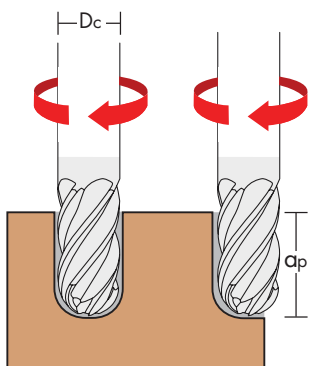


ISO Classification	Work Material	Type of Cut	Axial DOC	Radial DOC	No. of Flutes	Speed (SFM)	Feed (Inches per Tooth)						
							1/8	1/4	3/8	1/2	5/8	3/4	1
S	Titanium Alloys 6Al-4V, 6-2-4	Slotting	.5 x D	1 x D	5	250	.0005	.0009	.0014	.0018	.0023	.0028	.0037
		Peripheral - Rough	1 x D	.3 x D	5	300	.0006	.0013	.0019	.0025	.0031	.0038	.0050
		Peripheral - HEM*	1.5 x D	.1 x D	5	425	.0012	.0024	.0036	.0048	.0060	.0072	.0096
		Finish	1.5 x D	.01 x D	5	300	.0012	.0023	.0035	.0046	.0058	.0069	.0092
	Difficult to Machine Titanium Alloys 10-2-3	Slotting	.25 x D	1 x D	5	200	.0003	.0007	.0010	.0014	.0017	.0020	.0027
		Peripheral - Rough	1 x D	.25 x D	5	250	.0005	.0010	.0015	.0020	.0025	.0029	.0039
		Peripheral - HEM*	1.5 x D	.1 x D	5	300	.0009	.0018	.0027	.0035	.0044	.0053	.0071
		Finish	1.5 x D	.01 x D	5	250	.0009	.0017	.0026	.0034	.0043	.0051	.0068
M	Austenitic Stainless Steels, FeNi Alloys 303, 304, 316, Invar, Kovar	Slotting	.5 x D	1 x D	5	275	.0006	.0012	.0018	.0024	.0030	.0036	.0048
		Peripheral - Rough	1.25 x D	.3 x D	5	350	.0008	.0016	.0025	.0033	.0041	.0049	.0065
		Peripheral - HEM*	2 x D	.1 x D	5	475	.0016	.0031	.0047	.0063	.0078	.0094	.0125
		Finish	2 x D	.01 x D	5	350	.0015	.0030	.0045	.0060	.0075	.0090	.0121
	Precipitation Hardening Stainless Steels 17-4, 15-5, 13-8	Slotting	.5 x D	1 x D	5	250	.0005	.0010	.0015	.0020	.0025	.0030	.0040
		Peripheral - Rough	1.25 x D	.3 x D	5	325	.0007	.0014	.0020	.0027	.0034	.0041	.0055
		Peripheral - HEM*	1.5 x D	.1 x D	5	450	.0013	.0026	.0039	.0052	.0065	.0078	.0104
		Finish	1.5 x D	.01 x D	5	325	.0013	.0025	.0038	.0050	.0063	.0075	.0101
P	Martensitic & Ferritic Stainless Steels 410, 416, 440	Slotting	.5 x D	1 x D	5	300	.0006	.0013	.0019	.0026	.0032	.0038	.0051
		Peripheral - Rough	1.25 x D	.3 x D	5	375	.0009	.0017	.0026	.0035	.0044	.0052	.0070
		Peripheral - HEM*	2 x D	.15 x D	5	500	.0014	.0028	.0042	.0056	.0070	.0084	.0112
		Finish	2 x D	.01 x D	5	375	.0016	.0032	.0048	.0064	.0080	.0096	.0129
	Low Carbon Steels 1018, 1020, 12L14, 5120, 8620	Slotting	.5 x D	1 x D	5	325	.0007	.0014	.0021	.0028	.0035	.0042	.0056
		Peripheral - Rough	1.25 x D	.3 x D	5	400	.0010	.0019	.0029	.0038	.0048	.0057	.0076
		Peripheral - HEM*	2 x	.15 x D	5	525	.0015	.0031	.0046	.0061	.0077	.0092	.0123
		Finish	2 x	.01 x D	5	400	.0018	.0035	.0053	.0070	.0088	.0106	.0141
	Medium Carbon Steels ≤ 48 HRC 1045, 4140, 4340, 5140	Slotting	.5 x D	1 x D	5	300	.0006	.0013	.0019	.0026	.0032	.0038	.0051
		Peripheral - Rough	1.25 x D	.3 x D	5	375	.0009	.0017	.0026	.0035	.0044	.0052	.0070
		Peripheral - HEM*	2 x D	.15 x D	5	500	.0014	.0028	.0042	.0056	.0070	.0084	.0112
		Finish	2 x D	.01 x D	5	375	.0016	.0032	.0048	.0064	.0080	.0096	.0129
	Tool and Die Steels ≤ 48 Rc A2, D2, O1, S7, P20, H13	Slotting	.5 x D	1 x D	5	275	.0005	.0011	.0016	.0022	.0027	.0032	.0043
		Peripheral - Rough	1.25 x D	.3 x D	5	350	.0007	.0015	.0022	.0029	.0037	.0044	.0059
		Peripheral - HEM*	2 x D	.15 x D	5	475	.0012	.0024	.0035	.0047	.0059	.0071	.0095
		Finish	2 x D	.01 x D	5	350	.0014	.0027	.0041	.0054	.0068	.0081	.0109
K	Cast Iron Gray ASTM-A48 Class 20, 25, 30, 35 & 40	Slotting	.5 x D	1 x D	5	300	.0006	.0012	.0018	.0024	.0030	.0036	.0048
		Peripheral - Rough	1.25 x D	.3 x D	5	375	.0008	.0016	.0025	.0033	.0041	.0049	.0065
		Peripheral - HEM*	2 x D	.15 x D	5	500	.0013	.0026	.0039	.0053	.0066	.0079	.0105
		Finish	2 x D	.01 x D	5	375	.0015	.0030	.0045	.0060	.0075	.0090	.0121
	Cast Iron Malleable	Slotting	.5 x D	1 x D	5	275	.0005	.0010	.0015	.0020	.0025	.0030	.0040
		Peripheral - Rough	1.25 x D	.3 x D	5	350	.0007	.0014	.0020	.0027	.0034	.0041	.0055
		Peripheral - HEM*	2 x D	.15 x D	5	475	.0011	.0022	.0033	.0044	.0055	.0066	.0088
		Finish	2 x D	.01 x D	5	350	.0013	.0025	.0038	.0050	.0063	.0075	.0101

