

DIAMANTOVÉ NÁSTROJE



panas
rezné nástroje a údržba foriem

SUPERABRASIVI-SUPERABRASIVES

Specifica Materiali Super Abrasivi:

- Diamante
- CBN (Borazon), Nitruro di Boro Cubico.

Sono definiti "Super-Duri" perché la loro durezza è decisamente superiore a quella degli abrasivi tradizionali; il corindone, il carburo di silicio etc. Il Diamante ha durezza 10 nella scala di Mohs, il CBN è di poco inferiore. Nella scala di knoop il diamante ha durezza superiore a 8500Kg/mm² mentre il CBN 4500Kg/mm² circa. Esistono diverse tipologie di diamante, da quello presente in natura e quindi detto "Diamante naturale" alle diverse varietà prodotte industrialmente e quindi detto "Sintetico". Il CBN non esiste in natura ma viene prodotto solo industrialmente.

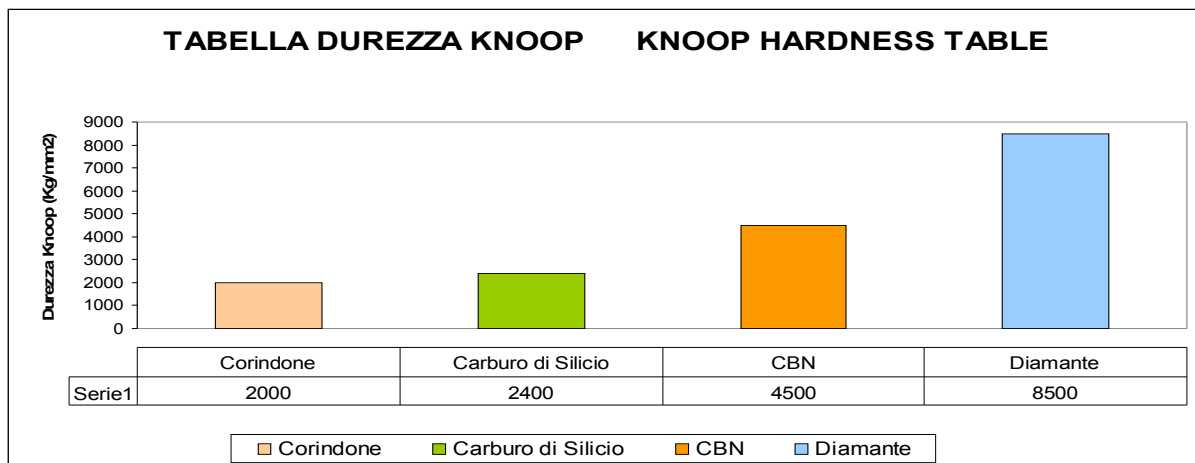
Super Abrasives Materials:

- Diamond
- CBN (Borazon), Cubic Boron Nitride.

The assignment of Superabrasives derives from the factor that their hardness is significantly higher than all other conventional abrasives, such as corundum, carbide silicon etc.

The Diamond hardness is 10 in the Mohs scale, the CBN is slightly lower. In the scale of knoop, the Diamond hardness is over 8500kg/mm². There are different types of diamonds: when it is naturally occurring, it is called "natural Diamond". Other different varieties are produced industrially and called "Synthetic Diamonds".

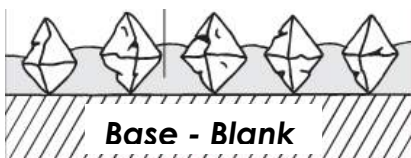
The CBN does not exist in nature but it is produced industrially.



Granulometrie Grit	FEPA	Uso Application
Estremamente Fine	D15	Finitura <i>Finishing</i>
Molto Fine	D25 D46	Pre-Finitura <i>Pre-Finishing</i>
Fine	D91	Eliminazione Rugosità <i>Roughness Removal</i>
Media	D126	Utilizzo Universale <i>Universal Use</i>
Grossa	D151 D181	Asportazione <i>Removal</i>
Molto Grossa	D251	Asportazione <i>Removal</i>

Definizione granulometria [µm] ISO 6106 (FEPA Standard)		Mesh Size	Ra Ottenibile Roughness
Diamond	CBN	Micron	Ra
D15	-	-	
D25	-	-	
D46	B46	325/400	
D54	B54	270/325	0,4-0,5
D64	B64	230/270	
D76	B76	200/230	0,6-0,8
D91	B91	170/200	0,8-1,2
D107	B107	140/170	
D126	B126	120/140	1,0-1,4
D151	B151	100/120	1,4-1,6
D181	B181	80/100	2,2-2,6
D213	B213	70/80	
D251	-	60/70	
-	B252	60/80	3,0-3,2
D301	B301	50/60	
D357	B357	45/50	
D427	B427	40/50	
D502	-	35/45	
D602	-	30/40	
D852	-	20/30	

Nichel



Utilizzo del Diamante e del CBN per Materiali Lavorati

Use of Diamond and CBN for Machined Materials

Materiali -Materials	Diamond	CBN
GFK-CFK, resine epossidiche GFK-CFK epoxy resins	X	-
Carbone per elettrodi, grafite Coal for electrode, graphite	X	-
Ceramica, allumina, carburo di silicio Ceramics, alumina, silicium carbide	X	-
Carburo di tungsteno Tungsten carbide	X	-
Materiali magnetici, ferrite Magnetic materials, ferrite	X	-
Metalli duri e sinterizzati, PCD/PCB Hard and sintered materials, PCD/PCB	X	-
Ghisa, ghisa grigia, ghisa sferoidale Cast iron, grey cast iron, nodular grey	X	X
Stellite	-	X
Superleghe a base di Nichel Superalloy based on Nichel	-	X
Acciaio al cromo e per cuscinetti Chromium steels and for bearings	-	X
Acciai super rapidi e acciai per utensili HSS and tool steels	-	X

Vantaggi degli Utensili in Diamante e CBN

Advantages of Diamond and CBN tools

- Elevata vita utensile e tenuta della forma
- High tool life and grip shape
- Riduzione tempi morti di lavorazione
- Reduction in machining time
- Diminuzione del numero di ravvivature
- Decrease in the number of rattractions
- Minori sostituzioni dell'utensile
- Less tool replacements
- Il pezzo non viene danneggiato termicamente
- The piece is not thermally damaged
- Durante la lavorazione non si generano forti aumenti della temperatura
- During operation do not generate strong increases in temperature
- Qualità costante su una grande quantità di pezzi
- Consistent quality on a large amount of pieces

Consigli d'Utilizzo - Advice for Use

DIAMANTE
Il diamante non si utilizza per la lavorazione degli acciai poiché la reazione chimica che si sviluppa dall'interazione del ferro contenuto nell'acciaio e il carbonio contenuto nel diamante causa una veloce usura dell'utensile. Nel punto di contatto del grano di diamante con il materiale lavorato si sviluppano elevate temperature. L'acciaio sottrae al diamante atomi di carbonio provocando la distruzione del grano del diamante che si trasforma in grafite cambiando stato cristallino. Utilizzare quindi il diamante per lavorare l'acciaio è anti economico.

DIAMOND
Do not use diamond for machining of steels because the chemical reaction that develops from the interaction of the iron content in steel and carbon in the diamond causes a fast tool wear. At the point of contact of diamond grain with the worked material, develop high temperatures. Diamond steel subtracts carbon atoms causing the destruction of diamond grain, which transforms into graphite changing state crystalline. To use the diamond to work steel is not economical. For machining ferrous material shall be used CBN.

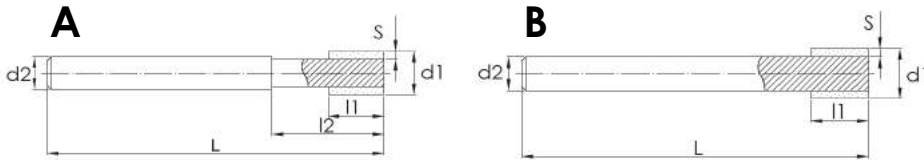
CBN
Il CBN è composto da boro e azoto ed è meno duro del diamante. In compenso però non reagisce con il ferro contenuto nell'acciaio. Al contrario del diamante, nel CBN non è presente alcun atomo di carbonio rendendolo indicato per lavorare l'acciaio. Utilizzando il CBN si hanno considerevoli vantaggi. Mentre il diamante a 700°C ha una elevata perdita di durezza, il CBN la mantiene pressoché invariata anche a temperature superiori dei 1000°C e può quindi essere utilizzato in condizioni molto più gravose.

CBN
The CBN consists of boron and nitrogen and is less hard than diamond. On the other hand, however, does not react with the iron in steel. Unlike the diamond, the CBN has no carbon atom, making it suitable for machining steel. Using the CBN will have considerable advantages. While the diamond at 700°C has a high loss of hardness, CBN keeps almost unchanged even at temperatures in excess of 1000° and then can be used in much more difficult conditions.

Grit Size FEPA	Spessore Strato Rivestimento Electroplated Layer Thickness	Incremento del Ø Ø Increase
D46	0,075	0,15
D54	0,09	0,18
D76	0,1	0,2
D91	0,125	0,25
D107	0,14	0,28
D126	0,18	0,36
D151	0,2	0,4
D181	0,22	0,44
D251	0,28	0,56
D301	0,35	0,7
D427	0,5	1
D502	0,6	1,2
D602	0,75	1,5
D711	0,85	1,7

Molette Cilindriche per Interni Electrodepositate in Diamante & CBN

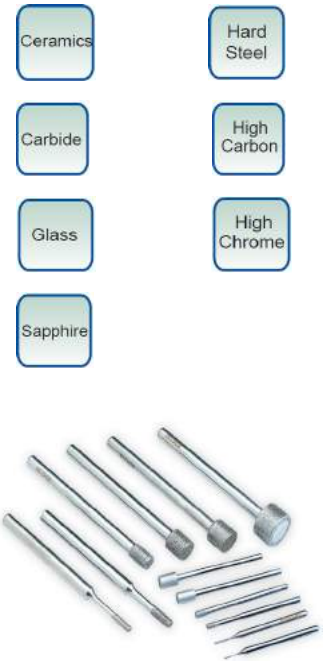
Electroplated Diamond & CBN Cylindrical Wheels for Internal Grinding



CODE		Type	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	€URO	
Diamond	CBN								Diamond	CBN
X003D3	X003B3	A	0.3	3.0	2	4	35	600		
X004D3	X004B3	A	0.4	3.0	2	5	35	D46/400		
X005D3	X005B3	A	0.5	3.0	2	5	35	D46/400		
X006D3	X006B3	A	0.6	3.0	3	5	40	D76/200		
X007D3	X007B3	A	0.7	3.0	3	8	40	D76/200		
X008D3	X008B3	A	0.8	3.0	3	8	40	D76/200		
X009D3	X009B3	A	0.9	3.0	4	8	40	D76/200		
X010D3	X010B3	A	1.0	3.0	5	8	40	D76/200		
X015D3	X015B3	A	1.5	3.0	5	8	45	D107/150		
X020D3	X020B3	A	2.0	3.0	5	12	45	D107/150		
X025D3	X025B3	A	2.5	3.0	5	15	45	D107/150		
X030D3	X030B3	A	3	3.0	5	15	45	D107/150		
X040D3	X040B3	B	4	3.0	5	-	50	D107/150		
X050D3	X050B3	B	5	3.0	8	-	50	D107/150		
X060D3	X060B3	B	6	3.0	8	-	50	D107/150		
X040D6	X040B6	A	4	6.0	10	22	80	D151/100		
X050D6	X050B6	A	5	6.0	10	22	80	D151/100		
X060D6	X060B6	A	6	6.0	10	22	80	D151/100		
X070D6	X070B6	B	7	6.0	10	-	80	D151/100		
X080D6	X080B6	B	8	6.0	10	-	80	D151/100		
X090D6	X090B6	B	9	6.0	10	-	80	D151/100		
X100D6	X100B6	B	10	6.0	10	-	80	D151/100		
X120D6	X120B6	B	12	6.0	10	-	80	D151/100		
X140D6	X140B6	B	14	6.0	10	-	80	D151/100		
X160D6	X160B6	B	16	6.0	10	-	80	D151/100		
X180D6	X180B6	B	18	6.0	10	-	80	D151/100		
X200D6	X200B6	B	20	6.0	10	-	80	D151/100		

