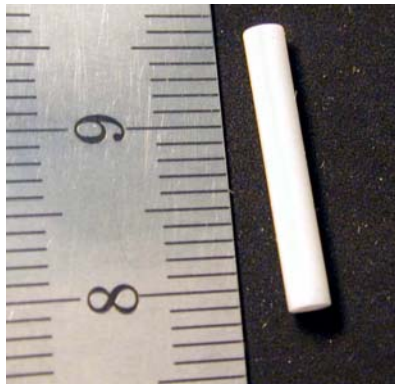


## CYLINDRICAL LAPPING



### Process specification

Machine	FLM 500-R
Working wheel	GG
Stock removal	2-5 $\mu$
Pieces per load	200
Cycle time without handling	5:00 min.
Lapping compound	AWS-RB

### Parts specification

Material	Al <sub>2</sub> O <sub>3</sub> ceramics
Previous operation	ground
Dimensions	Ø 2.4 x 18 mm

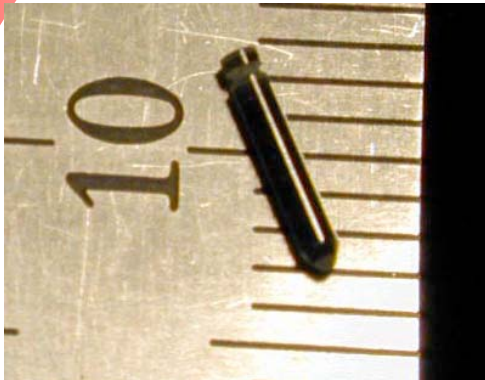
### Premachined condition

Base size	2.4 mm
Surface	ground
Flatness	0.002 mm
Parallelism	0.002 mm

### Results

Tolerance in dimension	± 0.1 $\mu$
Cpk	1.33
Ra	0.05 $\mu$
Rz	0.02 $\mu$
Flatness	0.01 $\mu$
Parallelism	0.05 $\mu$
Surface optical:	crosshatch

## CYLINDRICAL LAPPING



### Process specification

Machine	FLM 500-R
Working wheel	cast iron
Stock removal	5 $\mu$
Pieces per load	400
Cycle time without handling	17:00 min.
Lapping compound	AWS-RB 1-2 PTG-RS

### Parts specification

Material	sapphire
Previous operation	ground
Dimensions	$\varnothing$ 1.1 x 5 mm

### Premachined condition

Base size	1.01 mm
Surface	ground
Flatness	0.001 mm
Parallelism	0.003 mm

### Results

Tolerance in dimension	$\pm 0.5 \mu$
Cpk	1.33
Ra	0.05 $\mu$
Rz	0.5 $\mu$
Flatness	0.2 $\mu$
Parallelism	0.6 $\mu$
Surface optical:	polished