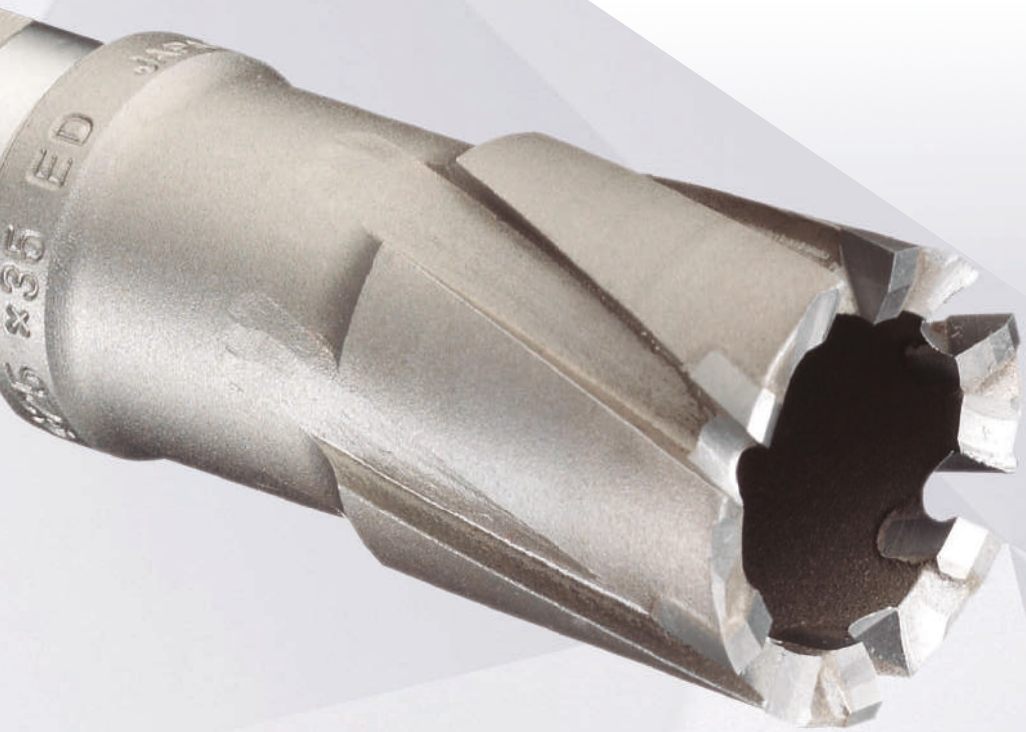


FRESE A CAROTARE



BLUE-MASTER[®]
by *celesa*

CUTTING TECHNOLOGIES

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO SERIE CORTA
HSS


Ref. 250R

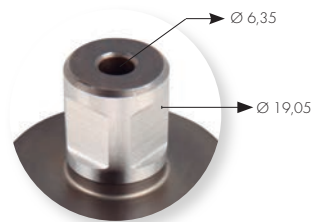
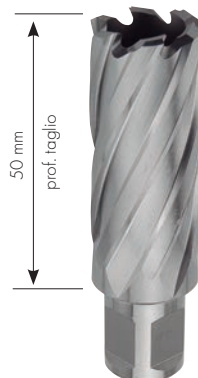
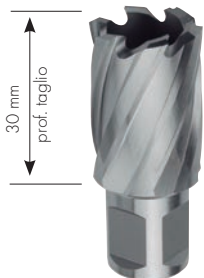
**30 mm
CAPACITÀ
DI TAGLIO**
HSS


Ref. 500R

**50 mm
CAPACITÀ
DI TAGLIO**

VALIDE PER MACCHINE TIPO:

Rota Broach - Alfa Rota Best - Magnetor - Slugger - Dr. Bemder - Bux - Hougen


250R

	Ø mm	€
250R12	12	26,76
250R13	13	27,14
250R14	14	27,36
250R15	15	27,30
250R16	16	27,56
250R17	17	29,31
250R18	18	29,39
250R19	19	29,43
250R20	20	30,70
250R21	21	32,77
250R22	22	33,97
250R23	23	34,81
250R24	24	36,17
250R25	25	37,36
250R26	26	38,69
250R27	27	41,52
250R28	28	42,75
250R29	29	45,50
250R30	30	45,36
250R31	31	49,39
250R32	32	49,63
250R33	33	57,40
250R34	34	60,97
250R35	35	61,36
250R36	36	65,13
250R37	37	66,30
250R38	38	66,96
250R39	39	67,57
250R40	40	71,78
250R41	41	73,08
250R42	42	77,93
250R43	43	84,20
250R44	44	86,87
250R45	45	87,86
250R46	46	89,88
250R47	47	91,55
250R48	48	95,22
250R49	49	95,90
250R50	50	101,58


500R

	Ø mm	€
500R12	12	35,35
500R13	13	35,35
500R14	14	31,77
500R15	15	34,04
500R16	16	35,83
500R17	17	36,04
500R18	18	36,38
500R19	19	37,13
500R20	20	38,78
500R21	21	39,72
500R22	22	40,85
500R23	23	43,69
500R24	24	44,98
500R25	25	60,15
500R26	26	62,81
500R27	27	66,68
500R28	28	69,74
500R29	29	74,25
500R30	30	75,48
500R31	31	81,32
500R32	32	82,78
500R33	33	88,77
500R34	34	92,70
500R35	35	94,28
500R36	36	99,38
500R37	37	101,86
500R38	38	103,47
500R39	39	111,13
500R40	40	113,96
500R41	41	121,78
500R42	42	124,83
500R43	43	126,48
500R44	44	128,05
500R45	45	133,59
500R46	46	133,55
500R47	47	146,17
500R48	48	149,84
500R49	49	148,88
500R50	50	152,09

PUNZONI Ø 6,35 mm PER FRESE A CAROTARE

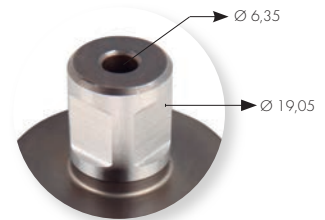
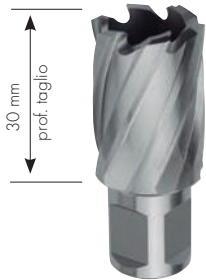

	DESCRIZIONE	L mm	€
P250CA	Punzone normale per frese Serie:250R/C/T	71	11,63
P250CAA	Utilizzare con adattatore per FEIN o NITTO 250R/C/T	101	13,98
P500CA	Punzone normale per frese Serie:500R/C/T	92	12,63

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO SERIE CORTA

HSS Co 8%  **110 Kg/m³** Ref. 250C **30 mm CAPACITÀ DI TAGLIO**

HSS Co 8%  **110 Kg/m³** Ref. 500C **50 mm CAPACITÀ DI TAGLIO**

VALIDE PER MACCHINE TIPO:
Rota Broach - Alfa Rota Best - Magnetor - Slugger - Dr. Bemder - Bux - Hougen



