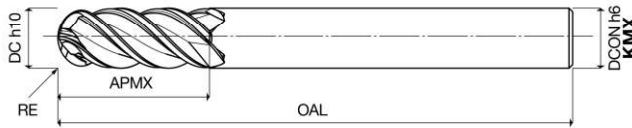
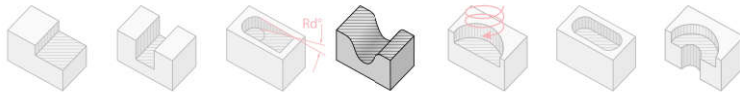


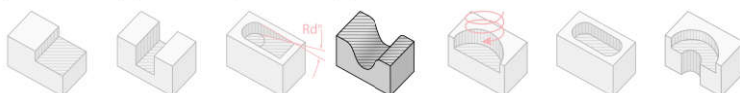
Cod. Art.	DC h10	APMX	OAL	RE	DCON h6	Z	UNCOATED
451400300 KMX	3	20	55	1,5	3	4	KM
451400400 KMX	4	20	60	2	4	4	KM
451400500 KMX	5	20	60	2,5	5	4	KM
451400600 KMX	6	24	65	3	6	4	KM
451400700 KMX	7	30	75	3,5	7	4	KM
451400800 KMX	8	32	80	4	8	4	KM
451400900 KMX	9	32	80	4,5	9	4	KM
451401000 KMX	10	32	80	5	10	4	KM
451401100 KMX	11	50	100	5,5	11	4	KM
451401200 KMX	12	50	100	6	12	4	KM
451401300 KMX	13	55	115	6,5	13	4	KM
451401400 KMX	14	55	115	7	14	4	KM
451401500 KMX	15	60	120	7,5	15	4	KM
451401600 KMX	16	60	120	8	16	4	KM
451401700 KMX	17	60	120	8,5	17	4	KM
451401800 KMX	18	60	120	9	18	4	KM
451401900 KMX	19	60	130	9,5	19	4	KM
451402000 KMX	20	60	130	10	20	4	KM

parametri tecnici a pag. / for technical parameters see page 277



Cod. Art.	DC h10	APMX	OAL	RE	DCON h6	Z	UNCOATED
451500300 KMX	3	25	70	1,5	3	4	KM
451500400 KMX	4	32	72	2	4	4	KM
451500500 KMX	5	32	80	2,5	5	4	KM
451500600 KMX	6	40	82	3	6	4	KM
451500700 KMX	7	42	100	3,5	7	4	KM
451500800 KMX	8	42	100	4	8	4	KM
451500900 KMX	9	45	100	4,5	9	4	KM
451501000 KMX	10	45	100	5	10	4	KM
451501100 KMX	11	70	130	5,5	11	4	KM
451501200 KMX	12	75	160	6	12	4	KM
451501300 KMX	13	75	160	6,5	13	4	KM
451501400 KMX	14	75	160	7	14	4	KM
451501500 KMX	15	75	160	7,5	15	4	KM
451501600 KMX	16	75	160	8	16	4	KM
451501700 KMX	17	75	160	8,5	17	4	KM
451501800 KMX	18	75	160	9	18	4	KM
451501900 KMX	19	75	160	9,5	19	4	KM
451502000 KMX	20	75	160	10	20	4	KM

parametri tecnici a pag. / for technical parameters see page 277



## Series 45140

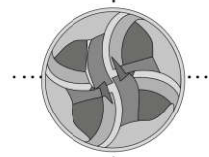
Frese a quattro taglienti a testa semisferica  
Ball-nosed four flute end mills

Gamma Raggi  
Radii Range

RE: 1,5 - 2 - 2,5 - 3 - 3,5 - 4  
4,5 - 5 - 5,5 - 6 - 6,5 - 7 - 7,5  
8 - 8,5 - 9 - 9,5 - 10

# Z4

BALL-NOSED  
CUTTERS



## Series

## 45150

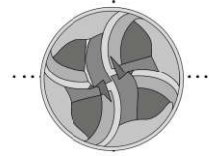
Frese a quattro taglienti a testa semisferica  
Ball-nosed four flute end mills

Gamma Raggi  
Radii Range

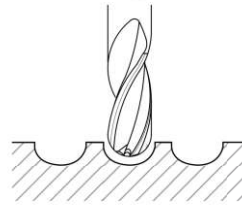
RE: 1,5 - 2 - 2,5 - 3 - 3,5 - 4  
4,5 - 5 - 5,5 - 6 - 6,5 - 7 - 7,5  
8 - 8,5 - 9 - 9,5 - 10

# Z4

BALL-NOSED  
CUTTERS



# Parametri di taglio / Cutting parameters



Materiali Materials		Sgrossatura Roughing $a_p = 0,4\phi$   $a_e = 0,9\phi$	
Serie Series		45135 - 45140* - 45150**	
Gruppo e descrizione Group and description		Vc (m/min.)	
		NON RIVESTITA UNCOATED	<b>Skin<sup>UP</sup></b>
Ghisa Cast Iron	Grigia e sferoidale Grey and spheroidal	80 - 90	110 - 120
	Basso contenuto di C Low Carbon content	90 - 100	120 - 130
Acciaio Steel	Medio contenuto di C Medium Carbon content	90 - 100	120 - 130
	Basso legato Low alloy	80 - 90	110 - 120
	Alto legato High alloy	70 - 80	90 - 100
	Acciaio da stampi e utensili Tool and die Steel	50 - 60	70 - 80
Materiali non ferrosi - Leghe leggere Non ferrous materials - Light alloys	Alluminio non legato Unalloyed aluminium	-	-
	Alluminio Si < 6% si < 6% aluminium	-	-
	Materiali termoplastici Thermoplastic materials	-	-
Rame/Ottone Copper/Brass		90 - 100	120 - 130
	≤ 54 HRC	-	-
Acciaio inossidabile Stainless Steel	Aisi 304 - 416 - 420	-	40 - 50
	Aisi 316 - 440	-	25 - 35
	17-4 ph 15-5 ph	-	25 - 35
	Leghe Cr - Co / Cr - Co alloys	-	15 - 20
	Duplex F51	-	25 - 30
	Super Duplex F55	-	15 - 20
Superleghe resistenti al calore Superalloys	Hrsa Hastelloy	-	10 - 15
	Hrsa Inconel 625	-	10 - 15
	Hrsa Inconel 718	-	10 - 15
	Hrsa Nimonic	-	10 - 15
Ti	Titanio - Titanium	-	25 - 35
	Leghe di titanio / Titanium alloys	-	25 - 35

DC	Avanzamento fz mm/tagliente   FEED mm/tooth
3	0,009
4	0,012
5	0,015
6	0,018
8	0,023
10	0,033
12	0,042
16	0,055
20	0,075

\*series 45140 fz consigliato | recommended -50%

\*\*series 45150 fz consigliato | recommended -70%

	45135	45140*	45150**
●	●	●	●
●	●	●	●
○	○	○	○
●	●	●	●
●	●	●	●

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