

ONE INVESTMENT DECISION DESERVES ANOTHER

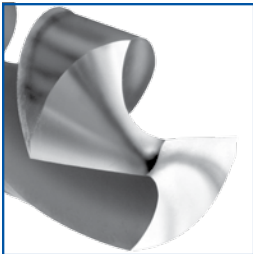
New Machining Center Justification Depends On Improved Productivity, Quality and Return On Investment.

Productivity does not stop at the spindle. It also extends through the tooling. Properly ground and applied tools will provide productivity gains, improve part quality and accelerate return on investment.

It is a fact that 50% or more machining time is consumed making holes. It is also a fact that properly ground drills will reduce center drilling and reaming operations, extend tool life, reduce breakthrough burrs and improve the quality of your parts. An improvement in drilling methods will greatly accelerate your return on investment.

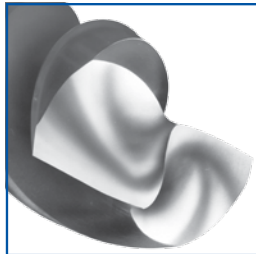
The high performance, generated drill points shown below provide benefits not available on conventionally ground drills. We will prove these advantages by sharpening a sample of your drills FREE. You can test our claims on your parts, in your own plant.

A Winslow Engineering grinding system will keep your drills cutting faster, cleaner, rounder and longer - and will sharpen your profit picture.



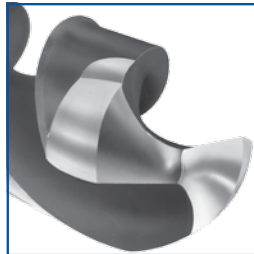
Helical

Exclusive Winslow helical grind features S-shaped crown chisel. Excellent self centering. Reduces thrust, increases feedrates, extends drill life, improves hole quality.



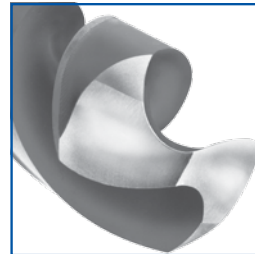
Wide Web Helical

Grind helical points on wide web drills for improved drilling. All the benefits of helical point plus eliminates need for splitting or web thinning.



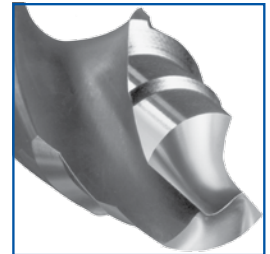
Bickford®

Exclusive Winslow-Bickford Point is self centering, reduces thrust, increases drill life, minimizes burrs at breakthrough, produces excellent hole quality.



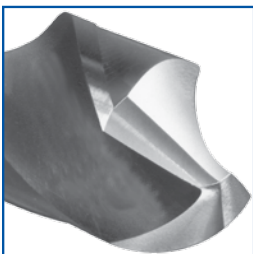
Racon®

Exclusive Winslow Racon Point features full radiussed cutting lip. Greatly extends drill life with minimal burrs at breakthrough.



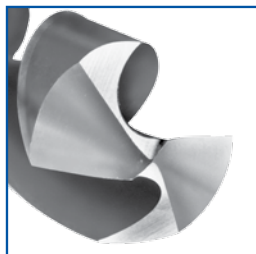
Step Drill

Grind pilot diameter and countersink angle in one operation. Round or relieved pilots.



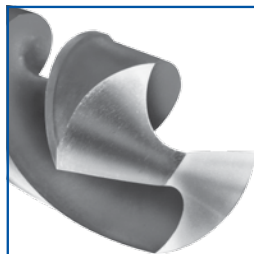
Pyrcon (Four Facet)

Cam-relieved Pyrcon point is stronger than flat facet grinds. Helps drill centering, provides greater clearance for coolant and chip flow.



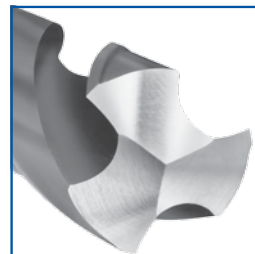
Split/Notched

Creates secondary cutting edge in chisel. Helps drill centering, chip and coolant flow. Advantageous where drill feed cannot be controlled.



