



ALLIED MACHINE & ENGINEERING CORP.

Available With
MasterFinish
Geometry



EcoCut

Drilling and Turning
With One Tool

Represented by:



Allied Machine & Engineering Corp is Registered by U.L. to ISO 9001:2000



Allied Machine & Engineering Corp. (AMEC) offers EcoCut through an exclusive supply agreement with Ceratizit

EcoCut, exclusively distributed in North America by AMEC, offers a versatile line of lathe tools that can perform up to four machining operations. A single EcoCut tool can be used for drilling, boring, facing and standard turning operations. EcoCut tools can improve cycle times while reducing both tooling costs and tool storage problems, plus offer the benefit of shorter set-up times for many lathe applications.

The EcoCut product line is divided into three basic styles:

- **Mini:** Solid carbide version available in diameters ranging from 4 - 8 mm
- **Classic:** Indexable version available in diameters ranging from 8 - 32 mm
- **Rebore:** Indexable three flute boring tool available in two diameters, 40 & 60 mm

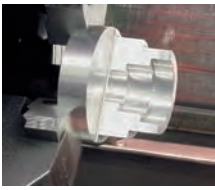
AMEC continues to be a global leader in the engineering and manufacturing of replaceable drill inserts and holders. The EcoCut products allow AMEC to offer customers additional solutions in hole making while maintaining AMEC's pledge to provide customers with "the HOLE advantage."

Visit the Allied Machine & Engineering Corp. website at www.alliedmachine.com for additional information about all AMEC products, or contact the Application Engineering Department at 800-321-5537 for technical assistance.

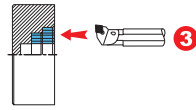
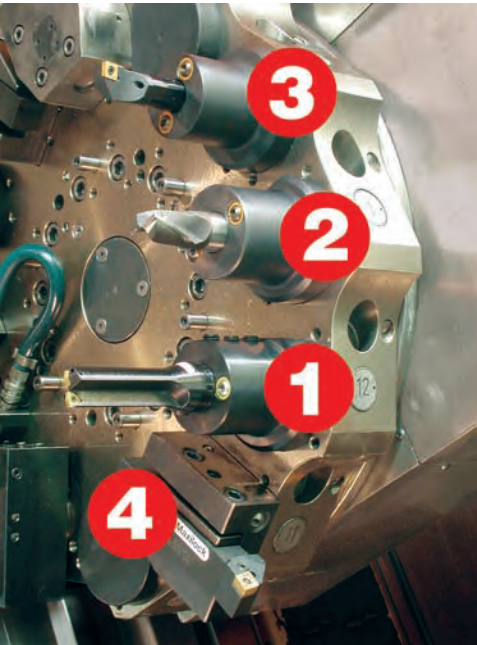
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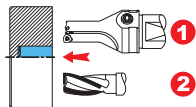
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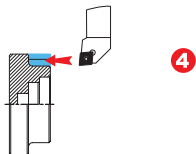
Conventional



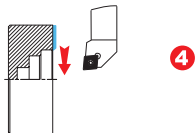
3 Internal turning applications



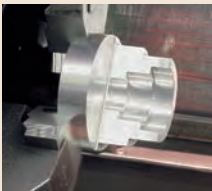
1 Drilling into solid material with flat bottom holes



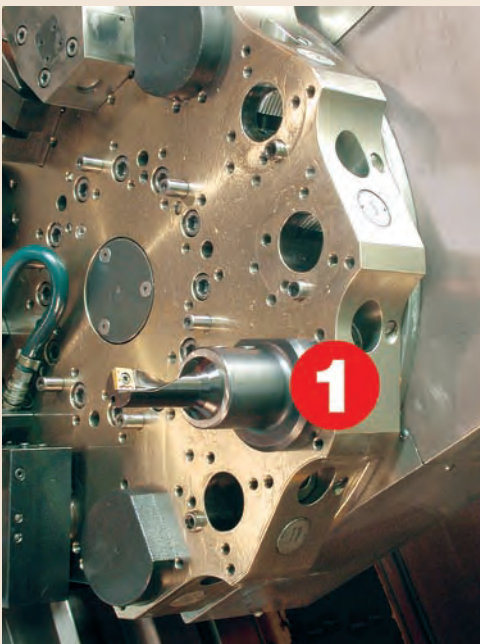
4 External turning applications



4 Face turning



EcoCut



1 Drilling into solid material with flat bottom holes



3 Internal turning applications



4 Face turning

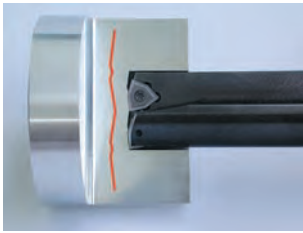


4 External turning applications



Reverse direction of rotation

Conventional



EcoCut

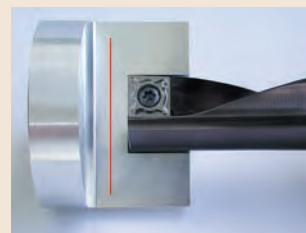
Problem solver for insufficient tool storage



Less programming effort



Produces a true flat bottom hole



Reduced inventory costs for holders and indexable inserts



Cost savings on tooling purchases

Shorter set-up times
Reduced pre-setting times

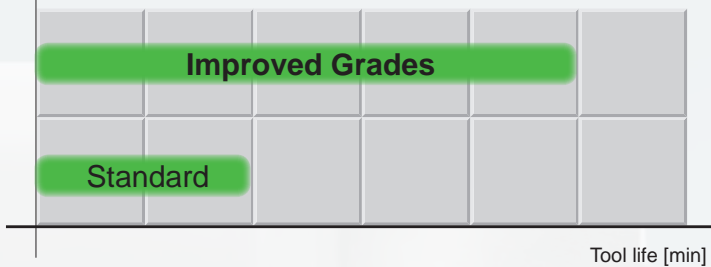


New EcoCut Grade Advantages

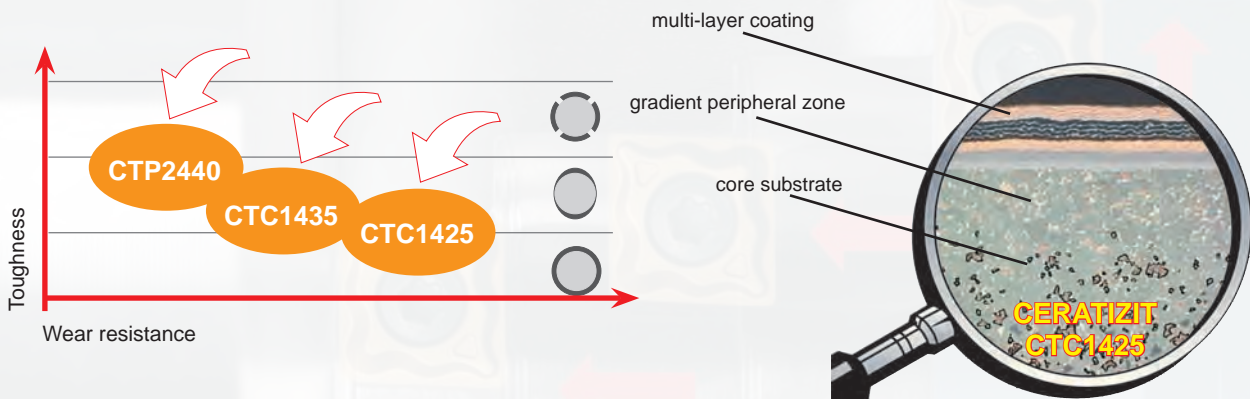
Longer tool life

Up to **+150%**
longer tool life

Increased application safety



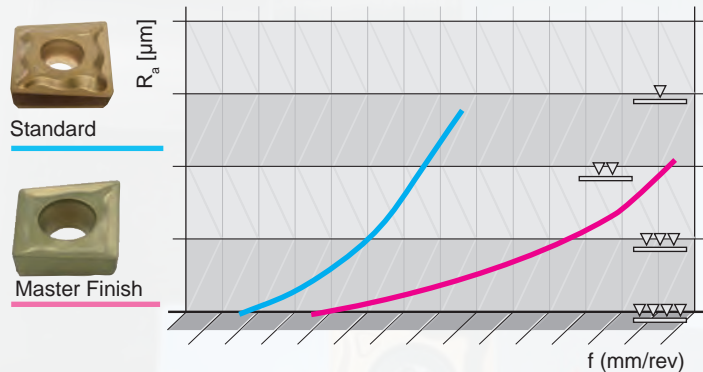
Innovative carbide substrate with **gradient peripheral zones** for excellent cutting edge stability and performance. These grades also utilize CVD and PVD coatings for increased life.



EcoCut MasterFinish Advantages

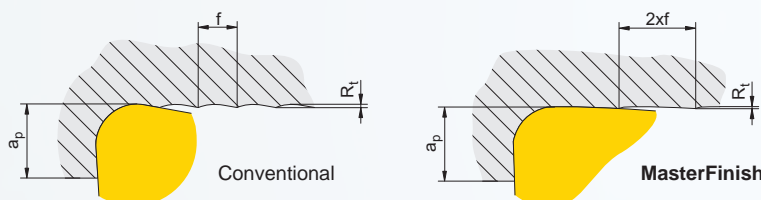
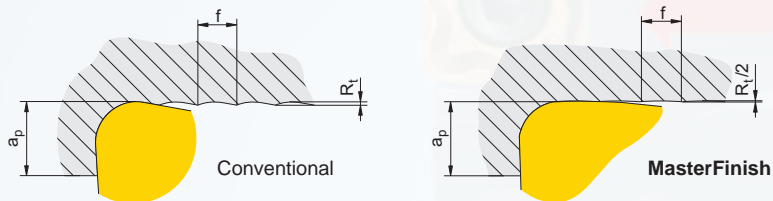
Improved surface finish

Increased feed rates



Improved surface finish

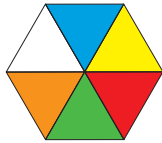
With the same feed rate, an insert with 'MasterFinish' geometry reaches a roughness value R_a which is many times lower than the conventional design.



Shorter machining time

If you want to reach the same R_a value as a standard insert, up to twice the feed rate can be applied to the insert with 'MasterFinish' geometry (= shorter cycle times!)

Material



Based on VDI 3323 CERATIZIT's MasterGuide divides materials into six main groups. Each is given a color, according to the system partly adopted in ISO 513.

Blue: steel
Free machining, alloy, tempered and structural steels

Yellow: stainless steel
Ferritic Cr-steels, austenitic CrNi-steels, martensitic Cr-steels, duplex stainless

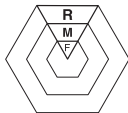
Red: cast iron
Grey cast iron, tempered iron, nodular cast iron, CGI, sintered iron

Green: nonferrous metals and non-metallic materials
Wrought and cast aluminum alloys, copper, copper alloys, non-metallic materials

Orange: heat resistant alloys / titanium
Ni/Co-base alloys, Ti alloys

White: hard materials
Hardened steels (≥ 45 HRC), chilled castings, hard cast irons

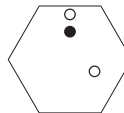
Machining application type



Each colored segment is divided into three sections, and each section indicates the relevant machining application type:

R = rough machining
M = medium machining
F = fine machining

Application



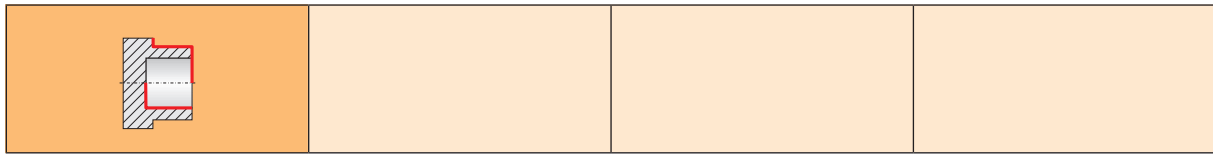
The ideal application area for the insert is indicated by a black circle. Extended applications are indicated by an open circle. The CERATIZIT MasterGuide provides you with an easily understandable structure for choosing a product.

- **Main application**
- **Extended application**

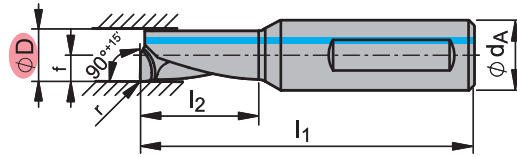


EcoCut Mini Ø .157 inch

Tools

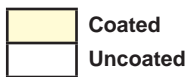


Solid carbide



Picture shows right-hand version

Item Number	Description - Grade	L R	D inch	d _A inch	l ₁ inch	l ₂ inch	f inch	r inch	MasterGuide					
									Steel	Stainless	Cast Iron	Non ferrous metals	Heat resistant	Hard Materials
11155574	EC 04L-2.25D CM45	L	0.157	0.236	1.378	0.354	0.079	0.008	●	●	○	○	○	○
11155538	EC 04L-2.25D-27 TSM30	L	0.157	0.236	1.378	0.354	0.079	0.008	●	○	○	○	○	○
11155575	EC 04L-4.00D CM45	L	0.157	0.236	1.614	0.630	0.079	0.008	●	●	○	○	○	○
11155539	EC 04L-4.00D-27 TSM30	L	0.157	0.236	1.614	0.630	0.079	0.008	●	○	○	○	○	○
11155576	EC 04R-2.25D CM45	R	0.157	0.236	1.378	0.354	0.079	0.008	●	●	○	○	○	○
11155540	EC 04R-2.25D-27 TSM30	R	0.157	0.236	1.378	0.354	0.079	0.008	●	○	○	○	○	○
11155577	EC 04R-4.00D CM45	R	0.157	0.236	1.614	0.630	0.079	0.008	●	●	○	○	○	○
11155543	EC 04R-4.00D-27 TSM30	R	0.157	0.236	1.614	0.630	0.079	0.008	●	○	○	○	○	○



● Main application
○ Extended application
- See page 7 for details



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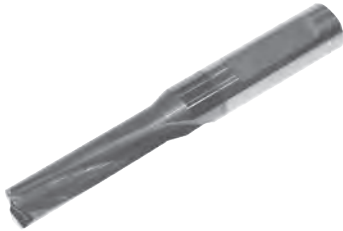
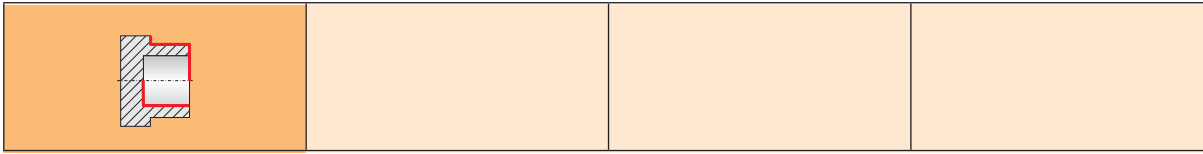


