

HSS-PM HSS-PM Line

Serie/Series 21105

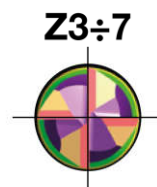
Frese a **SGROSSARE** tagliente al centro
Roughing end mills center cutting



Cod. Art.	X-85 (PM Co 8,5%)	COATED	D +0,05 -0	I	L	dh6	Z
211050603	CM	CMX	6	13	57	6	3
211050703	CM	CMX	7	16	66	10	3
211050803	CM	CMX	8	19	69	10	4
211050903	CM	CMX	9	19	69	10	4
211051003	CM	CMX	10	22	72	10	4
211051103	CM	CMX	11	22	79	12	4
211051203	CM	CMX	12	26	83	12	4
211051303	CM	CMX	13	26	83	12	4
211051403	CM	CMX	14	26	83	12	4
211051503	CM	CMX	15	32	92	16	4
211051603	CM	CMX	16	32	92	16	4
211051703	CM	CMX	17	32	92	16	4
211051803	CM	CMX	18	32	92	16	4
211051807	CM	CMX	18	32	98	20	4
211052003	CM	CMX	20	38	98	16	4
211052007	CM	CMX	20	38	104	20	4
211052203	CM	CMX	22	38	104	20	4
211052207	CM	CMX	22	38	114	25	4
211052403	CM	CMX	24	45	121	25	5
211052503	CM	CMX	25	45	121	25	5
211052603	CM	CMX	26	45	121	25	5
211052803	CM	CMX	28	45	121	25	5
211053003	CM	CMX	30	45	121	25	5
211053203	CM	CMX	32	53	133	32	5
211053603	CM	CMX	36	53	133	32	6
211054003	CM	CMX	40	63	143	32	6
211054503	CM	CMX	45	63	143	32	6
211055003	CM	CMX	50	75	155	32	7



parametri tecnici a pag. 1 / for technical parameters see page 124



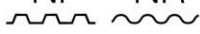
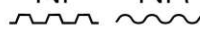
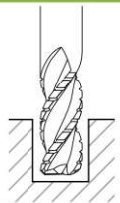
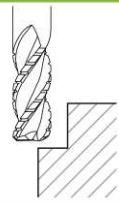
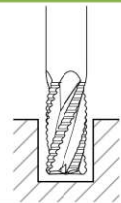
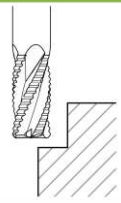


MATERIALI LAVORABILI / WORKPIECE MATERIALS

serie séries	TITANIO TITANIUM	HRSA HRSA	ACCIAI INOSSIDABILI STAINLESS STEELS	MATERIALI NON FERROSI NON FERROUS MATERIALS	LEGHE LEGGERE LIGHT ALLOYS	ACCIAI STEELS	GHISE CAST IRON
21105	●	●	●	○	○	●	●

● consigliata/recommended ● accettabile/acceptable ○ non consigliata/not recommended

Parametri di taglio/Cutting parameters

		15105 15120* WF 	15105 15120* WF 	21105 21120* NF NR 	19105 - 20105 20120* - 21105 21120* NF NR 		
Materiali <i>Materials</i>		Cava Slotting $ap = 1\phi$ $ae = 1\phi$	Sgrossatura Roughing $ap = 1,5\phi$ $ae = 0,5\phi$	Cava Slotting $ap = 1\phi$ $ae = 1\phi$	Sgrossatura Roughing $ap = 1,5\phi$ $ae = 0,5\phi$		
							
Gruppo e descrizione <i>Group and description</i>		Vc (mt/min.)		Vc (mt/min.)		Vc (mt/min.)	
		X-85 NON RIVESTITA UNCOATED	X-85 Skin Alu	X-85 NON RIVESTITA UNCOATED	X-85 Skin	X-85 NON RIVESTITA UNCOATED	X-85 Skin
Ghisa Cast Iron	Grigia e sferoidale <i>Grey and spheroidal</i>	-	-	-	-	20 - 25	45 - 50
	Basso contenuto di C <i>Low carbon content</i>	-	-	-	-	30 - 35	60 - 70
Acciaio Steel	Medio contenuto di C <i>Medium carbon content</i>	-	-	-	-	30 - 35	50 - 60
	Basso legato <i>Low alloyed</i>	-	-	-	-	25 - 30	50 - 60
	Alto legato <i>High alloyed</i>	-	-	-	-	20 - 30	40 - 50
	Acciaio da stampi e utensili <i>Die/tool steel</i>	-	-	-	-	15 - 20	30 - 40
Acciaio Inossidabile Stainless Steel	AISI 304 - 416 - 420	-	-	-	-	15 - 20	15 - 20
	AISI 316 - 440	-	-	-	-	15 - 20	15 - 20
	17-4 ph 15-5 ph	-	-	-	-	10 - 15	10 - 15
	Leghe Cr - Co <i>Cr - Co alloys</i>	-	-	-	-	10 - 15	10 - 15
	Duplex F51	-	-	-	-	5 - 10	5 - 10
	Super Duplex F55	-	-	-	-	5 - 10	5 - 10
Superleghe resistenti al calore Heat Resistant Super Alloys	HRSA Hastelloy	-	-	-	-	5 - 10	5 - 10
	HRSA Inconel 625	-	-	-	-	5 - 10	5 - 10
	HRSA Inconel 718	-	-	-	-	5 - 10	5 - 10
	HRSA Nimonic	-	-	-	-	5 - 10	5 - 10
Ti	Titanio - <i>Titanium</i>	-	-	-	-	10 - 15	10 - 15
	Leghe di titanio <i>Titanium alloys</i>	-	-	-	-	10 - 15	10 - 15
Materiali non ferrosi Leghe leggere Non ferrous materials Light alloys	Alluminio non legato <i>Unalloyed aluminium</i>	110 - 120	250 - 260	110 - 120	250 - 260	-	-
	Alluminio Si < 6% <i>si < 6% aluminium</i>	70 - 80	170 - 180	70 - 80	170 - 180	-	-
	Materiali termoplastici <i>Thermoplastic materials</i>	130 - 140	270 - 280	130 - 140	270 - 280	-	-
	Rame/Ottone <i>Copper/Brass</i>	30 - 35	75 - 80	30 - 35	75 - 80	-	-
D		Avanzamento fz mm/tagliente FEED mm/tooth					
6		0,012	0,025	0,012	0,012	0,020	0,020
8		0,016	0,035	0,016	0,016	0,026	0,026
10		0,022	0,045	0,022	0,022	0,030	0,030
12		0,026	0,055	0,026	0,026	0,040	0,040
16		0,036	0,070	0,036	0,036	0,060	0,060
20		0,045	0,085	0,045	0,045	0,080	0,080

* series fz consigliato | RECOMMENDED -50%