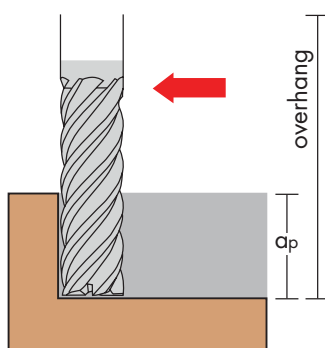
D = Tool diameter *HEM= High-efficiency machining

Adjustments - Apply these adjustments when programming the following applications.



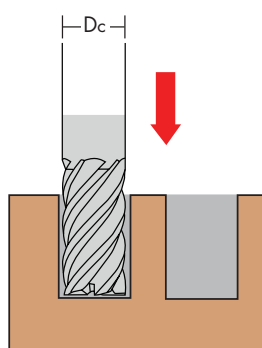
1. Ball nose end mills

- Reduce chip load by 25% from roughing/slotting recommendation when axial DOC (Ap) exceeds 75% of Dc



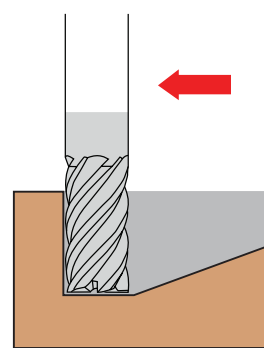
2. Long reach mills with large overhang

- Reduce speed rate and chipload by 10%



3. Plunge entry into work piece

- Reduce chipload by 80% of recommended slotting rate
- Peck mill if axial DOC (Ap) exceeds 50% of Dc