250C			250C		
	Ø mm	€		Ø mm	€
250C12	12	36,15	250C57	57	337,74
250C13	13	36,15	250C58	58	372,48
250C14	14	36,15	250C59	59	383,93
250C15	15	38,86	250C60	60	386,87
250C16	16	38,67	250C61	61	414,91
250C17	17	41,67	250C62	62	394,73
250C18	18	43,59	250C63	63	398,93
250C19	19	45,13	250C64	64	420,06
250C20	20	48,03	250C65	65	433,57
250C21	21	52,56	250C66	66	632,44
250C22	22	54,09	250C67	67	640,91
250C23	23	56,87	250C68	68	653,77
250C24	24	58,88	250C69	69	668,98
250C25	25	61,40	250C70	70	686,43
250C26	26	68,04	250C71	71	717,32
250C27	27	70,21	250C72	72	722,74
250C28	28	72,68	250C73	73	729,31
250C29	29	74,10	250C74	74	742,57
250C30	30	74,43	250C75	75	730,34
250C31	31	81,05	250C76	76	772,16
250C32	32	82,28	250C77	77	775,14
250C33	33	83,93	250C78	78	778,31
250C34	34	85,88	250C79	79	788,61
250C35	35	91,67	250C80	80	799,62
250C36	36	92,06	250C81	81	807,39
250C37	37	92,95	250C82	82	821,38
250C38	38	97,86	250C83	83	838,05
250C39	39	98,00	250C84	84	855,87
250C40	40	102,18	250C85	85	860,07
250C41	41	142,43	250C86	86	864,15
250C42	42	146,30	250C87	87	869,23
250C43	43	152,60	250C88	88	879,95
250C44	44	157,45	250C89	89	887,06
250C45	45	163,25	250C90	90	900,10
250C46	46	168,59	250C91	91	909,96
250C47	47	173,42	250C92	92	918,34
250C48	48	177,30	250C93	93	927,57
250C49	49	201,13	250C94	94	940,20
250C50	50	222,37	250C95	95	949,11
250C51	51	232,00	250C96	96	958,01
250C52	52	238,81	250C97	97	966,62
250C53	53	247,34	250C98	98	979,65
250C54	54	269,52	250C99	99	992,82
250C55	55	291,70	250C100	100	1.009,89
250C56	56	315,57			

500C			500C		
	Ø mm	€		Ø mm	€
500C12	12	49,77	500C57	57	374,07
500C13	13	46,95	500C58	58	412,71
500C14	14	46,95	500C59	59	425,44
500C15	15	47,69	500C60	60	436,25
500C16	16	54,58	500C61	61	474,31
500C17	17	57,71	500C62	62	480,94
500C18	18	60,49	500C63	63	499,34
500C19	19	66,98	500C64	64	507,57
500C20	20	71,09	500C65	65	521,00
500C21	21	78,59	500C66	66	703,25
500C22	22	80,36	500C67	67	724,85
500C23	23	83,14	500C68	68	735,26
500C24	24	84,91	500C69	69	745,77
500C25	25	88,45	500C70	70	756,72
500C26	26	92,12	500C71	71	794,27
500C27	27	95,77	500C72	72	798,80
500C28	28	100,28	500C73	73	803,96
500C29	29	104,08	500C74	74	817,04
500C30	30	107,13	500C75	75	803,82
500C31	31	112,77	500C76	76	853,68
500C32	32	113,95	500C77	77	860,66
500C33	33	118,27	500C78	78	870,02
500C34	34	120,32	500C79	79	877,68
500C35	35	127,89	500C80	80	878,57
500C36	36	130,50	500C81	81	892,23
500C37	37	132,22	500C82	82	901,02
500C38	38	135,58	500C83	83	914,64
500C39	39	146,28	500C84	84	925,13
500C40	40	157,09	500C85	85	948,75
500C41	41	179,37	500C86	86	956,92
500C42	42	185,46	500C87	87	971,02
500C43	43	192,11	500C88	88	975,64
500C44	44	198,74	500C89	89	980,35
500C45	45	203,73	500C90	90	989,72
500C46	46	210,93	500C91	91	999,42
500C47	47	215,91	500C92	92	1.013,17
500C48	48	222,57	500C93	93	1.021,62
500C49	49	282,41	500C94	94	1.034,24
500C50	50	291,31	500C95	95	1.048,67
500C51	51	292,20	500C96	96	1.057,35
500C52	52	297,01	500C97	97	1.068,17
500C53	53	303,44	500C98	98	1.080,35
500C54	54	311,46	500C99	99	1.105,69
500C55	55	317,88	500C100	100	1.117,31
500C56	56	338,75			

PUNZONI Ø 6,35 mm PER FRESE A CAROTARE



	DESCRIZIONE	L mm	€
P250CA	Punzone normale per frese Serie250R/C/T	71	11,63
P250CAA	Utilizzare con adattatore per FEIN o NITTO 250R/C/T	101	13,98
P500CA	Punzone normale per frese Serie500R/C/T	92	12,63

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO RIVESTITE SERIE CORTA
HSSC
8%

110
Kg/m rñ
TiA IN

Ref. 250T

30 mm
CAPACITÀ
DI TAGLIO
HSSC
8%

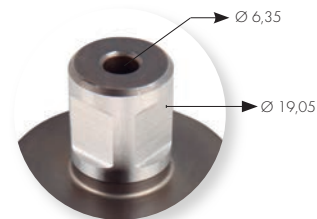
110
Kg/m rñ
TiA IN

Ref. 500T

50 mm
CAPACITÀ
DI TAGLIO

VALIDE PER MACCHINE TIPO:

Rota Broach - Alfa Rota Best - Magnetor - Slugger - Dr. Bemder - Bux - Hougen



250T			250T		
	Ø mm	€		Ø mm	€
250T12	12	66,85	250T36	36	178,06
250T13	13	66,85	250T37	37	181,07
250T14	14	66,85	250T38	38	189,45
250T15	15	73,08	250T39	39	192,78
250T16	16	77,37	250T40	40	204,79
250T17	17	80,61	250T41	41	252,30
250T18	18	84,56	250T42	42	264,17
250T19	19	93,10	250T43	43	274,07
250T20	20	97,82	250T44	44	281,69
250T21	21	109,19	250T45	45	290,83
250T22	22	113,91	250T46	46	299,23
250T23	23	118,01	250T47	47	306,83
250T24	24	122,29	250T48	48	312,94
250T25	25	127,03	250T49	49	320,51
250T26	26	131,78	250T50	50	322,09
250T27	27	136,29	250T51	51	334,57
250T28	28	140,58	250T52	52	343,40
250T29	29	143,64	250T53	53	354,45
250T30	30	144,71	250T54	54	383,18
250T31	31	158,05	250T55	55	417,24
250T32	32	160,59	250T56	56	448,17
250T33	33	165,28	250T57	57	476,89
250T34	34	177,40	250T58	58	521,89
250T35	35	177,96	250T59	59	536,72
			250T60	60	540,53

500T			500T		
	Ø mm	€		Ø mm	€
500T12	12	89,30	500T36	36	229,55
500T13	13	89,30	500T37	37	231,38
500T14	14	89,30	500T38	38	237,24
500T15	15	101,77	500T39	39	238,20
500T16	16	115,31	500T40	40	265,24
500T17	17	115,58	500T41	41	322,27
500T18	18	125,59	500T42	42	330,66
500T19	19	139,06	500T43	43	342,48
500T20	20	147,75	500T44	44	352,84
500T21	21	165,30	500T45	45	362,39
500T22	22	170,67	500T46	46	373,92
500T23	23	176,47	500T47	47	383,43
500T24	24	182,06	500T48	48	392,62
500T25	25	187,88	500T49	49	478,13
500T26	26	193,22	500T50	50	405,67
500T27	27	202,05	500T51	51	494,28
500T28	28	210,86	500T52	52	500,55
500T29	29	219,19	500T53	53	510,75
500T30	30	223,09	500T54	54	523,34
500T31	31	224,14	500T55	55	533,59
500T32	32	225,44	500T56	56	563,76
500T33	33	227,66	500T57	57	613,83
500T34	34	228,20	500T58	58	668,45
500T35	35	228,39	500T59	59	687,44
			500T60	60	703,76

