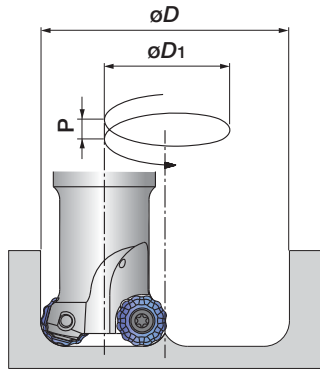


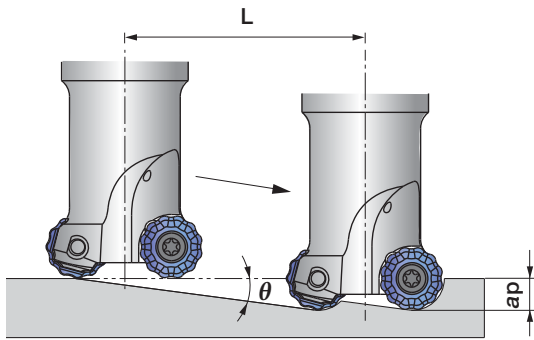
Holemaking with helical feed



Designation	Tool \varnothing $\varnothing D_c$ (in)	Min. machining diameter (in)		Max. machining diameter (in)		Pitch P (in)
		$\varnothing D$	$\varnothing D_1$	$\varnothing D$	$\varnothing D_1$	
ERC12R125U...	1.250	2.028	0.778	2.421	1.171	< 0.236
ERC12R150U...	1.500	2.528	1.028	2.921	1.421	< 0.236
TRC12R200U...	2.000	3.528	1.528	3.921	1.921	< 0.236
TRC12R250U...	2.500	4.528	2.028	4.921	2.421	< 0.236
TRC12R300U...	3.000	5.528	2.528	5.921	2.921	< 0.236
ERC16R150U...	1.500	2.370	0.870	2.921	1.421	< 0.315
TRC16R200U...	2.000	3.370	1.370	3.921	1.921	< 0.315
TRC16R250U...	2.500	4.370	1.870	4.921	2.421	< 0.315
TRC16R300U...	3.000	5.370	2.370	5.921	2.921	< 0.315
TRC16R400U...	4.000	7.370	3.370	7.921	3.921	< 0.315
TRC16R500U...	5.000	9.370	4.370	9.921	4.921	< 0.315

When holemaking with a helical feed, the pitch (P) needs to be set at lower values than that shown above.

Ramping

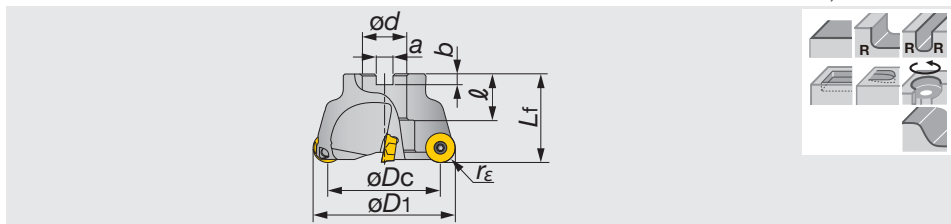


Designation	Tool \varnothing $\varnothing D_c$ (in)	Max. ramping angle θ°	L: tool pass length when ramping angle is 2 degrees ap (in)				
			0.079	0.118	0.158	0.236	0.315
			ERC12R125U...	1.250	10	2.244	3.346
ERC12R150U...	1.500	7	2.244	3.346	4.488	6.732	-
TRC12R200U...	2.000	5.5	2.244	3.346	4.488	6.732	-
TRC12R250U...	2.500	3.5	2.244	3.346	4.488	6.732	-
TRC12R300U...	3.000	2.5	2.244	3.346	4.488	6.732	-
ERC16R150U...	1.500	16	2.244	3.346	4.488	6.732	-
TRC16R200U...	2.000	9.5	2.244	3.346	4.488	6.732	9.016
TRC16R250U...	2.500	6.5	2.244	3.346	4.488	6.732	9.016
TRC16R300U...	3.000	4.5	2.244	3.346	4.488	6.732	9.016
TRC16R400U...	4.000	3	2.244	3.346	4.488	6.732	9.016
TRC16R500U...	5.000	2.5	2.244	3.346	4.488	6.732	9.016

Tool pass length: $L = ap / \tan \theta$, Ramping angle needs to be set at smaller than 2 degrees in order to prevent chips from getting tangled.

