

# HSS-PM HSS-PM Line

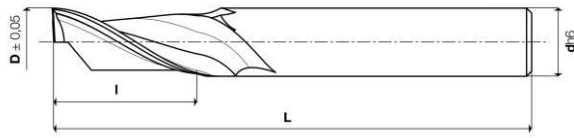
Serie/Series

## 11405

Frese a un tagliente elicoidale  
Single flute end mills

## 12105

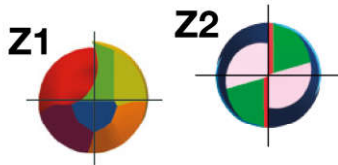
Frese a due taglienti  
Two flute end mills



Cod. Art.	X-85 (PM Co 8,5%)	COATED	D +0,05 -0,05	D <sup>II</sup>	I	L	dh6	Z
114050317	CM	CMX	3,17	1/8	11	55	6,35	1
114050400	CM	CMX	4		11	55	6	1
114050476	CM	CMX	4,76	3/16	13	60	6,35	1
114050500	CM	CMX	5		13	60	6	1
114050555	CM	CMX	5,55	7/32	13	60	6,35	1
114050600	CM	CMX	6		13	60	6	1
114050635	CM	CMX	6,35	1/4	13	60	6,35	1
114050700	CM	CMX	7		16	65	10	1
114050754	CM	CMX	7,54	19/64	16	65	9,52	1
114050800	CM	CMX	8		19	70	10	1
114050873	CM	CMX	8,73	11/32	22	75	9,52	1
114050952	CM	CMX	9,52	3/8	22	75	9,52	1
114051000	CM	CMX	10		22	75	10	1
114051111	CM	CMX	11,11	7/16	25	80	12,7	1
114051200	CM	CMX	12		25	80	12	1
114051270	CM	CMX	12,7	1/2	25	80	12,7	1

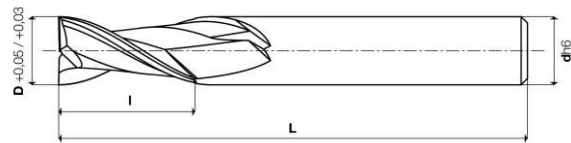


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Serie/Series 11405

Serie/Series 12105



Cod. Art.	X-85 (PM Co 8,5%)	COATED	D +0,05 +0,03	I	L	dh6	Z
121050200	CM	CMX	2	7	51	6	2
121050300	CM	CMX	3	8	52	6	2
121050400	CM	CMX	4	11	55	6	2
121050500	CM	CMX	5	13	57	6	2
121050600	CM	CMX	6	13	57	6	2
121050700	CM	CMX	7	16	66	10	2
121050800	CM	CMX	8	19	69	10	2
121050900	CM	CMX	9	19	69	10	2
121051000	CM	CMX	10	22	72	10	2
121051100	CM	CMX	11	22	79	12	2
121051200	CM	CMX	12	26	83	12	2
121051300	CM	CMX	13	26	83	12	2
121051400	CM	CMX	14	26	83	12	2
121051500	CM	CMX	15	32	92	16	2
121051600	CM	CMX	16	32	92	16	2
121051800	CM	CMX	18	32	92	16	2
121052000	CM	CMX	20	38	104	20	2
121052200	CM	CMX	22	38	104	20	2
121052500	CM	CMX	25	45	121	25	2
121052800	CM	CMX	28	45	121	25	2
121053000	CM	CMX	30	45	121	25	2
121053200	CM	CMX	32	53	133	32	2



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### MATERIALI LAVORABILI / WORKPIECE MATERIALS

serie	TITANIO TITANIUM	HRSA HRSA	ACCIAI INOSSIDABILI STAINLESS STEELS	MATERIALI NON FERROSI NON FERROUS MATERIALS	LEGHE LEGGERE LIGHT ALLOYS	ACCIAI STEELS	GHISE CAST IRON
11405	○	○	○	●	●	○	○
12105	○	○	●	●	●	○	○

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

# Parametri di taglio/Cutting parameters

	11405 12105 12120*		11405 12105 12120*		11405 12105 12120*		11405 12105 12120*	
Materiali Materials	Cava Slotting $ap = 1\sigma$ $ae = 1\sigma$		Sgrossatura Roughing $ap = 0,5\sigma$ $ae = 0,1\sigma$		Sgrossatura Roughing $ap = 1,5\sigma$ $ae = 0,5\sigma$		Contornatura leggera Light shouldering $ap = 1,5\sigma$ $ae = 0,15\sigma$	
Gruppo e descrizione Group and description	Vc (mt /min.)		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 Alu	X-85 NON RIVESTITA UNCOATED	X-85 Skin Alu	X-85 NON RIVESTITA UNCOATED	X-85 Skin Alu
Alluminio non legato Unalloyed aluminium	110 - 120	250 - 260	110 - 120	250 - 260	110 - 120	250 - 260	110 - 120	250 - 260
Alluminio Si < 6% si < 6% aluminium	70 - 80	170 - 180	70 - 80	170 - 180	70 - 80	170 - 180	70 - 80	170 - 180
Materiali termoplastici Thermoplastic materials	130 - 140	270 - 280	130 - 140	270 - 280	130 - 140	270 - 280	130 - 140	270 - 280
Rame/Ottone Copper/Brass	30 - 35	75 - 80	30 - 35	75 - 80	30 - 35	75 - 80	30 - 35	75 - 80
	Avanzamento fz mm/tagliante FEED mm/tooth							
D	0,007		0,007		0,007		0,007	
3	0,007		0,007		0,007		0,007	
4	0,008		0,010		0,008		0,010	
5	0,010		0,016		0,010		0,016	
6	0,012		0,020		0,012		0,020	
8	0,016		0,032		0,016		0,030	
10	0,022		0,045		0,022		0,040	
12	0,030		0,060		0,024		0,050	
16	0,036		0,100		0,030		0,080	
20	0,045		0,120		0,036		0,105	

Materiali non ferrosi  
Leghe leggere  
Non ferrous materials  
Light alloys

\* series 12120 fz consigliato | RECOMMENDED -50%