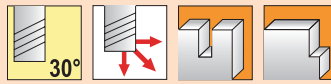


620MA (640MA metric) / z = 2
623MA (643MA metric) / z = 3
630MA (650MA metric) / z = 4
 .1181" - .3150"
 (3,00mm - 8,00mm)

Technical information:
 page 200, 202



TOLERANCES

d_1	+0,000 -0,050mm (+.000" -.002")
d_2	3mm - 6mm -0,0000 -0,0075mm (+.0000" -.0003")
	1/4" - 1-1/4" -0,0025 -0,0100mm (-.0001" -.0004")

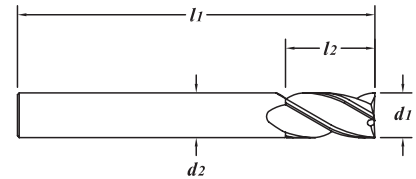
Extra Length - TiALN Coated
Extra Lang - TiALN-Beschichtet
Longitud Extra - Recubrimiento de TiALN
Extra Longue - Revêtement TiALN
Lunghezza Extra - Rivestimento in TiALN
超长 - TiALN 涂层



END MILLS



Solid submicron grain carbide end mill - center cutting
 Extended reach
 Dry or semi-dry machining
 Up to 40% faster than uncoated
 Can be modified with a neck within 48 hours
 Extremely versatile
 Uncoated - page 162
 TiCN Coated - page 164



Vollhartmetallfräser aus Feinkornhartmetall - Zentrumschnitt
 Erweiterte Reichweite
 Trocken oder Halbtrockene Bearbeitung
 Bis zu 40% schneller als unbeschichtete Werkzeuge
 Kann innerhalb 48 Stunden am Schaft verjüngt werden
 Extrem Vielseitig
 Unbeschichtet - Seite 162
 TiCN-Beschichtet - Seite 164



Fresa de submicrograno sólido carburo - corte centrado
 Mayor alcance
 Mecanizado seco o semisecco
 Hasta un 40% más rápido que sin recubrimiento
 Puede ser modificado con un cuello en 48 horas
 Extremadamente versátil
 Sin recubrimiento - Página 162
 Recubrimiento de TiCN - Página 164



Fraises carbure submicrograin - coupe au centre
 Extension supplémentaire
 Usinage a sec ou avec l'air
 40% plus rapide que le non revetu
 Peut être modifier avec un col degage sous un delai de 48 heures
 Utilisations variables
 Sans revêtement - Page 162
 Revêtement TiCN - Page 164



Super sub-micrograno metallo duro - taglio al centro
 Estensione più grande
 Lavorazione a secco o a umido
 40% più veloce rispetto non rivestito
 Può essere modificata in 48 ore
 Estremamente versatile
 Non Rivestito - Pagina 162
 Rivestimento in TiCN - Pagina 164



超微粒整体硬质合金立铣刀 - 中心切削
 加长
 干式或半干式机加工
 跟无涂层刀具相比可提高速度高达40%
 可以在48小时内用轴颈进行修正
 功能极多
 未涂层 - 162页
 TiCN 涂层 - 164页

z = 2 EDP#	z = 3 EDP#	z = 4 EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	
			Decimal	Metric				
92017	93017	94017	.1181	3,00	3,0	50	16	
92027	93027	94027	.1181	3,00	3,0	75	20	
92037	93037	94037	.1181	3,00	3,0	75	25	
41017	54517	42017	.1250	1/8"	3,17	1/8"	2"	5/8"
41027	54527	42027	.1250	1/8"	3,17	1/8"	3"	3/4"
41037	54537	42037	.1250	1/8"	3,17	1/8"	3"	1"
92047	93047	94047	.1575	4,00	4,0	50	16	
92057	93057	94057	.1575	4,00	4,0	75	20	
92067	93067	94067	.1575	4,00	4,0	75	25	
41047	54547	42047	.1875	3/16"	4,76	3/16"	3"	1"
41057	54557	42057	.1875	3/16"	4,76	3/16"	3"	1-1/8"
41067	54567	42067	.1875	3/16"	4,76	3/16"	4"	1"
92077	93077	94077	.1969	5,00	5,0	50	16	
92087	93087	94087	.1969	5,00	5,0	75	20	
92097	93097	94097	.1969	5,00	5,0	75	25	
92107	93107	94107	.2362	6,00	6,0	75	25	
92117	93117	94117	.2362	6,00	6,0	100	25	
92127	93127	94127	.2362	6,00	6,0	100	32	
92137	93137	94137	.2362	6,00	6,0	150	38	
41077	54577	42077	.2500	1/4"	6,35	1/4"	3"	1"
41087	54587	42087	.2500	1/4"	6,35	1/4"	4"	1"
41097	54597	42097	.2500	1/4"	6,35	1/4"	4"	1-1/2"
41107	54607	42107	.2500	1/4"	6,35	1/4"	6"	1-1/2"
41117	54617	42117	.3125	5/16"	7,94	5/16"	3"	1"
41127	54627	42127	.3125	5/16"	7,94	5/16"	4"	1"
41137	54637	42137	.3125	5/16"	7,94	5/16"	4"	1-5/8"
41147	54647	42147	.3125	5/16"	7,94	5/16"	6"	1-1/2"
92147	93147	94147	.3150	8,00	8,0	75	25	
92157	93157	94157	.3150	8,00	8,0	100	25	
92167	93167	94167	.3150	8,00	8,0	100	41	
92177	93177	94177	.3150	8,00	8,0	150	50	