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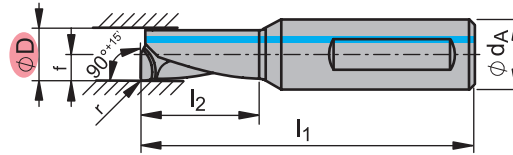
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EcoCut Mini Ø .197 inch Tools

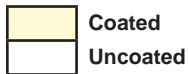


Solid carbide



Picture shows right-hand version

Item Number	Description - Grade	L R	D inch	d _A inch	l ₁ inch	l ₂ inch	f inch	r inch	MasterGuide					
									Steel	Stainless	Cast Iron	Non ferrous metals	Heat resistant	Hard Materials
11155578	EC 05L-2.25D CM45	L	0.197	0.236	1.457	0.443	0.098	0.008	●	●	○	○	○	○
11155544	EC 05L-2.25D-27 TSM30	L	0.197	0.236	1.457	0.443	0.098	0.008	●	○	○	●	○	○
11155580	EC 05L-4.00D CM45	L	0.197	0.236	1.772	0.787	0.098	0.008	●	●	○	○	○	○
11155546	EC 05L-4.00D-27 TSM30	L	0.197	0.236	1.772	0.787	0.098	0.008	●	○	○	●	○	○
11155581	EC 05R-2.25D CM45	R	0.197	0.236	1.457	0.443	0.098	0.008	●	●	○	○	○	○
11155547	EC 05R-2.25D-27 TSM30	R	0.197	0.236	1.457	0.443	0.098	0.008	●	○	○	●	○	○
11155582	EC 05R-4.00D CM45	R	0.197	0.236	1.772	0.787	0.098	0.008	●	●	○	○	○	○
11155548	EC 05R-4.00D-27 TSM30	R	0.197	0.236	1.772	0.787	0.098	0.008	●	○	○	●	○	○



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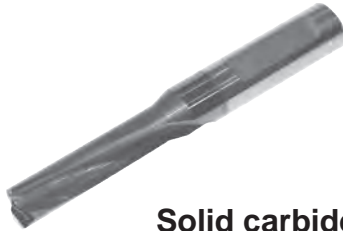
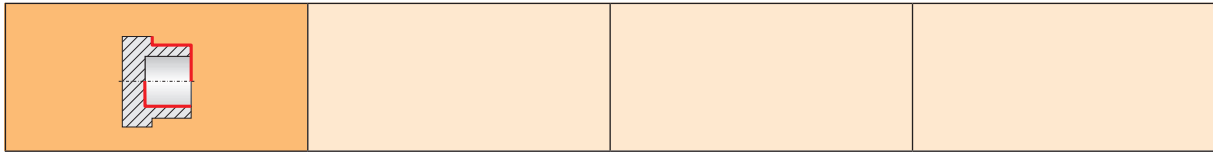
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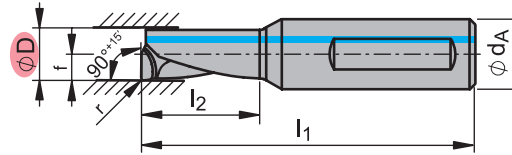


EcoCut Mini Ø .236 inch

Tools



Solid carbide



Picture shows right-hand version

Item Number	Description - Grade	L R	D inch	d_A inch	l_1 inch	l_2 inch	f inch	r inch	MasterGuide					
									Steel	Stainless	Cast Iron	Non ferrous metals	Heat resistant	Hard Materials
11109351	EC 06L-2.25D CM45	L	0.236	0.315	1.496	0.531	0.118	0.008	●	●	○	○	○	○
11107950	EC 06L-2.25D-27 TSM30	L	0.236	0.315	1.496	0.531	0.118	0.008	●	○	○	●	○	○
11109352	EC 06L-4.00D CM45	L	0.236	0.315	1.929	0.945	0.118	0.008	●	●	○	○	○	○
11107951	EC 06L-4.00D-27 TSM30	L	0.236	0.315	1.929	0.945	0.118	0.008	●	○	○	●	○	○
11109353	EC 06R-2.25D CM45	R	0.236	0.315	1.496	0.531	0.118	0.008	●	●	○	○	○	○
11107952	EC 06R-2.25D-27 TSM30	R	0.236	0.315	1.496	0.531	0.118	0.008	●	○	○	●	○	○
11109354	EC 06R-4.00D CM45	R	0.236	0.315	1.929	0.945	0.118	0.008	●	●	○	○	○	○
11107953	EC 06R-4.00D-27 TSM30	R	0.236	0.315	1.929	0.945	0.118	0.008	●	○	○	●	○	○

Coated
 Uncoated



● Main application
 ○ Extended application
 - See page 7 for details



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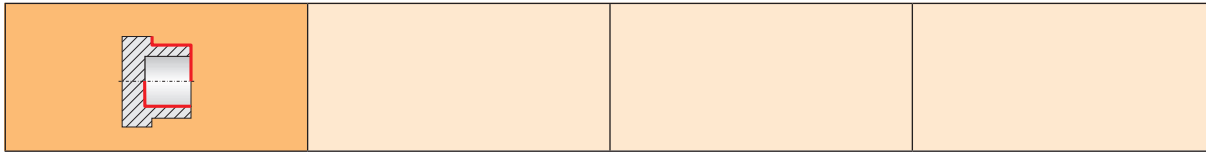


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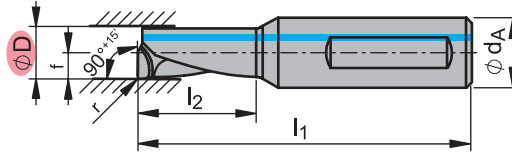
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EcoCut Mini Ø .276 inch Tools



Solid carbide



Picture shows right-hand version

Item Number	Description - Grade	L R	D inch	d_A inch	l_1 inch	l_2 inch	f inch	r inch	MasterGuide					
									Steel	Stainless	Cast Iron	Non ferrous metals	Heat resistant	Hard Materials
11109355	EC 07L-2.25D CM45	L	0.276	0.315	1.654	0.620	0.138	0.008	●	●	○	○	○	○
11107954	EC 07L-2.25D-27 TSM30	L	0.276	0.315	1.654	0.620	0.138	0.008	●	○	○	●	○	○
11109378	EC 07L-4.00D CM45	L	0.276	0.315	2.087	1.102	0.138	0.008	●	●	○	○	○	○
11107955	EC 07L-4.00D-27 TSM30	L	0.276	0.315	2.087	1.102	0.138	0.008	●	○	○	●	○	○
11109379	EC 07R-2.25D CM45	R	0.276	0.315	1.654	0.620	0.138	0.008	●	●	○	○	○	○
11107956	EC 07R-2.25D-27 TSM30	R	0.276	0.315	1.654	0.620	0.138	0.008	●	○	○	●	○	○
11109380	EC 07R-4.00D CM45	R	0.276	0.315	2.087	1.102	0.138	0.008	●	●	○	○	○	○
11107957	EC 07R-4.00D-27 TSM30	R	0.276	0.315	2.087	1.102	0.138	0.008	●	○	○	●	○	○

Coated
 Uncoated



● Main application
 ○ Extended application
 - See page 7 for details



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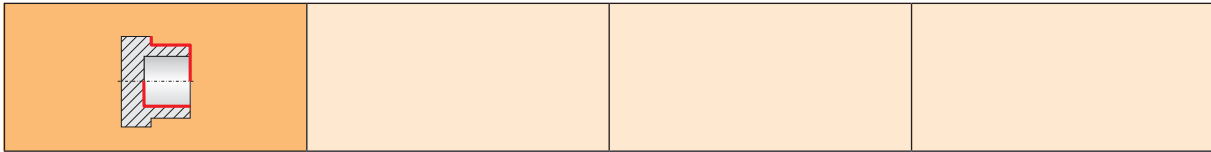


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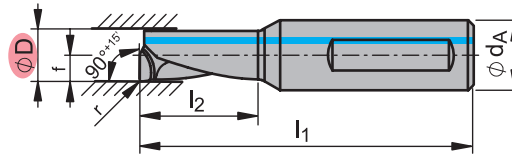
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EcoCut Mini Ø .315 inch Tools



Solid carbide



Picture shows right-hand version

Item Number	Description - Grade	L R	D inch	d _A inch	l ₁ inch	l ₂ inch	f inch	r inch	MasterGuide					
									Steel	Stainless	Cast Iron	Non ferrous metals	Heat resistant	Hard Materials
11109381	EC 08L-2.25D CM45	L	0.315	0.315	1.772	0.709	0.157	0.008	●	●	○	○	○	○
11108028	EC 08L-2.25D-27 TSM30	L	0.315	0.315	1.772	0.709	0.157	0.008	●	○	○	○	○	○
11109382	EC 08L-4.00D CM45	L	0.315	0.315	2.244	1.260	0.157	0.008	●	●	○	○	○	○
11108029	EC 08L-4.00D-27 TSM30	L	0.315	0.315	2.244	1.260	0.157	0.008	●	○	○	○	○	○
11109383	EC 08R-2.25D CM45	R	0.315	0.315	1.772	0.709	0.157	0.008	●	●	○	○	○	○
11108030	EC 08R-2.25D-27 TSM30	R	0.315	0.315	1.772	0.709	0.157	0.008	●	○	○	○	○	○
11109384	EC 08R-4.00D CM45	R	0.315	0.315	2.244	1.260	0.157	0.008	●	●	○	○	○	○
11108032	EC 08R-4.00D-27 TSM30	R	0.315	0.315	2.244	1.260	0.157	0.008	●	○	○	○	○	○

 Coated
 Uncoated





● Main application
 ○ Extended application
 - See page 7 for details



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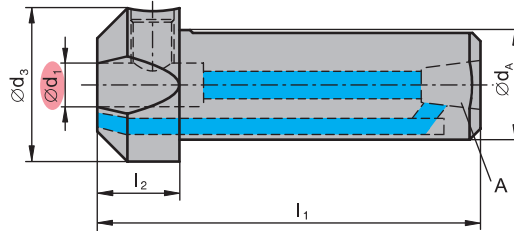


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EcoCut Mini Adapters



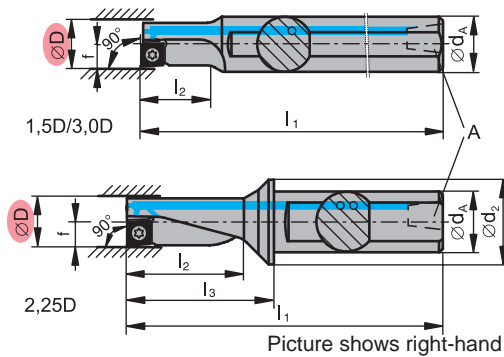
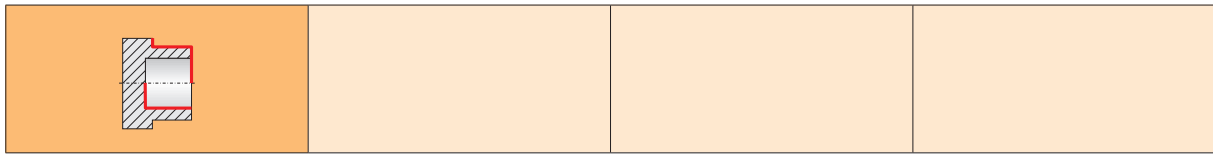
Item Number	Description	d ₁ inch	d _A inch	d ₃ inch	l ₁ inch	l ₂ inch	A
11147398	EC-ADX12-08-E	0.315	0.750	0.984	2.500	0.550	1/8"-27 NPT
11160654	EC-ADX12-06-E	0.236	0.750	0.984	2.500	0.550	1/8"-27 NPT

d ₁ inch	 1 piece		
0.315	310720		
0.236	310720		

 Page	 EC..04-05 8-9	 EC..06-08 10-12			
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EcoCut Classic Ø .315 - .394 inch Tools



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	A	
11065068	EC 08L-1.5D 04-E	L	0.315	0.500		3.15	0.47		0.157	1/16" -27 NPT	XC.. 0401..
11065200	EC 08L-2.25D 04-E	L	0.315	0.375	0.472	2.37	0.71	0.870	0.157	1/8" *	XC.. 0401..
11147310	EC 08L-3.0D 04 H-E	L	0.315	0.500		3.15	0.94		0.157	1/16" -27 NPT	XC.. 0401..
11065069	EC 08R-1.5D 04-E	R	0.315	0.500		3.15	0.47		0.157	1/16" -27 NPT	XC.. 0401..
11065201	EC 08R-2.25D 04-E	R	0.315	0.375	0.472	2.37	0.71	0.870	0.157	1/8" *	XC.. 0401..
11147327	EC 08R-3.0D 04 H-E	R	0.315	0.500		3.15	0.94		0.157	1/16" -27 NPT	XC.. 0401..
11065070	EC 10L-1.5D 05-E	L	0.394	0.500		3.54	0.59		0.197	1/16" -27 NPT	XC.. 0502..
11065202	EC 10L-2.25D 05-E	L	0.394	0.500	0.630	2.71	0.89	1.085	0.197	1/16" -27 NPT	XC.. 0502..
11147311	EC 10L-3.0D 05 H-E	L	0.394	0.500		3.35	1.18		0.197	1/16" -27 NPT	XC.. 0502..
11065071	EC 10R-1.5D 05-E	R	0.394	0.500		3.54	0.59		0.197	1/16" -27 NPT	XC.. 0502..
11065203	EC 10R-2.25D 05-E	R	0.394	0.500	0.630	2.71	0.89	1.085	0.197	1/16" -27 NPT	XC.. 0502..
11147328	EC 10R-3.0D 05 H-E	R	0.394	0.500		3.35	1.18		0.197	1/16" -27 NPT	XC.. 0502..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

* 1/8" = through-hole only

	D inch		
XC.. 0401..	0.315	10 pieces 278669-10	1 piece 291575 (T6)
XC.. 0502..	0.394	307282-10	291575 (T6)



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H = heavy metal
(Densimet)