PUNZONI Ø 6,35 mm PER FRESE A CAROTARE


	DESCRIZIONE	L mm	€
P250CA	Punzone normale per frese Serie250R/C/T	71	11,63
P250CAA	Utilizzare con adattatore per FEIN o NITTO 250R/C/T	101	13,98
P500CA	Punzone normale per frese Serie500R/C/T	92	12,63

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO SERIE LUNGA

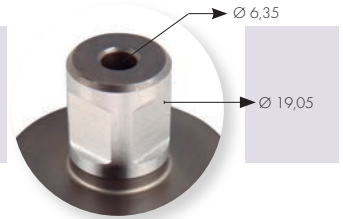


Ref. 750C

75 mm
CAPACITÀ
DI TAGLIO

Ref. 1000C

100 mm
CAPACITÀ
DI TAGLIO



VALIDE PER MACCHINE TIPO:
Rota Broach - Alfa Rota Best - Magnetor - Slugger - Dr. Bemder - Bux - Hougen



750C		
	Ø mm	€
750C50	50	415,15
750C51	51	433,07
750C52	52	437,07
750C53	53	440,97
750C54	54	446,31
750C55	55	453,41
750C56	56	461,97
750C57	57	466,42
750C58	58	477,03
750C59	59	488,43
750C60	60	513,07
750C61	61	533,35
750C62	62	548,68
750C63	63	559,08
750C64	64	573,41
750C65	65	587,71
750C66	66	734,28
750C67	67	751,39
750C68	68	767,35
750C69	69	779,75
750C70	70	789,89
750C71	71	801,11
750C72	72	814,23
750C73	73	826,63
750C74	74	837,57
750C75	75	846,97
750C76	76	856,86
750C77	77	864,55
750C78	78	873,24
750C79	79	891,17
750C80	80	915,26
750C81	81	942,56
750C82	82	951,97
750C83	83	980,04
750C84	84	1.001,12
750C85	85	1.025,88
750C86	86	1.056,59
750C87	87	1.087,18
750C88	88	1.105,20
750C89	89	1.131,44
750C90	90	1.156,14
750C91	91	1.194,80
750C92	92	1.229,63
750C93	93	1.255,79
750C94	94	1.294,88
750C95	95	1.331,72
750C96	96	1.352,72
750C97	97	1.380,86
750C98	98	1.408,19
750C99	99	1.431,17
750C100	100	1.456,08

750C		
	Ø mm	€
750C18	18	115,04
750C19	19	119,84
750C20	20	125,82
750C21	21	130,53
750C22	22	138,51
750C23	23	144,04
750C24	24	149,21
750C25	25	152,27
750C26	26	156,71
750C27	27	161,14
750C28	28	167,94
750C29	29	175,18
750C30	30	183,97
750C31	31	186,97
750C32	32	193,21
750C33	33	206,44
750C34	34	210,51
750C35	35	214,33
750C36	36	220,03
750C37	37	226,46
750C38	38	233,26
750C39	39	248,83
750C40	40	259,90
750C41	41	262,32
750C42	42	282,35
750C43	43	297,20
750C44	44	312,43
750C45	45	327,82
750C46	46	353,08
750C47	47	367,13
750C48	48	382,99
750C49	49	399,67



1000C		
	Ø mm	€
1000C50	50	528,62
1000C51	51	535,06
1000C52	52	537,83
1000C53	53	539,99
1000C54	54	543,26
1000C55	55	549,10
1000C56	56	555,20
1000C57	57	559,21
1000C58	58	573,00
1000C59	59	585,61
1000C60	60	610,01
1000C61	61	620,78
1000C62	62	637,57
1000C63	63	647,92
1000C64	64	665,06
1000C65	65	675,23
1000C66	66	782,34
1000C67	67	798,97
1000C68	68	813,84
1000C69	69	831,22
1000C70	70	837,73
1000C71	71	853,94
1000C72	72	866,15
1000C73	73	877,50
1000C74	74	887,36
1000C75	75	897,97
1000C76	76	909,58
1000C77	77	914,17
1000C78	78	918,86
1000C79	79	938,65
1000C80	80	960,87
1000C81	81	983,17
1000C82	82	1.000,39
1000C83	83	1.020,26
1000C84	84	1.044,25
1000C85	85	1.246,35
1000C86	86	1.294,50
1000C87	87	1.323,05
1000C88	88	1.351,51
1000C89	89	1.377,04
1000C90	90	1.413,89
1000C91	91	1.457,17
1000C92	92	1.496,43
1000C93	93	1.530,83
1000C94	94	1.582,59
1000C95	95	1.620,60
1000C96	96	1.647,80
1000C97	97	1.680,43
1000C98	98	1.709,88
1000C99	99	1.737,17
1000C100	100	1.757,83

1000C		
	Ø mm	€
1000C18	18	168,25
1000C19	19	176,85
1000C20	20	185,45
1000C21	21	195,98
1000C22	22	204,42
1000C23	23	210,11
1000C24	24	220,22
1000C25	25	221,88
1000C26	26	223,46
1000C27	27	225,97
1000C28	28	236,42
1000C29	29	246,03
1000C30	30	257,97
1000C31	31	262,32
1000C32	32	269,08
1000C33	33	287,63
1000C34	34	291,72
1000C35	35	296,48
1000C36	36	304,74
1000C37	37	315,02
1000C38	38	322,63
1000C39	39	330,49
1000C40	40	340,76
1000C41	41	353,21
1000C42	42	380,28
1000C43	43	399,89
1000C44	44	419,87
1000C45	45	437,24
1000C46	46	455,88
1000C47	47	479,59
1000C48	48	503,16
1000C49	49	521,04

PUNZONI Ø 6,35 mm PER FRESE A CAROTARE



	DESCRIZIONE	L mm	€
P750CA	Punzone normale per frese Serie750C	123	14,52
P1000CA	Punzone normale per frese Serie1000C	147	17,14
P1000CAA	Utilizzare con adattatore per FEIN o Nitto 1000C	177	14,35

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO SERIE EXTRA LUNGA

Frese a Carotare

Rosa

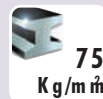
HSS



Ref. 1500C

150 mm
CAPACITÀ
DI TAGLIO

HSS



Ref. 2000C

200 mm
CAPACITÀ
DI TAGLIO


1500C

	Ø mm	€
1500C22	22	518,30
1500C24	24	558,35
1500C26	26	566,60
1500C28	28	599,43
1500C30	30	654,07
1500C32	32	744,42
1500C34	34	807,05
1500C36	36	843,10
1500C38	38	892,57
1500C40	40	942,72
1500C42	42	1.052,03
1500C44	44	1.161,59
1500C46	46	1.261,19
1500C48	48	1.392,00
1500C50	50	1.462,49
1500C52	52	1.648,48
1500C54	54	1.765,33
1500C55	55	1.939,52