4. Ramp entry into work piece

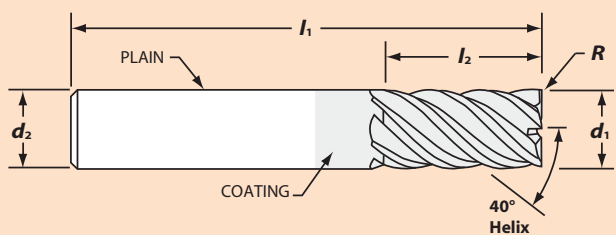
- Ramp at 1.5°-2.5° angle
- Reduce chipload by 20% of recommended slotting rate

M525

Square End and Corner Radius



For high performance and high-efficiency machining in materials ranging from titanium to low carbon steels. Large selection of corner radii to meet the demands of today's aerospace industry. Square corner available for general finishing operations and for finishing to a 90° angle.



Use M525 plain shank with milling chuck, collet or shrink-fit tool holders to minimize total indicator runout (TIR) when performing high-efficiency machining or finishing operations.

Model Code: M525 w/Square Corner

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code	EZ-ID Number		
					M525-xxxx-xxxx-SQ-Lx d1	l2	l1
1/8	1/8	1/4	1-1/2	65001	M525-0125-0250-SQ		
		1/2	1-1/2	65005	M525-0125-0500-SQ		
		3/4	2-1/2	65009	M525-0125-0750-SQ		
3/16	3/16	5/16	2	65013	M525-0187-0312-SQ		
		9/16	2	65017	M525-0187-0562-SQ		
		3/4	2-1/2	65021	M525-0187-0750-SQ		
1/4	1/4	3/8	2	65025	M525-0250-0375-SQ		
		3/4	2-1/2	65049	M525-0250-0750-SQ		
		1-1/8	3	65055	M525-0250-1125-SQ		
5/16	5/16	7/16	2	65061	M525-0312-0437-SQ		
		13/16	2-1/2	65067	M525-0312-0812-SQ		
		1-1/4	3	65073	M525-0312-1250-SQ		
		2-1/8	4	65079	M525-0312-2125-SQ		
		1/2	2	65085	M525-0375-0500-SQ		
3/8	3/8	1	2-1/2	65133	M525-0375-1000-SQ		
		1-1/4	3	65141	M525-0375-1250-SQ		
		1-5/8	3-1/2	65149	M525-0375-1625-SQ		
		1-5/8	4	65157	M525-0375-1625-SQ-L4		
		1-5/8	6	65165	M525-0375-1625-SQ-L6		
		2	4	65173	M525-0375-2000-SQ		
		2-1/2	6	65181	M525-0375-2500-SQ-L6		
		5/8	2-1/2	65189	M525-0437-0625-SQ		
		1	2-3/4	65197	M525-0437-1000-SQ		
		2	4	65205	M525-0437-2000-SQ		
1/2	1/2	5/8	2-1/2	65213	M525-0500-0625-SQ		
		1	3	65258	M525-0500-1000-SQ		
		1-1/4	3	65267	M525-0500-1250-SQ		
		1-5/8	4	65276	M525-0500-1625-SQ		
		1-5/8	6	65285	M525-0500-1625-SQ-L6		
		2-1/8	4	65294	M525-0500-2125-SQ		
		2-5/8	5	65303	M525-0500-2625-SQ		
		3-1/4	6	65312	M525-0500-3250-SQ		
		3/4	3	65321	M525-0625-0750-SQ		
		1-5/8	3-1/2	65361	M525-0625-1625-SQ		
5/8	5/8	2-1/8	4	65371	M525-0625-2125-SQ		
		2-1/8	6	65381	M525-0625-2125-SQ-L6		
		2-5/8	5	65391	M525-0625-2625-SQ		
		3-1/4	6	65401	M525-0625-3250-SQ		
		4	6	65411	M525-0625-4000-SQ-L6		
		1	3	65421	M525-0750-1000-SQ		
		1-5/8	4	65461	M525-0750-1625-SQ		
		2-3/8	5	65471	M525-0750-2375-SQ		
		2-3/8	6	65481	M525-0750-2375-SQ-L6		
		3-1/4	6	65491	M525-0750-3250-SQ		
1	1	4-1/8	7	65501	M525-0750-4125-SQ		
		1-3/4	4	65555	M525-1000-1750-SQ		
		2-5/8	5	65566	M525-1000-2625-SQ		
		3-1/4	6	65588	M525-1000-3250-SQ		
1-1/4	1-1/4	4-1/4	7	65599	M525-1000-4250-SQ		
		2	4-1/2	65643	M525-1250-2000-SQ		
		3-1/4	6	65654	M525-1250-3250-SQ		
		5	8	65665	M525-1250-5000-SQ		

