

micro-T17 Nd-YAG

Tube: cutting - drilling - welding



swisstec
micromachining

Corporate Headquarter:
Swiss Tec AG
Zollstrasse 35
FL-9494 Schaan
Liechtenstein

International Salesoffice:
Swiss Tec AG
Birkenstrasse 49
CH-6343 Rotkreuz
Switzerland

Telefon +41 (0)41 790 3385
Telefax +41 (0)41 790 3384
www.swisstecag.com
info@swisstecag.com

- tube micromachining for dry or wet operation
- tube diameter range: 0.5-8mm
- machine frame made of granite (temperature-stable, shock absorbing)
- linear X-axis: linear motor or lead screw
- max. cutting length: 300mm
- rotative A-axis: direct drive
- highly dynamic positioning
- application dependent laser configuration
- adjustable nozzle distance
- NC controlled process gas
- process observation
- easy access to workspace
- automatic material feed
- high-precision tube guiding
- optional tube loading rack
- external laser supply unit
- made for 24-7 production
- low maintenance
- warranty 2000 working hours (4000 optional)

Technical specifications

	Standard	Option
general information		
machine dimensions (L x W x H)	[mm] 1180x600x1300	
laser dimensions (L x W x H)	[mm] 1000x420x720	
weight	[kg] 800	
electrical supply	3x400V/50Hz	
pneumatic supply	[bar] min. 6	
integrated transport system	✓	
integrated control cabinet	✓	
operator panel	movable	rotatable
laser cabinet	external	
laser system		
type	Nd-YAG	application dependent
wavelength	[nm] 1064	
frequency	[Hz] 0.1 – 5000	
pulse length	[µs] 12 – 300	
optical system	[mm] F=50	
exchangeable protection glass	✓	
cutting nozzle diameter	[mm] 0.5	0.2
beam expander	1 to 8x	
powered beam expander		✓
nozzle distance adjustment	manual	powered
focus adjustment	manual	powered
water cooling system	external	chiller
number of process gas connections	1	up to 4
gas pressure monitoring and control		✓
water pressure monitoring and control		✓
tube flushing monitoring and control		✓
process observation	monocular	binocular
CCD-camera / monitor		monochrom/color
mechanics		
max. cutting length	100	up to 300
X-axis: guiding rails	✓	
X-axis: drive	lead screw	linear motor
X-axis: max. speed	[m/min] 9	
X-axis: measuring system	[µs] +/- 0,5	+/- 0,1
A-axis: direct drive	✓	
A-axis: measuring system	[incr] 180'000	
security cover		
laser class	1	
eye protecting inspection window	[mm] 100 x 200	
number of doors	2	
interlock switch	✓	
workspace illumination		✓
<ul style="list-style-type: none"> • machine setup time: 4 hours • factory training: <ul style="list-style-type: none"> ○ free at Swisstec's facility ○ additional charges for training at customer's facility 		