2000C

	Ø mm	€
2000C26	26	787,57
2000C28	28	833,21
2000C30	30	909,15
2000C32	32	1.034,73
2000C34	34	1.121,80
2000C36	36	1.252,61
2000C38	38	1.326,08
2000C40	40	1.400,58
2000C42	42	1.563,00
2000C44	44	1.725,76
2000C46	46	1.873,74
2000C48	48	2.120,58
2000C50	50	2.227,95
2000C52	52	2.320,21
2000C54	54	2.391,59

PUNZONI Ø 8 mm PER FRESE A CAROTARE


	DESCRIZIONE	L mm	€
P1500CA	Punzone normale per frese Serie 1500C	220	34,22
P2000CA	Punzone normale per frese Serie 2000C	248	43,34
P2500CA	Punzone EXTRA lungo per l'uso di frese con estensioni	310	72,03

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO CON DENTI IN METALLO DURO

35 mm
CAPACITÀ
DI TAGLIO

50 mm
CAPACITÀ
DI TAGLIO

MD



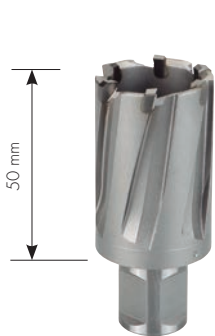
IN α

AI

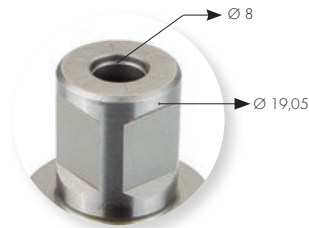


Cu-Ni-La

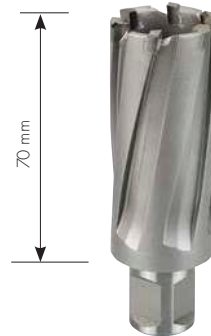
GHISA



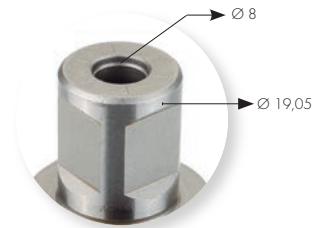
Ref. 350A



ATTACCO
DOPPIO WELDON



Ref. 500A



ATTACCO
DOPPIO WELDON

35 mm PROFONDITÀ DI TAGLIO

350A			350A		
	Ø mm	€		Ø mm	€
350A12	12,0	139,09	350A26	26,0	150,64
350A13	13,0	140,39	350A26,5*	26,5	97,64
350A14	14,0	140,39	350A27	27,0	150,64
350A15	15,0	140,39	350A28	28,0	150,64
350A16	16,0	140,39	350A29	29,0	150,64
350A17	17,0	140,39	350A30	30,0	150,64
350A17,5*	17,5	90,99	350A31	31,0	167,78
350A18	18,0	140,39	350A32	32,0	167,78
350A19	19,0	140,39	350A33	33,0	167,78
350A20	20,0	140,39	350A34	34,0	167,78
350A21	21,0	140,39	350A35	35,0	167,78
350A21,5*	21,5	97,64	350A36	36,0	167,78
350A22	22,0	150,64	350A37	37,0	167,78
350A22,5*	22,5	97,64	350A38	38,0	167,78
350A23	23,0	150,64	350A39	39,0	203,73
350A23,5*	23,5	97,64	350A40	40,0	203,73
350A24	24,0	150,64	350A41	41,0	203,73
350A24,5*	24,5	97,64	350A42	42,0	203,73
350A25	25,0	150,64	350A43	43,0	203,73
			350A44	44,0	203,73
			350A45	45,0	203,73
			350A46	46,0	203,73
			350A47	47,0	203,73
			350A48	48,0	203,73
			350A49	49,0	203,73
			350A50	50,0	203,73
			350A51	51,0	203,73
			350A52	52,0	203,73



- L'accostamento della fresa al materiale deve essere delicato, senza urti o impatti bruschi.
- Lubrificare con CUT-MAGIC.

50 mm PROFONDITÀ DI TAGLIO

500A			500A		
	Ø mm	€		Ø mm	€
500A14	14,0	157,74	500A40	40,0	214,60
500A15	15,0	157,74	500A41	41,0	251,31
500A16	16,0	157,74	500A42	42,0	251,31
500A17	17,0	157,74	500A43	43,0	251,31
500A17,5*	17,5	102,24	500A44	44,0	251,31
500A18	18,0	157,74	500A45	45,0	251,31
500A19	19,0	157,74	500A46	46,0	278,81
500A20	20,0	157,74	500A47	47,0	278,81
500A21	21,0	157,74	500A48	48,0	278,81
500A21,5*	21,5	109,38	500A49	49,0	278,81
500A22	22,0	168,76	500A50	50,0	278,81
500A22,5*	22,5	109,38	500A51	51,0	308,15
500A23	23,0	168,76	500A52	52,0	308,15
500A23,5*	23,5	109,38	500A53	53,0	308,15
500A24	24,0	168,76	500A54	54,0	308,15
500A24,5*	24,5	109,38	500A55	55,0	308,15
500A25	25,0	168,76	500A56	56,0	348,51
500A26	26,0	168,76	500A57	57,0	348,51
500A26,5*	26,5	109,38	500A58	58,0	348,51
500A27	27,0	168,76	500A59	59,0	348,51
500A28	28,0	168,76	500A60	60,0	348,51
500A29	29,0	168,76	500A61	61,0	403,52
500A30	30,0	168,76	500A62	62,0	403,52
500A31	31,0	187,11	500A63	63,0	403,52
500A32	32,0	187,11	500A64	64,0	403,52
500A33	33,0	187,11	500A65	65,0	403,52
500A34	34,0	187,11	500A66	66,0	427,98
500A35	35,0	187,11	500A67	67,0	427,98
500A36	36,0	214,60	500A68	68,0	427,98
500A37	37,0	214,60	500A69	69,0	427,98
500A38	38,0	214,60	500A70	70,0	427,98
500A39	39,0	214,60			

Codolo 32 mm

*Fino ad esaurimento scorte

PUNZONI PER FRESE A CAROTARE DENTI IN METALLO DURO



Ref. P350AA



Ref. P350AA-1

	DESCRIZIONE	Ø x L mm	€
P350AA	Fresa a carotare 350A Ø 12 - 15 mm	Ø 5 x 91	19,53
P350AA-1	Fresa a carotare 350A Ø 16 - 52 mm	Ø 8 x 91	19,96
P500A	Fresa a carotare 500A Ø 14 - 16 mm	Ø 5 x 112	21,30
P500AA	Fresa a carotare 500A Ø 17 - 70 mm	Ø 8 x 112	22,39

FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO CON DENTI IN METALLO DURO
75 mm
 CAPACITÀ
 DI TAGLIO

100 mm
 CAPACITÀ
 DI TAGLIO

MD



IN Ø

AI

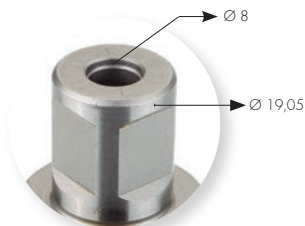
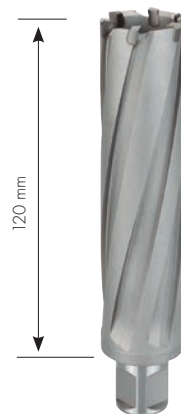