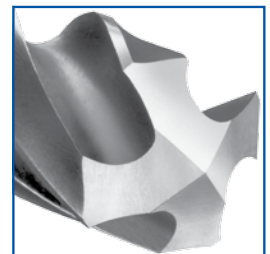
Conventional

Primary grind for the production of split points.



3-Fluted Tools

Regrind point and gash web. Good centering with increased feedrates. Also grind core drills without gashing web.



4-Fluted Tools

Regrind point on core drills. Used to enlarge existing punched or cored holes.

New and Rebuilt Machine Sales and Service

Winslow

Engineering Inc.

N7677 Peebles Lane

Fond du Lac, WI 54935

920.921.6404 • www.winsloweng.com

Model HC Drill Point Grinder

Extremely versatile, semi-automatic machine from 1/16" (1.55 mm) to 1-1/2" (38.0 mm) at a rate up to 100 per hour. Handles right-hand and left-hand drills, point angles from 60° to 160°. Capable of grinding conventional, Winslow-Helical, Racon, Bickford Point, four facet and split points.



Model FR200 Form Relief Grinder

High versatility for precision form relief grinding, OD and ID grinding and surface grinding of most cutting tools. Tool types include step drills, subland drills, taps, form tools, trepanning tools, reamers, center drills, boring tools, multi-flute cutters, punch inserts, porting tools and counter-sinks. Accommodates tools with 1 through 18 flutes.



Model 520 Drill Point Splitter

Automatic wheel dressing and infeed cycle permits accurate splitting at a rate up to 350 per hour. Splits drills from 3/32" (2.4 mm) to 1/2" (12.5 mm); web thins drills from 5/16" (8.0 mm) to 3/4" (19.0 mm). Meets all NAS 907 specifications.



Model 525 Drill Point Splitter

Automatic chucking and indexing of the drill permits precision splitting at a rate up to 400 per hour. Splits drills from 1/16" (1.55 mm) to 1" (25.5 mm); web thins drills from 1/8" (3.2 mm) to 1" (25.5 mm). Meets or exceeds all NAS 907 specifications.



Model 100C, 1000CC & 932 Drill Point Grinder

High production machines for grinding new and reconditioned drills with high accuracy, including fully automatic cycle and wheel dresser. The 100C grinds drills from 1/16" (1.5mm) to 1-1/2" (38.0mm), point angles from 90 to 140 degrees and up 500 units per hour. Point styles include Conventional, Winslow-Helical, Racon, Bickford Point, Core drills, Step drills, Taps and Reamers. The hopper-fed 1000CC grinds 3/32" (2.40mm) to 1/2" (13.0mm) up to 700 units per hour. The hopper-fed 932 grinds from 1/2" (13.0mm) to 1.0" (24.5mm). Point styles include Conventional and Winslow/Helical.



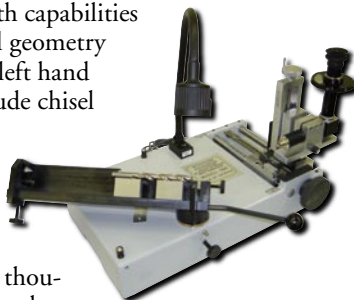
Model HR Drill Point Grinder

Automatic cycle sharpens drills from 1/16" (1.55 mm) to 1-1/2" (38.0 mm) at a rate up to 120 per hour. Handles right-hand and left-hand drills, point angles from 60° to 160°. Generates conventional, Winslow-Helical, Racon, Bickford Point and split points.



Model 560 Tool Analyzer

Versatile tool inspection unit with capabilities to measure a wide variety of tool geometry on 2-, 3-, or 4-fluted, right and left hand tools. Measured geometries include chisel angles, web thickness, relief angles, step lengths, web and chisel centrality, rake angles, secondary cutting edge angles and notch angles. Standard model 560 provided with .0005 thousandths digital calipers. Digital readouts (DRO) are available options.



Model 560 Visual Inspector Tool Analyzer

The visual inspector is a versatile tool inspection unit with capabilities to measure a wide variety of tool geometry on 2-, 3-, or 4-fluted right and left hand tools. Measured geometries include chisel angles, web thickness, relief angles, step lengths, web and chisel centrality, rake angles, secondary cutting edge angles and notch angles. Visual inspector comes complete with computer, flat screen, on screen windows compatible software analysis, tool image email availability and image folder storage.