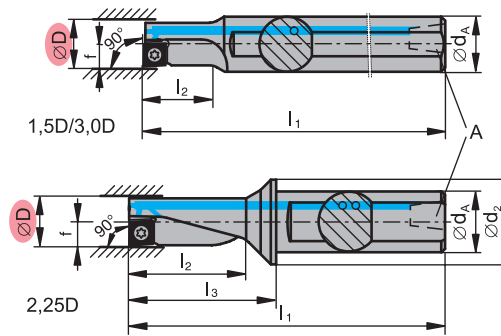
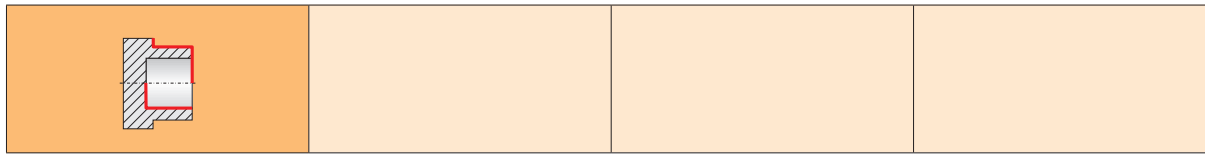
Page 41

	XC.. 0401..	XC.. 0502..			
Page	 24-25	 24-25			




EcoCut Classic Ø .472 - .551 inch




Tools



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	A	
11065073	EC 12L-1.5D 06-E	L	0.472	0.625		3.94	0.71		0.236	1/8"-27 NPT	XC.. 0602..
11065204	EC 12L-2.25D 06-E	L	0.472	0.625	0.787	3.05	1.06	1.300	0.236	1/8"-27 NPT	XC.. 0602..
11147313	EC 12L-3.0D 06 H-E	L	0.472	0.625		3.74	1.42		0.236	1/8"-27 NPT	XC.. 0602..
11065074	EC 12R-1.5D 06-E	R	0.472	0.625		3.94	0.71		0.236	1/8"-27 NPT	XC.. 0602..
11065205	EC 12R-2.25D 06-E	R	0.472	0.625	0.787	3.05	1.06	1.300	0.236	1/8"-27 NPT	XC.. 0602..
11147329	EC 12R-3.0D 06 H-E	R	0.472	0.625		3.74	1.42		0.236	1/8"-27 NPT	XC.. 0602..
11065075	EC 14L-1.5D 07-E	L	0.551	0.625		4.33	0.83		0.276	1/8"-27 NPT	XC.. 0703..
11065207	EC 14L-2.25D 07-E	L	0.551	0.625	0.787	3.27	1.24	1.520	0.276	1/8"-27 NPT	XC.. 0703..
11147314	EC 14L-3.0D 07 H-E	L	0.551	0.625		3.94	1.65		0.276	1/8"-27 NPT	XC.. 0703..
11065076	EC 14R-1.5D 07-E	R	0.551	0.625		4.33	0.83		0.276	1/8"-27 NPT	XC.. 0703..
11065228	EC 14R-2.25D 07-E	R	0.551	0.625	0.787	3.27	1.24	1.520	0.276	1/8"-27 NPT	XC.. 0703..
11147330	EC 14R-3.0D 07 H-E	R	0.551	0.625		3.94	1.65		0.276	1/8"-27 NPT	XC.. 0703..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch		
XC.. 0602..	0.472	10 pieces 56652-10	1 piece 56655 (T7)
XC.. 0703..	0.551	24645-10	56656 (T8)






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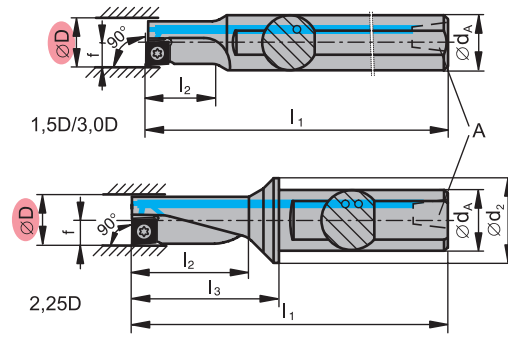
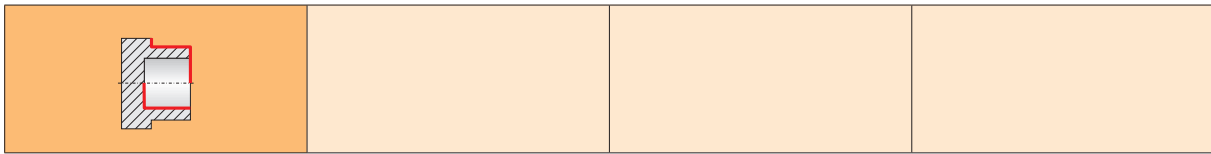
H = heavy metal
(Densimet)

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	XC.. 0602..	XC.. 0703..			
Page	 26-27	 26-27			






EcoCut Classic Ø .630 - .709 inch Tools



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	A	
11065077	EC 16L-1.5D 08-E	L	0.630	0.750		4.92	0.94		0.315	1/8"-27 NPT	XC.. 0803..
11065230	EC 16L-2.25D 08-E	L	0.630	0.750	0.984	3.73	1.42	1.730	0.315	1/8"-27 NPT	XC.. 0803..
11147316	EC 16L-3.0D 08 H-E	L	0.630	0.750		4.33	1.89		0.315	1/8"-27 NPT	XC.. 0803..
11065098	EC 16R-1.5D 08-E	R	0.630	0.750		4.92	0.94		0.315	1/8"-27 NPT	XC.. 0803..
11065231	EC 16R-2.25D 08-E	R	0.630	0.750	0.984	3.73	1.42	1.730	0.315	1/8"-27 NPT	XC.. 0803..
11147332	EC 16R-3.0D 08 H-E	R	0.630	0.750		4.33	1.89		0.315	1/8"-27 NPT	XC.. 0803..
11065099	EC 18L-1.5D 09-E	L	0.709	1.000		5.31	1.06		0.354	1/4"-18 NPT	XC.. 09T3..
11065232	EC 18L-2.25D 09-E	L	0.709	1.000	1.260	4.36	1.59	2.110	0.354	1/4"-18 NPT	XC.. 09T3..
11147318	EC 18L-3.0D 09 H-E	L	0.709	1.000		5.05	2.12		0.354	1/4"-18 NPT	XC.. 09T3..
11065100	EC 18R-1.5D 09-E	R	0.709	1.000		5.31	1.06		0.354	1/4"-18 NPT	XC.. 09T3..
11065233	EC 18R-2.25D 09-E	R	0.709	1.000	1.260	4.36	1.59	2.110	0.354	1/4"-18 NPT	XC.. 09T3..
11147333	EC 18R-3.0D 09 H-E	R	0.709	1.000		5.04	2.12		0.354	1/4"-18 NPT	XC.. 09T3..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch	 10 pieces	 1 piece
XC.. 0803..	0.630	77613-10	56656 (T8)
XC.. 09T3..	0.709	77613-10	56656 (T8)




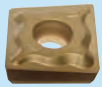

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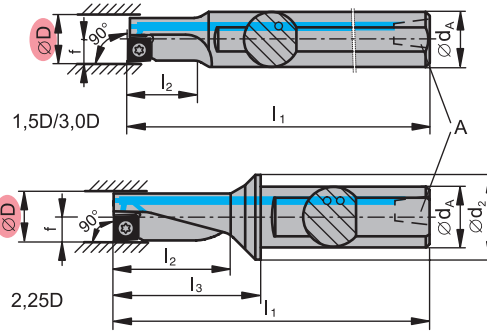
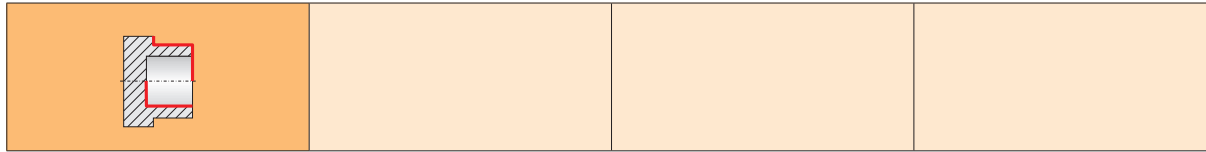
H = heavy metal
(Densimet)

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	XC.. 0803..  Page 26-27	XC.. 09T3..  Page 26-27			
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EcoCut Classic Ø .787 - .984 inch Tools



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	A	
11065101	EC 20L-1.5D 10-E	L	0.787	1.000		5.91	1.18		0.394	1/4"-18 NPT	XC.. 10T3..
11065234	EC 20L-2.25D 10-E	L	0.787	1.000	1.260	4.42	1.77	2.170	0.394	1/4"-18 NPT	XC.. 10T3..
11147321	EC 20L-3.0D 10 H-E	L	0.787	1.000		5.12	2.36		0.394	1/4"-18 NPT	XC.. 10T3..
11065102	EC 20R-1.5D 10-E	R	0.787	1.000		5.91	1.18		0.394	1/4"-18 NPT	XC.. 10T3..
11065235	EC 20R-2.25D 10-E	R	0.787	1.000	1.260	4.42	1.77	2.170	0.394	1/4"-18 NPT	XC.. 10T3..
11147334	EC 20R-3.0D 10 H-E	R	0.787	1.000		5.12	2.36		0.394	1/4"-18 NPT	XC.. 10T3..
11065103	EC 25L-1.5D 13-E	L	0.984	1.250		7.09	1.48		0.492	1/4"-18 NPT	XC.. 1304..
11065236	EC 25L-2.25D 13-E	L	0.984	1.250	1.575	5.09	2.22	2.715	0.492	1/4"-18 NPT	XC.. 1304..
11147323	EC 25L-3.0D 13 H-E	L	0.984	1.250		5.91	2.95		0.492	1/4"-18 NPT	XC.. 1304..
11065105	EC 25R-1.5D 13-E	R	0.984	1.250		7.09	1.48		0.492	1/4"-18 NPT	XC.. 1304..
11065238	EC 25R-2.25D 13-E	R	0.984	1.250	1.575	5.09	2.22	2.715	0.492	1/4"-18 NPT	XC.. 1304..
11147335	EC 25R-3.0D 13 H-E	R	0.984	1.250		5.91	2.95		0.492	1/4"-18 NPT	XC.. 1304..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch		
XC.. 10T3..	0.787	10 pieces 165795-10	1 piece 6274 (T15)
XC.. 1304..	0.984	106022-10	6275 (T20)






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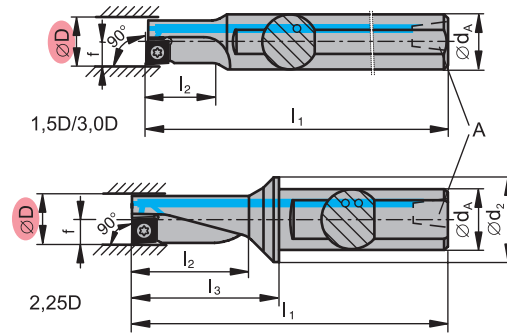
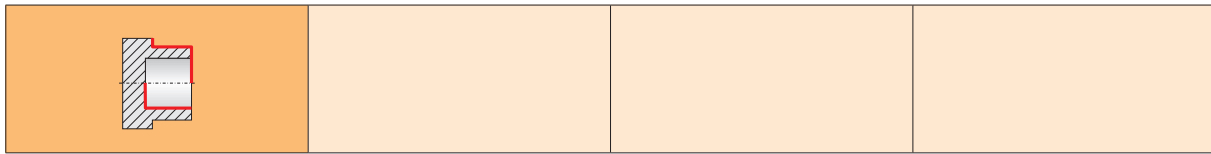
H = heavy metal
(Densimet)

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	XC.. 10T3..	XC.. 1304..			
Page	 28-29	 28-29			



EcoCut Classic Ø 1.260 inch Tools



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	A	
11065106	EC 32L-1.5D 17-E	L	1.260	1.500		7.87	1.89		0.630	1/4"-18 NPT	XC.. 1705..
11065239	EC 32L-2.25D 17-E	L	1.260	1.500	1.969	6.21	2.83	3.460	0.630	1/4"-18 NPT	XC.. 1705..
11147324	EC 32L-3.0D 17 H-E	L	1.260	1.500		7.28	3.78		0.630	1/4"-18 NPT	XC.. 1705..
11065107	EC 32R-1.5D 17-E	R	1.260	1.500		7.87	1.89		0.630	1/4"-18 NPT	XC.. 1705..
11065240	EC 32R-2.25D 17-E	R	1.260	1.500	1.969	6.21	2.83	3.460	0.630	1/4"-18 NPT	XC.. 1705..
11147336	EC 32R-3.0D 17 H-E	R	1.260	1.500		7.28	3.78		0.630	1/4"-18 NPT	XC.. 1705..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch		
XC.. 1705..	1.260	10 pieces 106022-10	1 piece 6275 (T20)



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H = heavy metal
(Densimet)

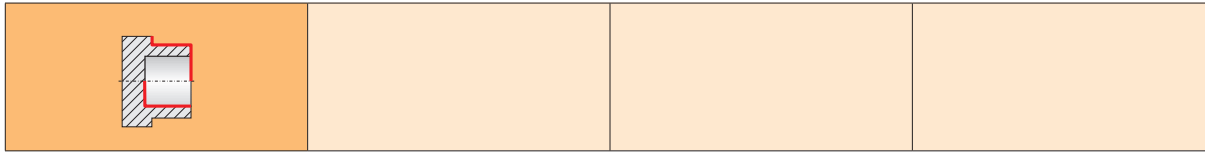
Page 41

	XC.. 1705.. 				
Page	28-29				

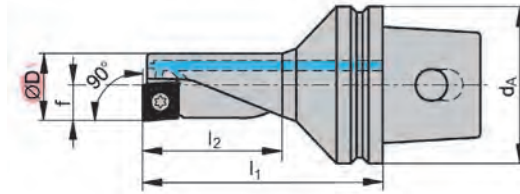


EcoCut Classic UTS 40


Tools







2.25D (=l₂)



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A mm	l ₁ inch	l ₂ inch	f inch	
313472	UT40-EC 16L-2.25D 08	L	0.630	40	2.362	1.417	0.315	XC.. 0803..
313474	UT40-EC 16R-2.25D 08	R	0.630	40	2.362	1.417	0.315	XC.. 0803..
11039660	UT40-EC 18L-2.25D 09	L	0.709	40	2.560	1.594	0.354	XC.. 09T3..
11039661	UT40-EC 18R-2.25D 09	R	0.709	40	2.560	1.594	0.354	XC.. 09T3..
313480	UT40-EC 20L-2.25D 10	L	0.787	40	2.756	1.772	0.394	XC.. 10T3..
313476	UT40-EC 20R-2.25D 10	R	0.787	40	2.756	1.772	0.394	XC.. 10T3..
313478	UT40-EC 25L-2.25D 13	L	0.984	40	3.150	2.224	0.492	XC.. 1304..
313481	UT40-EC 25R-2.25D 13	R	0.984	40	3.150	2.224	0.492	XC.. 1304..
313482	UT40-EC 32L-2.25D 17	L	1.260	40	3.740	2.835	0.630	XC.. 1705..
313484	UT40-EC 32R-2.25D 17	R	1.260	40	3.740	2.835	0.630	XC.. 1705..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.