Cu-Ni-La

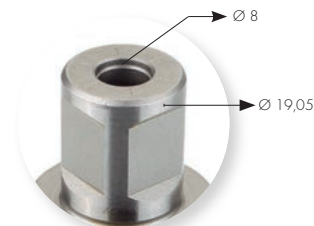
GHISA



Ref. 750A

ATTACCO
DOPPIO WELDON

Ref. 1000A

ATTACCO
DOPPIO WELDON
75 mm PROFONDITÀ DI TAGLIO

750A			750A		
	Ø mm	€		Ø mm	€
750A17	17	200,89	750A52	52	472,48
750A18	18	241,87	750A53	53	472,48
750A19	19	241,87	750A54	54	472,48
750A20	20	241,87	750A55	55	472,48
750A21	21	241,87	750A56	56	534,36
750A22	22	258,77	750A57	57	534,36
750A23	23	258,77	750A58	58	534,36
750A24	24	258,77	750A59	59	534,36
750A25	25	258,77	750A60	60	534,36
750A26	26	258,77	750A61	61	618,74
750A27	27	258,77	750A62	62	618,74
750A28	28	258,77	750A63	63	618,74
750A29	29	258,77	750A64	64	618,74
750A30	30	258,77	750A65	65	618,74
750A31	31	286,89	750A66	66	618,74
750A32	32	286,89	750A67	67	618,74
750A33	33	286,89	750A68	68	618,74
750A34	34	286,89	750A69	69	618,74
750A35	35	286,89	750A70	70	618,74
750A36	36	329,04	750A75	75	650,91
750A37	37	329,04	750A80	80	687,79
750A38	38	329,04	750A85	85	746,16
750A39	39	329,04	750A90	90	819,46
750A40	40	329,04	750A95	95	855,89
750A41	41	385,32	750A100	100	936,21
750A42	42	385,32	750A105	105	1.287,35
750A43	43	385,32	750A110	110	1.287,35
750A44	44	385,32	750A115	115	1.660,42
750A45	45	385,32	750A120	120	1.660,42
750A46	46	427,50	750A125	125	2.136,21
750A47	47	427,50	750A130	130	2.137,29
750A48	48	427,50	750A135	135	2.330,26
750A49	49	427,50	750A140	140	2.330,26
750A50	50	427,50	750A145	145	2.949,91
750A51	51	472,48	750A150	150	2.949,91

Codolo 32 mm

100 mm PROFONDITÀ DI TAGLIO

1000A			1000A		
	Ø mm	€		Ø mm	€
1000A25	25	297,58	1000A56	56	675,97
1000A27	27	297,58	1000A57	57	675,97
1000A28	28	297,58	1000A58	58	675,97
1000A29	29	297,58	1000A59	59	675,97
1000A30	30	297,58	1000A60	60	675,97
1000A31	31	329,93	1000A61	61	782,72
1000A32	32	329,93	1000A62	62	782,72
1000A33	33	329,93	1000A63	63	782,72
1000A34	34	329,93	1000A64	64	782,72
1000A35	35	329,93	1000A65	65	782,72
1000A36	36	378,41	1000A66	66	782,72
1000A37	37	378,41	1000A67	67	795,36
1000A38	38	378,41	1000A68	68	795,36
1000A39	39	378,41	1000A69	69	795,36
1000A40	40	378,41	1000A70	70	795,36
1000A41	41	443,12	1000A75	75	795,36
1000A42	42	443,12	1000A80	80	832,66
1000A43	43	487,45	1000A85	85	942,25
1000A44	44	487,45	1000A90	90	987,56
1000A45	45	487,45	1000A95	95	1.032,88
1000A46	46	540,79	1000A100	100	1.090,96
1000A47	47	540,79	1000A105	105	1.536,33
1000A48	48	540,79	1000A110	110	1.536,33
1000A49	49	540,79	1000A115	115	2.052,59
1000A50	50	565,38	1000A120	120	2.052,59
1000A51	51	597,70	1000A125	125	2.631,57
1000A52	52	597,70	1000A130	130	2.631,57
1000A53	53	597,70	1000A135	135	3.291,88
1000A54	54	597,70	1000A140	140	3.291,88
1000A55	55	597,70	1000A145	145	4.421,57
			1000A150	150	4.421,57

Codolo 37 mm

PUNZONI PER FRESE A CAROTARE DENTI IN METALLO DURO


	DESCRIZIONE	Ø x L mm	€
P750AA	Frese a carotare 750A Ø 17 - 70 mm	Ø8x140	32,52
P750AA-1	Frese a carotare 750A Ø 75 - 150 mm	Ø8x160	37,39
P1000AA	Frese a carotare 1000A Ø 25 - 70 mm	Ø8x160	44,06
P1000AA-1	Frese a carotare 1000A Ø 75 - 150 mm	Ø8x190	50,67

**FRESE A CAROTARE SPECIALE PER MACCHINE A SUPPORTO MAGNETICO Ø CODOLO DI 19,05 mm
SPECIALE PER ROTAIE DELLE FERROVIE, HARDOX...**



- Denti in metallo duro.
- Per materiali estremamente duri.
- Possibilità di lavorare su trapani, fresatrici e torni.
- Possibilità di lavorare con Cono Morse ad attacco rapido.



Ref. MB250AT
Ref. MB500AT

HSSCo
8%

TiA IN

HARDXO
450

HARDXO
500

Ref. MB350ST
Ref. MB500ST

MD

HARDXO
450

HARDXO
500

HARDXO
600

25 mm
CAPACITÀ
DI TAGLIO



Ref. MB250AT

25 mm PROF. DI TAGLIO

50 mm
CAPACITÀ
DI TAGLIO



Ref. MB500AT

50 mm PROF. DI TAGLIO

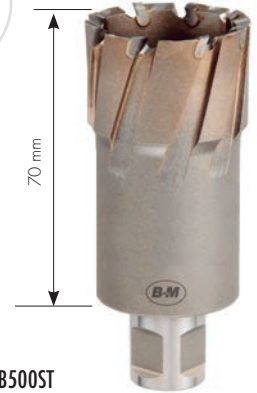
35 mm
CAPACITÀ
DI TAGLIO



Ref. MB350ST

35 mm PROF. DI TAGLIO

50 mm
CAPACITÀ
DI TAGLIO



Ref. MB500ST

50 mm PROF. DI TAGLIO

MB250AT		
	Ø mm	€
MB250AT16	16	150,35
MB250AT18	18	154,68
MB250AT20	20	158,99
MB250AT22	22	166,08
MB250AT24	24	172,03
MB250AT26	26	177,56
MB250AT28	28	183,27
MB250AT30	30	189,05
MB250AT32	32	221,98

MB500AT		
	Ø mm	€
MB500AT16	16	187,59
MB500AT18	18	197,62
MB500AT20	20	207,63
MB500AT22	22	216,28
MB500AT24	24	223,35
MB500AT26	26	230,53
MB500AT28	28	242,03
MB500AT30	30	256,29
MB500AT32	32	282,78

