

Hard Broach



Allows finishing of hardened steels

Carbide hard broach and hard broaching machine allows finish cutting of hardened steel

High-efficiency machining

High efficiency finishing instead of grinding is possible

[Hard Broach / Product Description](#)

Finishing after heat treatment possible

Hard Broaching Machine HW-5008

Hard Broach machining
(Carbide Broach)



1. Finishing of parts after heat treatment for improved accuracy
2. Replacement of grinding process
(For a high accuracy level, similar to that achieved by grinding,
and for process improvement)

Hard Broaching Machine HW-5008

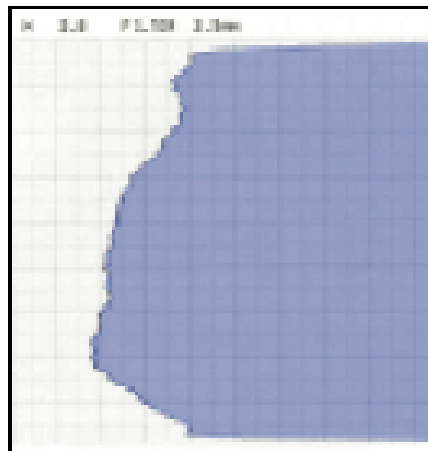
Nachi-developed broaching machine
allows a cutting speed of 60m/min

Pulling force: 50 kN (50ton)
Max. stroke: 800mm
Cutting speed: 1~60m/min
Machine height: 3400mm
Floor space: 1780×1900mm
Machine mass: 5700Kg