	D inch	d _A mm	 10 pieces	 1 piece	 1 piece
XC.. 0803..	0.630	40	77613-10	56656 (T8)	194263
XC.. 09T3..	0.709	40	77613-10	56656 (T8)	194263
XC.. 10T3..	0.787	40	165795-10	6274 (T15)	194263
XC.. 1304..	0.984	40	106022-10	6275 (T20)	194263
XC.. 1705..	1.260	40	106022-10	6275 (T20)	194263



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	XC.. 0803..	XC.. 09T3..	XC.. 10T3..	XC.. 1304..	XC.. 1705..
Page	 26-27	 26-27	 28-29	 28-29	 28-29

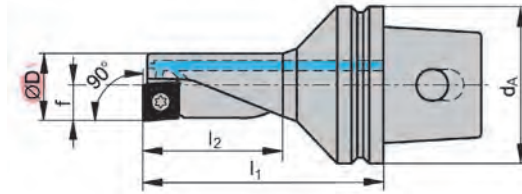


EcoCut Classic UTS 50 + UTS 63

Tools



2.25D (=l₂)



Picture shows right-hand version

Item Number	Description	L R	D inch	d _A mm	l ₁ inch	l ₂ inch	f inch	
313612	UT50-EC 16L-2.25D 08	L	0.630	50	2.756	1.417	0.315	XC.. 0803..
313613	UT50-EC 16R-2.25D 08	R	0.630	50	2.756	1.417	0.315	XC.. 0803..
11039663	UT50-EC 18L-2.25D 09	L	0.709	50	2.953	1.594	0.354	XC.. 09T3..
11039665	UT50-EC 18R-2.25D 09	R	0.709	50	2.953	1.594	0.354	XC.. 09T3..
313614	UT50-EC 20L-2.25D 10	L	0.787	50	3.150	1.772	0.394	XC.. 10T3..
313615	UT50-EC 20R-2.25D 10	R	0.787	50	3.150	1.772	0.394	XC.. 10T3..
313616	UT50-EC 25L-2.25D 13	L	0.984	50	3.543	2.224	0.492	XC.. 1304..
313617	UT50-EC 25R-2.25D 13	R	0.984	50	3.543	2.224	0.492	XC.. 1304..
11039689	UT63-EC 25L-2.25D 13	L	0.984	63	3.740	2.224	0.492	XC.. 1304..
11039691	UT63-EC 25R-2.25D 13	R	0.984	63	3.740	2.224	0.492	XC.. 1304..
313618	UT50-EC 32L-2.25D 17	L	1.260	50	3.937	2.835	0.630	XC.. 1705..
313619	UT50-EC 32R-2.25D 17	R	1.260	50	3.937	2.835	0.630	XC.. 1705..
11039690	UT63-EC 32L-2.25D 17	L	1.260	63	4.134	2.835	0.630	XC.. 1705..
11039692	UT63-EC 32R-2.25D 17	R	1.260	63	4.134	2.835	0.630	XC.. 1705..

	D inch	d _A mm	10 pieces	1 piece	1 piece
XC.. 0803..	0.630	50	77613-10	56656 (T08)	225429
XC.. 09T3..	0.709	50	77613-10	56656 (T08)	225429
XC.. 10T3..	0.787	50	165795-10	6274 (T15)	225429
XC.. 1304..	0.984	50	106022-10	6275 (T20)	225429
XC.. 1304..	0.984	63	106022-10	6275 (T20)	225430
XC.. 1705..	1.260	50	106022-10	6275 (T20)	225429
XC.. 1705..	1.260	63	106022-10	6275 (T20)	225430



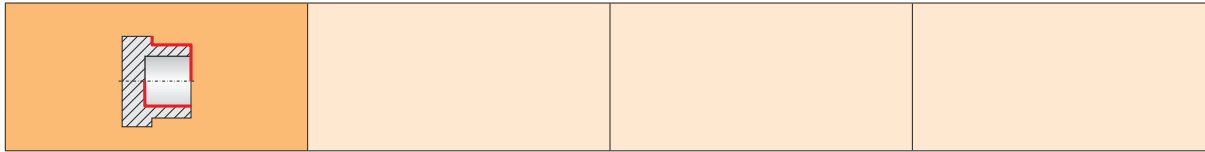
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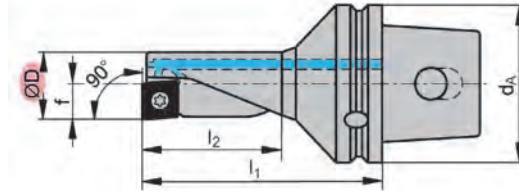
Page 34-37

Holder shipped with 3 insert clamping screws.
Inserts and hand drivers sold separately.

Page	XC.. 0803.. 26-27	XC.. 09T3.. 26-27	XC.. 10T3.. 28-29	XC.. 1304.. 28-29	XC.. 1705.. 28-29
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2.25D (=I₂)



Picture shows right-hand version

Item Number	Description	L R		D inch	d _A mm	l ₁ inch	l ₂ inch	f inch	
11087209	UT63-EC 25L-2.25D 13-MIY	L		0.984	63	3.740	2.224	0.492	XC.. 1304..
11085385	UT63-EC 25R-2.25D 13-MIY		R	0.984	63	3.740	2.224	0.492	XC.. 1304..
11087210	UT63-EC 32L-2.25D 17-MIY	L		1.260	63	4.134	2.835	0.630	XC.. 1705..
11085389	UT63-EC 32R-2.25D 17-MIY		R	1.260	63	4.134	2.835	0.630	XC.. 1705..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch	d _A mm	 10 pieces	 1 piece	 1 piece
XC.. 1304..	0.984	63	106022-10	6275 (T20)	225430
XC.. 1705..	1.260	63	106022-10	6275 (T20)	225430



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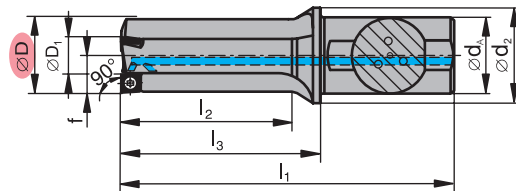
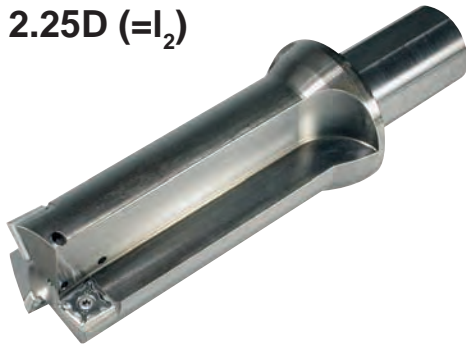
	XC.. 1304.. 28-29	XC.. 1705.. 28-29			
Page					




EcoCut Rebore Ø 1.575 - 2.362 inch Tools






2.25D (=l₂)



Picture shows right-hand version

Item Number	Description	L R	D inch	D ₁ inch	d _A inch	d ₂ inch	l ₁ inch	l ₂ inch	l ₃ inch	f inch	
11108233	ECR 4020L03-2.25D 10	L	1.575	0.787	1.575	1.969	6.890	3.543	4.134	0.787	XC.. 10T3..
11108235	ECR 4020R03-2.25D 10	R	1.575	0.787	1.575	1.969	6.890	3.543	4.134	0.787	XC.. 10T3..
11108234	ECR 6032L03-2.25D 17	L	2.362	1.260	1.575	2.756	9.134	5.314	6.378	1.181	XC.. 1705..
11108236	ECR 6032R03-2.25D 17	R	2.362	1.260	1.575	2.756	9.134	5.314	6.378	1.181	XC.. 1705..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch	 10 pieces	 1 piece
XC.. 10T3..	1.575	165795-10	6274 (T15)
XC.. 1705..	2.362	106022-10	6275 (T20)



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Initial bore required.

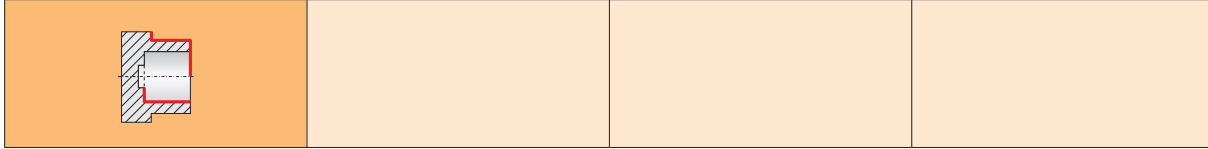
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	XC.. 10T3..  28-29	XC.. 1705..  28-29			
Page					

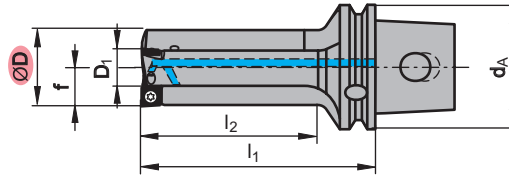


EcoCut Rebore UTS MIY


Tools for Mazak Integrex







2.25D (=l₂)



Picture shows right-hand version

Item Number	Description	L R	D inch	D ₁ inch	d _A mm	l ₁ inch	l ₂ inch	f inch	
11120982	UT63-ECR40L3-2.25D-MIY	L	1.575	0.787	63	6.230	3.543	0.787	XC.. 10T3..
11120981	UT63-ECR40R3-2.25D-MIY	R	1.575	0.787	63	6.230	3.543	0.787	XC.. 10T3..

Holder shipped with 3 insert clamping screws. Inserts and hand drivers sold separately.

	D inch			
XC.. 10T3..	1.575	10 pieces 165795-10	1 piece 6274 (T15)	1 piece 225430



Page 30-31





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Initial bore required.

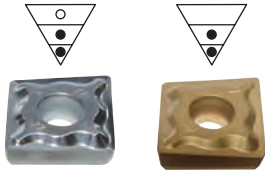
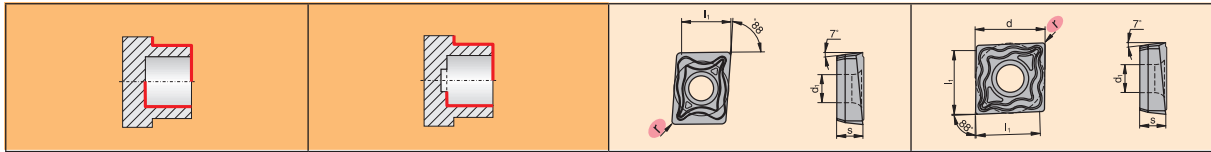
Page 38

	XC.. 10T3.. 				
Page	28-29				



EcoCut

Inserts Ø .315 - .394 inch



-27P

EN

MasterGuide					
Steel	Stainless	Cast Iron	Non Ferrous metals	Heat Resistant	Hard materials
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○

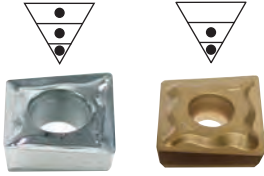
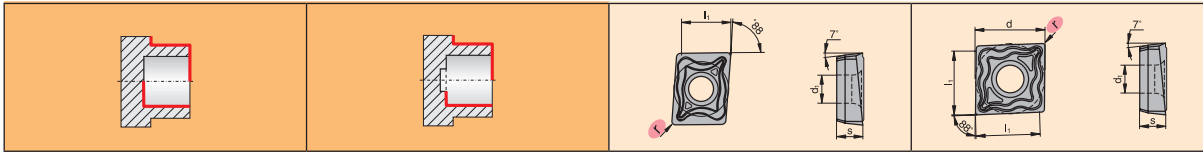
Item Number	Description - Grade	L N R	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non Ferrous metals	Heat Resistant	Hard materials
11078744	XCET 040102FL-27P H216T	L	0.008	0.157	0.177	0.071	0.083	●	●	○	●	○	○
11078745	XCET 040102FR-27P H216T	R	0.008	0.157	0.177	0.071	0.083	●	●	○	●	○	○
11002560	XCET 040104FL-27P H216T	L	0.016	0.157	0.177	0.071	0.083	●	●	○	●	○	○
11038512	XCET 040104FR-27P H216T	R	0.016	0.157	0.177	0.071	0.083	●	●	○	●	○	○
11078798	XCET 050202FN-27P H216T	N	0.008	0.197	0.228	0.083	0.089	●	●	○	●	○	○
11038705	XCET 050204FN-27P H216T	N	0.016	0.197	0.228	0.083	0.089	●	●	○	●	○	○

	EC.. 				
Page	14				



EcoCut

Inserts Ø .315 - .394 inch



-27Q

EN

MasterGuide

Item Number	Description - Grade	L N R	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
11215226	XCET 040102FL-27Q H210T	L	0.008	0.157	0.177	0.071	0.083	●	○	○	●	●	
11215241	XCET 040102FR-27Q H210T	R	0.008	0.157	0.177	0.071	0.083	●	○	○	●	●	
11219146	XCNT 040102EL CTC1425	L	0.008	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219288	XCNT 040102EL CTC1435	L	0.008	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219399	XCNT 040102EL CTP2440	L	0.008	0.157	0.177	0.071	0.083	●	●	○	○	○	
11219189	XCNT 040102ER CTC1425	R	0.008	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219289	XCNT 040102ER CTC1435	R	0.008	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219404	XCNT 040102ER CTP2440	R	0.008	0.157	0.177	0.071	0.083	●	●	○	○	○	
11215229	XCET 040104FL-27Q H210T	L	0.016	0.157	0.177	0.071	0.083	●	○	○	●	●	
11215243	XCET 040104FR-27Q H210T	R	0.016	0.157	0.177	0.071	0.083	●	○	○	●	●	
11219201	XCNT 040104EL CTC1425	L	0.016	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219290	XCNT 040104EL CTC1435	L	0.016	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219432	XCNT 040104EL CTP2440	L	0.016	0.157	0.177	0.071	0.083	●	●	○	○	○	
11219207	XCNT 040104ER CTC1425	R	0.016	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219293	XCNT 040104ER CTC1435	R	0.016	0.157	0.177	0.071	0.083	●	○	●	○	○	
11219434	XCNT 040104ER CTP2440	R	0.016	0.157	0.177	0.071	0.083	●	●	○	○	○	
11215250	XCET 050202FN-27Q H210T	N	0.008	0.197	0.228	0.083	0.089	●	○	○	●	●	
11219208	XCNT 050202EN CTC1425	N	0.008	0.197	0.228	0.083	0.089	●	○	●	○	○	
11219299	XCNT 050202EN CTC1435	N	0.008	0.197	0.228	0.083	0.089	●	○	●	○	○	
11219440	XCNT 050202EN CTP2440	N	0.008	0.197	0.228	0.083	0.089	●	●	○	○	○	
11215256	XCET 050204FN-27Q H210T	N	0.016	0.197	0.228	0.083	0.089	●	○	○	●	●	
11219220	XCNT 050204EN CTC1425	N	0.016	0.197	0.228	0.083	0.089	●	○	●	○	○	
11219301	XCNT 050204EN CTC1435	N	0.016	0.197	0.228	0.083	0.089	●	○	●	○	○	
11219441	XCNT 050204EN CTP2440	N	0.016	0.197	0.228	0.083	0.089	●	●	○	○	○	