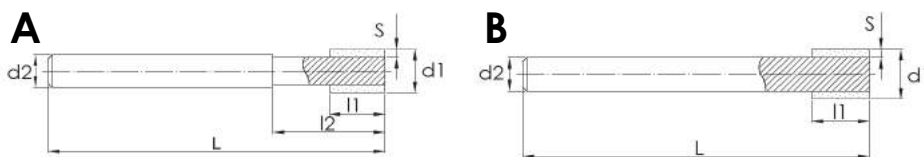
Diamond

CBN



Molette Vetrificate Cilindriche in CBN per Interni ed Esterni

Vetrified CBN Cylindrical Wheels for Internal Grinding



CODE	Type	S mm	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	€URO	
									Diamond	CBN
XV4003	A	1,0	4	3,0	6	12	60	D76/200		
XV5003	A	1,5	5	3,0	6	12	60	D76/200		
XV6003	A	2,0	6	3,0	6	12	60	D76/200		
XV8003	A	3,0	8	3,0	8	12	60	D76/200		
XV1006	B	2,0	10	6,0	8	-	80	D76/200		
XV1206	B	3,0	12	6,0	10	-	80	D76/200		
XV1408	B	3,0	14	8,0	12	-	80	D76/200		
XV1406	B	4,0	14	6,0	12	-	80	D76/200		
XV1608	B	4,0	16	8,0	12	-	80	D76/200		
XV1606	B	5,0	16	6,0	12	-	80	D76/200		
XV1808	B	5,0	18	8,0	12	-	80	D76/200		
XV1806	B	6,0	18	6,0	12	-	80	D76/200		

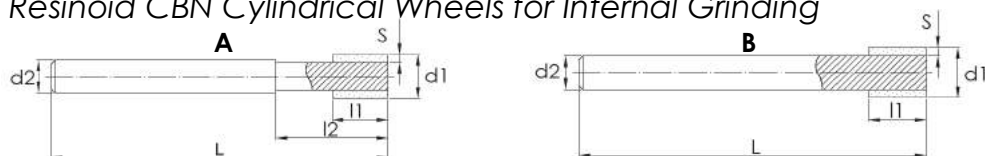
Hard Alloy Steel

High Speed Steel



Molette Resinoidi Cilindriche in CBN per Interni ed Esterni

Resinoid CBN Cylindrical Wheels for Internal Grinding



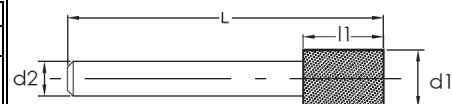
CODE	Type	S mm	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	EURO	
									Diamond	CBN
XR4003	A	1,0	4,0	3,0	5	12	45	D76/200		
XR4503	A	1,25	4,5	3,0	6	12	45	D76/200		
XR5006	A	1,5	5,0	3,0	6	12	45	D76/200		
XR6006	A	2,0	6,0	6,0	6	15	80	D107/150		
XR7006	A	2,5	7,0	6,0	8	15	80	D107/150		
XR8006	A	3,0	8,0	6,0	8	20	80	D107/150		
XR1006	A	2,0	10,0	6,0	10	20	80	D107/150		
XR1206	B	3,0	12,0	6,0	10	-	80	D107/150		
XR1406	B	4,0	14,0	6,0	10	-	80	D107/150		
XR1606	B	4,0	16,0	6,0	10	-	80	D107/150		
XR1806	B	5,0	18,0	6,0	10	-	80	D107/150		
XR2006	B	6,0	20,0	6,0	10	-	80	D107/150		



Molette Elettrodepositate in Diamante & CBN Gambo Ø6mm

Electroplated Diamond & CBN Shaped Points Shank Ø6mm

CODE	SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	Grit Size	EURO	
								Diamond	CBN
XB65-6		6,5	6	15	-	60	40-60-100		
XB80-6		8,0	6	15	-	60	40-60-100		
XB10-6		10,0	6	10	11	60	40-60-100		
XB11-6		10,0	6	19	12	60	40-60-100		
XB12-6		10,0	6	32	15	60	40-60-100		
XB18-6		18,0	6	26	-	60	40-60-100		
XC60-4		6,0	6	32	-	60	40-60-100		
XC65-6		6,5	6	15	-	60	40-60-100		
XC80-6		8,0	6	15	-	60	40-60-100		
XC10-6		10,0	6	19	-	60	40-60-100		
XF65-6		6,5	6	22	-	60	40-60-100		
XF70-6		7,0	6	22	-	60	40-60-100		
XF80-6		8,0	6	15	-	60	40-60-100		
XF10-6		10,0	6	19	-	60	40-60-100		
XG10-6		10,0	6	19	-	60	40-60-100		
XM60-6		6,0	6	12	-	60	40-60-100		
XM61-6		6,0	6	15	-	60	40-60-100		
XM80-6		8,0	6	15	-	60	40-60-100		
XM10-6		10,0	6	20	-	60	40-60-100		
XD80-6		8,0	6	-	-	60	40-60-100		
XD10-6		10,0	6	-	-	60	40-60-100		
XD16-6		16,0	6	-	-	60	40-60-100		
XD20-6		20,0	6	-	-	60	40-60-100		
XE60-6		6,0	6	13	-	60	40-60-100		
XE90-6		9,0	6	18	-	60	40-60-100		
XE10-6		10,0	6	16	-	60	40-60-100		
XE12-6		12,0	6	25	-	60	40-60-100		
XH80-6		8,0	6	15	-	60	40-60-100		
XL65-6		6,5	6	25	-	60	40-60-100		
XY80-6		8,0	6	5	-	60	40-60-100		
XY16-6		16,5	6	6	-	60	40-60-100		
XY20-6		20,0	6	6	-	60	40-60-100		
XY25-6		25,0	6	7	-	60	40-60-100		
XX25-6		25,0	6	4	-	60	40-60-100		
XT25-6		25,0	6	5	-	60	40-60-100		
XA10-6		10,0	6	1,2	-	60	40-60-100		

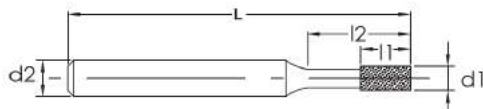


SET/BM-10 10Pcs.

In caso d'ordine specificare la grana
In case of order specify the grit

Molette Electrodepositate in Diamante & CBN Gambo Ø3mm

Electroplated Diamond & CBN Shaped Points Shank Ø3mm



CODE		SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	EURO	
Diamond	CBN								Diamond	CBN
*XB10	*XB101		1,0	3	8	-	45	D107/150		
*XB15	*XB151		1,5	3	8	-	45	D107/150		
*XB20	*XB201		2,0	3	8	11	45	D126/120		
*XB25	*XB251		2,5	3	8	12	45	D126/120		
*XB30	*XB301		3,0	3	10	15	45	D126/120		
*XB35	*XB351		3,5	3	10	-	45	D126/120		
XB40	XB401		4,0	3	10	-	45	D126/120		
XB50	XB501		5,0	3	10	-	45	D151/100		
XB60	XB601	6,0	3	10	-	45	D151/100			
XC10	XC101		1,0	3	8	-	45	D107/150		
*XC15	*XC151		1,5	3	8	-	45	D107/150		
*XC20	*XC201		2,0	3	8	11	45	D126/120		
*XC25	*XC251		2,5	3	8	12	45	D126/120		
*XC30	*XC301		3,0	3	10	15	45	D126/120		
XC35	XC351		3,5	3	10	-	45	D126/120		
XC40	XC401		4,0	3	10	-	45	D126/120		
XC50	XC501		5,0	3	10	-	45	D151/100		
XC60	XC601	6,0	3	10	-	45	D151/100			
XL12	XL121		1,2	3	16	-	45	D107/150		
*XL15	*XL151		1,5	3	10	-	45	D107/150		
XL16	XL161		1,5	3	13	-	45	D107/150		
*XL20	*XL201		2,0	3	12	-	45	D107/150		
*XL30	*XL301		3,0	3	14	-	45	D126/120		
*XM20	*XM201		2,0	3	12	-	45	D107/150		
*XM30	*XM301		3,0	3	15	-	45	D107/150		
XM40	XM401		4,0	3	15	-	45	D107/150		
XM50	XM501		5,0	3	15	-	45	D107/150		
XM60	XM601		6,0	3	13	-	45	D107/150		
*XH20	*XH201		2,0	3	10	-	45	D126/120		
XH30	XH301		3,0	3	10	-	45	D126/120		
XZ30	XZ301		3,0	3	10	-	45	D126/120		
*XF20	*XF201		2,0	3	10	-	45	D126/120		
*XF30	*XF301		3,0	3	12	-	45	D126/120		
XF33	XF331		3,3	3	15	-	45	D126/120		
XF40	XF401		4,0	3	10	-	45	D126/120		
XF50	XF501		5,0	3	10	-	45	D151/100		
XF60	XF601		6,0	3	10	-	45	D151/100		
XF61	XF611		6,0	3	12	-	45	D151/100		
XG30	XG301		3,0	3	14	-	45	D126/120		
XG40	XG401		4,0	3	9	-	45	D126/120		
XG50	XG501		5,0	3	10	-	45	D126/120		
XG51	XG511		5,0	3	13	-	45	D126/120		
XG60	XG601		6,0	3	13	-	45	D151/100		
XD10	XD101		1,0	3	-	-	45	D76/200		
XD15	XD151		1,5	3	-	-	45	D107/150		
*XD20	*XD201		2,0	3	-	-	45	D107/150		
XD25	XD251		2,5	3	-	-	45	D126/120		
*XD30	*XD301		3,0	3	-	-	45	D126/120		
XD40	XD401		4,0	3	-	-	45	D126/120		
XD50	XD501		5,0	3	-	-	45	D151/100		
XD60	XD601		6,0	3	-	-	45	D151/100		
XD80	XD801	8,0	3	-	-	45	D151/100			
XE30	XE301		3,0	3	5	-	45	D126/120		
XE40	XE401		4,0	3	7	-	45	D126/120		
XE50	XE501		5,0	3	9	-	45	D151/100		
XE51	XE511		5,0	3	12	-	45	D151/100		
XE60	XE601		6,0	3	10	-	45	D151/100		
XJ20	XJ201			2,0	3	4	-	45	D126/120	
XJ30	XJ301	3,0		3	6	-	45	D126/120		
XJ40	XJ401	4,0		3	8	-	45	D126/120		

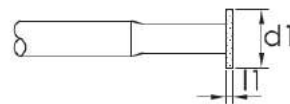


- SET/BMS-30 30Pcs. DIAMOND
- SET/BMB-30 30Pcs. CBN
- *SET/BMS-20 20Pcs. DIAMOND
- *SET/BMB-20 20Pcs. CBN



Molette a T Electrodepositate in Diamante & CBN Gambo Ø3mm

Electroplated Diamond & CBN T Shape Shank Ø3mm

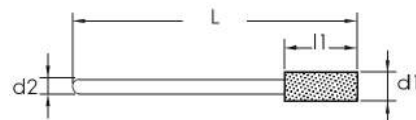


CODE		SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	EURO	
Diamond	CBN								Diamond	CBN
XT131	XT1311		13,0	3	1	-	45	D151/100		
XT1315	XT13151		13,0	3	1,5	-	45	D151/100		
XT132	XT1321		13,0	3	2	-	45	D151/100		
XT1325	XT13251		13,0	3	2,5	-	45	D151/100		
XT133	XT1331		13,0	3	3	-	45	D151/100		
XT1335	XT13351		13,0	3	3,5	-	45	D151/100		
XT134	XT1341		13,0	3	4	-	45	D151/100		
XY1315	XY13151		13,0	3	1,5	-	45	D151/100		
XY132	XY1321		13,0	3	2	-	45	D151/100		
XY1325	XY13251		13,0	3	2,5	-	45	D151/100		
XY133	XY1331		13,0	3	3	-	45	D151/100		
XY1335	XY13351		13,0	3	3,5	-	45	D151/100		
XY134	XY1341		13,0	3	4	-	45	D151/100		