Model Code: M525 w/Corner Radius

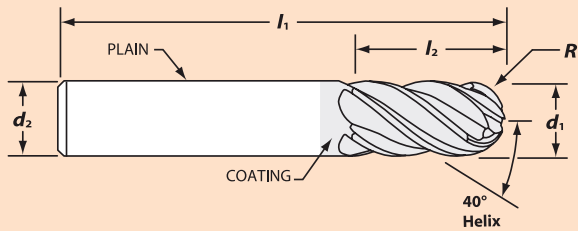
Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code by Corner Radius (R) (replace -xxx in EZ-ID number with decimal size shown below)									EZ-ID Number M525-xxxx-xxxx-xxx-Lx			
				.015	.030	.060	.090	.120	.156	.190	.250	.375	d1	l2	R	l1
1/8	1/8	1/4	1-1/2	65002	65003										M525-0125-0250-xxx	
		1/2	1-1/2	65006	65007										M525-0125-0500-xxx	
		3/4	2-1/2	65010	65011										M525-0125-0750-xxx	
3/16	3/16	5/16	2	65014	65015										M525-0187-0312-xxx	
		9/16	2	65018	65019										M525-0187-0562-xxx	
		3/4	2-1/2	65022	65023										M525-0187-0750-xxx	
1/4	1/4	3/8	2	65026	65027	65028	65029								M525-0250-0375-xxx	
		3/4	2-1/2	65050	65051	65052	65053								M525-0250-0750-xxx	
		1-1/8	3	65056	65057	65058	65059								M525-0250-1125-xxx	
5/16	5/16	7/16	2	65062	65063	65064	65065								M525-0312-0437-xxx	
		13/16	2-1/2	65068	65069	65070	65071								M525-0312-0812-xxx	
		1-1/4	3	65074	65075	65076	65077								M525-0312-1250-xxx	
		2-1/8	4	65080	65081	65082	65083								M525-0312-2125-xxx	
		1/2	2	65086	65087	65088	65089	65090	65091							M525-0375-0500-xxx
3/8	3/8	1	2-1/2	65134	65135	65136	65137	65138	65139						M525-0375-1000-xxx	
		1-1/4	3	65142	65143	65144	65145	65146	65147						M525-0375-1250-xxx	
		1-5/8	3-1/2	65150	65151	65152	65153	65154	65155						M525-0375-1625-xxx	
		1-5/8	4	65158	65159	65160	65161	65162	65163						M525-0375-1625-xxx-L4	
		1-5/8	6	65166	65167	65168	65169	65170	65171						M525-0375-1625-xxx-L6	
		2	4	65174	65175	65176	65177	65178	65179						M525-0375-2000-xxx	
		2-1/2	6	65182	65183	65184	65185	65186	65187						M525-0375-2500-xxx-L6	
		5/8	2-1/2	65190	65191	65192	65193	65194	65195							M525-0437-0625-xxx
7/16	7/16	1	2-3/4	65198	65199	65200	65201	65202	65203						M525-0437-1000-xxx	
		2	4	65206	65207	65208	65209	65210	65211						M525-0437-2000-xxx	
		5/8	2-1/2	65214	65215	65216	65217	65218	65219	65220					M525-0500-0625-xxx	
1/2	1/2	1	3	65259	65260	65261	65262	65263	65264	65265					M525-0500-1000-xxx	
		1-1/4	3	65268	65269	65270	65271	65272	65273	65274					M525-0500-1250-xxx	
		1-5/8	4	65277	65278	65279	65280	65281	65282	65283					M525-0500-1625-xxx	
		1-5/8	6	65286	65287	65288	65289	65290	65291	65292					M525-0500-1625-xxx-L6	
		2-1/8	4	65295	65296	65297	65298	65299	65300	65301					M525-0500-2125-xxx	
		2-5/8	5	65304	65305	65306	65307	65308	65309	65310					M525-0500-2625-xxx	
		3-1/4	6	65313	65314	65315	65316	65317	65318	65319					M525-0500-3250-xxx	
		3/4	3	65322	65323	65324	65325	65326	65327	65328	65329					M525-0625-0750-xxx
5/8	5/8	1-5/8	3-1/2	65362	65363	65364	65365	65366	65367	65368	65369				M525-0625-1625-xxx	
		2-1/8	4	65372	65373	65374	65375	65376	65377	65378	65379				M525-0625-2125-xxx	
		2-1/8	6	65382	65383	65384	65385	65386	65387	65388	65389				M525-0625-2125-xxx-L6	
		2-5/8	5	65392	65393	65394	65395	65396	65397	65398	65399				M525-0625-2625-xxx	
		3-1/4	6	65402	65403	65404	65405	65406	65407	65408	65409				M525-0625-3250-xxx	
		4	6	65412	65413	65414	65415	65416	65417	65418	65419				M525-0625-4000-xxx-L6	
3/4	3/4	1	3	65422	65423	65424	65425	65426	65427	65428	65429				M525-0750-1000-xxx	
		1-5/8	4	65462	65463	65464	65465	65466	65467	65468	65469				M525-0750-1625-xxx	
		2-3/8	5	65472	65473	65474	65475	65476	65477	65478	65479				M525-0750-2375-xxx	
		2-3/8	6	65482	65483	65484	65485	65486	65487	65488	65489				M525-0750-2375-xxx-L6	
		3-1/4	6	65492	65493	65494	65495	65496	65497	65498	65499				M525-0750-3250-xxx	
		4-1/8	7	65502	65503	65504	65505	65506	65507	65508	65509				M525-0750-4125-xxx	
1	1	1-3/4	4	65556	65557	65558	65559	65560	65561	65562	65563	65564			M525-1000-1750-xxx	
		2-5/8	5	65567	65568	65569	65570	65571	65572	65573	65574	65575			M525-1000-2625-xxx	
		3-1/4	6	65589	65590	65591	65592	65593	65594	65595	65596	65597			M525-1000-3250-xxx	
		4-1/4	7	65600	65601	65602	65603	65604	65605	65606	65607	65608			M525-1000-4250-xxx	
1-1/4	1-1/4	2	4-1/2	65644	65645	65646	65647	65648	65649	65650	65651	65652			M525-1250-2000-xxx	
		3-1/4	6	65655	65656	65657	65658	65659	65660	65661	65662	65663			M525-1250-3250-xxx	
		5	8	65666	65667	65668	65669	65670	65671	65672	65673	65674			M525-1250-5000-xxx	

