

## Flathoning on DLM 705



- Tungsten carbide inserts -

### 1.) Work piece

Description:	Tungsten carbide insert
Processing:	Double side flathoning
Requests:	Size: 2,5 -0,02 mm
	Surface: Rz 2,5 µm
	Parallelism: 0,020 mm
	Flatness: 0,010 mm



Raw part

### 2.) Machine and environment

Machine:	DLM 705
Wheels:	DIAMOND D91
Rinsing agent:	Honing Oil 1.003.0008
Parts per load:	882 pcs / load



DLM 705

### 3.) Process

Cycle time:	~ 3,5 min. / load = 252 parts / min.
Stock removal:	~ 1 µm / sec.

### 4.) Results

Reached values:	Size: 2,5 mm -0,01 mm
	Surface: Ra 0,03 µm
	Parallelism: 0,001 mm
	Flatness: 0,001 mm



Finished part

### 1.) Work piece

Description:	Tungsten carbide insert
Processing:	Double side flathoning
Requests:	Size : 4,76 mm +/- 0,13 mm
	Surface : Rz 4,0 µm
	Parallelism : 0,001 mm
	Flatness : 0,003 mm



Raw part

### 2.) Machine and environment

Machine:	DLM 705
Wheels:	DIAMOND D91
Rinsing agent:	Honing Oil 1.003.0008
Parts per load:	330 parts / load



DLM 705

### 3.) Process

Cycle time:	~ 3 min. / load = 110 parts / min.
Stock removal:	~ 1 µm / sec.

### 4.) Results

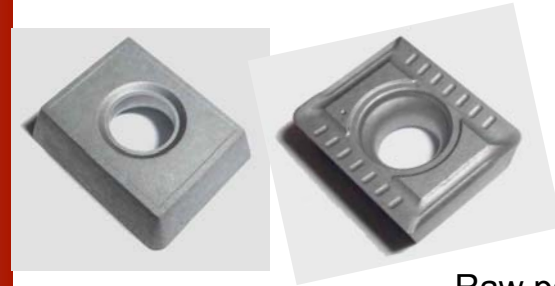
Reached values:	Size : 4,76 mm +/- 0,002 mm
	Surface : Ra 0,03 µm
	Parallelism : 0,0005 mm
	Flatness : 0,001 mm



Finished part

### 1.) Work piece

Description: Tungsten carbide insert  
Processing: Single side flathoning  
Requests: Size: 4,76 mm +0,025/-0,05 mm  
Surface: Ra 0,4 µm  
Parallelism: 0,010 mm  
Flatness: 0,010 mm



Raw part

### 2.) Machine and environment

Machine: DLM 705  
Wheel: DIAMOND D91  
Rinsing agent: Honing Oil 1.003.0008  
Parts per load: 330 parts / load



DLM 705

### 3.) Process

Cycle time: ~ 3 min. / load = 110 parts / min.  
Stock removal: ~ 1 µm / sec.

### 4.) Results

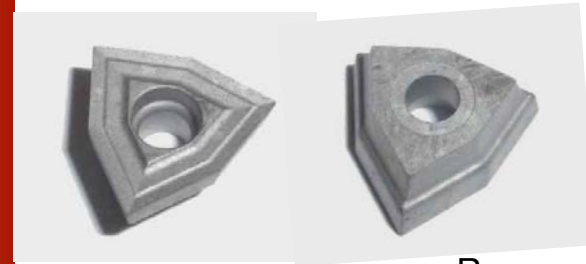
Reached values: Size: 4,76 mm -0,02 mm  
Surface: Ra 0,03 µm  
Parallelism: 0,001 mm  
Flatness: 0,001 mm



Finished part

### 1.) Work piece

Description : Tungsten carbide insert  
Processing : Single side flathoning  
Requests : Size : 3,0 + 0,04 mm  
Surface : Rz 1,5 µm  
Parallelism : 0,010 mm  
Ebenheit: 0,020 mm



Raw part

### 2.) Machine and environment

Machine: DLM 705  
Wheel: DIAMOND D91  
Rinsing agent: Honöl 1.003.0008  
Parts per load: 690 Stk. /Charge



DLM 705

### 3.) Process

Cycle time: ~ 3,5 min. / load = 197 parts / min.  
Stock removal: ~ 1 µm / sec.

### 4.) Results

Reached values: Size: 3,0 +0,015 mm  
Surface: Ra 0,03 µm  
Parallelism : 0,001 mm  
Flatness: 0,001 mm



Finished part