Molette Sagomate Electrodepositate in Diamante Gambo Ø2,35mm

Electroplated Diamond Shaped Points Shank Ø2,35mm

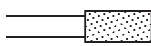



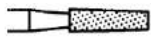
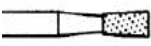
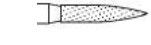
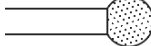
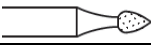
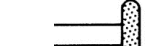




CODE		SHAPE	d1 mm	d2 mm	l1 mm	L mm	FEPA/GRIT	EURO	
Diamond	CBN							Diamond	CBN
*XB11-2	-		1,1	2,35	7	45	D107/150		
*XB14-2	-		1,4	2,35	7	45	D107/150		
*XB19-2	-		1,9	2,35	7	45	D126/120		
*XB24-2	-		2,4	2,35	7	45	D126/120		
*XB27-2	-		2,7	2,35	7	45	D126/120		
XB30-2	-		3,0	2,35	15	45	D126/120		
*XB32-2	-		3,2	2,35	7	45	D126/120		
XB39-2	-		3,9	2,35	10	45	D126/120		
XB49-2	-		4,9	2,35	10	45	D126/120		
*XC14-2	-			1,4	2,35	7	45	D107/150	
*XC19-2	-	1,9		2,35	7	45	D126/120		
*XC29-2	-	2,9		2,35	7	45	D126/120		
XC39-2	-	3,9		2,35	10	45	D126/120		
XC49-2	-	4,9		2,35	10	45	D126/120		
*XL14-2	-		1,4	2,35	10	45	D107/150		
*XL24-2	-		2,4	2,35	13	45	D107/150		
XL60-2	-		6,0	2,35	14	45	D151/100		
XM15-2	-		1,5	2,35	10	45	D76/200		
*XM18-2	-		1,8	2,35	10	45	D107/150		
*XM24-2	-		2,4	2,35	12	45	D107/150		
XM29-2	-		2,9	2,35	14	45	D107/150		
XU42-2	-		4,2	2,35	6	45	D107/150		
*XH14-2	-		1,4	2,35	7	45	D126/120		
*XH19-2	-		1,9	2,35	7	45	D126/120		
*XH26-2	-		2,6	2,35	7	45	D126/120		
XF25-2	-		2,5	2,35	6	45	D126/120		
*XG17-2	-		1,7	2,35	10	45	D107/150		
XG25-2	-		2,5	2,35	10	45	D107/150		
*XD20-2	-		2,0	2,35	-	45	D107/150		
*XD24-2	-		2,4	2,35	-	45	D126/120		
XD30-2	-		3,0	2,35	-	45	D126/120		
*XD35-2	-		3,5	2,35	-	45	D126/120		
XD39-2	-		3,9	2,35	-	45	D126/120		
XJ30-2	-		3,0	2,35	6	45	D126/120		
XJ60-2	-		6,0	2,35	10	45	D151/100		
XV30-2	-		3,0	2,35	1,5	45	D107/150		
XS16-2	-		16,0	2,35	0,5	45	D76/200		

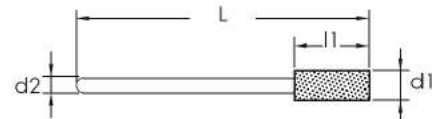


SET/BMR30 30Pcs.	
*SET/BMR20 20Pcs.	

Molette Sagomate Electrodepositate in Diamante Gambo Ø2,35mm

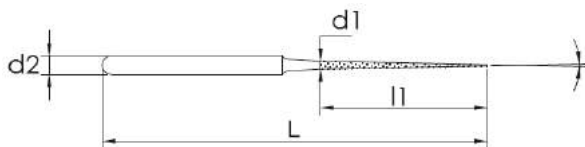
Electroplated Diamond Shaped Points Shank Ø2,35mm

CODE		SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	EURO	
Diamond	CBN								Diamond	CBN
XB10-3	-		1,0	2,35	5	-	45	D76/200		
XB15-3	-		1,5	2,35	5	-	45	D107/150		
XB16-3	-		1,5	2,35	7	-	45	D107/150		
XB25-3	-		2,5	2,35	7	-	45	D126/120		
XB30-3	-		3,0	2,35	7	-	45	D151/120		
XB35-3	-		7,0	2,35	6	-	45	D151/120		
XB40-3	-		8,0	2,35	10	-	45	D181/80		
XL15-3	-		1,5	2,35	10	-	45	D107/150		
XL20-3	-		2,0	2,35	12	-	45	D126/120		
XL25-3	-		2,5	2,35	12	-	45	D126/120		
XL30-3	-		3,0	2,35	12	-	45	D151/120		
XL40-3	-		4,0	2,35	12	-	45	D151/120		
XL50-3	-		5,0	2,35	12	-	45	D151/120		
XL70-3	-		7,0	2,35	12	-	45	D181/80		
XL80-3	-		8,0	2,35	12	-	45	D181/80		
XM15-3	-		1,5	2,35	8	-	45	D76/200		
XM16-3	-		1,5	2,35	10	-	45	D76/200		
XM35-3	-		3,5	2,35	6	-	45	D107/150		
XN10-3	-		1,0	2,35	4	-	45	D76/200		
XN15-3	-		1,5	2,35	4	-	45	D76/200		
XN20-3	-		2,0	2,35	4	-	45	D76/200		
XN30-3	-		3,0	2,35	4	-	45	D76/200		
XH20-3	-		2,0	2,35	8	-	45	D107/150		
XH25-3	-		2,5	2,35	12	-	45	D126/120		
XH26-3	-		2,5	2,35	10	-	45	D126/120		
XH30-3	-		3,0	2,35	10	-	45	D126/120		
XH40-3	-		4,0	2,35	10	-	45	D151/120		
XH50-3	-		5,0	2,35	10	-	45	D151/120		
XJ20-3	-			2,0	2,35	5	-	45	D107/150	
XJ25-3	-	2,5		2,35	7	-	45	D126/120		
XJ70-3	-	7,0		2,35	12	-	45	D181/80		
XG09-3	-		0,9	2,35	4	-	45	D76/200		
XG15-3	-		1,5	2,35	10	-	45	D107/150		
XG20-3	-		2,0	2,35	10	-	45	D126/120		
XD10-3	-		1,0	2,35	-	-	45	D76/200		
XD20-3	-		2,0	2,35	-	-	45	D107/150		
XD30-3	-		3,0	2,35	-	-	45	D126/120		
XD40-3	-		4,0	2,35	-	-	45	D126/120		
XJ40-3	-		4,0	2,35	6	-	45	D126/120		
XT60-3	-		6,0	2,35	1,5	-	45	D126/120		
XT80-3	-		8,0	2,35	2	-	45	D126/120		
XT81-3	-		8,0	2,35	3	-	45	D151/120		
XY40-3	-		4,0	2,35	0,4	-	45	D107/150		
XY50-3	-		5,0	2,35	0,6	-	45	D107/150		
XY60-3	-		6,0	2,35	0,5	-	45	D107/150		
XY10-3	-		10,0	2,35	0,5	-	45	D107/150		
XY11-3	-		10,0	2,35	1	-	45	D126/120		
XY12-3	-		12,0	2,35	0,6	-	45	D126/120		
XY13-3	-		12,0	2,35	1	-	45	D126/120		
XY13-3	-		13,0	2,35	2,5	-	45	D151/120		
XY14-3	-		16,0	2,35	2,5	-	45	D181/80		
XY16-3	-		16,0	2,35	3,5	-	45	D181/80		
XU40-3	-		4,0	2,35	-	-	45	D107/150		
XU60-3	-		6,0	2,35	-	-	45	D126/120		
XU10-3	-		10,0	2,35	-	-	45	D126/120		
XU12-3	-		12,0	2,35	-	-	45	D151/120		
XR27-3	45°		2,7	2,35	-	-	45	D107/150		
XR40-3			4,0	2,35	-	-	45	D107/150		
XR50-3			5,0	2,35	-	-	45	D107/150		
XR60-3			6,0	2,35	-	-	45	D107/150		
XR10-3			10,0	2,35	-	-	45	D151/120		
XV18-3	-		1,8	2,35	0,5	-	45	D76/200		
XV40-3	-		4,0	2,35	0,8	-	45	D107/150		
XV60-3	-		6,0	2,35	1	-	45	D107/150		
XV10-3	-		10,0	2,35	1,6	-	45	D126/120		
XV16-3	-		16,0	2,35	2	-	45	D126/120		



Molette Coniche Electrodepositate in Diamante Gambo Ø3mm

Electroplated Diamond Tapered Points Shank Ø3mm



MIN. ORDINE: 20 PZ. CAD. - MIN. ORDER: 20 PCS. EACH

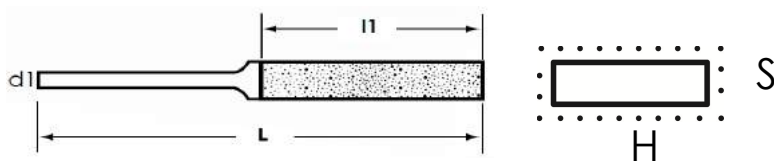
CODE		α°	d1 mm	d2 mm	l1 mm	l2 mm	L mm	FEPA/GRIT	EURO	
Diamond	CBN								Diamond	CBN
X01850	-	3,1	1,8	3	25	-	50	D107/140		
X02155	-	2,8	2,1	3	34	-	55			
X03060	-	6,4	3,0	3	25	-	50			
X04855	-	9,6	4,8	3	26	-	55			
X01560	-	2,3	1,5	3	26	-	60			
X02070	-	1,9	2,0	3	48	-	73			
X02365	-	2,7	2,3	3	40	-	65			
X02570	-	2,6	2,5	3	45	-	70			
X03070	-	4,2	3,0	3	38	-	65			
X06060	-	10	6,0	6	33	-	60		D126/120	
X06061	-	12	6,0	6	28	-	60			
X06062	-	14	6,0	6	23	-	60			
X06063	-	16	6,0	6	21	-	60			
X06064	-	20	6,0	6	17	-	60			
X10060	-	30	10,0	6	19	-	60			



In caso d'ordine specificare la grana
In case of order please specify the grit

Lime elettrodepositate in Diamante gambo Ø3mm

Electroplated Diamond Files Shank Ø3mm

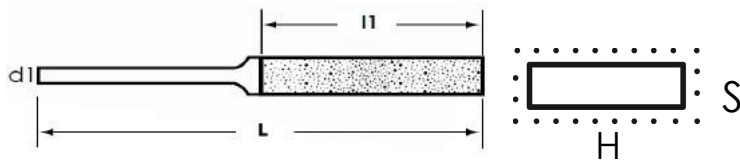


CODE	H x S	SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	EURO		
								D107/150	D76/200	D46/400
XP139.1	5.5 X 0.5		3	-	40	-	140			
XP139.2	5.5 X 0,8		3	-	50	-	140			
XP139.3	5.5 X 1		3	-	50	-	140			

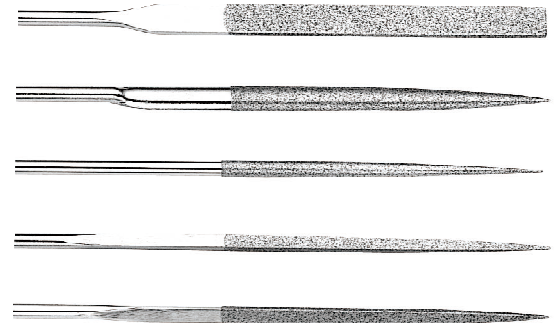
In caso d'ordine specificare la grana
In case of order please specify the grit



Lime Electrodepositate in Diamante Gambo Ø3mm
Electroplated Diamond Files Shank Ø3mm



CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D126/120	D76/200	D46/400
XP140.1	5.5 X 1.5		3	50	140			
XP140.2	5 X 2		3	50	140			
XP140.3	Ø 3		3	50	140			
XP140.4	2,5		3	50	140			
XP140.5	3,5		3	50	140			



SET/XP140 5Pcs.