TRD12/16

Face mills with button insert of 0.236" (6 mm) or 0.315" (8 mm) radius



A.R. = +10°, R.R. = -6°~0°

Inch	Max. ap	$\varnothing D_c$	z	$\varnothing D_1$	L_f	$\varnothing d$	ℓ	a	b	r_ϵ	l_b	Insert
TRD12050RU	0.236	1.528	4	2.00	1.560	0.750	1.570	0.315	0.197	0.236	0.990	RDM*1204...
TRD16080RU	0.315	2.520	4	3.15	2.000	1.000	1.970	0.375	0.236	0.315	1.600	RDM*1606...
TRD16100RU	0.315	3.310	5	3.94	2.000	1.250	1.970	0.500	0.315	0.315	2.200	RDM*1606...
TRD16125RU	0.315	4.290	6	4.92	2.500	1.500	2.480	0.625	0.394	0.315	5.300	RDM*1606...

SPARE PARTS

Designation	Clamp screw	Wrench
TRD12...	CSTB-3.5	T-15D
TRD16...	CSTB-5	T-20D

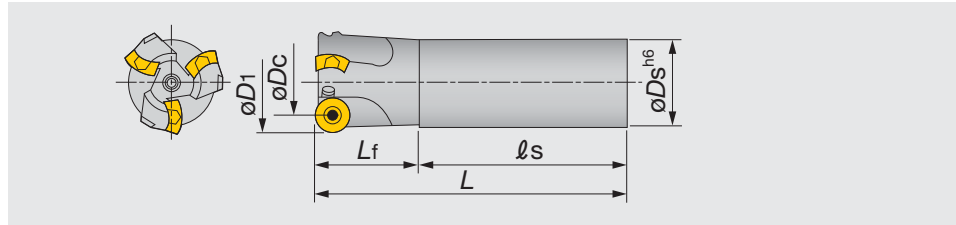
Reference pages

Inserts → **D160**, Standard cutting conditions → **D161**

ERD12

Indexable endmills with button insert of 0.236" (6 mm) or 0.315" (8 mm) radius

A.R. = +8°~ 10°, R.R. = -6°~ -2°



Inch	Max. ap	ϕD_c	z	ϕD_1	ϕD_s	L	L_f	L_s	Insert
ERD12125RSU	0.236	0.778	2	1.250	1.250	4.780	1.970	2.280	RDM*1204...
ERD12150RSU	0.236	1.028	3	1.500	1.500	4.780	1.970	2.280	RDM*1204...
ERD12200RSU	0.236	1.528	4	2.000	2.000	4.780	1.970	2.280	RDM*1204...
ERD12125RLU	0.236	1.250	2	1.250	1.250	10.000	1.970	7.500	RDM*1204...
ERD12150RLU	0.236	1.500	3	1.500	1.500	10.000	1.970	7.500	RDM*1204...
ERD12200RLU	0.236	2.000	4	2.000	2.000	10.000	1.970	7.500	RDM*1204...

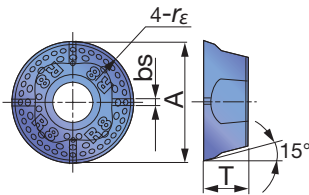
SPARE PARTS

Designation	Clamp screw	Lubricant	Wrench
ERD12**R...	CSTB-3.5	M-1000	T-15D

INSERT

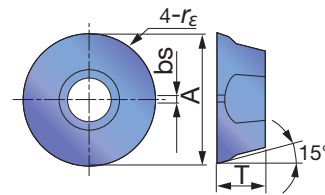
RDMT12/16-MJ

Button insert with pressed MJ chipbreaker



RDMW12/16

Flat-top button insert with 0.236" (6 mm) or 0.315" (8 mm) radius



P Steel	☆			★	★		☆		
M Stainless		★	☆						
K Cast iron	★								
N Non-ferrous									
S Superalloys	★	☆							
H Hard materials									

★ : First choice
☆ : Second choice

Designation	r_ϵ	Max. ap	Coated					Un-coated	A	T	bs
			AH120	AH130	AH140	AH330	T3130	UX30			
RDMT1204ZDPN-MJ	0.236	0.236	●	●		●	●		0.504	0.187	0.031
RDMW1204ZDSN	0.236	0.236	●						0.504	0.187	0.031
RDMT1606ZDPN-MJ	0.315	0.315	●	●	●	●	●		0.661	0.250	0.031
RDMW1606ZDSN	0.315	0.315	●						0.661	0.250	0.031

● : Line up

Profile Milling

Reference pages

Standard cutting conditions → **D161**