

Hanita™ Micro Series Solid Carbide End Mills High-performance small diameter end mills for medium to hard ferrous materials



Series 7N02, 7N12 and 7N22 (mm) – 2 flute square end Series 7N01, 7N21 (mm) – 2 flute ball nose

- Specifically designed for efficient precision machining in Die and Mold applications.
- Effective in a wide range of materials, including graphite, high-silicon aluminum, carbon, alloy, and stainless steels, and hardened materials < 50 HRc.
- Fully compliant with JIS specifications.
- Tapered neck design provides maximum strength.
- Provides excellent surface finishes and long tool life.
- Available with short and long length necks to serve many machining applications.
- Standard diameters from 0.3 mm to as high as 6.0 mm.
- Available with TiAlN coating for ferrous materials and DLC (Diamond Like Coating) for graphite and high-silicon aluminum.
- ***The perfect solution for precision rib milling.***

Target Application

- Small diameter milling on precision milling centers.
- High-speed machining applications.
- Rib processing applications.
- Small parts machining.
- Medical implant machining.
- High-performance machining with micro-size end mills as small as 0.3 mm (0.012").

HANITA 

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GLOBAL MARKETING BULLETIN

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Target Markets

- Die and Mold
- Medical
- Small parts machining

Competitors

Prototyp, Guhring, Hitachi, Micro 100, Robb Jack, OSG, Pokolm

How to beat the competition

Head-to-head performance comparisons are the best way to win the business.

With a limited number of suppliers offering standard tools in such small diameters, many shops are using conventional, general application geometries. Hanita micro series end mills are high-performance designs, capable of efficient machining in difficult materials. This provides an excellent opportunity to provide the user significant reduction in machining time.

Strategy

1. Target the users requiring small diameter tools where increasing metal removal rates or operating in fewer passes will make a significant difference for the customer.
2. Identify the benchmarks of comparison for the customer.
 - a. What metal removal rate is being achieved now?
 - b. How many parts per tool?
3. Pursue different kinds of applications with a single tool.
 - a. Roughing or semi-finishing.
 - b. Different workpiece materials.

Hanita micro series end mills deliver high-performance machining over the widest scope of operation types and workpiece materials.

Appearance



Features, Functions and Benefits

- All standard tools are metric diameters.
- All standard tools have common shanks (either 3 mm, 4 mm, or 6 mm diameter).
- Micro series end mills have a 30° helix and tapered necks for maximum strength and rigidity.
- Series 7N01 (2 flute ball nose) and 7N02 (2 flute square end) have short necks.
- Series 7N21 (2 flute ball nose) and 7N12 and 7N22 (2 flute square end) have long necks.
- TiAlN coating (add suffix RJ to the catalog number) is available as standard for ferrous materials.
- DLC (add suffix DJ to the catalog number) is available as standard for graphite and high-silicon aluminum.

Always select the shortest reach length possible to maximize strength and optimize performance.

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Application Recommendation

Recommended cutting parameters can be found on the product flyer, available in PDF format at <http://www.kennametal.com>, then click on Customer Support/Metalworking/Download Catalogs/Catalogs by Brand/Hanita/ and choose "Hanita Miniature End Mills Catalog."

Preferred Clamping System and Tool Combinations

Standard clamping systems can be used.

Key Selling Arguments

- Enables high-performance machining with extremely small diameters.
- Wide range of diameter and reach lengths as standard product.
- Excellent performance in a wide range of materials, including graphite and high silicon aluminum, carbon, alloy and stainless steels, and hardened materials < 50 HRc.
- Tapered neck design provides maximum strength.
- Provides excellent surface finishes and long tool life.
- Standard sizes available down to 0.3mm (0.012").

Product Portfolio

The original product offering with ordering numbers is available on the product flyer, available in pdf format at <http://www.kennametal.com> (see the complete URL above). New product is available in the *Hanita Breakthroughs* catalog, to be launched Fall 2008.

Product Availability

All standard sizes are available from stock.
Please use SIPPPRs and forward forecast updates for any converted, high-volume consumer.

Pricing

Pricing is competitive with OSG, Hitachi, and Robb Jack.

Planned Promotional Activities

New series 7N21 and expanded series 7N01 are featured in the *Hanita Breakthroughs* catalog, Fall 2008.

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