In case of order please specify the grit
 In case of order please specify the grit

CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D126/120	D76/200	D46/400
XP141.1	5.5 X 1.5		3	70	140			
XP141.2	5 X 2		3	70	140			
XP141.3	Ø 3		3	70	140			
XP141.4	2,5		3	70	140			
XP141.5	3,5		3	70	140			
XP141.6	5.4 X 1.5		3	70	140			
XP141.7	1.7 X 6		3	70	140			
XP141.8	6 X 2		3	70	140			
XP141.9	5 X 2		3	70	140			
XP141.10	6 X 1.5		3	70	140			

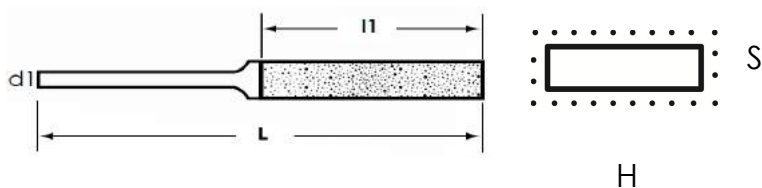


SET/XP141 10Pcs.

In case of order please specify the grit
 In case of order please specify the grit

Lime Electrodepositate in Diamante Gambo Rivestito in PVC Ø3mm

Electroplated Diamond Files Shank Ø3mm Cover With PVC



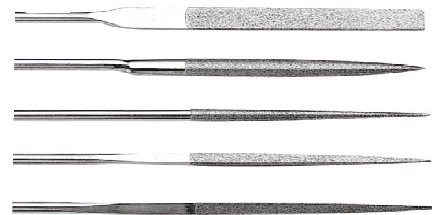
CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D76/200	D107/150	D46/400
XP142.2	5.5 X 1.5		3	50	180			
XP142.1	5 X 2		3	50	180			
XP142.3	Ø 3		3	50	180			
XP142.4	2.5		3	50	180			
XP142.5	3.5		3	50	180			
XP142.6	5.5 X 1		3	50	180			
XP142.7	5.5 X 0.5		3	40	180			
XP142.8	5.5 X 0.8		3	50	180			
XP142.9	Ø 2		3	50	180			
XP142.10	5.5 X 1.5		3	25	180			



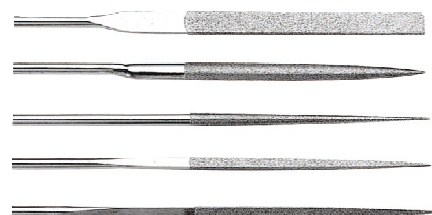
In caso d'ordine specificare la grana
In case of order please specify the grit

SET/XP142 10Pcs.

CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D126/120	D76/200	D46/400
XP143.1	7.5 X 1.5		3,4	60	180			
XP143.2	6 X 2.1		3,4	60	180			
XP143.3	Ø 3.5		3,4	60	180			
XP143.4	3		3,4	60	180			
XP143.5	4		3,4	60	180			



CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D126/120	D76/200	D46/400
XP144.1	8.5 X 1.6		4	70	200			
XP144.2	7 X 2.5		4	70	200			
XP144.3	Ø 4		4	70	200			
XP144.4	3.5		4	70	200			
XP144.5	4.5		4	70	200			



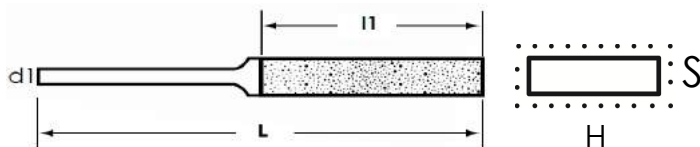
SET/XP143 5 Pcs.

SET/XP144 5 Pcs.

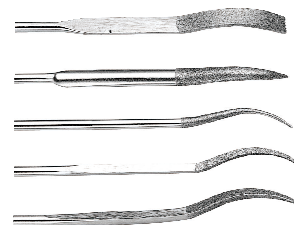
In caso d'ordine specificare la grana
In case of order please specify the grit

Lime Rifloirs Electrodepositate in Diamante Gambo Ø3mm

Rifloirs files Electroplated with Diamond Shank Ø3mm



CODE	H x S	SHAPE	l1 mm	L mm	EURO		
					D126/150	D76/200	D46/400
XP145.1	5.5 X 1.2		30	140			
XP145.2	5 X 2		30	140			
XP145.3	Ø 3		30	140			
XP145.4	2.5		30	140			
XP145.5	3.5		30	140			



SET/XP145 5 Pcs.

In caso d'ordine specificare la grana
In case of order please specify the grit

CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D126/200	D76/150	D46/400
XP146.1	3 X 2		3	30	155			
XP146.2	Ø 2		2	20	155			
XP146.3	Ø 3		3	20	155			
XP146.4	Ø 3		3	30	155			
XP146.5	3		3	20	155			
XP146.6	3		3	30	155			



SET/XP146 6 Pcs.

In caso d'ordine specificare la grana
In case of order please specify the grit

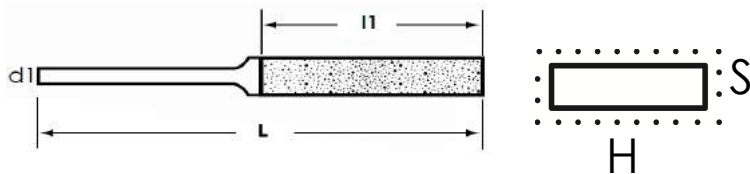
CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D107/150	D76/200	D46/400
XP147.1	6 X 1.3		3	20	140			
XP147.2	2.5		3	20	140			
XP147.3	3.5 X 1.5		3	20	140			
XP147.4	3.5		3	20	140			
XP147.5	5 X 2		3	20	140			
XP147.6	3.5 X 1.5		3	20	140			
XP147.7	3.5 X 2		3	20	140			
XP147.8	Ø 3		3	20	140			
XP147.9	5 X 1.5		3	20	140			
XP147.10	Ø 2.3		3	20	140			



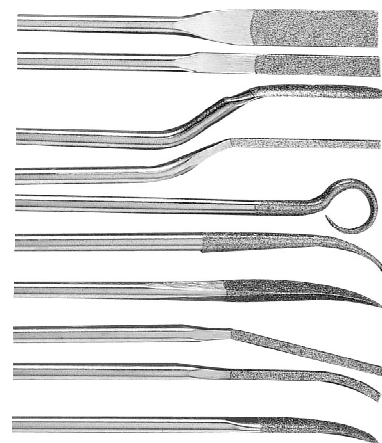
SET/XP147 10 Pcs.

In caso d'ordine specificare la grana
In case of order please specify the grit

Lime a Macchina Electrodepositate in Diamante Gambo Ø3mm
Electroplated Diamond Machine Files Shank Ø3mm



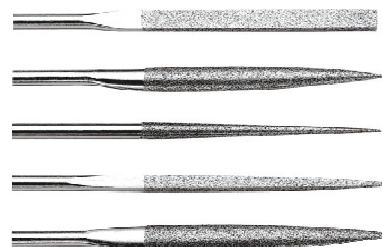
CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D107/150	D76/200	D46/400
XP148.1	5.8 X 1.2		3	20	65			
XP148.2	3.2 X 1.4		3	20	65			
XP148.3	5 X 2		3	20	65			
XP148.4	3.2 X 1.4		3	30	65			
XP148.5	Ø 3		3	20	65			
XP148.6	Ø 3		3	30	65			
XP148.7	2.5		3	20	65			
XP148.8	3.2 X 1.4		3	30	65			
XP148.9	3.2 X 1.4		3	30	65			
XP148.10	3.5 X 2		3	20	65			



SET/XP148	10 Pcs.	
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In caso d'ordine specificare la grana
 In case of order please specify the grit

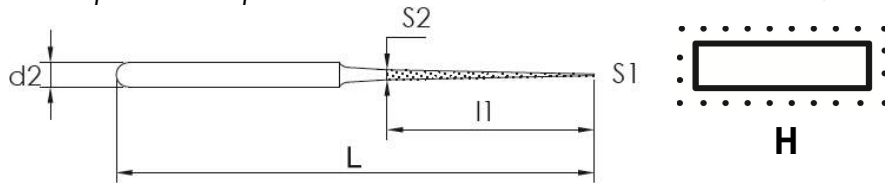
CODE	H x S	SHAPE	d1 mm	l1 mm	L mm	EURO		
						D107/150	D76/200	D46/400
XP149.1	4 X 1.2		3,0	45	90			
XP149.2	5 X 2		3,0	45	90			
XP149.3	Ø 3		3,0	45	90			
XP149.4	2.5		3,0	45	90			
XP149.5	5 X 2		3,0	45	90			



SET/XP149	5 Pcs.	
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In caso d'ordine specificare la grana
 In case of order please specify the grit

Lime a Macchina Coniche Electrodepositate in Diamantate Gambo Ø3mm
Electroplated Tapered Diamond Machine Files Shank Ø3mm



CODE	d2 mm	SHAPE	H mm	S1 mm	S2 mm	l1 mm	L mm	€URO			
								D107/150	D76/200	D54/300	D46/400
XP150.1	Ø 3		2	0,3	1,4	25	70				
XP150.2	Ø 3		4	0,3	1,4	25	70				
XP150.3	Ø 3		6	0,3	1,1	25	70				



SET/XP150	12 Pcs.	
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In caso d'ordine specificare la grana
 In case of order please specify the grit

CODE	d2 mm	SHAPE	H mm	S1 mm	S2 mm	l1 mm	L mm	€URO		
								D76/200	D46/400	D30/600
XP151.1	Ø 3		3	0,3	1,4	15	70			
XP151.2	Ø 3		6	0,3	1,1	15	70			
XP151.3	Ø 3		3	0,3	1,4	15	56			
XP151.4	Ø 3		6	0,3	1,1	15	56			



SET/XP151	12 Pcs.	
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In caso d'ordine specificare la grana
 In case of order please specify the grit

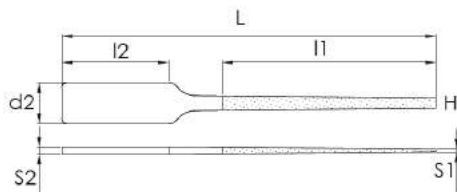
CODE	d2 mm	SHAPE	H mm	S1 mm	S2 mm	l1 mm	L mm	€URO		
								D107/150	D76/240	D46/320
XEL-121	-		2,3	1,5	2	50	180			
XEL-122	-		4,3	1,5	2	50	180			
XEL-123	-		6,5	1,5	2,2	50	180			
XEL-124	-		8,5	1,5	2	50	180			



SET/XEL-12	12 Pcs.	
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Lime Diamantate Coniche

