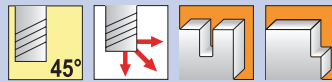


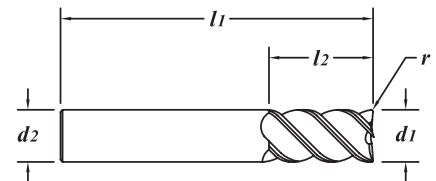
TOLERANCES

$d_1$	+0,000 -0,050mm (+.000" -.002")	
$d_2$	3mm - 6mm	+0,0000 -0,0075mm (+.0000" -.0003")
	1/4" - 1"	-0,0025 -0,0100mm (-.0001" -.0004")
$r$	+0,025 -0,025mm (+.001" -.001")	

.1181" - .3125"  
(3,00mm - 7,94mm)



Corner Radius - **Balinit® X.CEED Coated**  
Eckenradius - **Balinit® X.CEED-Beschichtet**  
Ángulo Redondeado - **Recubrimiento de Balinit® X.CEED**  
Rayon de Coin - **Revêtement Balinit® X.CEED**  
Torica - **Rivestimento in Balinit® X.CEED**  
圆角半径 - **Balinit® X.CEED 涂层**



HIGH PERFORMANCE  
END MILLS



Solid submicron grain carbide end mill - center cutting  
High performance milling  
Rigid work holding, machine stability and part integrity are critical!  
Dry or semi-dry machining  
Up to 40% faster than uncoated  
Improved finishes in titanium  
Heavy core  
An ideal tool for finishing applications after using the VRX end mill (see page 103)  
**Recommended for steels, stainless steel and exotics**



Hochleistungs- Vollhartmetallfräser aus Feinkornhartmetall - Zentrumschnitt  
Hochleistungsbearbeitung  
Gute Werkstücksanpassung, Maschinestabilität und Teileintegration sind entscheidend!  
Trocken oder Halbtrockene Bearbeitung  
Bis zu 40% schneller als unbeschichtete Werkzeuge  
Verbessertes Schlichten von Titan  
Starker Kern  
Ein ideales Werkzeug zum Schlichten nach der Benutzung des VRX Fräasers (Siehe Seite 103)  
**Empfohlen für Stahl, rostfreier Stahl und exotischen Werkstoffen**



Fresa de submicrograno sólido carburo de alto rendimiento - corte centrado  
Mecanizado de alto rendimiento  
La sujeción firme del útil, la estabilidad de la máquina y la integridad de las piezas son cruciales  
Mecanizado seco o semisecco  
Hasta un 40% más rápido que sin recubrimiento  
Acabados mejorados en titanio  
Núcleo pesado  
Herramienta ideal para aplicaciones de acabado después de la utilización de fresas VRX (Véase página 103)  
**Recomendado para aceros, acero inoxidable y materiales exóticos**



Fraises carbure submicrograin - coupe au centre  
Pour haute performance fraisage  
Le serrage et la stabilité de la pièce, la rigidité de la machine et l'attachement de l'outil sont tres importantes  
Usinage a sec ou avec l'air  
40% plus rapide que le non revetu  
Amelioration des finitions dans le Titane  
Un outil ideal pour la finition apres l'utilisation des fraises VRX (voir page 103)  
**Recommandee pour aciers, aciers inoxydables et alliages exotiques**



Super sub-micrograno metallo duro - taglio al centro  
**Alte prestazioni per lavorazioni di acciai, inox e materiali esotici**  
Serraggio rigido, macchina stabile e ottimo bloccaggio del pezzo sono necessari!  
Lavorazione a secco o a umido  
40% più veloce rispetto non rivestito  
Consigliata per una migliore finitura sul titanio  
Utensile ideale per operazioni di finitura dopo l'utilizzo della fresa VRX (Vedi pagina 103)



高效超细晶粒整体硬质合金铣刀 - 中心切削  
在钢件、不锈钢和稀有材质上作高效铣削  
高刚性工件支持、机床稳定性以及零件的牢固性是至关重要的因素！  
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%  
改善钛合金的光洁度  
强力芯部  
VRX立铣刀是一种理想刀具，适合精加工 (见103页)