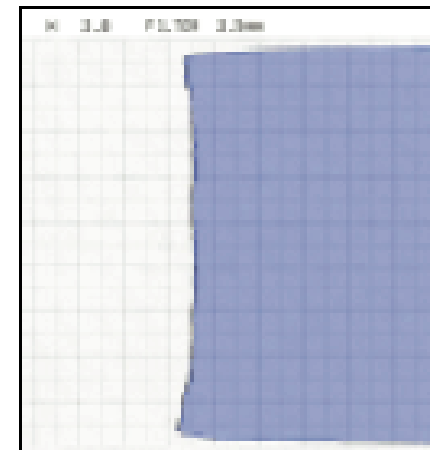


Machining accuracy -- Squareness

Cutting speed: 60m/min
Material: SCM420 (60HRC)
Coolant: Semi-dry

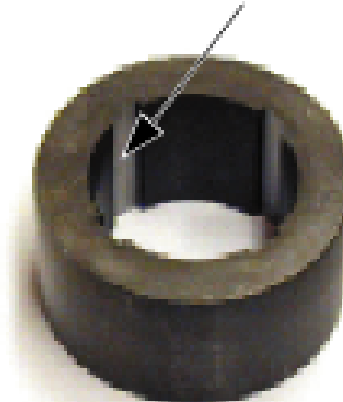


Before broaching (after heat treatment): 21 μ m

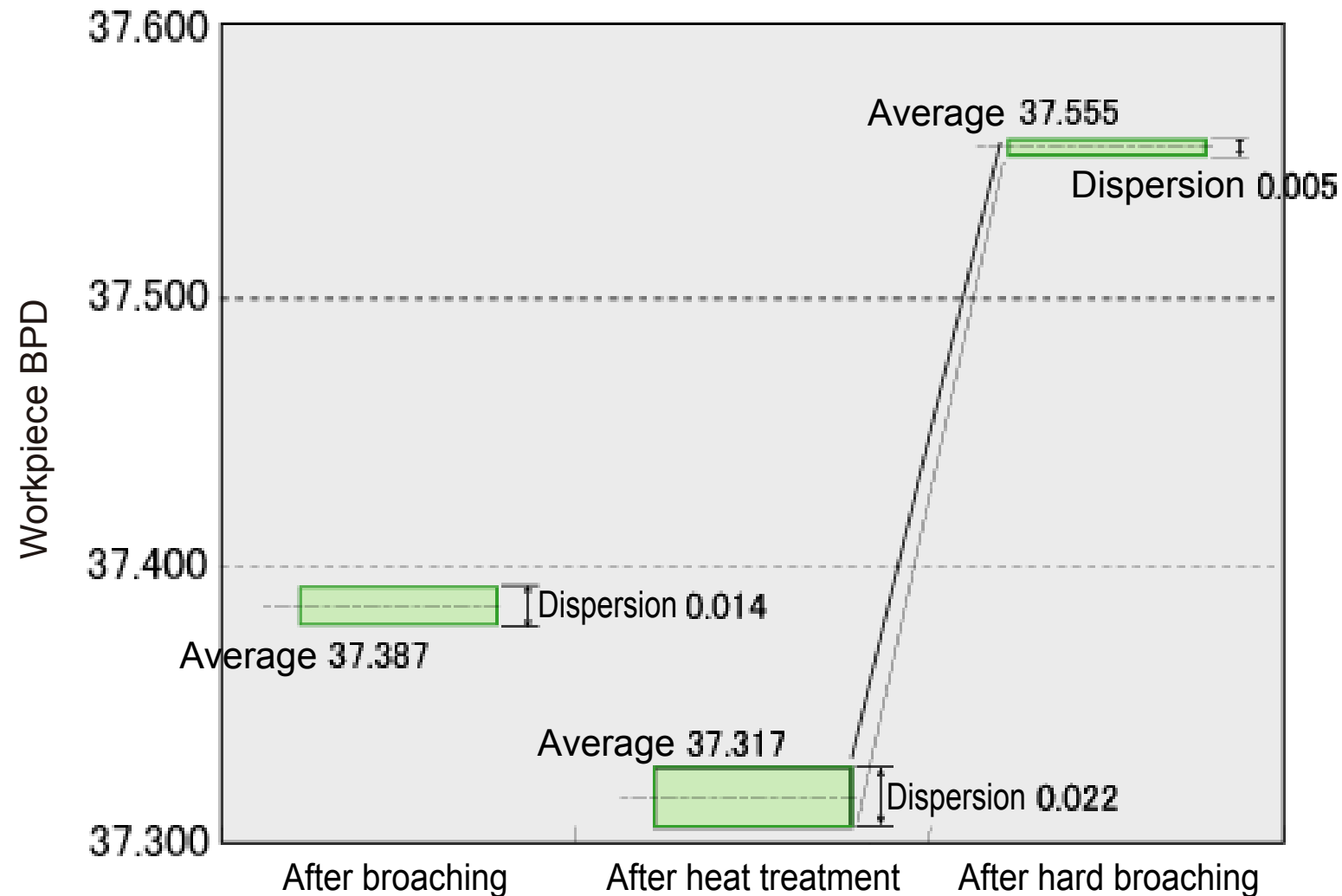


Squareness after broaching: 3 μ m

Broaching location



Machining accuracy -- BPD (Between Pin Dia.) dispersion



Workpiece specifications

DP16/32PA30°NG26

Hardness 60HRC

Machining section

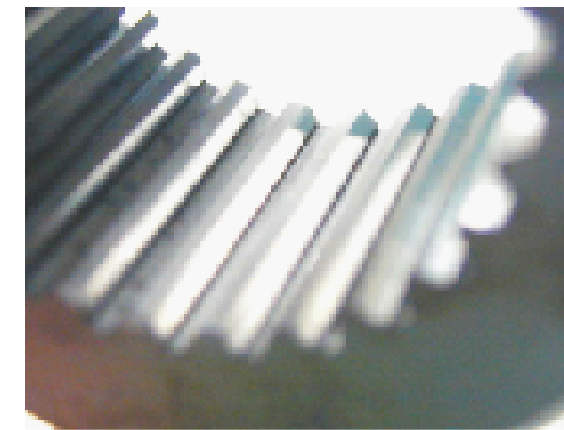
Involute spline

Cutting condition

Cutting speed: 60m/min

Cutting margin: 0.25mm (BPD)

Semi-dry condition



Cost comparison of hard broaching and grinding