continued →

620MA (640MA metric) / z = 2 (continued)

623MA (643MA metric) / z = 3 (continued)

630MA (650MA metric) / z = 4 (continued)

.3750" - 1.250"
(9,52mm - 31,75mm)

z = 2 EDP#	z = 3 EDP#	z = 4 EDP#	d1 † Diameter			d2 Shank Diameter	l1 Overall Length	l2 Flute Length
			Decimal		Metric			
41157	54657	42157	.3750	3/8"	9,52	3/8"	3"	1"
41167	54667	42167	.3750	3/8"	9,52	3/8"	4"	1"
41177	54677	42177	.3750	3/8"	9,52	3/8"	4"	2"
41187	54687	42187	.3750	3/8"	9,52	3/8"	6"	1-1/2"
41197	54697	42197	.3750	3/8"	9,52	3/8"	6"	3"
92187	93187	94187	.3937		10,00	10,0	75	25
92197	93197	94197	.3937		10,00	10,0	100	25
92207	93207	94207	.3937		10,00	10,0	100	50
92217	93217	94217	.3937		10,00	10,0	150	38
92227	93227	94227	.3937		10,00	10,0	150	75
41207	54707	42207	.4375	7/16"	11,11	7/16"	4"	1"
41217	54717	42217	.4375	7/16"	11,11	7/16"	4"	2"
41227	54727	42227	.4375	7/16"	11,11	7/16"	6"	1-1/2"
41237	54737	42237	.4375	7/16"	11,11	7/16"	6"	3"
92237	93237	94237	.4724		12,00	12,0	100	25
92247	93247	94247	.4724		12,00	12,0	100	50
92257	93257	94257	.4724		12,00	12,0	150	50
92267	93267	94267	.4724		12,00	12,0	150	75
41247	54747	42247	.5000	1/2"	12,70	1/2"	4"	1"
41257	54757	42257	.5000	1/2"	12,70	1/2"	4"	2"
41267	54767	42267	.5000	1/2"	12,70	1/2"	6"	1-1/2"
41277	54777	42277	.5000	1/2"	12,70	1/2"	6"	3"
92277	93277	94277	.5512		14,00	14,0	100	25
92287	93287	94287	.5512		14,00	14,0	100	50
92297	93297	94297	.5512		14,00	14,0	150	50
92307	93307	94307	.5512		14,00	14,0	150	75
41287	54787	42287	.5625	9/16"	14,29	9/16"	6"	2"
41297	54797	42297	.5625	9/16"	14,29	9/16"	6"	3"
41307	54807	42307	.6250	5/8"	15,87	5/8"	6"	2"
41317	54817	42317	.6250	5/8"	15,87	5/8"	6"	3"
92317	93317	94317	.6299		16,00	16,0	150	50
92327	93327	94327	.6299		16,00	16,0	150	75
92337	93337	94337	.7087		18,00	18,0	150	50
92347	93347	94347	.7087		18,00	18,0	150	75
41327	54827	42327	.7500	3/4"	19,05	3/4"	6"	2"
41337	54837	42337	.7500	3/4"	19,05	3/4"	6"	3"
92357	93357	94357	.7874		20,00	20,0	150	50
92367	93367	94367	.7874		20,00	20,0	150	75
92377	93377	94377	.9843		25,00	25,0	150	50
92387	93387	94387	.9843		25,00	25,0	150	75
41347	54847	42347	1.000	1"	25,40	1"	6"	2"
41357	54857	42357	1.000	1"	25,40	1"	6"	3"
-	-	42367	1.000	1"	25,40	1"	6"	4"
-	-	42397	1.250	1-1/4"	31,75	1-1/4"	6"	3"