- Coated
- Uncoated
- MasterFinish - See page 6 for details



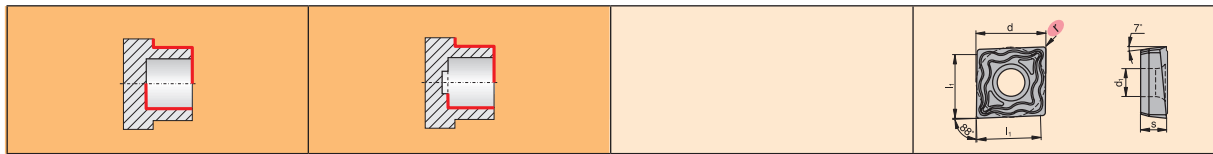
- Main application
 - Extended application
- See page 7 for details

<p>Page</p>	<p>EC..</p> <p>14</p>				
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EcoCut

Inserts Ø .472 - .709 inch



-27P

EN

MasterGuide					
Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○

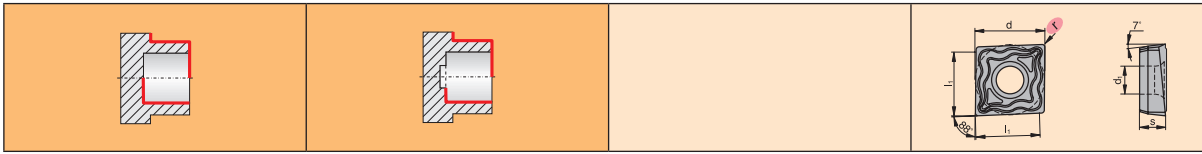
Item Number	Description - Grade	LNR 	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
11078799	XCET 060202FN-27P H216T	N	0.008	0.236	0.256	0.094	0.098	●	●	○	●	○	○
11038706	XCET 060204FN-27P H216T	N	0.016	0.236	0.256	0.094	0.098	●	●	○	●	○	○
11038707	XCET 070304FN-27P H216T	N	0.016	0.276	0.299	0.125	0.11	●	●	○	●	○	○
11002562	XCET 080304FN-27P H216T	N	0.016	0.315	0.335	0.125	0.134	●	●	○	●	○	○
11038881	XCET 09T304FN-27P H216T	N	0.016	0.354	0.378	0.156	0.134	●	●	○	●	○	○

 Page	EC.. 15-16	UT..EC.. 19-20			
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EcoCut

Inserts Ø .472 - .709 inch



-27Q



EN



-M50Q

Item Number	Description - Grade	LNR	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
11214549	XCET 060202FN-27Q H210T	N	0.008	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219226	XCNT 060202EN CTC1425	N	0.008	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219304	XCNT 060202EN CTC1435	N	0.008	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219444	XCNT 060202EN CTP2440	N	0.008	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11214551	XCET 060204FN-27Q H210T	N	0.016	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219230	XCNT 060204EN CTC1425	N	0.016	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219309	XCNT 060204EN CTC1435	N	0.016	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11219446	XCNT 060204EN CTP2440	N	0.016	0.236	0.256	0.094	0.098	●	○	○	○	○	○
11214569	XCET 070304FN-27Q H210T	N	0.016	0.276	0.299	0.125	0.11	●	○	○	○	○	○
11219235	XCNT 070304EN CTC1425	N	0.016	0.276	0.299	0.125	0.11	●	○	○	○	○	○
11219311	XCNT 070304EN CTC1435	N	0.016	0.276	0.299	0.125	0.11	●	○	○	○	○	○
11219447	XCNT 070304EN CTP2440	N	0.016	0.276	0.299	0.125	0.11	●	○	○	○	○	○
11210378	XCET 080304FN-27Q H210T	N	0.016	0.315	0.335	0.125	0.134	●	○	○	○	○	○
11219239	XCNT 080304EN CTC1425	N	0.016	0.315	0.335	0.125	0.134	●	○	○	○	○	○
11219318	XCNT 080304EN CTC1435	N	0.016	0.315	0.335	0.125	0.134	●	○	○	○	○	○
11219450	XCNT 080304EN CTP2440	N	0.016	0.315	0.335	0.125	0.134	●	○	○	○	○	○
11219467	XCNT 080304EN-M50Q CTC1425	N	0.016	0.315	0.335	0.125	0.134	●	○	○	○	○	○
11210380	XCET 09T304FN-27Q H210T	N	0.016	0.354	0.378	0.156	0.134	●	○	○	○	○	○
11219271	XCNT 09T304EN CTC1425	N	0.016	0.354	0.378	0.156	0.134	●	○	○	○	○	○
11219329	XCNT 09T304EN CTC1435	N	0.016	0.354	0.378	0.156	0.134	●	○	○	○	○	○
11219451	XCNT 09T304EN CTP2440	N	0.016	0.354	0.378	0.156	0.134	●	○	○	○	○	○
11219468	XCNT 09T304EN-M50Q CTC1425	N	0.016	0.354	0.378	0.156	0.134	●	○	○	○	○	○

	Coated
	Uncoated
	MasterFinish - See page 6 for details



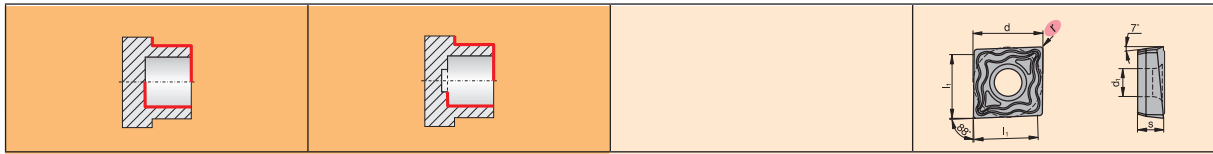
- Main application
- Extended application
- See page 7 for details

	EC..	UT..EC..			
Page	15-16	19-20			



EcoCut

Inserts Ø .787 - 1.260 inch



-27P

EN

MasterGuide					
Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○
●	●	○	●	○	○

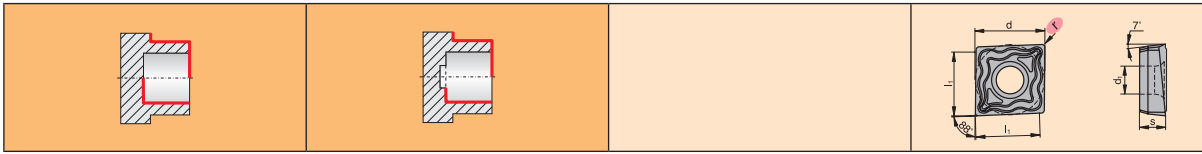
Item Number	Description - Grade	L N R	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
11038878	XCET 10T304FN-27P H216T	N	0.016	0.394	0.417	0.156	0.173	●	●	○	●	○	○
11078800	XCET 10T308FN-27P H216T	N	0.031	0.394	0.417	0.156	0.173	●	●	○	●	○	○
11002564	XCET 130404FN-27P H216T	N	0.016	0.492	0.531	0.187	0.209	●	●	○	●	○	○
11078801	XCET 130408FN-27P H216T	N	0.031	0.492	0.531	0.187	0.209	●	●	○	●	○	○
11038879	XCET 170508FN-27P H216T	N	0.031	0.63	0.689	0.219	0.209	●	●	○	●	○	○

<p>Page</p>	<p>EC..</p> <p>17-18</p>	<p>UT..EC..</p> <p>19-21</p>			
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EcoCut

Inserts Ø .787 - 1.260 inch



-27Q

EN

-M50Q

MasterGuide

Item Number	Description - Grade	LNR 	r inch	l ₁ inch	d inch	s inch	d ₁ inch	MasterGuide					
								Steel	Stainless	Cast Iron	Non ferrous metals	Heat Resistant	Hard materials
11161897	XCET 10T304FN-27Q H210T	N	0.016	0.394	0.417	0.156	0.173	●	○	○	●	●	
11219273	XCNT 10T304EN CTC1425	N	0.016	0.394	0.417	0.156	0.173	●	○	●	●	○	
11219360	XCNT 10T304EN CTC1435	N	0.016	0.394	0.417	0.156	0.173	●	○	●	●	○	
11219452	XCNT 10T304EN CTP2440	N	0.016	0.394	0.417	0.156	0.173	●	●	●	○	○	
11219469	XCNT 10T304EN-M50Q CTC1425	N	0.016	0.394	0.417	0.156	0.173	●	○	●	●	○	
11161900	XCET 10T308FN-27Q H210T	N	0.031	0.394	0.417	0.156	0.173	●	○	○	●	●	
11219276	XCNT 10T308EN CTC1425	N	0.031	0.394	0.417	0.156	0.173	●	○	●	●	○	
11219369	XCNT 10T308EN CTC1435	N	0.031	0.394	0.417	0.156	0.173	●	○	●	●	○	
11219453	XCNT 10T308EN CTP2440	N	0.031	0.394	0.417	0.156	0.173	●	●	●	○	○	
11219471	XCNT 10T308EN-M50Q CTC1425	N	0.031	0.394	0.417	0.156	0.173	●	○	●	●	○	
11161904	XCET 130404FN-27Q H210T	N	0.016	0.492	0.531	0.187	0.209	●	○	○	●	●	
11219282	XCNT 130404EN CTC1425	N	0.016	0.492	0.531	0.187	0.209	●	○	●	●	○	
11219383	XCNT 130404EN CTC1435	N	0.016	0.492	0.531	0.187	0.209	●	○	●	●	○	
11219455	XCNT 130404EN CTP2440	N	0.016	0.492	0.531	0.187	0.209	●	●	●	○	○	
11219472	XCNT 130404EN-M50Q CTC1425	N	0.016	0.492	0.531	0.187	0.209	●	○	●	●	○	
11161907	XCET 130408FN-27Q H210T	N	0.031	0.492	0.531	0.187	0.209	●	○	○	●	●	
11219285	XCNT 130408EN CTC1425	N	0.031	0.492	0.531	0.187	0.209	●	○	●	●	○	
11219391	XCNT 130408EN CTC1435	N	0.031	0.492	0.531	0.187	0.209	●	○	●	●	○	
11219456	XCNT 130408EN CTP2440	N	0.031	0.492	0.531	0.187	0.209	●	●	●	○	○	
11219474	XCNT 130408EN-M50Q CTC1425	N	0.031	0.492	0.531	0.187	0.209	●	○	●	●	○	
11161908	XCET 170508FN-27Q H210T	N	0.031	0.63	0.689	0.219	0.209	●	○	○	●	●	
11219287	XCNT 170508EN CTC1425	N	0.031	0.63	0.689	0.219	0.209	●	○	●	●	○	
11219393	XCNT 170508EN CTC1435	N	0.031	0.63	0.689	0.219	0.209	●	○	●	●	○	
11219458	XCNT 170508EN CTP2440	N	0.031	0.63	0.689	0.219	0.209	●	●	●	○	○	
11219475	XCNT 170508EN-M50Q CTC1425	N	0.031	0.63	0.689	0.219	0.209	●	○	●	●	○	

Coated
 Uncoated
 MasterFinish - See page 6 for details

● Main application
 ○ Extended application
 - See page 7 for details

 Page	EC.. 17-18	UT..EC.. 19-21			
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EcoCut

Cutting data



Workpiece material		Type of treatment / alloy		Hardness HB	H216T v_c [sfm]
A	Low and medium carbon steel	annealed	$\leq 0,15\% \text{ C}$	125	–
		annealed	$0,15\% - 0,45\% \text{ C}$	150 - 250	–
		tempered	$\geq 0,45\% \text{ C}$	300	–
	Alloyed steel	annealed		180	–
		tempered		250 - 300	–
		tempered		350	–
	High strength alloy steel	annealed		200	–
		tempered		350	–
	Stainless steel	annealed	ferritic	200	–
		tempered	martensitic	325	–
R	Stainless steel	annealed	ferritic / martensitic	200	–
		quenched	austenitic	180	–
		quenched	duplex	230 - 260	–
		hardened	martensitic / austenitic	330	–
F	Grey cast iron		perlitic / ferritic	180	328 - 492
			perlitic / martensitic	260	328 - 492
	Ductile cast iron		ferritic	160	328 - 459
			perlitic	–	328 - 459
	Tempered iron		ferritic	130	328 - 525
			perlitic	230	328 - 525
N	Aluminum wrought alloys	non hardened		60	328 - 1640
		hardened		100	328 - 984
	Aluminum cast alloys	non hardened	$< 12\% \text{ Si}$	80	328 - 1640
		hardened	$< 12\% \text{ Si}$	90	328 - 984
		non hardened	$> 12\% \text{ Si}$	130	328 - 984
	Copper and copper alloys (bronze, brass)		machining alloy stock (1% Pb)	–	328 - 1640
			brass, red bronze	–	328 - 1640
			bronze	90	328 - 984
			lead-free copper and electrolytic copper	100	328 - 984
	Non metal materials		thermosetting plastics	100	262 - 590
			fiber reinforced plastics	–	197 - 492
		hard rubber	–	328 - 820	
S	Heat resistant alloys	annealed	Fe-base	200	65 - 164
		hardened	Fe-base	280	65 - 131
		annealed	Ni or Co-base	250	65 - 98
		hardened	Ni or Co-base 30 - 58 HRC	–	49 - 82
		cast	Ni or Co-base 1500 - 2000 N/mm ²	–	49-82
	Titanium alloys		pure titanium	R _m 440*	196 - 459
			alpha + beta alloys	R _m 1050*	131 - 196
H	Tempered steel	hardened and tempered		55 HRC	–
		hardened and tempered		60 HRC	–
	Chilled castings	cast		400	–
	White cast iron	hardened and tempered		55 HRC	–