M525

Ball End



The M525B ball end is excellent for contouring applications in a variety of materials. Based on the same high performance design as the M525 series but with a full end radius.



As a general rule, when using the M525B ball end mill, reduce feed rates by 25% when the axial DOC exceeds 75% of the mill diameter. Refer to speed and feed information for more detail.

Model Code: M525B w/Ball End

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code	EZ-ID Number M525-xxxx-xxxx-BN-Lx d1 l2 l1
1/8	1/8	1/4	1-1/2	65004	M525-0125-0250-BN
		1/2	1-1/2	65008	M525-0125-0500-BN
		3/4	2-1/2	65012	M525-0125-0750-BN
3/16	3/16	5/16	2	65016	M525-0187-0312-BN
		9/16	2	65020	M525-0187-0562-BN
		3/4	2-1/2	65024	M525-0187-0750-BN
1/4	1/4	3/8	2	65030	M525-0250-0375-BN
		3/4	2-1/2	65054	M525-0250-0750-BN
		1-1/8	3	65060	M525-0250-1125-BN
5/16	5/16	7/16	2	65066	M525-0312-0437-BN
		13/16	2-1/2	65072	M525-0312-0812-BN
		1-1/4	3	65078	M525-0312-1250-BN
		2-1/8	4	65084	M525-0312-2125-BN
		1/2	2	65092	M525-0375-0500-BN
3/8	3/8	1	2-1/2	65140	M525-0375-1000-BN
		1-1/4	3	65148	M525-0375-1250-BN
		1-5/8	3-1/2	65156	M525-0375-1625-BN
		1-5/8	4	65164	M525-0375-1625-BN-L4
		1-5/8	6	65172	M525-0375-1625-BN-L6
		2	4	65180	M525-0375-2000-BN
		2-1/2	6	65188	M525-0375-2500-BN-L6
		5/8	2-1/2	65196	M525-0437-0625-BN
7/16	7/16	1	2-3/4	65204	M525-0437-1000-BN
		2	4	65212	M525-0437-2000-BN
		5/8	2-1/2	65221	M525-0500-0625-BN
1/2	1/2	1	3	65266	M525-0500-1000-BN
		1-1/4	3	65275	M525-0500-1250-BN
		1-5/8	4	65284	M525-0500-1625-BN
		1-5/8	6	65293	M525-0500-1625-BN-L6
		2-1/8	4	65302	M525-0500-2125-BN
		2-5/8	5	65311	M525-0500-2625-BN
		3-1/4	6	65320	M525-0500-3250-BN
		3/4	3	65330	M525-0625-0750-BN
5/8	5/8	1-5/8	3-1/2	65370	M525-0625-1625-BN
		2-1/8	4	65380	M525-0625-2125-BN
		2-1/8	6	65390	M525-0625-2125-BN-L6
		2-5/8	5	65400	M525-0625-2625-BN
		3-1/4	6	65410	M525-0625-3250-BN
		4	6	65420	M525-0625-4000-BN-L6
		1	3	65430	M525-0750-1000-BN
		1-5/8	4	65470	M525-0750-1625-BN