Diamond Tapered Tip Files



CODE	d2 X l2 mm	SHAPE	H-H1 mm	S1 mm	S2 mm	l1 mm	L mm	EURO			
								D107/150	D76/200	D46/400	D30/600
XP153.1	8 x 20		3 - 2	0,5	1,4	40	70				
XP153.2	8 x 20		4 - 3	0,5	1,4	50	80				
XP153.3	8 x 20		6	0,5	1,4	50	90				
XP153.4	8 x 20		8	0,5	1,4	50	90				

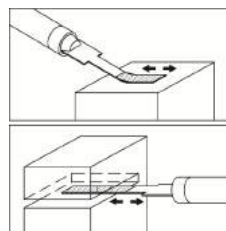
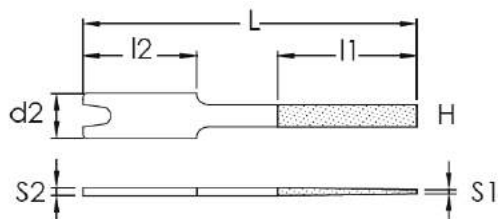


SET/XP153 10 Pcs.
Without tool holder

XP153-S	Optional

Lime Diamantate Coniche

Diamond tapered tip files



CODE	d2 X l2 mm	SHAPE	H-H1 mm	S1 mm	S2 mm	l1 mm	L mm	EURO		
								D107/150	D76/200	D46/400
XP154.1	8 x 20		3 - 2	0,5	1	25	60			
XP154.2	8 x 20		4 - 2	0,5	1	25	60			
XP154.3	8 x 20		4 - 3	0,5	1	25	60			
XP154.4	8 x 20		4	0,5	1	25	60			
XP154.5	8 x 20		3 - 2	0,5	1	40	70			
XP154.6	8 x 20		4 - 3	0,5	1	40	70			
XP154.7	8 x 20		6	0,5	1	40	70			
XP154.8	8 x 20		8	0,5	1	40	70			
XP154.9	8 x 20		10	0,5	1	40	70			
XP154.10	8 x 20		8	0,5	1	60	90			
XP154.11	8 x 20		10	0,5	1	60	90			



SET/XP154 10 Pcs.
With tool holder

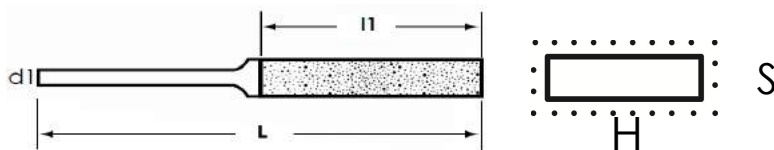
SET/XP154.1 10 Pcs.
Without tool holder

XP154-S	Optional

In caso d'ordine specificare la grana In case of order please specify the grit

Lime in Diamante Sinterizzato di Lappatura, Limatrici ad Ultrasuoni e Pneumatiche

Sintered Diamond Files for Pneumatic and Ultrasonic Lapping Machines

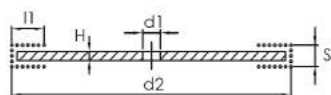


CODE	H X S	SHAPE	l1 mm	l2 mm	L mm	EURO		
						D76/200	D46/400	D30/600
XP155.1	6 X 1.5		20	-	54			
XP155.2	6 X 1.5		20	-	70			
XP155.3	10 X 2		20	-	105			

In caso d'ordine specificare la grana
In case of order please specify the grit

Dischi Diamantati

Diamond Disk

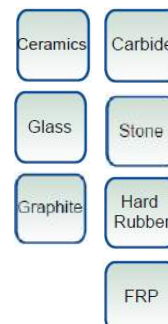


A

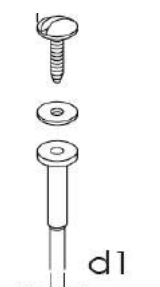


B

CODE	SHAPE	d2 mm	S mm	l1 mm	d1 mm	Type of Mandrel	EURO		
							D107/150	D76/200	D46/400
XP19.1	A	19	0,4	2	1,7	1-2-3			
XP19.2	B	19	0,4	6	1,7	1-2-3			
XP22.1	A	22	0,4	2	1,7	1-2-3			
XP22.2	B	22	0,4	8	1,7	1-2-3			
XP22.3	A	22	0,4	2	3	4-5-6			
XP22.4	B	22	0,4	8	3	4-5-6			
XP25.1	A	25	0,4	2	1,7	1-2-3			
XP25.2	B	25	0,5	8	1,7	1-2-3			
XP25.3	A	25	0,4	2	3	4-5-6			
XP25.4	B	25	0,5	8	3	4-5-6			
XP30.1	A	30	0,4	2	1,7	1-2-3			
XP30.2	B	30	0,5	8	1,7	1-2-3			
XP30.3	A	30	0,4	2	3	4-5-6			
XP30.4	B	30	0,5	10	3	4-5-6			

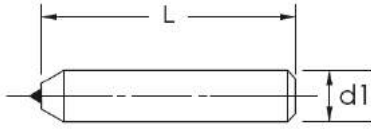


Mandrini - Holders					
CODE	Ø SCREW mm	d1 mm	Type of Mandrel	SHAPE	EURO
XP154M.234	1,7	2,34	1		
XP154M.300	1,7	3	2		
XP154M.317	1,7	3,17	3		
XP155M.234	3	2,34	4		
XP155M.300	3	3	5		
XP155M.317	3	3,17	6		



Ravvivamole a Diamante Singolo

Single Point Diamond Dresser



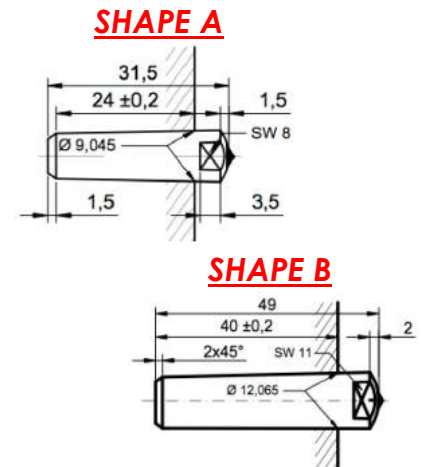
CODE	CARATI CARAT	EURO
PLS. SPECIFY d1 & L		
XP157.018	0,18	
XP157.020	0,20	
XP157.025	0,25	
XP157.035	0,35	
XP156.050	0,50	
XP156.075	0,75	
XP156.100	1,00	
XP156.150	1,50	
XP156.200	2,00	

SCELTA DELLA CARATURA CHOICE OF CARATS								
L. MOLA L. WHEEL	Ø MOLA - WHEEL'S Ø mm							
	100	200	300	400	500	600	700	800
20		<05		0,5-0,75	0,75-1	0,75-1	0,75-1	1-1,25
40	<0,5	0,5-0,75	0,5-0,75	0,75-1	0,75-1	0,75-1	0,75-1	1-1,25
60		0,5-0,75	0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1,5-1,75
80	0,5-0,75	0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
100		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
120		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
140		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
160		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
180	0,5-1	0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
200		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
220		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
240		0,75-1	0,75-1	0,75-1	0,75-1	1-1,25	1-1,25	1,5-1,75
260	0,75-1	1-1,25	1-1,25	1-1,25	1-1,25	1,5-1,75	1,75-2	1,75-2
280		1-1,25	1-1,25	1-1,25	1-1,25	1,5-1,75	1,75-2	1,75-2
300	1-1,25	1,5-1,75	1,5-1,75	1,5-1,75	1,5-1,75	1,75-2	1,75-2	1,75-2

Ravvivatore a Diamante Singolo Gambo Conico

Single Point Diamond Dresser with Tapered Shank

CODE SHAPE A	CODE SHAPE B	CARATI CARAT	EURO
XT0-0.18	XT2-0.18	0.18	
XT0-0.20	XT2-0.20	0.20	
XT0-0.25	XT2-0.25	0.25	
XT0-0.35	XT2-0.35	0.35	
XT0-0.50	XT2-0.50	0.50	
XT0-0.75	XT2-0.75	0.75	
XT0-1.00	XT2-1.00	1.0	
XT1-1.50	XT2-1.50	1.5	
XT1-2.00	XT2-2.00	2.0	



Bastoncini in Legno per Lappatura

Lapping Wood Stick

CODE	SHAPE	S mm	H mm	I1 mm	I2 mm	L mm	EURO
XP159.01		6,4	3,2	-	-	150	
XP159.02		6,4	6,4	-	-	150	
XP159.03		9,5	6,4	-	-	150	
XP159.04		12,7	6,4	-	-	150	
XP159.05		3,2	-	-	-	150	
XP159.06		4,7	-	-	-	150	
XP159.07		6,4	-	-	-	150	
XP159.08		9,5	-	-	-	150	

