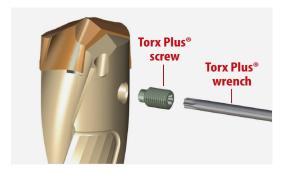


Micro grain carbide inserts and premium tool steel holder with coolant holes

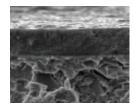
From its multi-layered-coated micro carbide inserts to its corrosion-resistant nickel- plated premium steel tool holder, the i-ONE Drills set new standards in productivity and affordability.

► Secure and quick clamping system

The Torx Plus® screw provides unsurpassed convenience and stability

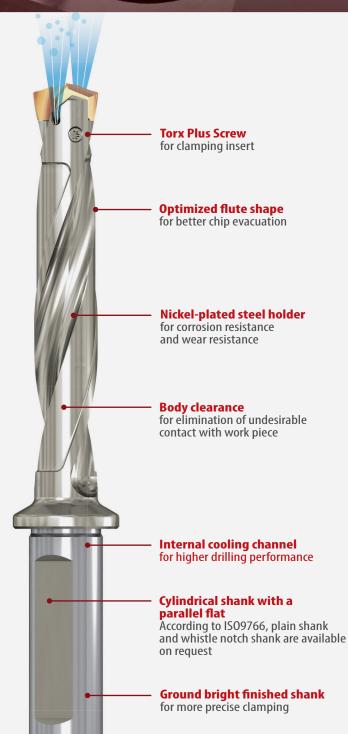


- ► Optimized point geometry ensures centering ability and smoother cutting
- ► Self centering and chip breaking by radius thinning
- Ground negative land on cutting edge for reliable tool life
- ► Multi-layered 'H'-coating reduces the cracking and provides higher shear strength while achieving excellent oxidation resistance and hot hardness



► Versatile and exchangeable

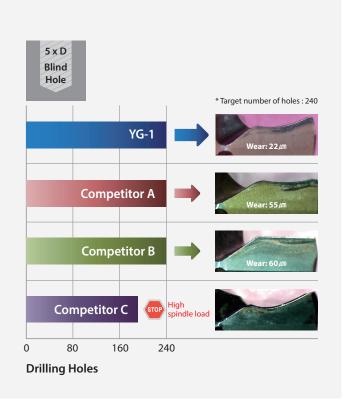
Available in insert sizes from .393 to 1.328 in. / \emptyset 10 to \emptyset 33.73mm, with drill bodies standard in 3XD, 5XD, and 8XD



Case Studies

▶ Ø14.0mm, Alloy Steel

Tool	Y141H1400	Competitors
O.D Size (mm)	Ø14.0 (0.5512 inch)	
Work Material	-DIN: 42CrMo4 -AISI: 4140 -JIS: SCM440(HRc30)	
Cutting Speed	80 m/min. (262.5 ft/min.)	
RPM	1,819 rev./min.	
Feed	0.18 mm/rev. (0.0071 in/rev.)	
Drilling Depth	65.0 mm (5XD / Blind)	
Cooling Method	Internal Cooling (35 bar) Water Soluble (9% Emulsion)	
Machine	Machining Center	



▶ Ø16.0mm, Pre-Hardened

Tool	YG-1	Competitor A
O.D Size (mm)	Ø16.0 (0.6299 inch)	
Work Material	-DIN: CK45 -AISI: 1045 -JIS: S45C(HRc20)	
Cutting Speed	75 m/min. (246.1 ft/min.)	
RPM	1,493 rev./min.	
Feed	0.3 mm/rev. (0.0118 in/rev.)	
Drilling Depth	35.0 mm (Through)	
Cooling Method	Internal Cooling (10 bar) Water Soluble (9% Emulsion)	
Machine	Machining Center	