3/4	3/4	2-3/8	5	65480	M525-0750-2375-BN
		2-3/8	6	65490	M525-0750-2375-BN-L6
		3-1/4	6	65500	M525-0750-3250-BN
		4-1/8	7	65510	M525-0750-4125-BN
1	1	1-3/4	4	65565	M525-1000-1750-BN
		2-5/8	5	65576	M525-1000-2625-BN
		3-1/4	6	65598	M525-1000-3250-BN
		4-1/4	7	65609	M525-1000-4250-BN
1-1/4	1-1/4	2	4-1/2	65653	M525-1250-2000-BN
		3-1/4	6	65664	M525-1250-3250-BN
		5	8	65675	M525-1250-5000-BN

Model Code: M525N w/Square Corner and Neck Relief

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Reach / LBS (specify) l3 max	Order Code	EZ-ID Number			
						M525-xxxx-xxxx-Nxxxx-SQ-Lx	d1	l2	l3
1/4	1/4	3/8	2-1/2	Up to 1-1/8	65680	M525-0250-0375-Nxxxx-SQ			
			3	Up to 1-5/8	65686	M525-0250-0375-Nxxxx-SQ-L3			
			4	Up to 2-5/8	65692	M525-0250-0375-Nxxxx-SQ-L4			
3/8	3/8	1/2	3	Up to 1-3/8	65706	M525-0375-0500-Nxxxx-SQ			
			4	Up to 2-3/8	65714	M525-0375-0500-Nxxxx-SQ-L4			
			5	Up to 3-3/8	65722	M525-0375-0500-Nxxxx-SQ-L5			
			6	Up to 4-3/8	65730	M525-0375-0500-Nxxxx-SQ-L6			
1/2	1/2	5/8	3	Up to 1-1/8	65738	M525-0500-0625-Nxxxx-SQ			
			4	Up to 2-1/8	65747	M525-0500-0625-Nxxxx-SQ-L4			
			5	Up to 3-1/8	65756	M525-0500-0625-Nxxxx-SQ-L5			
			6	Up to 4-1/8	65765	M525-0500-0625-Nxxxx-SQ-L6			
5/8	5/8	3/4	4	Up to 2-1/8	65774	M525-0625-0750-Nxxxx-SQ			
			5	Up to 3-1/8	65784	M525-0625-0750-Nxxxx-SQ-L5			
			6	Up to 4-1/8	65794	M525-0625-0750-Nxxxx-SQ-L6			
3/4	3/4	1	4	Up to 1-7/8	65804	M525-0750-1000-Nxxxx-SQ			
			5	Up to 2-7/8	65814	M525-0750-1000-Nxxxx-SQ-L5			
			6	Up to 3-7/8	65824	M525-0750-1000-Nxxxx-SQ-L6			
			7	Up to 4-7/8	67061	M525-0750-1000-Nxxxx-SQ-L7			
1	1	1-1/4	4	Up to 1-3/4	65834	M525-1000-1250-Nxxxx-SQ			
			5	Up to 2-3/4	65845	M525-1000-1250-Nxxxx-SQ-L5			
			6	Up to 3-3/4	65856	M525-1000-1250-Nxxxx-SQ-L6			
1-1/4	1-1/4	1-1/2	7	Up to 4-3/4	65867	M525-1000-1250-Nxxxx-SQ-L7			
			4-1/2	Up to 2-1/4	65878	M525-1250-1500-Nxxxx-SQ			
			6	Up to 3-3/4	65889	M525-1250-1500-Nxxxx-SQ-L6			
			8	Up to 5-3/4	65900	M525-1250-1500-Nxxxx-SQ-L8			