* R_m = maximum strength, measured in MPa

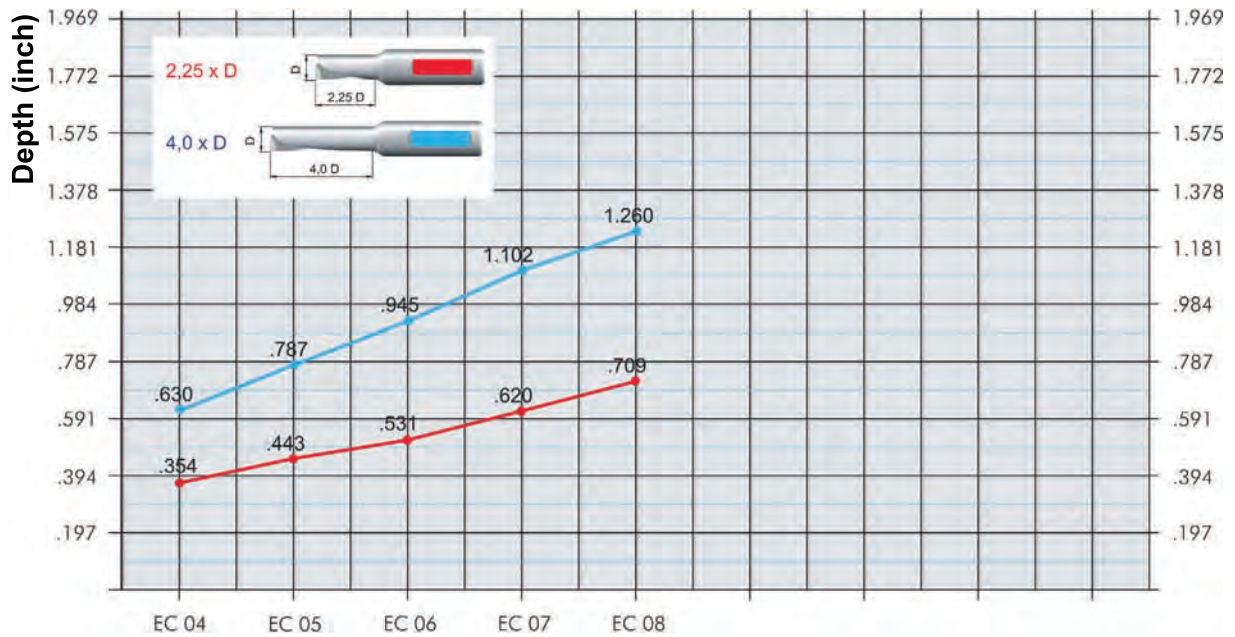
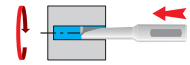


Cutting data

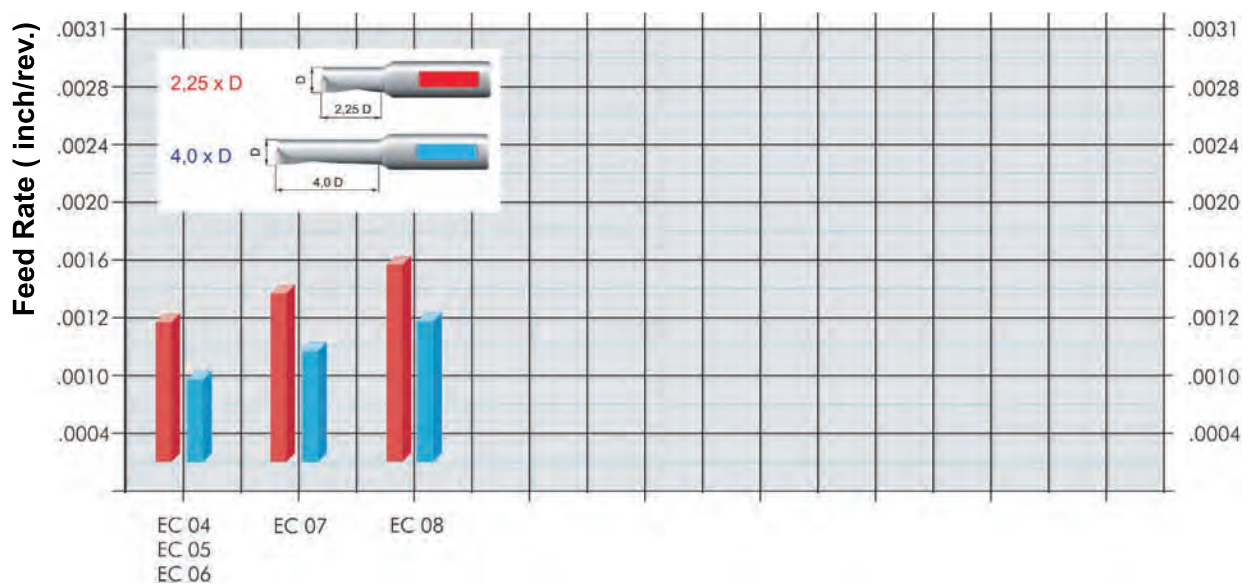


H210T	TSM30	CM45	CTC 1425	CTC 1435	CTP 2440
v_c [sfm]	v_c [sfm]	v_c [sfm]	v_c [sfm]	v_c [sfm]	v_c [sfm]
-	-	262 - 754	492 - 984	459 - 918	393 - 820
-	-	262 - 525	393 - 721	328 - 656	262 - 590
-	-	197 - 426	328 - 656	262 - 590	196 - 492
-	-	262 - 525	393 - 721	328 - 656	262 - 590
-	-	197 - 426	328 - 590	262 - 524	196 - 492
-	-	197 - 328	262 - 492	229 - 459	196 - 393
-	-	262 - 459	360 - 623	328 - 590	262 - 524
-	-	164 - 328	229 - 492	196 - 459	164 - 393
-	-	164 - 656	360 - 721	328 - 656	164 - 656
-	-	164 - 492	328 - 590	262 - 492	164 - 492
-	-	164 - 656	393 - 721	328 - 656	164 - 656
-	-	164 - 590	328 - 656	328 - 590	164 - 590
-	-	164 - 328	-	-	164 - 328
-	-	164 - 262	-	-	164 - 262
459 - 656	328 - 492	-	426 - 918	393 - 820	-
328 - 524	328 - 492	-	426 - 918	393 - 820	-
524 - 656	328 - 459	-	393 - 918	360 - 820	-
360 - 492	328 - 459	-	393 - 918	360 - 820	-
524 - 721	328 - 525	-	360 - 918	328 - 820	-
459 - 590	328 - 525	-	360 - 918	328 - 820	-
984 - 9840	328 - 1640	-	-	-	328 - 1640
656 - 8202	328 - 984	-	-	-	328 - 984
1312 - 6581	328 - 1640	-	-	-	328 - 1640
1312 - 5905	328 - 984	-	-	-	328 - 984
656 - 3280	328 - 984	-	-	-	328 - 656
820 - 2624	328 - 1640	-	-	-	328 - 1640
656 - 2624	328 - 1640	-	-	-	328 - 1640
492 - 1968	328 - 984	-	-	-	328 - 984
492 - 1312	328 - 984	-	-	-	328 - 984
328 - 721	262 - 590	-	-	-	262 - 590
262 - 656	197 - 492	-	-	-	196 - 492
328 - 656	328 - 820	-	-	-	328 - 820
114 - 164	-	66 - 164	-	-	65 - 164
82 - 131	-	66 - 131	-	-	65 - 131
82 - 131	-	49 - 82	-	-	49 - 82
65 - 98	-	33 - 66	-	-	32 - 65
49 - 82	-	33 - 66	-	-	32 - 65
262 - 459	164 - 394	164 - 394	-	-	164 - 393
131 - 328	98 - 164	98 - 164	-	-	98 - 164
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Maximum drilling depth



Drilling feed rate



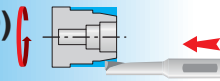


EcoCut Mini

Depth of cut / feed rate

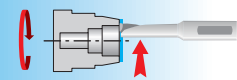


EcoCut Mini Longitudinal Turning and Boring Feed Chart (2.25D) (inch/rev.)



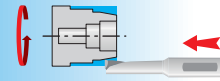
EcoCut Mini	Depth of Cut (inch)				
	up to 0.039	0.040 - 0.079	0.080 - 0.118	0.119 - 0.157	
EC 04..	.0002-.0039	.0002-.0020	-	-	
EC 05..	.0002-.0039	.0002-.0024	-	-	
EC 06..	.0002-.0039	.0002-.0032	.0002-.0016	-	
EC 07..	.0002-.0039	.0002-.0039	.0002-.0024	-	
EC 08..	.0002-.0039	.0002-.0039	.0002-.0032	.0002-.0016	

EcoCut Mini Face Turning Feed Chart (2.25D) (inch/rev.)

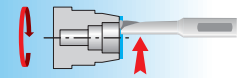


EcoCut Mini	Depth of Cut (inch)				
	up to 0.0079	0.008 - 0.0157	0.0158 - 0.0236	0.0237 - 0.0315	0.0316 - 0.0394
EC 04..	.0003-.0028	.0003-.0028	.0003-.0028	-	-
EC 05..	.0003-.0028	.0003-.0028	.0003-.0028	-	-
EC 06..	.0003-.0028	.0003-.0028	.0003-.0028	-	-
EC 07..	.0003-.0031	.0003-.0031	.0003-.0031	.0003-.0031	.0003-.0031
EC 08..	.0003-.0031	.0003-.0031	.0003-.0031	.0003-.0031	.0003-.0031

EcoCut Mini Longitudinal Turning and Boring Feed Chart (4.0D) (inch/rev.)



EcoCut Mini Face Turning Feed Chart (4.0D) (inch/rev.)



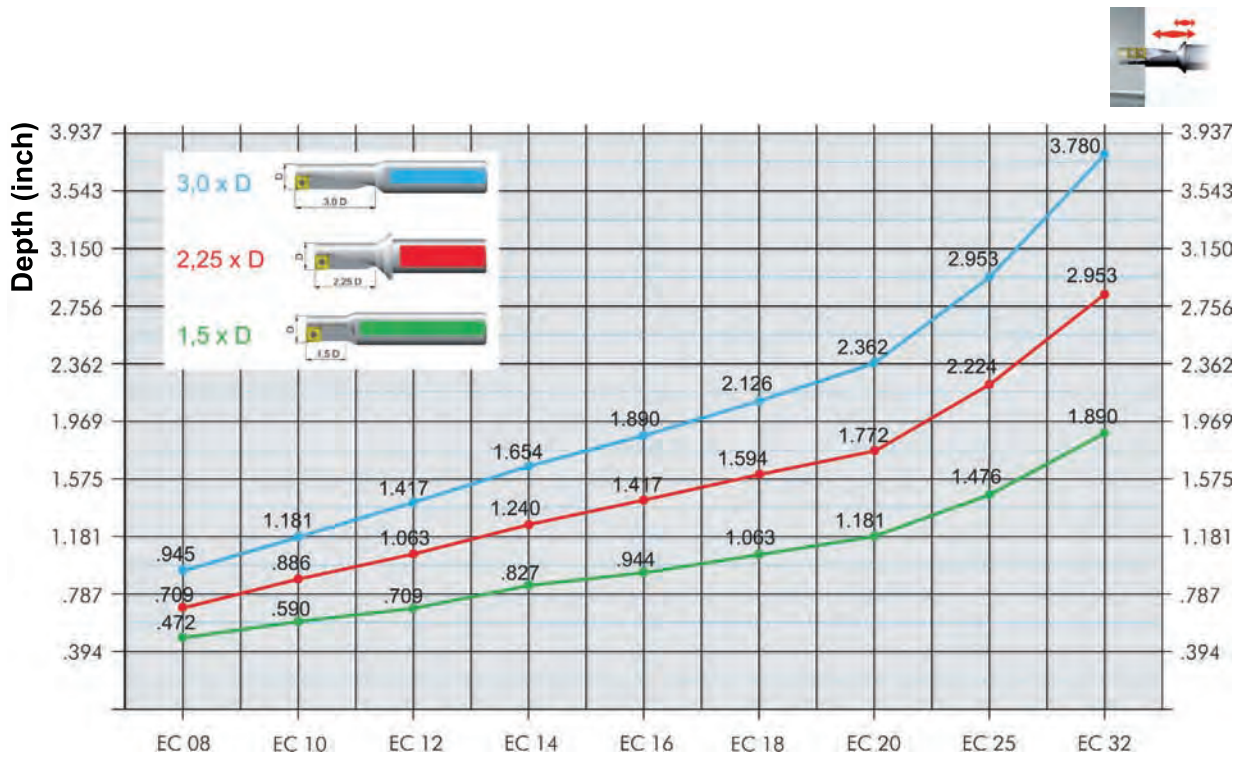


EcoCut Classic

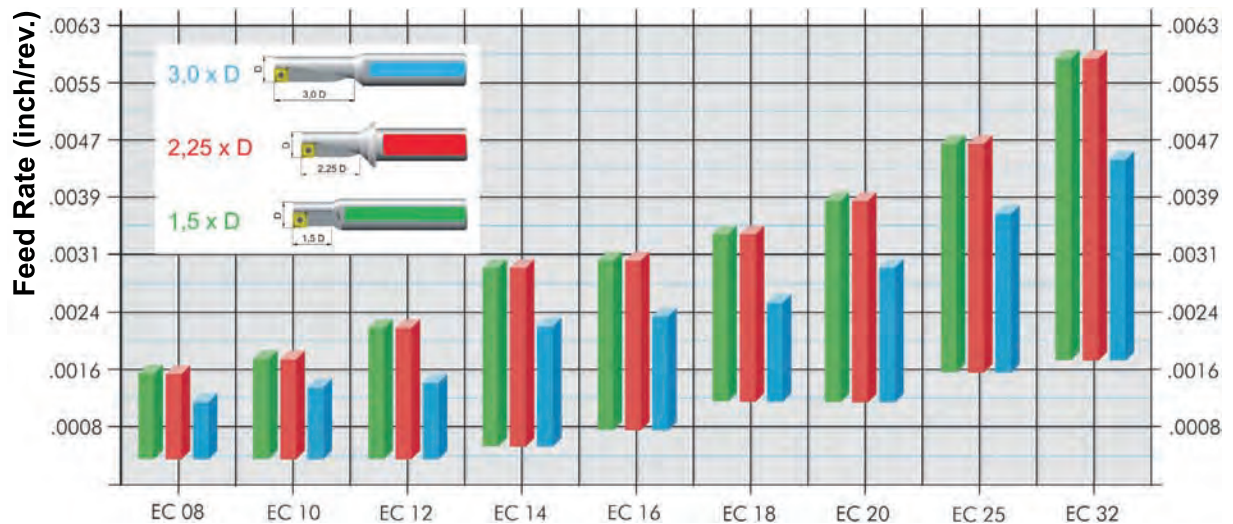
Drilling depth / feed rate



Maximum drilling depth



Drilling feed rate



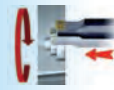


EcoCut Classic

Drilling depth / feed rate



EcoCut Classic Longitudinal Turning and Boring Feed Chart (1.5D) (inch/rev.)