Bastoncini in Fibro Ceramica per Lucidatura

Fiber Ceramic Grinder Stone

TIPO QUADRO MINI - SQUARE MINI TYPE										
SIZE mm	Smeraldo Emerald	Oro Gold	Marrone Chiaro Light Brown	Arancione Orange	Marrone Brown	EURO	Blue	Bianco White	Rosso Red	EURO
GRIT	#120	#180	#300	#400	#600		#800	#1000	#1200	
0.3X0.3X50	7SE-0303	7SG-0303	7SL-0303	7SO-0303	7SP-0303		7SB-0303	7SW-0303	7SR-0303	
0.5X0.5X50	7SE-0505	7SG-0505	7SL-0505	7SO-0505	7SP-0605		7SB-0605	7SW-0605	7SR-0605	
0.7X0.7X50	7SE-0707	7SG-0707	7SL-0707	7SO-0707	7SP-0707		7SB-0707	7SW-0707	7SR-0707	
0.9X0.9X50	7SE-0909	7SG-0909	7SL-0909	7SO-0909	7SP-0909		7SB-0909	7SW-0909	7SR-0909	
1.4X1.4X50	7SE-1414	7SG-1414	7SL-1414	7SO-1414	7SP-1414		7SB-1414	7SW-1414	7SR-1414	
TIPO RETTANGOLARE - RECTANGULAR STANDARD TYPE										
SIZE mm	Smeraldo Emerald	Oro Gold	Marrone Chiaro Light Brown	Arancione Orange	Marrone Brown	EURO	Blue	Bianco White	Rosso Red	EURO
GRIT	#120	#180	#300	#400	#600		#800	#1000	#1200	
1 x0.5x100	7SE-051	7SG-051	7SL-051	7SO-051	7SP-051		7SB-051	7SW-051	7SR-051	
2 x0.5x100	7SE-052	7SG-052	7SL-052	7SO-052	7SP-052		7SB-052	7SW-052	7SR-052	
4 x0.5x100	7SE-054	7SG-054	7SL-054	7SO-054	7SP-054		7SB-054	7SW-054	7SR-054	
6 x0.5x100	7SE-056	7SG-056	7SL-056	7SO-056	7SP-056		7SB-056	7SW-056	7SR-056	
10x0.5x100	7SE-0510	7SG-0510	7SL-0510	7SO-0510	7SP-0510		7SB-0510	7SW-0510	7SR-0510	
1 x0.8x100	7SE-081	7SG-081	7SL-081	7SO-081	7SP-081		7SB-081	7SW-081	7SR-081	
2 x0.8x100	7SE-084	7SG-084	7SL-084	7SO-084	7SP-084		7SB-084	7SW-084	7SR-084	
4 x0.8x100	7SE-084	7SG-084	7SL-084	7SO-084	7SP-084		7SB-084	7SW-084	7SR-084	
6 x0.8x100	7SE-086	7SG-086	7SL-086	7SO-086	7SP-086		7SB-086	7SW-086	7SR-086	
10x0.8x100	7SE-0810	7SG-0810	7SL-0810	7SO-0810	7SP-0810		7SB-0810	7SW-0810	7SR-0810	
1 x1.0x100	7SE-101	7SG-101	7SL-101	7SO-101	7SP-101		7SB-101	7SW-101	7SR-101	
2 x1.0x100	7SE-102	7SG-102	7SL-102	7SO-102	7SP-102		7SB-102	7SW-102	7SR-102	
4 x1.0x100	7SE-104	7SG-104	7SL-104	7SO-104	7SP-104		7SB-104	7SW-104	7SR-104	
6 x1.0x100	7SE-106	7SG-106	7SL-106	7SO-106	7SP-106		7SB-106	7SW-106	7SR-106	
10x1.0x100	7SE-110	7SG-110	7SL-110	7SO-110	7SP-110		7SB-110	7SW-110	7SR-110	
1 x1.5x100	7SE-151	7SG-151	7SL-151	7SO-151	7SP-151		7SB-151	7SW-151	7SR-151	
2 x1.5x100	7SE-152	7SG-152	7SL-152	7SO-152	7SP-152		7SB-152	7SW-152	7SR-152	
4 x1.5x100	7SE-154	7SG-154	7SL-154	7SO-154	7SP-154		7SB-154	7SW-154	7SR-154	
6 x1.5x100	7SE-156	7SG-156	7SL-156	7SO-156	7SP-156		7SB-156	7SW-156	7SR-156	
10x1.5x100	7SE-1510	7SG-1510	7SL-1510	7SO-1510	7SP-1510		7SB-1510	7SW-1510	7SR-1510	
2 x2.0x100	7SE-202	7SG-202	7SL-202	7SO-202	7SP-202		7SB-202	7SW-202	7SR-202	
4 x2.0x100	7SE-204	7SG-204	7SL-204	7SO-204	7SP-204		7SB-204	7SW-204	7SR-204	
6 x2.0x100	7SE-206	7SG-206	7SL-206	7SO-206	7SP-206		7SB-206	7SW-206	7SR-206	
10x2.0x100	7SE-210	7SG-210	7SL-210	7SO-210	7SP-210		7SB-210	7SW-210	7SR-210	
1 x3.0x100	7SE-301	7SG-301	7SL-301	7SO-301	7SP-301		7SB-301	7SW-301	7SR-301	
2 x3.0x100	7SE-302	7SG-302	7SL-302	7SO-302	7SP-302		7SB-302	7SW-302	7SR-302	
4 x3.0x100	7SE-304	7SG-304	7SL-304	7SO-304	7SP-304		7SB-304	7SW-304	7SR-304	
6 x3.0x100	7SE-306	7SG-306	7SL-306	7SO-306	7SP-306		7SB-306	7SW-306	7SR-306	
10x3.0x100	7SE-310	7SG-310	7SL-310	7SO-310	7SP-310		7SB-310	7SW-310	7SR-310	
1 x0.5x150	7SE-051B	7SG-051B	7SL-051B	7SO-051B	7SP-051B		7SB-051B	7SW-051B	7SR-051B	
2 x0.5x150	7SE-052B	7SG-052B	7SL-052B	7SO-052B	7SP-052B		7SB-052B	7SW-052B	7SR-052B	
4 x0.5x150	7SE-054B	7SG-054B	7SL-054B	7SO-054B	7SP-054B		7SB-054B	7SW-054B	7SR-054B	
6 x0.5x150	7SE-056B	7SG-056B	7SL-056B	7SO-056B	7SP-056B		7SB-056B	7SW-056B	7SR-056B	
10x0.5x150	7SE-0510B	7SG-0510B	7SL-0510B	7SO-0510B	7SP-0510B		7SB-0510B	7SW-0510B	7SR-0510B	
1 x0.8x150	7SE-081B	7SG-081B	7SL-081B	7SO-081B	7SP-081B		7SB-081B	7SW-081B	7SR-081B	
2 x0.8x150	7SE-084B	7SG-084B	7SL-084B	7SO-084B	7SP-084B		7SB-084B	7SW-084B	7SR-084B	
4 x0.8x150	7SE-084B	7SG-084B	7SL-084B	7SO-084B	7SP-084B		7SB-084B	7SW-084B	7SR-084B	
6 x0.8x150	7SE-086B	7SG-086B	7SL-086B	7SO-086B	7SP-086B		7SB-086B	7SW-086B	7SR-086B	
10x0.8x150	7SE-0810B	7SG-0810B	7SL-0810B	7SO-0810B	7SP-0810B		7SB-0810B	7SW-0810B	7SR-0810B	
1 x1.0x150	7SE-101B	7SG-101B	7SL-101B	7SO-101B	7SP-101B		7SB-101B	7SW-101B	7SR-101B	
2 x1.0x150	7SE-102B	7SG-102B	7SL-102B	7SO-102B	7SP-102B		7SB-102B	7SW-102B	7SR-102B	
4 x1.0x150	7SE-104B	7SG-104B	7SL-104B	7SO-104B	7SP-104B		7SB-104B	7SW-104B	7SR-104B	
6 x1.0x150	7SE-106B	7SG-106B	7SL-106B	7SO-106B	7SP-106B		7SB-106B	7SW-106B	7SR-106B	
10x1.0x150	7SE-110B	7SG-110B	7SL-110B	7SO-110B	7SP-110B		7SB-110B	7SW-110B	7SR-110B	
1 x1.5x150	7SE-151B	7SG-151B	7SL-151B	7SO-151B	7SP-151B		7SB-151B	7SW-151B	7SR-151B	
2 x1.5x150	7SE-152B	7SG-152B	7SL-152B	7SO-152B	7SP-152B		7SB-152B	7SW-152B	7SR-152B	
4 x1.5x150	7SE-154B	7SG-154B	7SL-154B	7SO-154B	7SP-154B		7SB-154B	7SW-154B	7SR-154B	
6 x1.5x150	7SE-156B	7SG-156B	7SL-156B	7SO-156B	7SP-156B		7SB-156B	7SW-156B	7SR-156B	
10x1.5x150	7SE-1510B	7SG-1510B	7SL-1510B	7SO-1510B	7SP-1510B		7SB-1510B	7SW-1510B	7SR-1510B	
2 x2.0x150	7SE-202B	7SG-202B	7SL-202B	7SO-202B	7SP-202B		7SB-202B	7SW-202B	7SR-202B	
4 x2.0x150	7SE-204B	7SG-204B	7SL-204B	7SO-204B	7SP-204B		7SB-204B	7SW-204B	7SR-204B	
6 x2.0x150	7SE-206B	7SG-206B	7SL-206B	7SO-206B	7SP-206B		7SB-206B	7SW-206B	7SR-206B	
10x2.0x150	7SE-210B	7SG-210B	7SL-210B	7SO-210B	7SP-210B		7SB-210B	7SW-210B	7SR-210B	
1 x3.0x150	7SE-301B	7SG-301B	7SL-301B	7SO-301B	7SP-301B		7SB-301B	7SW-301B	7SR-301B	
2 x3.0x150	7SE-302B	7SG-302B	7SL-302B	7SO-302B	7SP-302B		7SB-302B	7SW-302B	7SR-302B	
4 x3.0x150	7SE-304B	7SG-304B	7SL-304B	7SO-304B	7SP-304B		7SB-304B	7SW-304B	7SR-304B	
6 x3.0x150	7SE-306B	7SG-306B	7SL-306B	7SO-306B	7SP-306B		7SB-306B	7SW-306B	7SR-306B	
10x3.0x150	7SE-310B	7SG-310B	7SL-310B	7SO-310B	7SP-310B		7SB-310B	7SW-310B	7SR-310B	


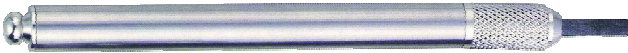

Bastoncini in Fibro Ceramica per Lucidatura

Fiber Ceramic Grinder Stone

TIPO TONDO - ROUND STANDARD TYPE										
SIZE Ømm	Smeraldo Emerald	Oro Gold	Marrone Chiario Light Brown	Arancione Orange	Marrone Brown	€URO	Blue	Bianco White	Rosso Red	€URO
GRIT	#120	#180	#300	#400	#600		#800	#1000	#1200	
2.35 x 50	7SED-23A	7SGD-23A	7SLD-23A	7SOD-23A	7SPD-23A		7SBD-23A	7SWD-23A	7SRD-23A	
3.00 x 50	7SED-3A	7SGD-3A	7SLD-3A	7SOD-3A	7SPD-3A		7SBD-3A	7SWD-3A	7SRD-3A	
3.17 x 50	7SED-31A	7SGD-31A	7SLD-31A	7SOD-31A	7SPD-31A		7SBD-31A	7SWD-31A	7SRD-31A	
2.35 x 100	7SED-23B	7SGD-23B	7SLD-23B	7SOD-23B	7SPD-23B		7SBD-23B	7SWD-23B	7SRD-23B	
3.00 x 100	7SED-3B	7SGD-3B	7SLD-3B	7SOD-3B	7SPD-3B		7SBD-3B	7SWD-3B	7SRD-3B	
3.17 x 100	7SED-31B	7SGD-31B	7SLD-31B	7SOD-31B	7SPD-31B		7SBD-31B	7SWD-31B	7SRD-31B	

Porta Bastoncini

Fiber Ceramic Stone Holder

CODE	Capacità Mandrino Holder Range mm	Tipo di Mandrino – Tool Holder Shape	€URO
7SH-03 7SH-05 7SH-07 7SH-09 7SH-14	0.3 x 0.3 0.5 x 0.5 & Ø0.9 0.7 x 0.7 & Ø0.9 0.9 x 0.9 & Ø1.3 1.4 x 1.4 & Ø2-2.35		
7SH-3B	Ø3		
7SH-1 7SH-2 7SH-4 7SH-6 7SH-10	1 2 4 6 10		

Paste Diamantate in Siringhe da 5gr.

Syringes Diamond Compound 5gr.



CODE	GRIT Micron Size	MESH SIZE	COLOR	Applicazione Application	€URO
XP-S05	0.5	28,000	Grigio - Grey	Lappatura a Specchio - Mirror Lapping	
XP-S10	1.0	14,000	Bianco - White		
XP-S30	3.0	8,000	Giallo - Yellow	Lappatura - Lapping	
XP-S45	4.5	5,000	Marrone Chiaro Light Brown	Lappatura - Lapping	
XP-S60	6.0	3,000	Arancione - Orange	Lappatura - Lapping	
XP-S80	8.0	2,000	Lilla - Lilac	Lappatura - Lapping	
XP-S90	9.0	1,800	Verde - Green	Finitura - Finishing	
XP-S13	13.0	1,500	Rosa - Pink	Finitura - Finishing	
XP-S15	15.0	1,200	Blue	Pre-Finitura Pre- Finishing	
XP-S18	17.5	1,000	Verde Scuro Dark Green	Pre-Finitura Pre- Finishing	
XP-S25	25.0	800	Marrone - Brown	Pre-Finitura Pre- Finishing	
XP-S35	35.0	600	Rosso - Red	Media Finitura- Sgrossatura Medium Finishing-Roughing	
XP-S50	50.0	400	Prugna - Purple	Sgrossatura - Roughing	
XP-S90	90.0	200	Nero - Black	Sgrossatura - Roughing	

Fogli Diamantati

Diamond Foils



GRIT	CODE	EURO	CODE	EURO	CODE	EURO
	10x100		50x100		100x100	
120	XP-10100.012		XP-50100.012		XP-100100.012	
150	XP-10100.015		XP-50100.015		XP-100100.015	
200	XP-10100.020		XP-50100.020		XP-100100.020	
300	XP-10100.030		XP-50100.030		XP-100100.030	
400	XP-10100.040		XP-50100.040		XP-100100.040	
600	XP-10100.060		XP-50100.060		XP-100100.060	
800	XP-10100.080		XP-50100.080		XP-100100.080	
1200	XP-10100.120		XP-50100.120		XP-100100.120	
1800	XP-10100.180		XP-50100.180		XP-100100.180	