WHAT'S THE REACH?

Every job is different. When ordering an M525 with neck relief, be sure to indicate the desired reach (also called Length Below Shank) dimension you need. The charts on this page indicate the maximum LBS dimension possible for every tool. Simply order by EZ-ID code to specify the dimensions you need. See page 19 to learn how the EZ-ID system works.

Model Code: M525N w/Corner Radius and Neck Relief

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Reach / LBS (specify) l3 max	Order Code by Corner Radius (R) (replace -xxx in EZ-ID number with decimal size shown below)								EZ-ID Number				
					.015	.030	.060	.090	.120	.156	.190	.250		.375	M525-xxxx-xxxx-Nxxxx-xxx-Lx		
					d1	l2	l3	R	l1								
1/4	1/4	3/8	2-1/2	Up to 1-1/8	65681	65682	65683	65684								-0250-0375-Nxxxx-xxx	
			3	Up to 1-5/8	65687	65688	65689	65690									-0250-0375-Nxxxx-xxx-L3
			4	Up to 2-5/8	65693	65694	65695	65696									-0250-0375-Nxxxx-xxx-L4
3/8	3/8	1/2	3	Up to 1-3/8	65707	65708	65709	65710	65711	65712						-0375-0500-Nxxxx-xxx	
			4	Up to 2-3/8	65715	65716	65717	65718	65719	65720						-0375-0500-Nxxxx-xxx-L4	
			5	Up to 3-3/8	65723	65724	65725	65726	65727	65728						-0375-0500-Nxxxx-xxx-L5	
			6	Up to 4-3/8	65731	65732	65733	65734	65735	65736						-0375-0500-Nxxxx-xxx-L6	
1/2	1/2	5/8	3	Up to 1-1/8	65739	65740	65741	65742	65743	65744	65745					-0500-0625-Nxxxx-xxx	
			4	Up to 2-1/8	65748	65749	65750	65751	65752	65753	65754					-0500-0625-Nxxxx-xxx-L4	
			5	Up to 3-1/8	65757	65758	65759	65760	65761	65762	65763					-0500-0625-Nxxxx-xxx-L5	
			6	Up to 4-1/8	65766	65767	65768	65769	65770	65771	65772					-0500-0625-Nxxxx-xxx-L6	
5/8	5/8	3/4	4	Up to 2-1/8	65775	65776	65777	65778	65779	65780	65781	65782				-0625-0750-Nxxxx-xxx	
			5	Up to 3-1/8	65785	65786	65787	65788	65789	65790	65791	65792				-0625-0750-Nxxxx-xxx-L5	
			6	Up to 4-1/8	65795	65796	65797	65798	65799	65800	65801	65802				-0625-0750-Nxxxx-xxx-L6	
3/4	3/4	1	4	Up to 1-7/8	65805	65806	65807	65808	65809	65810	65811	65812				-0750-1000-Nxxxx-xxx	
			5	Up to 2-7/8	65815	65816	65817	65818	65819	65820	65821	65822				-0750-1000-Nxxxx-xxx-L5	
			6	Up to 3-7/8	65825	65826	65827	65828	65829	65830	65831	65832				-0750-1000-Nxxxx-xxx-L6	
			7	Up to 4-7/8	67062	67063	67064	67065	67066	67067	67068	67069				-0750-1000-Nxxxx-xxx-L7	
1	1	1-1/4	4	Up to 1-3/4	65835	65836	65837	65838	65839	65840	65841	65842	65843			-1000-1250-Nxxxx-xxx	
			5	Up to 2-3/4	65846	65847	65848	65849	65850	65851	65852	65853	65854			-1000-1250-Nxxxx-xxx-L5	
			6	Up to 3-3/4	65857	65858	65859	65860	65861	65862	65863	65864	65865			-1000-1250-Nxxxx-xxx-L6	
			7	Up to 4-3/4	65868	65869	65870	65871	65872	65873	65874	65875	65876			-1000-1250-Nxxxx-xxx-L7	
1-1/4	1-1/4	1-1/2	4-1/2	Up to 2-1/4	65879	65880	65881	65882	65883	65884	65885	65886	65887			-1250-1500-Nxxxx-xxx	
			6	Up to 3-3/4	65890	65891	65892	65893	65894	65895	65896	65897	65898			-1250-1500-Nxxxx-xxx-L6	
			8	Up to 5-3/4	65901	65902	65903	65904	65905	65906	65907	65908	65909			-1250-1500-Nxxxx-xxx-L8	