EcoCut Holder	Depth of cut						
	up to 0.079	0.080 - 0.157	0.158 - 0.236	0.237 - 0.315	0.316 - 0.394	0.395 - 0.472	0.473 - 0.551
EC 08..	.0005-.005	.0005-.003	-	-	-	-	-
EC 08.. With MasterFinish	.001-.010	.001-.006	-	-	-	-	-
EC 10..	.0005-.006	.0005-.0035	-	-	-	-	-
EC 10.. With MasterFinish	.001-.012	.001-.007	-	-	-	-	-
EC 12..	.0005-.0065	.0005-.0055	.0005-.004	-	-	-	-
EC 12.. With MasterFinish	.001-.013	.001-.011	.001-.008	-	-	-	-
EC 14..	.0007-.0073	.0007-.0073	.0007-.005	-	-	-	-
EC 14.. With MasterFinish	.0014-.0145	.0014-.0145	.0014-.010	-	-	-	-
EC 16..	.0007-.008	.0007-.008	.0007-.006	.0007-.004	-	-	-
EC 16.. With MasterFinish	.0014-.016	.0014-.016	.0014-.012	.0014-.008	-	-	-
EC 18..	.0008-.0087	.0008-.0087	.0008-.008	.0008-.006	-	-	-
EC 18.. With MasterFinish	.0016-.0175	.0016-.0175	.0016-.016	.0016-.012	-	-	-
EC 20..	.0008-.0095	.0008-.0095	.0008-.009	.0008-.0075	.0008-.006	-	-
EC 20.. With MasterFinish	.0016-.019	.0016-.019	.0016-.018	.0016-.015	.0016-.012	-	-
EC 25..	.0009-.0105	.0009-.0105	.0009-.0105	.0009-.0095	.0009-.008	.0009-.0063	-
EC 25.. With MasterFinish	.0018-.021	.0018-.021	.0018-.021	.0018-.019	.0018-.016	.0018-.0125	-
EC 32..	.001-.012	.001-.012	.001-.012	.001-.012	.001-.0103	.001-.0088	.001-.0073
EC 32.. With MasterFinish	.002-.024	.002-.024	.002-.024	.002-.024	.002-.0205	.002-.0175	.002-.0145

EcoCut Classic Face Turning Feed Chart (1.5D) (inch/rev.)



EcoCut Holder	Depth of Cut						
	up to 0.079	0.080 - 0.157	0.158 - 0.236	0.237 - 0.315			
EC 08..	.0005-.0037	-	-	-			
EC 08.. With MasterFinish	.001-.0075	-	-	-			
EC 10..	.0005-.005	-	-	-			
EC 10.. With MasterFinish	.001-.010	-	-	-			
EC 12..	.0005-.0058	-	-	-			
EC 12.. With MasterFinish	.001-.0115	-	-	-			
EC 14..	.0005-.0065	-	-	-			
EC 14.. With MasterFinish	.001-.013	-	-	-			
EC 16..	.0005-.0073	.0005-.0073	-	-			
EC 16.. With MasterFinish	.001-.0149	.001-.0149	-	-			
EC 18..	.0005-.008	.0005-.008	-	-			
EC 18.. With MasterFinish	.001-.016	.001-.016	-	-			
EC 20..	.0005-.0088	.0005-.0088	-	-			
EC 20.. With MasterFinish	.001-.0175	.001-.0175	-	-			
EC 25..	.0005-.010	.0005-.010	.0005-.010	-			
EC 25.. With MasterFinish	.001-.020	.001-.020	.001-.020	-			
EC 32..	.0005-.011	.0005-.011	.0005-.011	.0005-.011			
EC 32.. With MasterFinish	.001-.022	.001-.022	.001-.022	.001-.022			

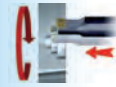


EcoCut Classic

Depth of cut / feed rate



EcoCut Classic Longitudinal Turning and Boring Feed Chart (2.25D) (inch/rev.)



EcoCut Holder	Depth of Cut						
	up to 0.039	0.040 - 0.079	0.080 - 0.118	0.119 - 0.157	0.158 - 0.197	0.198 - 0.236	0.237 - 0.276
EC 08..	.0008-.0052	.0008-.004	-	-	-	-	-
EC 08.. With MasterFinish	.0016-.0104	.0016-.008	-	-	-	-	-
EC 10..	.0008-.006	.0008-.0052	.0008-.0035	-	-	-	-
EC 10.. With MasterFinish	.0016-.012	.0016-.0104	.0008-.007	-	-	-	-
EC 12..	.0008-.0065	.0008-.0065	.0008-.005	.0008-.004	-	-	-
EC 12.. With MasterFinish	.0016-.013	.0016-.013	.0016-.010	.0016-.008	-	-	-
EC 14..	.0009-.0072	.0009-.0072	.0009-.0058	.0009-.0045	-	-	-
EC 14.. With MasterFinish	.0018-.0145	.0018-.0145	.0018-.0115	.0018-.009	-	-	-
EC 16..	.001-.008	.001-.008	.001-.007	.001-.0055	-	-	-
EC 16.. With MasterFinish	.002-.016	.002-.016	.002-.014	.002-.011	-	-	-
EC 18..	.001-.0085	.001-.0085	.001-.008	.001-.0065	.001-.005	-	-
EC 18.. With MasterFinish	.002-.017	.002-.017	.002-.016	.002-.013	.002-.010	-	-
EC 20..	.001-.0095	.001-.0095	.001-.0095	.001-.008	.001-.0065	-	-
EC 20.. With MasterFinish	.002-.019	.002-.019	.002-.019	.002-.016	.001-.013	-	-
EC 25..	.001-.0105	.001-.0105	.001-.0105	.001-.0105	.001-.0085	.001-.007	-
EC 25.. With MasterFinish	.002-.021	.002-.021	.002-.021	.002-.021	.002-.017	.002-.014	-
EC 32..	.001-.012	.001-.012	.001-.012	.001-.012	.001-.011	.001-.0085	.001-.008
EC 32.. With MasterFinish	.002-.024	.002-.024	.002-.024	.002-.024	.002-.022	.002-.017	.002-.016

EcoCut Classic Face Turning Feed Chart (2.25D) (inch/rev.)



EcoCut Holder	Depth of Cut						
	up to 0.039	0.040 - 0.079	0.080 - 0.118	0.119 - 0.157	0.158 - 0.197	0.198 - 0.236	
EC 08..	.0005-.0037	.0005-.0037	-	-	-	-	
EC 08.. With MasterFinish	.001-.0075	.001-.0075	-	-	-	-	
EC 10..	.0005-.005	.0005-.005	-	-	-	-	
EC 10.. With MasterFinish	.001-.010	.001-.010	-	-	-	-	
EC 12..	.0005-.0058	.0005-.0058	-	-	-	-	
EC 12.. With MasterFinish	.001-.0115	.001-.0115	-	-	-	-	
EC 14..	.0005-.0065	.0005-.0065	.0005-.0065	-	-	-	
EC 14.. With MasterFinish	.001-.013	.001-.013	.001-.013	-	-	-	
EC 16..	.0005-.0073	.0005-.0073	.0005-.0073	-	-	-	
EC 16.. With MasterFinish	.001-.0145	.001-.0145	.001-.0145	-	-	-	
EC 18..	.0005-.008	.0005-.008	.0005-.008	.0005-.008	-	-	
EC 18.. With MasterFinish	.001-.016	.001-.016	.001-.016	.001-.016	-	-	
EC 20..	.0005-.0085	.0005-.0085	.0005-.0085	.0005-.0085	-	-	
EC 20.. With MasterFinish	.001-.017	.001-.017	.001-.017	.001-.017			
EC 25..	.0005-.0095	.0005-.0095	.0005-.0095	.0005-.0095	.0005-.0095	-	
EC 25.. With MasterFinish	.001-.019	.001-.019	.001-.019	.001-.019	.001-.019		
EC 32..	.0005-.0108	.0005-.0108	.0005-.0108	.0005-.0108	.0005-.0108	.0005-.0108	
EC 32.. With MasterFinish	.001-.0215	.001-.0215	.001-.0215	.001-.0215	.001-.0215	.001-.0215	

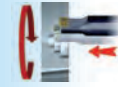


EcoCut Classic

Depth of cut / feed rate



EcoCut Classic Longitudinal Turning and Boring Feed Chart (3.0D) (inch/rev.)



EcoCut Holder	Depth of Cut						
	up to 0.039	0.040 - 0.079	0.080 - 0.118	0.119 - 0.157	0.158 - 0.197	0.198 - 0.236	0.237 - 0.276
EC 08..	.0008-.0052	.0008-.004	-	-	-	-	-
EC 08.. With MasterFinish	.0016-.0104	.0016-.008	-	-	-	-	-
EC 10..	.0008-.006	.0008-.0052	.0008-.0035	-	-	-	-
EC 10.. With MasterFinish	.0016-.012	.0016-.0104	.0008-.007	-	-	-	-
EC 12..	.0008-.0065	.0008-.0063	.0008-.005	.0008-.004	-	-	-
EC 12.. With MasterFinish	.0016-.013	.0016-.0125	.0016-.010	.0016-.008	-	-	-
EC 14..	.0009-.0072	.0009-.0072	.0009-.0058	.0009-.0045	-	-	-
EC 14.. With MasterFinish	.0018-.0145	.0018-.0145	.0018-.0115	.0018-.009	-	-	-
EC 16..	.001-.008	.001-.008	.001-.007	.001-.0055	-	-	-
EC 16.. With MasterFinish	.002-.016	.002-.016	.002-.014	.002-.011	-	-	-
EC 18..	.001-.0085	.001-.0085	.001-.008	.001-.0065	.001-.005	-	-
EC 18.. With MasterFinish	.002-.017	.002-.017	.002-.016	.002-.013	.002-.010	-	-
EC 20..	.001-.0095	.001-.0095	.001-.0095	.001-.008	.001-.0065	-	-
EC 20.. With MasterFinish	.002-.019	.002-.019	.002-.019	.002-.016	.001-.013	-	-
EC 25..	.001-.0105	.001-.0105	.001-.0105	.001-.010	.001-.0085	.001-.0068	-
EC 25.. With MasterFinish	.002-.021	.002-.021	.002-.021	.002-.020	.002-.017	.002-.0135	-
EC 32..	.001-.012	.001-.012	.001-.012	.001-.012	.001-.011	.001-.0085	.001-.008
EC 32.. With MasterFinish	.002-.024	.002-.024	.002-.024	.002-.024	.002-.022	.002-.017	.002-.016

EcoCut Classic Face Turning Feed Chart (3.0D) (inch/rev.)



EcoCut Holder	Depth of Cut						
	up to 0.039	0.040 - 0.079	0.080 - 0.118				
EC 08..	.0005-.003	-	-				
EC 08.. With MasterFinish	.001-.006	-	-				
EC 10..	.0005-.0037	-	-				
EC 10.. With MasterFinish	.001-.0075	-	-				
EC 12..	.0005-.0045	-	-				
EC 12.. With MasterFinish	.001-.009	-	-				
EC 14..	.0005-.0047	-	-				
EC 14.. With MasterFinish	.001-.0095	-	-				
EC 16..	.0005-.0062	.0005-.0062	-				
EC 16.. With MasterFinish	.001-.0124	.001-.0124	-				
EC 18..	.0005-.0055	.0005-.0055	-				
EC 18.. With MasterFinish	.001-.011	.001-.011	-				
EC 20..	.0005-.0085	.0005-.0085	-				
EC 20.. With MasterFinish	.001-.017	.001-.017	-				
EC 25..	.0005-.0073	.0005-.0073	.0005-.0073				
EC 25.. With MasterFinish	.001-.0145	.001-.0145	.001-.0145				
EC 32..	.0005-.008	.0005-.008	.0005-.008				
EC 32.. With MasterFinish	.001-.016	.001-.016	.001-.016				

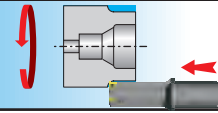


EcoCut Rebore

Depth of cut / feed rate

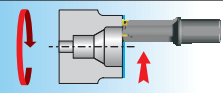


EcoCut Rebore Longitudinal Turning Feed Chart (inch/rev.)



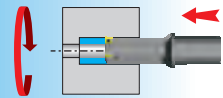
EcoCut Rebore	Depth of Cut						
	up to 0.079	0.080 - 0.157	0.158 - 0.197	0.198 - 0.315	0.316 - 0.394	0.395 - 0.472	0.473 - 0.551
ECR 40..	.001-.016	.001-.015	.001-.012	.001-.009	-	-	-
ECR 60..	.001-.016	.001-.016	.001-.015	.001-.013	.001-.010	.001-.0075	.001-.005

EcoCut Rebore Face Turning Feed Chart (inch/rev.)



EcoCut Rebore	Depth of Cut						
	up to 0.020	0.021 - 0.040	0.041 - 0.060	0.061 - 0.080	0.081 - 0.100	0.101 - 0.120	
ECR 40..	.0005-.012	.0005-.012	.0005-.012	.0005-.012	-	-	
ECR 60..	.0005-.012	.0005-.012	.0005-.012	.0005-.012	.0005-.012	.0005-.012	

EcoCut Rebore Counterboring Feed Chart (inch/rev.)