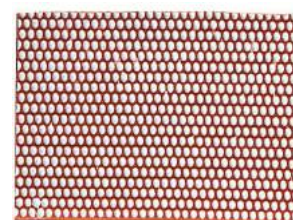


Fogli di Tela Diamantati

Diamond Cloth Foils

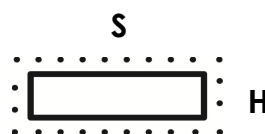


GRIT	CODE	EURO	CODE	EURO	CODE	EURO	CODE	EURO
	50 X 100		100 X 100		1170 X 295		690 X 295	
60 (Ni)	XT50-0060	86,00	XT100-0060	180,00	XT117-0060	4600,00	-	-
120 (Ni)	XT50-0120	70,00	XT100-0120	140,00	XT117-0120	3591,00	-	-
200 (Ni)	XT50-0200	55,00	XT100-0200	110,00	XT117-0200	2759,00	-	-
400 (Ni)	XT50-0400	45,00	XT100-0400	92,00	XT117-0400	2314,00	-	-
600 (Ni)	XT50-0600	45,00	XT100-0600	92,00	XT117-0600	2314,00	-	-
800 (Resin)	XT50-0800	32,00	XT100-0800	65,00	-	-	XT690-0800	885,00
1500 (Resin)	XT50-0500	32,00	XT100-0500	65,00	XT117-0500	-	XT690-0500	885,00
3000 (Resin)	XT51-1000	32,00	XT101-1000	65,00	XT118-1000	-	XT690-1000	885,00



Pietre per Lucidatura ad Olio

Oil Polishing Stone



MIN. ORDINE: 100 PZ. CAD. - MIN. ORDER: 100 PCS. EACH

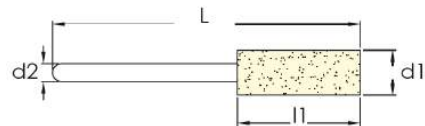
CODE	CODE	SHAPE	H mm	S mm	I1 mm	I2 mm	L mm	EURO		
								120-180 220-320	400-600	800-1000
XP160.016	XP161.016		1,6	13	-	-	150			
XP160.030	XP161.030		3	6	-	-	150			
XP160.031	XP161.031		3	13	-	-	150			
XP160.060	XP161.060		6	13	-	-	150			
XP160.032	XP161.032		3	25	-	-	150			
XP160.061	XP161.061	6	25	-	-	150				
XP160.062	XP161.062		6	6	-	-	150			
XP160.100	XP161.100		10	10	-	-	150			
XP160.130	XP161.130		13	13	-	-	150			
XP160.063	XP161.063		6	-	-	-	150			
XP160.064	XP161.064		6	-	-	-	150			
XP160.065	XP161.065		6	-	-	-	150			



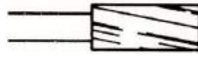

	Specifica per lucidatura dopo operazioni di Elettroerosione Specific tool polishing after EDM processing
	Specifica per lappatura dopo lavorazioni meccaniche Specific tool lapping after machining process

Molette Elastiche

Elastic Mounted Point



MIN. ORDINE: 100 PZ. CAD. - MIN. ORDER: 100 PCS. EACH



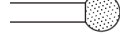



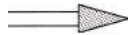


CODE	RESINOIDE RESINOID	d1 mm	d2 mm	l1 mm	L mm	GRIT	€URO
XP162.40		4,0	3	13	50	120	
XP162.50		5,0	3	15	50	120	
XP162.60		6,0	3	17	50	120	
XP162.80		8,0	3	20	50	120	
XP162.10		10,0	3	20	50	120	
CODE	GOMMA RUBBERIZE	d1 mm	d2 mm	l1 mm	L mm	GRIT	€URO
XP162.41		4,0	3	13	50	120	
XP162.51		5,0	3	15	50	120	
XP162.61		6,0	3	17	50	120	
XP162.81		8,0	3	20	50	120	
XP162.11		10,0	3	20	50	120	



Molette Abrasive Gambo Ø3mm

Abrasive Mounted Points Shank Ø3mm



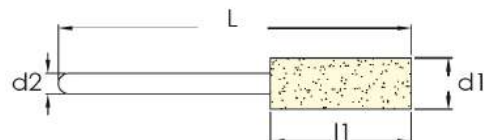
CODE		SHAPE	d1 mm	d2 mm	l1 mm	l2 mm	L mm	€URO	
ROSA PINK	RUBINO RUBY							ROSA PINK	RUBINO RUBY
XP163.B25	XP164.B25		2,5	3	2,5	-	45		
XP163.B03	XP164.B03		3	3	8	-	45		
XP163.B04	XP164.B04		4	3	10	-	45		
XP163.B05	XP164.B05		5	3	10	-	45		
XP163.B06	XP164.B06		6	3	12	-	45		
XP163.B08	XP164.B08		8	3	16	-	45		
XP163.B10	XP164.B10		10	3	16	-	45		
XP163.H03	XP164.H03		3	3	8	-	45		
XP163.H30	XP164.H30		3	3	10	-	45		
XP163.H04	XP164.H04		4	3	12	-	45		
XP163.H07	XP164.H07		7	3	10	-	45		
XP163.D03	XP164.D03		3	3	-	-	45		
XP163.D04	XP164.D04		4	3	-	-	45		
XP163.D05	XP164.D05		5	3	-	-	45		
XP163.D06	XP164.D06		6	3	-	-	45		
XP163.D08	XP164.D08		8	3	-	-	45		
XP163.D10	XP164.D10		10	3	-	-	45		
XP163.D12	XP164.D12		12	3	-	-	45		
XP163.G04	XP164.G04		4	3	12	-	45		
XP163.G06	XP164.G06		6	3	16	-	45		
XP163.G08	XP164.G08		8	3	16	-	45		
XP163.G10	XP164.G10		10	3	16	-	45		
XP163.L08	XP164.L08		8	3	13	-	45		
XP163.L12	XP164.L12		12	3	24	-	45		
XP163.M06	XP164.M06		6	3	12	-	45		
XP163.M08	XP164.M08		8	3	15	-	45		
XP163.M10	XP164.M10		10	3	18	-	45		
XP163.C03	XP164.C03		3	3	6	-	45		
XP163.C04	XP164.C04		4	3	12	-	45		
XP163.C05	XP164.C05		5	3	15	-	45		
XP163.C08	XP164.C08		8	3	16	-	45		
XP163.J06	XP164.J06		6	3	9	-	45		
XP163.Y13	XP164.Y13		13	3	2	-	45		
XP163.Y14	XP164.Y14		13	3	3	-	45		
XP163.Y16	XP164.Y16		16	3	2	-	45		
XP163.Y17	XP164.Y17		16	3	3	-	45		



A richiesta gambo Ø2,35-3,17mm
Shank Ø2,35-3,17mm on Demand

Molette in Feltro Gambo Ø3mm

Felt Bobs Shank Ø3mm



CODE	SHAPE	d1 mm	d2 mm	l1 mm	L mm	EURO
XP165.B04		4	3	8	45	
XP165.B05		5	3	9	45	
XP165.B06		6	3	10	45	
XP165.B08		8	3	10	45	
XP165.B10		10	3	14	45	
XP165.B12		12	3	20	50	
XP165.B15		15	3	20	50	
XP165.B16		20	3	20	50	
XP165.C04		4	3	8	45	
XP165.C05		5	3	9	45	
XP165.C06		6	3	10	45	
XP165.C08		8	3	10	45	
XP165.C10		10	3	13	50	
XP165.C12		12	3	14	50	
XP165.C13		12	3	20	50	
XP165.D08		8	3	-	45	
XP165.D10		10	3	-	50	
XP165.D12		12	3	-	50	
XP165.D18		18	3	-	50	
XP165.G04		4	3	10	45	
XP165.G05		5	3	12	45	
XP165.G06		6	3	16	45	
XP165.G08		8	3	17	45	
XP165.G10		10	3	14	50	
XP165.G11		10	3	20	50	
XP165.G12		12	3	20	50	
XP165.G13		12	3	25	50	
XP165.L10		10	3	14	50	
XP165.L12		12	3	25	50	
XP165.H12		12	3	12	50	
XP165.J06		6	3	10	45	
XP165.J08		8	3	14	45	
XP165.J10		10	3	14	50	
XP165.J12		12	3	20	50	
XP165.K12		12	3	18	50	



Molette in Feltro Gambo Ø6mm

Felt Bobs Shank Ø6mm

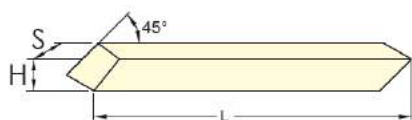


CODE	SHAPE	d1 mm	d2 mm	l1 mm	L mm	EURO
XP166.B04		12	6	25	65	
XP166.B05		15	6	25	65	
XP166.B06		20	6	25	65	
XP166.B08		25	6	30	65	
XP166.C15		15	6	20	65	
XP166.C20		20	6	25	65	
XP166.C25		25	6	30	65	
XP166.G15		15	6	25	65	
XP166.G20		20	6	25	65	
XP166.G25		25	6	30	65	
XP166.T32		32	6	8	65	
XP166.T40		40	6	9,6	65	



Barrette Quadre in Feltro

Square Felt

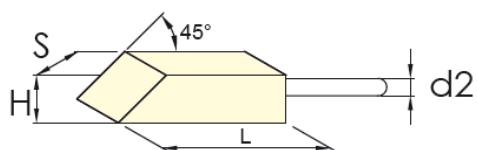


CODE	SHAPE	S mm	H mm	L mm	EURO
XPSQ0606		6	6	100	
XPSQ1010		10	10	100	



Barrette Quadre in Feltro con Gambo Ø3mm

Square Felt with Shank Ø3mm

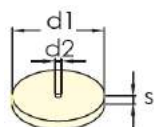


CODE	SHAPE	d2 mm	S mm	H mm	L mm	EURO
XPSQ0606.3		3	6	6	25	
XPSQ1010.3		3	10	10	35	
XPSQ1212.3		3	12	12	45	



Dischetti in Feltro

Felt Disk



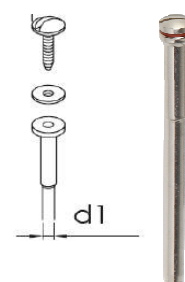
CODE	d1 mm	d2 mm	S mm	H mm	L mm	EURO
XPC25.3	25	1,7	3	-	-	
XPC25.4	25	1,7	4	-	-	
XPC25.5	25	1,7	5	-	-	



Mandrini

Holder

CODE	Ø SCREW mm	d1 mm	EURO
XP154M.234	1,7	2,34	
XP154M.300	1,7	3	
XP154M.317	1,7	3,17	



LEŠTIACE PRÍSTROJE



Serie G7: Generatori di Potenza – Power Controller Series



- Velocità variabile controllata tramite micro computer. Garantisce un miglior controllo della coppia a secondo del motore utilizzato.
- Velocità di rotazione costante sotto sforzo.
- Dispositivo termico di protezione per sovraccarico di corrente dovuta a pressione eccessiva dell'utensile sul pezzo durante la lavorazione
- E' possibile collegare anche i motori del vecchio modello (UM132 - UM142 etc.). In questo caso però non viene gestito il controllo velocità.
- Ricerca automatica del motore sull'uscita A o B.
- Indicazione digitale per la regolazione del numero dei giri.
- Il generatore G7 verifica costantemente le condizioni dei motori e del generatore stesso. Viene azionata automaticamente la ventola di raffreddamento interna per ridurre la temperatura.
- E' possibile utilizzare il pedale (optional) per fissare la velocità desiderata.