EDP#	$d_1$ † Diameter		$d_2$ Shank Diameter	$l_1$ Overall Length	$l_2$ Flute Length	$r$ Corner Radius	
	Decimal	Metric					
83527	.1181	3,00	3,0	38	8	0,2	
83537	.1181	3,00	3,0	38	8	0,5	
83547	.1181	3,00	3,0	50	12	0,2	
<b>NEW</b> 83550	.1181	3,00	3,0	50	12	0,3	
83557	.1181	3,00	3,0	50	12	0,5	
83567	.1250	1/8"	3,17	1/8"	1-1/2"	1/4"	.010"
83577	.1250	1/8"	3,17	1/8"	1-1/2"	1/4"	.020"
83587	.1250	1/8"	3,17	1/8"	2"	1/2"	.010"
83597	.1250	1/8"	3,17	1/8"	2"	1/2"	.020"
<b>NEW</b> 83600	.1250	1/8"	3,17	1/8"	2"	1/2"	.030"
83607	.1575	4,00	6,0	50	8	0,3	
83617	.1575	4,00	6,0	50	8	0,5	
83627	.1575	4,00	6,0	50	12	0,3	
83637	.1575	4,00	6,0	50	12	0,5	
83647	.1875	3/16"	4,76	3/16"	2"	5/16"	.010"
83657	.1875	3/16"	4,76	3/16"	2"	5/16"	.020"
83667	.1875	3/16"	4,76	3/16"	2"	9/16"	.010"
83677	.1875	3/16"	4,76	3/16"	2"	9/16"	.020"
<b>NEW</b> 83680	.1875	3/16"	4,76	3/16"	2"	9/16"	.030"
83707	.1969	5,00	6,0	65	15	0,3	
83717	.1969	5,00	6,0	65	15	0,5	
83767	.2362	6,00	6,0	50	12	0,3	
83777	.2362	6,00	6,0	50	12	0,5	
<b>NEW</b> 83780	.2362	6,00	6,0	65	19	0,2	
83787	.2362	6,00	6,0	65	19	0,3	
83797	.2362	6,00	6,0	65	19	0,5	
<b>NEW</b> 83807	.2362	6,00	6,0	65	19	1,0	
83827	.2500	1/4"	6,35	1/4"	2"	3/8"	.015"
83837	.2500	1/4"	6,35	1/4"	2"	3/8"	.030"
<b>NEW</b> 83845	.2500	1/4"	6,35	1/4"	2-1/2"	3/4"	.010"
83847	.2500	1/4"	6,35	1/4"	2-1/2"	3/4"	.015"
83857	.2500	1/4"	6,35	1/4"	2-1/2"	3/4"	.030"
<b>NEW</b> 83877	.2500	1/4"	6,35	1/4"	2-1/2"	3/4"	.060"
83927	.3125	5/16"	7,94	5/16"	2"	7/16"	.020"
83937	.3125	5/16"	7,94	5/16"	2"	7/16"	.030"
<b>NEW</b> 83940	.3125	5/16"	7,94	5/16"	2-1/2"	13/16"	.010"
83947	.3125	5/16"	7,94	5/16"	2-1/2"	13/16"	.020"
83957	.3125	5/16"	7,94	5/16"	2-1/2"	13/16"	.030"
<b>NEW</b> 83977	.3125	5/16"	7,94	5/16"	2-1/2"	13/16"	.060"

continued →

# 255RA (855RA metric) / z = 5 (continued)

.3150" - 1.000"  
(8,00mm - 25,40mm)