MB350ST		
	Ø mm	€
MB350ST18	18	121,37
MB350ST19	19	161,83
MB350ST20	20	121,37
MB350ST21	21	161,83
MB350ST22	22	130,24
MB350ST23	23	173,65
MB350ST24	24	130,24
MB350ST25	25	173,65
MB350ST26	26	130,24
MB350ST27	27	173,65
MB350ST28	28	130,24
MB350ST29	29	173,65
MB350ST30	30	130,24
MB350ST31	31	193,41
MB350ST32	32	145,04
MB350ST33	33	193,41
MB350ST34	34	193,41
MB350ST35	35	193,41
MB350ST36	36	193,41

MB500ST		
	Ø mm	€
MB500ST37	37	226,97
MB500ST38	38	226,97
MB500ST39	39	226,97
MB500ST40	40	226,97
MB500ST41	41	244,24
MB500ST42	42	244,24
MB500ST43	43	244,24
MB500ST44	44	244,24
MB500ST45	45	244,24
MB500ST46	46	285,07
MB500ST47	47	285,07
MB500ST48	48	285,07
MB500ST49	49	285,07
MB500ST50	50	285,07

PUNZONI Ø 6,35 mm
FRESE A CAROTARE Ref. MB250AT e MB500AT



	DESCRIZIONE	L mm	€
P250CA	Frese a carotare MB250AT Ø16-32 mm	71	11,63
P500CA	Frese a carotare MB500AT Ø16-32 mm	92	12,63

PUNZONI
FRESE A CAROTARE Ref. MB350ST e MB500ST

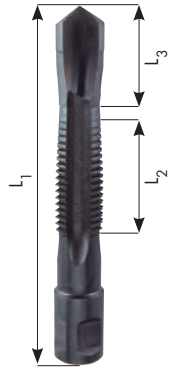
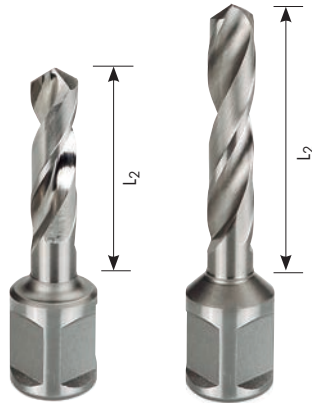
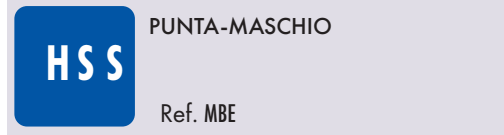
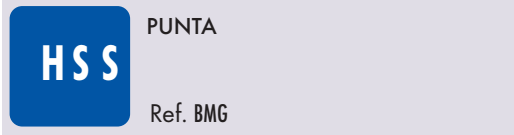


	DESCRIZIONE	Ø x L mm	€
P350AA-1	Frese a carotare MB350ST Ø18-36 mm	Ø8x91	19,96
P500AA	Frese a carotare MB500ST Ø37-50 mm	Ø8x112	22,39

PUNTE, PUNTA-MASCHIO E SVASATORE PER MACCHINE A SUPPORTO MAGNETICO

Fresse a Carotare

Rosa



			BMG		BMGL	
	∅ mm	L ₂ mm	€	L ₂ mm	€	
BMG0600	6,00	25	35,68	50	44,60	
BMG0675	6,75	25	41,98	50		
BMG0700	7,00	25	41,98	50	52,49	
BMG0800	8,00	25	41,98	50	52,49	
BMG0850	8,50	25	41,98	50		
BMG0900	9,00	25	41,98	50	52,49	
BMG1000	10,00	25	44,23	50	55,29	
BMG1020	10,20	25	44,23	50		
BMG1100	11,00	25	44,23	50	55,29	
BMG1200	12,00	25	44,23	50	55,29	
BMG1300	13,00	25	47,36	50	63,00	
BMG1400	14,00	25	48,25	50	64,18	
BMG1500	15,00	25	48,71	50	65,76	
BMG1600	16,00	25	60,10	50	75,14	

				MBE
	∅	L ₁ x L ₂ x L ₃ mm	FILETTATURA	€
MBE8M08X1,25	6,75	110x12,5x15	M 8 x 1,25	82,61
MBE8M10X1,50	8,50	113x15,0x15	M10 x 1,50	82,61
MBE8M12X1,75	10,20	117x18,0x16	M12 x 1,75	82,61
MBE8M14X2,00	12,00	117x20,0x16	M14 x 2,00	82,61
MBE8M16X2,00	14,00	117x20,0x16	M16 x 2,00	82,61
MBE8M18X2,50	15,50	130x25,0x16	M18 x 2,50	82,61
MBE8M20X2,50	17,50	135x25,0x16	M20 x 2,50	91,88
MBE8M22X2,50	19,50	135x25,0x17	M22 x 2,50	98,22
MBE8M24X3,00	21,00	148x30,0x17	M24 x 3,00	131,16
MBE8M27X3,00	24,00	155x30,0x18	M27 x 3,00	167,57
MBE8M30X3,50	26,50	169x63,0x19	M30 x 3,50	190,68



		ABE
	∅ mm	€
ABE25	25	91,61
ABE30	30	102,41
ABE40	40	119,94
ABE50	50	167,16
ABE55	55	183,26
ABE63	63	247,15



PUNTA SVASATORE E ADATTATORE PER MACCHINE A SUPPORTO MAGNETICO

HSS

PUNTA SVASATORE

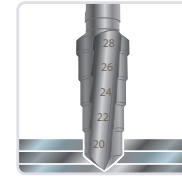
Ref. MBE



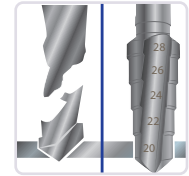
WELDON
Ø 19,05mm

Ref. MBE20-28
Tipo A

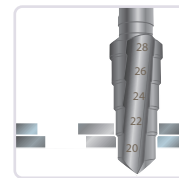
Ref. MBE22-26
Tipo B



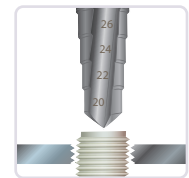
Misure multiple di fori in un solo utensili.



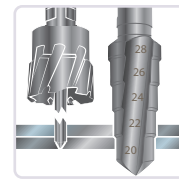
Design più compatto che allunga la vita dell'utensile ed evita rotture scomode.



È possibile trapanare due pezzi separate e allineare 2 fori non coassiali.



Allarga facilmente i fori.



Trapani su set di fori, senza pericolo di rottura, come accade con le frese a tazza.



Non sono necessari accessori come il punzone guida.

MBE					
	Ø Z mm minore-maggiore	Geometria	Z	Lz mm	€
MBE08-16	8 - 10 - 12 - 14 - 16	Tipo A	5	12	43,70
MBE10-18	10 - 12 - 14 - 16 - 18	Tipo A	5	12	48,37
MBE20-28	20 - 22 - 24 - 26 - 28	Tipo A	5	12	68,94
MBE30-38	30 - 32 - 34 - 36 - 38	Tipo B	5	12	107,32
MBE40-48	40 - 42 - 44 - 46 - 48	Tipo B	5	12	153,73
MBE10-14	10 - 12 - 14	Tipo A	3	25	37,15
MBE16-20	16 - 18 - 20	Tipo A	3	25	53,01
MBE22-26	22 - 24 - 26	Tipo B	3	25	63,63
MBE28-32	28 - 30 - 32	Tipo B	3	25	86,15
MBE34-38	34 - 36 - 38	Tipo B	3	25	107,35
MBE40-44	40 - 42 - 44	Tipo B	3	25	132,51
MBE46-50	46 - 48 - 50	Tipo B	3	25	159,04

Geometria di tipo A: Con punta e taglio al centro.

