“Machining to Zero” with the Mold Meister Ball End Mill
Features of Mold Meister Ball

**Features:**
- Precision Carbide End Mill Best Suited for “Machining to Zero”
- Seamless Ball Tolerance Drastically Reduces Polishing Time
- High Precision Ball Tolerance $\pm 3\mu u$, Ball Accuracy Range 180°
- Highly Suitable for Mold and Die Work

**Work Materials:**
- Pre-Hardened Steels, Mold Steels, Hardened Steels H13, D2, M3 (45-60 Hrc)
Appearance of Mold Meister Ball

Seamless
One Pass Grinding
Actual Measurement of Competitor’s Accuracy

Competitor A R1
Nominal: ±5μm

A

Competitor B R3
Nominal: ±5μm

B
Nachi Inspection Sheet

Nachi R1
Nominal: ± 3μm

Highly Accurate Milling is Possible with this Tool

- CAM
- M/C

Easy Compensation

Reduce Time for Polishing and Rectification Drastically
Tool Life Comparison in Hardened Steel Milling

**Conditions**
- Material SKD11 (60HRC)
- Speed $V = 151 \text{m/min} (S = 12,000 \text{min}^{-1})$
- Feed $F = 1,400 \text{mm/min} (f = 0.058 \text{mm/t})$
- Cut Depth $= 0.5 \text{mm}$, $P_f = 0.4 \text{mm}$
- DRY (Air Blow) - Vertical MC (BT40)

**Graphs:**
- Cutting Length Only 5m
- Cutting Length 20m
- Cutting Length 25m

**Competitors:**
- Competitor A: Cutting Length Only 5m
- Competitor B: Cutting Length 20m
- NACHI Mold Meister: Cutting Length 25m

**Graph:**
- X-axis: Cutting length (m)
- Y-axis: Wear in R ($\mu$m)
- Lines and points indicating tool wear progression.

**Notes:**
- The graph shows the tool life comparison with wear progression over different cutting lengths for each competitor.
Thank You