HIGH PERFORMANCE  
END MILLS

EDP#	<i>d1</i> † Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>r</i> Corner Radius	
	Decimal	Metric					
83987	.3150	<b>8,00</b>	<b>8,0</b>	<b>50</b>	<b>12</b>	<b>0,5</b>	
83997	.3150	<b>8,00</b>	<b>8,0</b>	<b>50</b>	<b>12</b>	<b>1,0</b>	
<b>NEW</b> 84000	.3150	<b>8,00</b>	<b>8,0</b>	<b>65</b>	<b>22</b>	<b>0,3</b>	
84007	.3150	<b>8,00</b>	<b>8,0</b>	<b>65</b>	<b>22</b>	<b>0,5</b>	
84017	.3150	<b>8,00</b>	<b>8,0</b>	<b>65</b>	<b>22</b>	<b>1,0</b>	
<b>NEW</b> 84027	.3150	<b>8,00</b>	<b>8,0</b>	<b>65</b>	<b>22</b>	<b>1,5</b>	
84087	.3750	3/8"	9,52	3/8"	2"	1/2"	.020"
84097	.3750	3/8"	9,52	3/8"	2"	1/2"	.030"
<b>NEW</b> 84100	.3750	3/8"	9,52	3/8"	2-1/2"	7/8"	.010"
84107	.3750	3/8"	9,52	3/8"	2-1/2"	7/8"	.020"
84117	.3750	3/8"	9,52	3/8"	2-1/2"	7/8"	.030"
<b>NEW</b> 84137	.3750	3/8"	9,52	3/8"	2-1/2"	7/8"	.060"
84167	.3937		<b>10,00</b>	<b>10,0</b>	<b>70</b>	<b>22</b>	<b>0,5</b>
84177	.3937		<b>10,00</b>	<b>10,0</b>	<b>70</b>	<b>22</b>	<b>1,0</b>
<b>NEW</b> 84257	.4724		<b>12,00</b>	<b>12,0</b>	<b>75</b>	<b>32</b>	<b>0,3</b>
84267	.4724		<b>12,00</b>	<b>12,0</b>	<b>75</b>	<b>32</b>	<b>0,5</b>
84277	.4724		<b>12,00</b>	<b>12,0</b>	<b>75</b>	<b>32</b>	<b>1,0</b>
<b>NEW</b> 84287	.4724		<b>12,00</b>	<b>12,0</b>	<b>75</b>	<b>32</b>	<b>1,5</b>
<b>NEW</b> 84307	.5000	1/2"	12,70	1/2"	3"	1-1/4"	.010"
84317	.5000	1/2"	12,70	1/2"	3"	1-1/4"	.020"
84327	.5000	1/2"	12,70	1/2"	3"	1-1/4"	.030"
84337	.5000	1/2"	12,70	1/2"	3"	1-1/4"	.060"
<b>NEW</b> 84357	.5000	1/2"	12,70	1/2"	3"	1-1/4"	.120"
84367	.5000	1/2"	12,70	1/2"	4"	2"	.030"
84377	.5000	1/2"	12,70	1/2"	4"	2"	.060"
<b>NEW</b> 84397	.5000	1/2"	12,70	1/2"	4"	2"	.120"
<b>NEW</b> 84467	.6250	5/8"	15,87	5/8"	3-1/2"	1-1/4"	.015"
84487	.6250	5/8"	15,87	5/8"	3-1/2"	1-1/4"	.030"
84497	.6250	5/8"	15,87	5/8"	3-1/2"	1-1/4"	.060"
<b>NEW</b> 84507	.6250	5/8"	15,87	5/8"	3-1/2"	1-1/4"	.120"
84567	.6299		<b>16,00</b>	<b>16,0</b>	<b>88</b>	<b>32</b>	<b>1,0</b>
84577	.6299		<b>16,00</b>	<b>16,0</b>	<b>88</b>	<b>32</b>	<b>2,0</b>
84587	.6299		<b>16,00</b>	<b>16,0</b>	<b>150</b>	<b>65</b>	<b>1,0</b>
84597	.6299		<b>16,00</b>	<b>16,0</b>	<b>150</b>	<b>65</b>	<b>2,0</b>
<b>NEW</b> 84667	.7500	3/4"	19,05	3/4"	4"	1-1/2"	.015"
84687	.7500	3/4"	19,05	3/4"	4"	1-1/2"	.030"
84697	.7500	3/4"	19,05	3/4"	4"	1-1/2"	.060"
<b>NEW</b> 84700	.7500	3/4"	19,05	3/4"	4"	1-1/2"	.120"
84707	.7500	3/4"	19,05	3/4"	5"	2"	.030"
84717	.7500	3/4"	19,05	3/4"	5"	2"	.060"
<b>NEW</b> 84747	.7500	3/4"	19,05	3/4"	5"	2"	.120"
<b>NEW</b> 84757	.7500	3/4"	19,05	3/4"	5"	2"	.190"
84767	.7874		<b>20,00</b>	<b>20,0</b>	<b>100</b>	<b>38</b>	<b>1,0</b>
84777	.7874		<b>20,00</b>	<b>20,0</b>	<b>100</b>	<b>38</b>	<b>3,0</b>
84887	.9843		<b>25,00</b>	<b>25,0</b>	<b>100</b>	<b>38</b>	<b>1,0</b>
84897	.9843		<b>25,00</b>	<b>25,0</b>	<b>100</b>	<b>38</b>	<b>3,0</b>
<b>NEW</b> 84957	1.000	1"	25,40	1"	4"	1-1/2"	.015"
84967	1.000	1"	25,40	1"	4"	1-1/2"	.030"
<b>NEW</b> 84970	1.000	1"	25,40	1"	4"	1-1/2"	.060"
84977	1.000	1"	25,40	1"	4"	1-1/2"	.120"
<b>NEW</b> 84980	1.000	1"	25,40	1"	4"	1-1/2"	.190"
84987	1.000	1"	25,40	1"	5"	2"	.030"
84997	1.000	1"	25,40	1"	5"	2"	.120"
<b>NEW</b> 85007	1.000	1"	25,40	1"	5"	2"	.190"