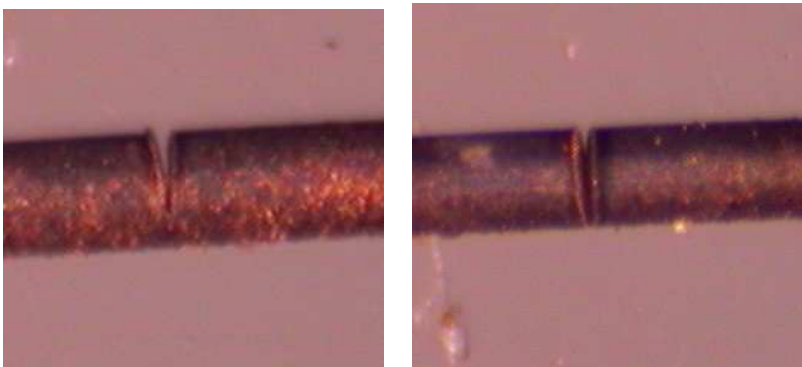
Laser	SP40
wavelength [nm]	1064
beam expander BE	
focal distance [mm]	80
theor. spot size [ $\mu\text{m}$ ]	Less than 100
Galvohead	No
fix optics	
mode aperture [mm]	1.0mm

Material	Tungsten
thickness [mm]	Dia.0.1 and 0.15
Condition	
Ar [ l/min ]	5

## Settings:

No.	P <sub>av</sub> [W]	Pulse width [ms]	Number of Welding Points	Beam spot size [mm]	Time [s]	Remarks
①	0.4	2	3	0.1		0.15
②	0.36	2	3	0.1		0.15
③	0.44	2	3	0.1		0.15
④	0.36	2	2	0.1		0.1
⑤	0.33	2	2	0.1		0.1
⑥	0.3	2	2	0.1		0.1

$\phi$  0.1mm Wire Cutting for rare metal material.



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