Geometria di tipo B: Senza punta e senza taglio al centro. Ingrandisce solo i fori precedentemente realizzati.

HSS

ADATTATORE DOPPIO WELDON 19.05 A 1/4" ESAGONALE

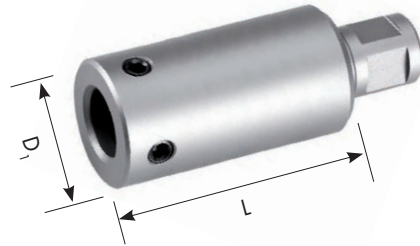
Ref. MBEHEX1/4



Ref. MBEHEX1/4

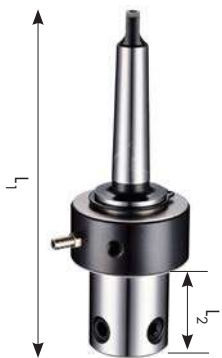
MBEHEX1/4		
	DESCRIZIONE	€
MBEHEX1/4	DOPPIO WELDON 19,05 a 1/4" HEX	16,29

ESTENSIONI PER FRESE A CAROTARE SU TRAPANI CON BASE MAGNETICA

ATTACCO: 19,05 mm DOBLE WELDON
USCITA: 19,05 mm WELDON


	L mm	D ₁ mm	ACRWX
			€
ACRWX75	75	35	40,78
ACRWX100	100	35	90,52
ACRWX150	150	35	119,49
ACRWX200	200	35	161,74
ACRWX250	250	35	201,56

Questo adattatore alloggia al suo interno un punzone di prolunga che permette di utilizzare frese HSS/ HSSCo con il punzone originale, senza la necessità di cambiarlo con uno extra lungo. Nel caso di utilizzo di frese dentate in metallo duro, il cui punzone è di 8 mm, occorre sostituire il punzone con uno più lungo, come P1500CA, P2000CA o P2500CA.

MANDRINI PER TRAPANI CON BASE MAGNETICA E TRAPANI A COLONNA


Ref. CMN°2



Ref. CMN°2SR



Ref. CMN°2CR



Ref. CMN°3



Ref. CMN°3SR



Ref. CMN°3x32



Ref. CMN°4x32



	L2 mm	L1 mm	CM	Uscita	Refrigerazione	€
CMN°2	43	158	2	19,05	Con	176,13
CMN°2SR	43	158	2	19,05	Senza	140,90
CMN°2CR	43	158	2	19,05 Quick- IN	Con	288,01
CMN°3	43	177	3	19,05	Con	188,72
CMN°3SR	43	177	3	19,05	Senza	150,97
CMN°3CR	43	177	3	19,05 Quick- IN	Con	288,01
CMN°4	80	250	4	19,05	Con	294,13
CMN°5	80	270	5	19,05	Con	347,25
CMN°3x32	116	229	3	32,00	Con	240,85
CMN°4x32	116	250	4	32,00	Con	312,78

ADATTATORI PER ALTRI TIPI DI ATTACCHI



ACR18W

ATTACCO: 18 mm FEIN
USCITA: 19,05 mm DOPPIO WELDON



ACRWB16

ATTACCO: NITTO
USCITA: 19,05 mm DOPPIO WELDON



ACR18W
37,67 €

ATTACCO: 19,05 mm DOPPIO WELDON
USCITA: FILETTATURA M18 X 6 P1,5



ACRNITTO
40,78 €

ATTACCO: 19,05 mm DOPPIO WELDON
USCITA: B16



ACRWM18X6P1,5
40,78 €

ATTACCO: NITTO
USCITA: FILETTATURA M18 X 6 P1,5



ACRWB16
40,78 €

ATTACCO: 18 mm FEIN
USCITA: B16



ACRNM18X6P1,5
40,78 €

ATTACCO: 19,05 mm DOPPIO WELDON
USCITA: 1/2 X 20 UNF



ACR18B16
40,78 €

ATTACCO: NITTO / 19,05 mm DOPPIO WELDON
USCITA: B16



ACRW1/2X20
40,78 €

ATTACCO: NITTO / 19,05 mm DOPPIO WELDON
USCITA: 1/2 X 20 UNF

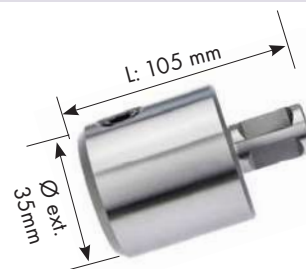


ACRNB16
40,78 €

ATTACCO: 19,05 mm DOPPIO WELDON
USCITA: 32 mm DOPPIO WELDON



ACRN1/2X20
40,78 €



ACRWX32
40,78 €

KIT ED ESPOSITORI IN METACRILATO CON FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO

Frese a Carotare

Rosa



Dimensioni: 210 x 210 x 210 mm

	Contenuto:	€
EFB250R1	6 Frese a carotare Ref. 250R: Ø12-14-16-18-20-22 mm 2 Punzoni	275,72
EFB250R2	6 Frese a carotare Ref. 250R: Ø24 - 25 - 26 - 28 - 30 - 32 mm 2 Punzoni	368,19
EFB250C1	6 Frese a carotare Ref. 250C: Ø12-14-16-18-20-22 mm 2 Punzoni	434,88
EFB250C2	6 Frese a carotare Ref. 250C: Ø24 - 25 - 26 - 28 - 30 - 32 mm 2 Punzoni	677,71
250RM14-24	6 Frese a carotare Ref. 250R: Ø14-16-18-20-22-24 mm 1 Punzón	259,85
EFB500R1	6 Frese a carotare Ref. 500R: Ø12-14-16-18-20-22 mm 2 Punzoni	366,16
EFB500C1	6 Frese a carotare Ref. 500C: Ø12-14-16-18-20-22 mm 2 Punzoni	614,23

Contenuto: 20 Frese a carotare

CFBE01

HSSRef. 250R: Ø 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm
Ref. 500R: Ø 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm**880,99 €**