■ = M525 (to complete the EZ-ID number)

M525

Ball End with Neck Relief



Minimizes tool deflection and increases productivity when contouring deep cavities.

Model Code: M525N w/Ball End and Neck Relief

Cutter Dia	Shank Dia	Length of Cut	Overall Length	Reach / LBS (specify) I3 max	Order Code	EZ-ID Number
d1	d2	l2	l1			M525-xxxx-xxxx-Nxxxx-BN-Lx d1 l2 l3 l1
1/4	1/4	3/8	2-1/2	Up to 1-1/8	65685	M525-0250-0375-Nxxxx-BN
			3	Up to 1-5/8	65691	M525-0250-0375-Nxxxx-BN-L3
			4	Up to 2-5/8	65697	M525-0250-0375-Nxxxx-BN-L4
3/8	3/8	1/2	3	Up to 1-3/8	65713	M525-0375-0500-Nxxxx-BN
			4	Up to 2-3/8	65721	M525-0375-0500-Nxxxx-BN-L4
			5	Up to 3-3/8	65729	M525-0375-0500-Nxxxx-BN-L5
			6	Up to 4-3/8	65737	M525-0375-0500-Nxxxx-BN-L6
1/2	1/2	5/8	3	Up to 1-1/8	65746	M525-0500-0625-Nxxxx-BN
			4	Up to 2-1/8	65755	M525-0500-0625-Nxxxx-BN-L4
			5	Up to 3-1/8	65764	M525-0500-0625-Nxxxx-BN-L5
5/8	5/8	3/4	6	Up to 4-1/8	65773	M525-0500-0625-Nxxxx-BN-L6
			4	Up to 2-1/8	65783	M525-0625-0750-Nxxxx-BN
			5	Up to 3-1/8	65793	M525-0625-0750-Nxxxx-BN-L5
3/4	3/4	1	6	Up to 4-1/8	65803	M525-0625-0750-Nxxxx-BN-L6
			4	Up to 1-7/8	65813	M525-0750-1000-Nxxxx-BN
			5	Up to 2-7/8	65823	M525-0750-1000-Nxxxx-BN-L5
1	1	1-1/4	6	Up to 3-7/8	65833	M525-0750-1000-Nxxxx-BN-L6
			7	Up to 4-7/8	67070	M525-0750-1000-Nxxxx-BN-L7
			4	Up to 1-3/4	65844	M525-1000-1250-Nxxxx-BN
1-1/4	1-1/4	1-1/2	5	Up to 2-3/4	65855	M525-1000-1250-Nxxxx-BN-L5
			6	Up to 3-3/4	65866	M525-1000-1250-Nxxxx-BN-L6
			7	Up to 4-3/4	65877	M525-1000-1250-Nxxxx-BN-L7
1-1/4	1-1/4	1-1/2	4-1/2	Up to 2-1/4	65888	M525-1250-1500-Nxxxx-BN
			6	Up to 3-3/4	65899	M525-1250-1500-Nxxxx-BN-L6
			8	Up to 5-3/4	65910	M525-1250-1500-Nxxxx-BN-L8