EcoCut Rebore	Depth of Cut				
	0.787	1.181	1.575	1.969	2.362
ECR 40..	.002-.016	.002-.035	.002-.035	-	-
ECR 60..	-	-	.002-.030	.002-.045	.002-.045

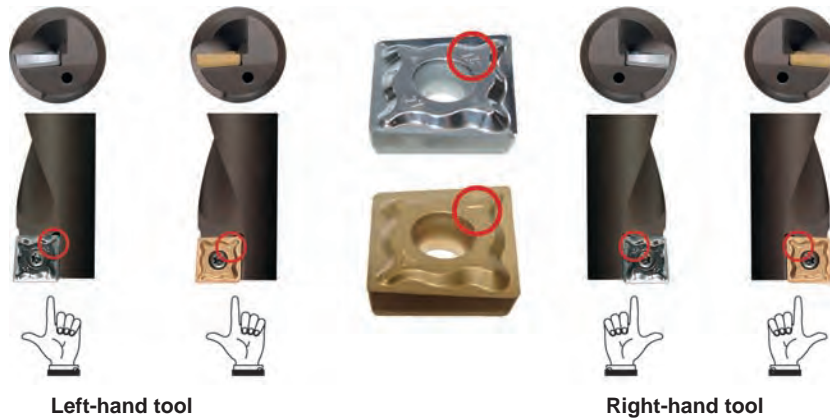


Tools	Initial bore (D ₂)
ECR 40 Ø 1.575 inch	Ø min. = .787 inch
ECR 60 Ø 2.362 inch	Ø min. = 1.260 inch

Mounting of the insert

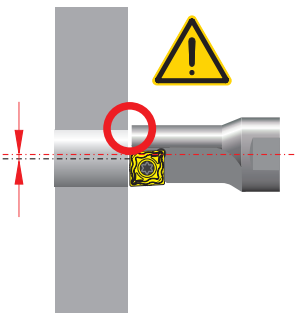


Right-hand and left-hand inserts are used with EC-08 holders. For all other EcoCut Classic sizes, neutral inserts are used.

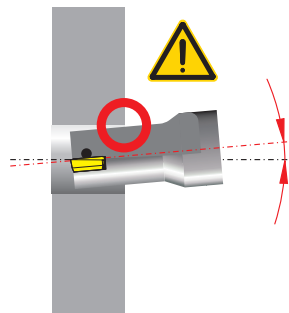


Axial alignment of the machine

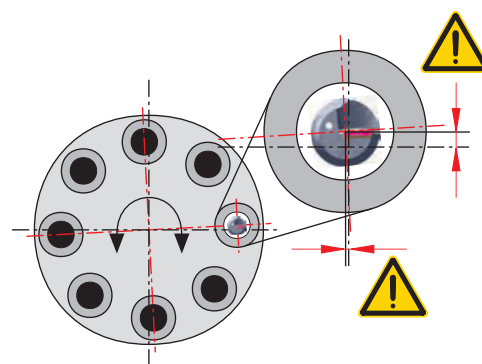
Displacement in x-direction



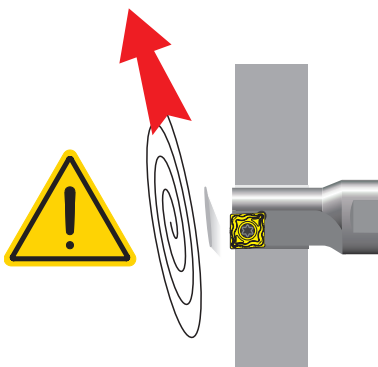
Angular error



Turret position error

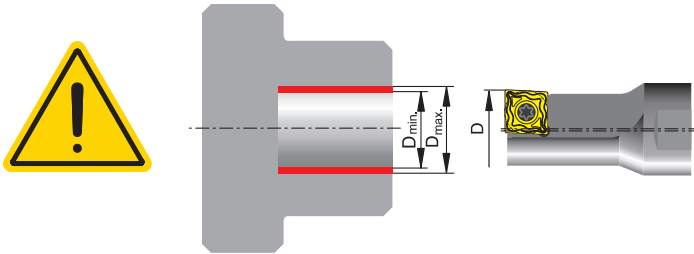


Through hole



With through holes; a **sharp-edged disk** is created as tool break-out occurs. Safety measures are necessary.

Off-center drilling



Due to the special construction of EcoCut tools and inserts, off-center drilling is possible. This allows deviations from the tool's nominal diameter to be obtained (see table below).

Type of tool	Nominal Ø tool D (inch)	Workpiece bore diameter (inch)	
		D _{min}	D _{max}
EC 04 L/R - 2.25D	.157	.154	.166
EC 05 L/R - 2.25D	.197	.193	.205
EC 06 L/R - 2.25D	.236	.232	.244
EC 07 L/R - 2.25D	.276	.272	.283
EC 08 L/R - 2.25D	.315	.311	.323
EC 08 L/R - ... 04	.315	.309	.327
EC 10 L/R - ... 05	.394	.388	.413
EC 12 L/R - ... 06	.472	.467	.492
EC 14 L/R - ... 07	.551	.546	.571
EC 16 L/R - ... 08	.630	.624	.650
EC 18 L/R - ... 09	.709	.703	.728
EC 20 L/R - ... 10	.787	.780	.807
EC 25 L/R - ... 13	.984	.976	1.016
EC 32 L/R - ... 17	1.260	1.252	1.299

EcoCut Mini solid carbide tools

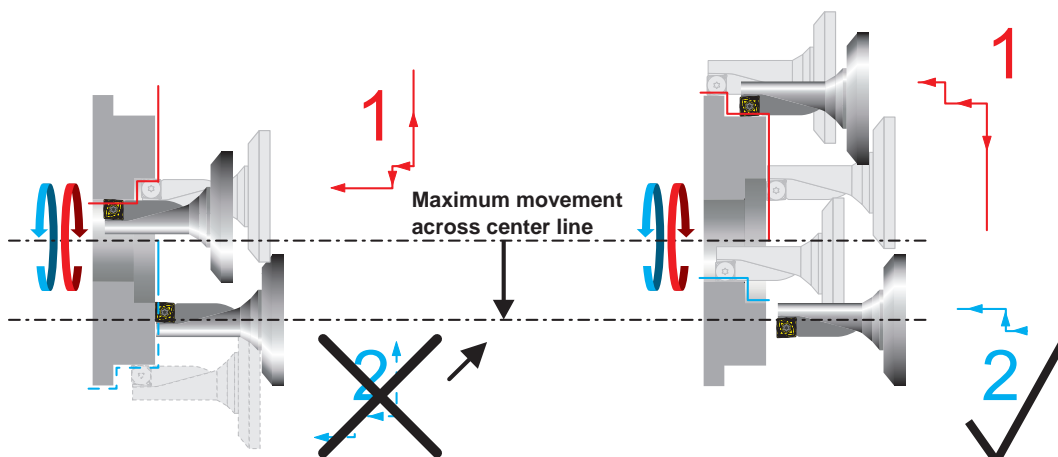
Machining across center line

Situation:

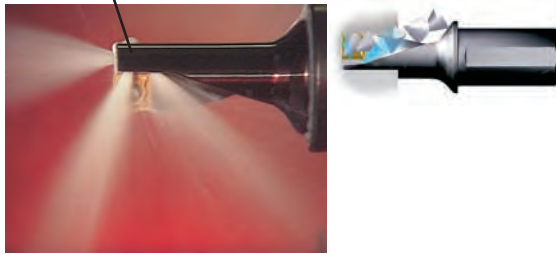
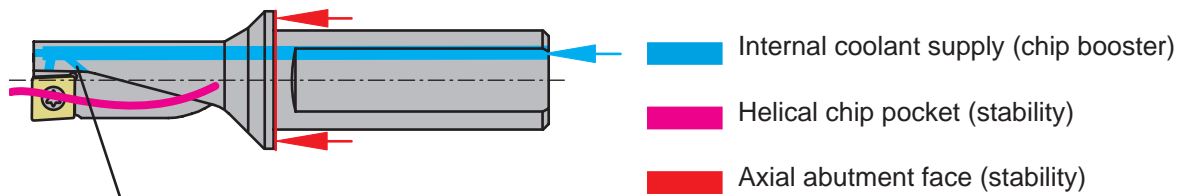
In applications where the design of the machine does not allow positions across center line, the external machining operations cannot be done with the same tool.

Solution:

Use a right-hand EcoCut tool.



Chip booster / coolant pressure



EcoCut offers an innovative design in the 2.25 & 3.0D holders. The chip booster feature offers bi-directional coolant for better chip evacuation. The **backwards directed coolant hole** improves chip evacuation. Minimum coolant pressure is 45 psi.

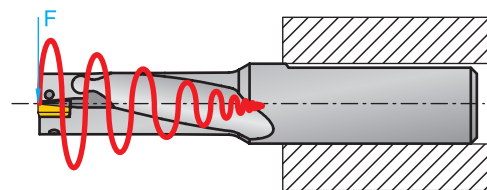
If the required coolant is not available, peck cycles may be required to evacuate chips.

The advantages of DENSIMET in 3.0D tools.

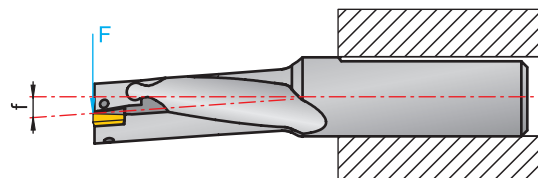
The EcoCut 3.0D series offers improved performance by utilizing DENSIMET material. The tools are designated by placing an "H" at the end of the item number. DENSIMET, a CERATIZIT tungsten heavy metal alloy, offers a high modulus of elasticity and its density offers very good vibration-damping properties. The results are tighter tolerances, excellent surface quality and improved tool life.

Material	Modulus of elasticity (N/mm ²)	Density (g/mm ³)
Steel	210 000	7,85
DENSIMET	360 000	17,50

Vibration-damping



40% lower deflection than steel



Type of problem								Corrective measures	
Wear type				Workpiece problems		Chip control			
Edge chipping	Built-up edge	Wear on clearance face	Plastic deformation	Vibrations	Surface finish	Chip too long (ribbon chip)	Chip too short (fragmented chip)		
	↑	↓	↓	↓	↑	↓		Cutting speed	Cutting values
↓		~	↓	↑	↓	↑	↓	Feed	
↑		↑	↑	↓	↑			Corner radius	Insert selection
		↑	↑					larger ↓ smaller ↑	
↓		↑	↑					Cutting material	General criteria
				~	~			wear resistance ↓ toughness ↑	
~				~	~			Tool clamping	
~				~	~			Workpiece clamping	
~				~	↓			Overhang	
~		~		~	~			Tip height	
	●	●	●		●	●		Cooling lubricant	

↑	raise, increase, large influence	↓	avoid, reduce large influence	~	check, optimize
↑	raise, increase low influence	↓	avoid, reduce low influence	●	use



Warranty



Allied Machine & Engineering Corp. warrants to original equipment manufacturers, distributors, industrial and commercial users of its products, that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

Allied's obligation under this warranty is limited to furnishing without additional charge a replacement or, at its option repairing or issuing credit for any product which shall within one year from the date of sale be returned freight prepaid to the plant designated by an Allied representative and which upon inspection is determined by Allied to be defective in materials and workmanship.

Complete information as to operating conditions, machine setup, and application of cutting fluid should accompany any product returned for inspection. The provisions of this warranty shall not apply to any Allied product which has been subjected to misuse, improper operating conditions, machine setup or application of cutting fluid or which has been repaired or altered if such repair or alteration in the judgement of Allied would adversely affect performance of the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Allied shall have no liability or responsibility on any claim of any kind, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein. IN NO EVENT SHALL ALLIED MACHINE & ENGINEER CORP. BE LIABLE FOR ANY SPECIAL INCIDENTAL OR CONSEQUENTIAL DAMAGES. Allied makes no other warranty, express or implied, except as set forth above, and Allied neither assumes nor authorizes any other person or entity to assume for it any other obligation of liability in connection with any of its products.

ALL PRICES, DELIVERIES, DESIGNS, AND MATERIALS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

WARNING

Cutting tools, tooling and metalworking machines may fail during use. Use safety glasses, appropriate safety equipment and exercise personal safety at all times while operating machinery.

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Other Product Literature:

Allied Drilling Products

Allied Drilling Products are designed and manufactured by Allied Machine & Engineering Corp. The combination of premium materials, along with unique geometry and coatings allows for the finest drilling systems in the metal cutting industry, resulting in the lowest cost per hole.



Literature Order Number: TAASC-081

Alvan® Expandable Reamers



The Alvan® product line includes both monobloc and ring style expandable reamers, offered with carbide, cermet, PCD and CBN cutting edges and are available in sizes from 0.228 inch to 7.898 inch (5.8 mm to 200.6 mm) diameters.

Literature Order Number: ALV-08

AccuPort 432® Port Contour Cutter ONE OPERATION PORT HOLE DRILLING SYSTEM



AMEC's revolutionary port hole drilling system combines two manufacturing functions into one. The patent-pending design provides excellent repeatability and surface finish while eliminating lost production time due to pre-drilling, setups, and regrinding.

Literature Order Number: AP432-08

Structural Steel T-A® Drilling System HIGH PERFORMANCE HOLDERS AND INSERTS



Designed specifically for use on structural steel materials, this patent-pending system delivers Outstanding Performance and Durability. TiAlN insert coating allows for increased tool life and better heat resistance while providing better hole tolerances. Tool holders can be used with standard T-A® Drill Inserts.

Literature Order Number: SS-08

Opening Drill® / Revolution Drill™



The Revolution Drill™ is an IC Drill that allows adjustability of up to .200" (5.1mm) in diameter. Available in sizes from 1.875" (47.63mm) to 4.00" (101.6mm). The Opening Drill® offers adjustable diameters for the coring of existing holes up to 5.62" (142.75mm). These adjustable diameter tools reduce inventory requirements and offer removable cartridges for easy replacement.

Literature Order Number: ODREV-08

GEN3SYS® HIGH PENETRATION DRILLING SYSTEM



The GEN3SYS® High Penetration Drilling System offers diameters from 12-32mm (0.4724" - 1.2598"). GEN3SYS® holders are offered in 3X, 5X, and 7X depths in both helical and straight fluted options. GEN3SYS® inserts are offered in C1 and C2 carbide with AMEC's exclusive AM200® coating.

Literature Order Number: GEN3-07

AccuThread 856® THREAD MILLING PRODUCTS



AccuThread 856® specific Thread Mills conform with J1926 and SAE AS5202. AccuThread 856® has a thicker core and a helical flute which offers increased strength and rigidity when cutting grades are applied. AccuThread 856® provides superior thread forms compared to other competitive thread mills and taps.

Literature Order Number: AT856-08



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