Contenuto: 20 Frese a carotare

CFBE02

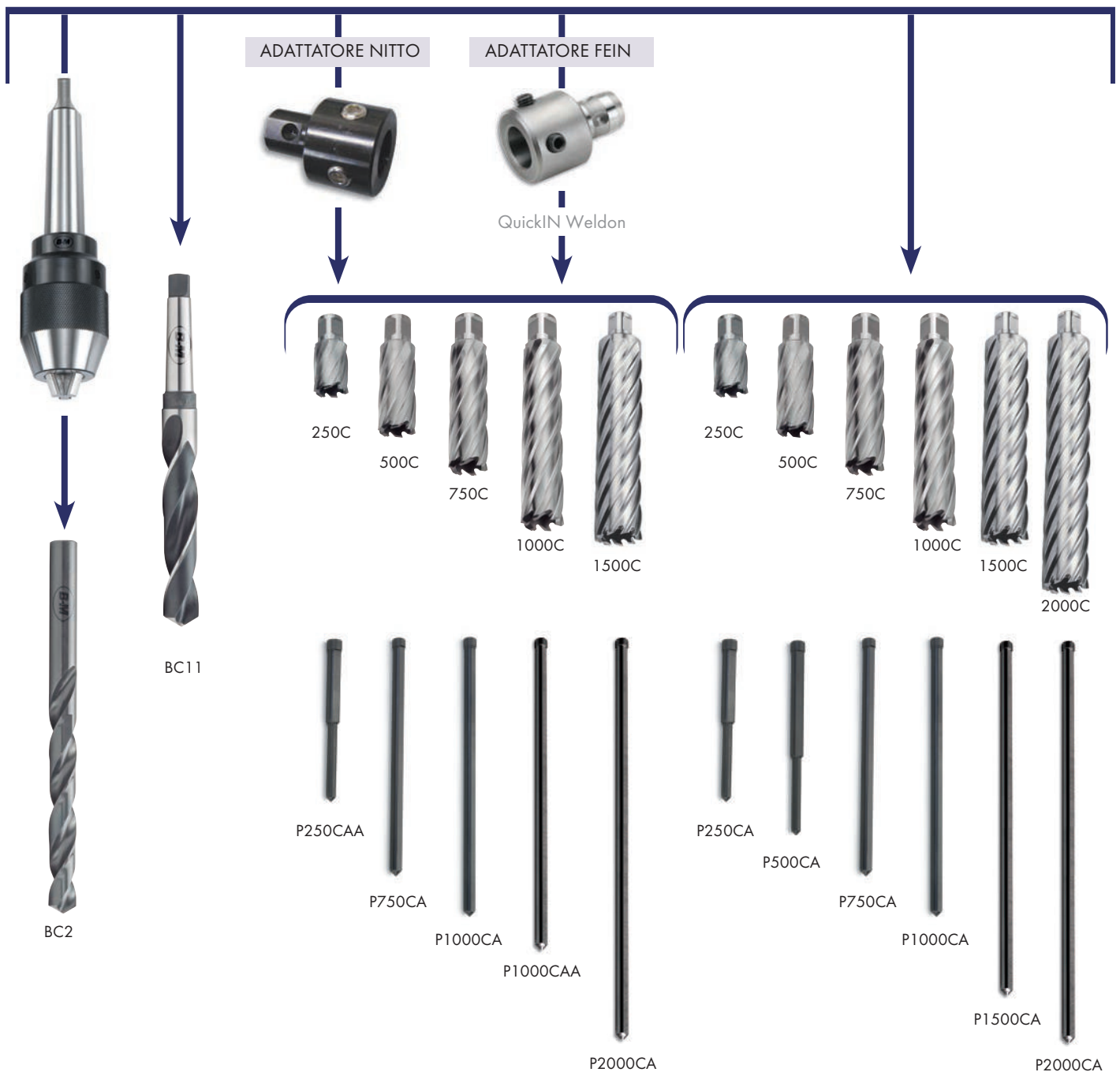
HSS CoRef. 250C: Ø 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm
Ref. 500C: Ø 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm**1.388,68 €**

Contenuto: 18 Frese a carotare

CFBE03

MDRef. 350A: Ø 14 - 16 - 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm
Ref. 500A: Ø 18 - 20 - 22 - 24 - 26 - 28 - 30 - 32 mm**2.828,93 €**

DIAGRAMMA ILLUSTRATIVO DEGLI ACCESSORI PER FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO



CONDIZIONI DI TAGLIO PER FRESE A CAROTARE PER MACCHINE A SUPPORTO MAGNETICO

mm/GIRO						
250R - 500R - 1500C - 2000C	0,053	-	0,05	0,075	0,12	-
250C - 500C - 750C - 1000C - MB350AT - MB500AT	0,063	-	0,055	0,085	0,15	-
350A - 500A - 750A - 1000A - MB350ST - MB500ST	0,10	0,075	0,10	0,15	0,22	0,07

SCELTA DELLE R.P.M. PER FRESE A CAROTARE 250R - 500R - 250C - 500C - 750C - 1000C - 1500C - 2000C

Vc (m/min)	SCELTA DIAMETRO (Ø mm)												
	10	15	20	25	30	35	40	50	60	70	80	90	100
100	3183	2122	1952	1273	1061	909	796	637	531	455	398	354	318
95	3024	2016	1512	1512	1008	864	756	605	504	432	378	336	302
90	2865	1910	1432	1432	955	819	716	573	477	409	358	318	286
85	2706	1804	1353	1353	902	773	676	541	451	387	338	301	271
80	2547	1698	1273	1276	849	728	637	509	424	364	318	283	255
75	2387	1592	1194	1194	796	682	597	477	398	341	298	265	239
70	2228	1485	1114	1114	743	637	557	446	371	318	279	248	223
65	2069	1379	1035	1035	690	591	517	414	345	296	259	230	207
60	1910	1273	955	922	637	546	477	382	318	273	239	212	191
55	1751	1167	875	875	584	500	438	350	292	250	219	195	175
50	1592	1061	796	796	531	455	398	318	265	227	199	177	159
45	1432	955	716	716	477	409	658	286	239	205	179	159	143
40	1273	849	637	637	424	364	618	255	212	192	159	141	127
35	1114	743	557	557	371	318	279	223	186	159	139	124	111
30	955	637	477	477	318	273	239	191	159	136	119	106	95
25	796	531	398	398	265	227	199	159	133	114	99	88	80
20	637	424	318	318	212	182	159	127	106	91	80	71	64
15	477	318	239	239	159	136	119	95	80	68	60	53	48
10	318	212	159	159	106	91	80	64	53	45	40	35	32

SCELTA DIAMETRO (Ø mm)

SCELTA DELLE R.P.M. PER FRESE A CAROTARE 350A - 500A - 750A - 1000A - MB350ST - MB500ST

Vc (m/min)	SCELTA DIAMETRO (Ø mm)												
	10	15	20	25	30	35	40	50	60	70	80	90	100
100	3183	2122	1952	1273	1061	909	796	637	531	455	398	354	318
95	3024	2016	1512	1512	1008	864	756	605	504	432	378	336	302
90	2865	1910	1432	1432	955	819	716	573	477	409	358	318	286
85	2706	1804	1353	1353	902	773	676	541	451	387	338	301	271
80	2547	1698	1273	1276	849	728	637	509	424	364	318	283	255
75	2387	1592	1194	1194	796	682	597	477	398	341	298	265	239
70	2228	1485	1114	1114	743	637	557	446	371	318	279	248	223
65	2069	1379	1035	1035	690	591	517	414	345	296	259	230	207
60	1910	1273	955	922	637	546	477	382	318	273	239	212	191
55	1751	1167	875	875	584	500	438	350	292	250	219	195	175
50	1592	1061	796	796	531	455	398	318	265	227	199	177	159
45	1432	955	716	716	477	409	658	286	239	205	179	159	143
40	1273	849	637	637	424	364	618	255	212	192	159	141	127
35	1114	743	557	557	371	318	279	223	186	159	139	124	111
30	955	637	477	477	318	273	239	191	159	136	119	106	95
25	796	531	398	398	265	227	199	159	133	114	99	88	80
20	637	424	318	318	212	182	159	127	106	91	80	71	64
15	477	318	239	239	159	136	119	95	80	68	60	53	48
10	318	212	159	159	106	91	80	64	53	45	40	35	32

SCELTA DIAMETRO (Ø mm)