E' necessario utilizzare l'adattatore KE50-156 quando si collegano i vecchi apparecchi utilizzati per il modello UC500
Adapter KE50-156 is necessary when connecting to existing controller UC500

Variable speed control by microcomputer. It provides better torque control according to the motor used.

- Constant rotation speed under load.
- Thermal protection device for current overload due to excessive pressure of the tool on the workpiece.
- It is possible to connect the old type (UM132 - UM142, etc.).
- Rotation speed and error are not displayed when using old motor.
- Automatic motor output A or B.
- Digital indication for adjusting the number of revolutions.
- The controller G7 constantly monitors the condition of the motor and the controller. It is driven automatically the internal cooling fan to reduce the temperature.
- Can be used the foot switch (optional) to set the desired speed.

CODE	Volt	Input	Peso Kg.	Dimensions mm	EURO
UC-901	120	AC120V 60Hz	2,3	200LX110HX180S	
UC-903	230	AC230V 50Hz	2,3	200LX110HX180S	
VC90	FOOT CONTROL (Optional)				

UG42A Manipolo ad Elevata Coppia - High Torque Handpiece

CODE	Giri RPM	Coppia Torque	Peso Weight	Dimensions mm	EURO
	Min'	N/cm	Gr.	Ø Max. X L	
UG42A	1.000-20.000	6,4	220	28 X 157	



UG43A Manipolo alta Velocità - Speed Type Handpiece

CODE	Giri RPM	Coppia Torque	Peso Weight	Dimensions mm	EURO
	Min'	N/cm	Gr.	Ø Max. X L	
UG43A	1.000-35.000	5,4	220	28 X 157	



Pinze in Dotazione - Standard Collet

CODICE FORNITO CODE INCLUDED	CODE OPTIONAL	Ø mm	EURO
KP-036B	-	2,34	
KP-032B	-	3	
-	KP-033B	3,175	

- Le smerigliatrici sono fornite con pinza Ø 2,34 & 3,0mm.
- The Handle machines are supply with collet Ø 2,35 & 3,0mm

• **PROTEZIONE DALLA POLVERE:** costruiti con un nuovo meccanismo che protegge i cuscinetti aumentandone la durata.

• **ALTA PRECISIONE:** diminuzione della vibrazione dell'albero che è inferiore di 0.02mm.

• **CAMBIO UTENSILE RAPIDO:** Aperura e chiusura della pinza ruotando semplicemente la ghiera.

• **INTERRUTTORE A MANO:** non è più necessario premere il pulsante sul generatore. I manipoli sono dotati di pulsante per l'accensione e lo spegnimento.

• **SICUREZZA:** Ergonomico, leggero e a norma CE. Risulta confortevole anche dopo molte ore di lavoro. Il rivestimento della ghiera in silicone riduce lo scivolamento.

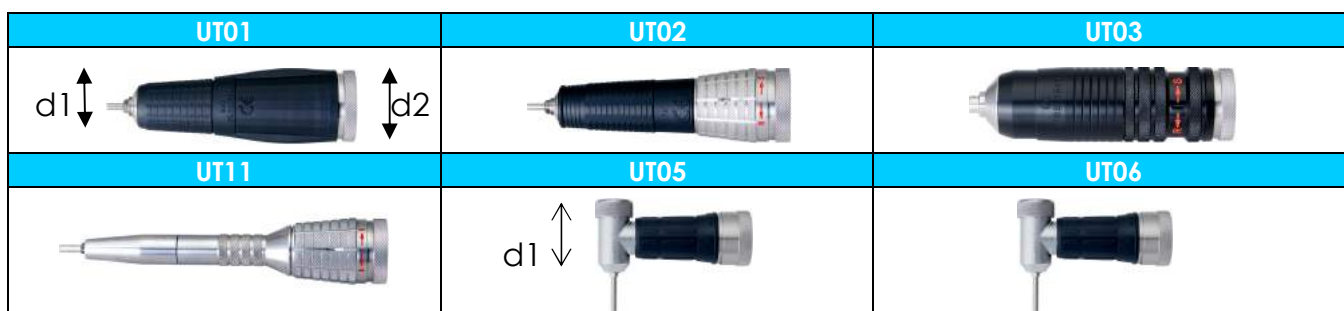
• **DUST COVER:** made with a new mechanism that protects the bearings extending its lifetime.

• **PRECISION:** reduction of vibration of the tree that is less than 0.02mm.

• **QUICK CHANGE TOOL:** Opening and closing the clamp by simply turning the dial.

• **SWITCH HAND:** you no longer need to press the button on the controller. The handpieces are equipped with a button for switching ON-OFF.

• **SAFETY:** Ergonomic, lightweight and CE. It is comfortable even after long hours of work. The silicon coating ring reduces slipping.



CODE	Pinze in Dotazione - Standard Collet			
	CODICE FORNITO CODE INCLUDED	CODE OPTIONAL	Ø mm	€URO
UT01 UT02	KB-036B	-	2,34	
	KB-032B	-	3,00	
UT03	-	KP-033B	3,17	
	KP-060A	-	6,00	
	KP-062A	-	3,00	
	-	KP-061A	2,34	
	-	KP-063A	3,17	
UT05	-	KP-064A	6,35	
	KP-022	-	3,00	
	KP-021	-	2,34	
UT06 UT07	-	KP-025	3,17	
	KP-032B	-	3,00	
	KP-036B	-	2,34	
UT11	-	KP-033B	3,17	
	KP-032B	-	3,00	
	KP-036B	-	2,34	
		KP-033B	3,17	

CODE	d1 Min mm	d2 Max mm	L.Tot mm	Peso Weight Gr.	€URO
UT01	17,0	27,2	88,0	115	
UT02	13,0	25,2	86,5	100	
UT03	26,0	26,4	95,0	150	
UT05	33,0	25,4	73,0	100	
UT06	45,5	25,4	80,5	200	
UT07	47,5	25,4	89,5	210	
UT11	8,0	25,8	121,0	120	
UT15	-	26	43,5	100	

Motori - Motors

CODE	Giri RPM	Coppia Torque	Peso Weight	Dimensioni Dimensions	€URO
	Min'	N/cm	Gr.	Ø X L (mm)	
UM20A	1.000-8.000	9,8	176	31,5 X 89,3	
UM21A	1.000-15.000	8,8	176	31,5 X 89,3	
UM23A	1.000-30.000	6,8	176	31,5 X 89,3	
UM12A	1.000-20.000	6,4	120	27,5 X 77	
UM13A	1.000-35.000	5,4	120	27,5 X 77	
UM14A	2.000-45.000	6,0	120	27,5 X 77	
UM05A	2.000-55.000	3,6	90	27,5 X 66,5	

TESTINE HEAD	MOTORI - MOTORS (min')						
	UM20A 8.000	UM21A 15.000	UM23A 30.000	UM12A 20.000	UM13A 35.000	UM14A 45.000	UM05A 55.000
UT01 	YES	YES	YES	YES	YES		
UT02 	YES	YES	YES	YES	YES	YES	YES
UT03 	YES	YES	YES	YES			
UT05 	YES	YES	SOLO CON UT15 ONLY WITH UT15				
UT06 	YES	YES					
UT07 	YES	YES					
UT11 	YES	YES	YES	YES	YES	YES	YES
UT15 	YES	YES	YES	YES			

UM20A-UM21A-UM23A Alta Potenza - High Power



UM05A Alta velocità High Speed



UT15 Riduttore Velocità per Testine ad Angolo Reduction Joint for Angle Head



Sistema ad Ultrasuoni – Ultrasonic System



•Incorpora un sistema elettronico automatico per la scelta della frequenza in funzione del tipo di apparecchio utilizzato.

•Al generatore UC550 può essere collegato sia il manipolo ad ultrasuoni che gli apparecchi rotativi, la limatrice meccanica e la levigatrice a nastro.

•Velocità variabile controllata.

•Velocità di rotazione costante sotto sforzo con inserimento automatico del circuito di compensazione.

•Fusibile di protezione sul circuito primario di alimentazione a corrente continua

•Sensore termico che interrompe temporaneamente la corrente nell'eventualità di surriscaldamento del circuito

•Dispositivo termico di protezione per sovraccarico di corrente dovuta a pressione eccessiva dell'utensile sul pezzo lavorato.

•Variatore a pedale per il controllo della velocità (VC10) e interruttore a pedale ON/OFF (FS18) sono opzionali.

•Incorporates automatic electronic system for the selection of the Frequency range depending on the type of apparatus used.

•On the UC550 generator can be connected the ultrasonic handpiece, the rotary devices, the recipro and belt sander.

•Variable speed control.

•Rotation speed constant under load with automatic compensation circuit.

•Protection fuse on the primary side of the DC power

•Temperature sensor that pauses the current in the event of overheat the circuit.

•Thermal protection device for current overload due to excessive pressure of the tool on the workpiece.

•Foot control for speed control (VC10) and foot switch ON-OFF (FS18) are optional.

CODE	Input Volt	Output Volt	Peso - Weight Kg.	Dimensioni Dimensions	€URO
UC550	AC120-220-240, 50-60Hz	AC90, 22,6Hz	2,6	170LX110HX195S mm	
VC60	VARIATORE A PEDALE - VARIABLE FOOT CONTROL (Optional)				
FS18	INTERRUTTORE A PEDALE - ON/OFF FOOT CONTROL (Optional)				

US55 Manipolo ad Ultrasuoni - Ultrasonic Handpiece

CODE	Ampiezza Vibrazione Stroke Amplitude	Peso Weight	Dimensioni Dimensions	€URO
	µm			
US55	45	180	29 X 139	

Mandri in Dotazione - Standard Holder

TIPO PIATTO - FLAT TYPE					TIPO TONDO - ROUND TYPE				
CODE INCLUDED	CODE OPTIONAL	T mm	SHANK	€URO	CODE INCLUDED	CODE OPTIONAL	Ø mm	SHANK	€URO
U7103	-	2	M6X1		-	U7101	2,5	M6X1	
-	U7104	3	M6X1		U7102	-	3,2	M6X1	



UC500 Generatore di Potenza - Power Controller Series



- Al generatore UC500 non può essere collegato il manipolo ad ultrasuoni US55 ma solo gli apparecchi rotativi, la limatrice meccanica e la levigatrice a nastro.
- Velocità variabile controllata.
- Velocità di rotazione costante sotto sforzo con inserimento automatico del circuito di compensazione.
- Fusibile di protezione sul circuito primario di alimentazione a corrente continua.
- Fusibile termico sul trasformatore per protezione contro surriscaldamento.
- Sensore termico che interrompe temporaneamente la corrente nell'eventualità di surriscaldamento del circuito.
- Dispositivo termico di protezione per sovraccarico di corrente dovuta a pressione eccessiva dell'utensile sul pezzo lavorato.
- Variatore a pedale per il controllo della velocità (VC10) e interruttore a pedale ON/OFF (FS18) sono opzionali.

- On the UC500 generator cannot be connected the ultrasonic handpiece US55 but only rotary devices, the reciprocating and belt sander.
- Variable speed control.
- Rotation speed constant under load with automatic compensation circuit.
- Protection fuse on the primary circuit of DC power.
- Thermal fuse on the transformer for protection against overheating.
- Temperature sensor that pauses the current in the event of circuit overheat.
- Thermal protection device for current overload due to excessive pressure of the tool on the workpiece.
- Foot control for speed control (VC10) and foot switch ON/OFF (FS18) are optional.

CODE	Volt	Input	Peso Kg.	Dimensioni Dimensions	€URO
UC500	100	AC 100V 50-60Hz 30va	2,0	170LX110HX195S mm	
VC60	VARIATORE A PEDALE - VARIABLE FOOT CONTROL (Optional)				
FS18	INTERRUTTORE A PEDALE - ON/OFF FOOT CONTROL (Optional)				

UA12A - UA13A - UA14A Manipolo Rotativo - Rotary Handpiece

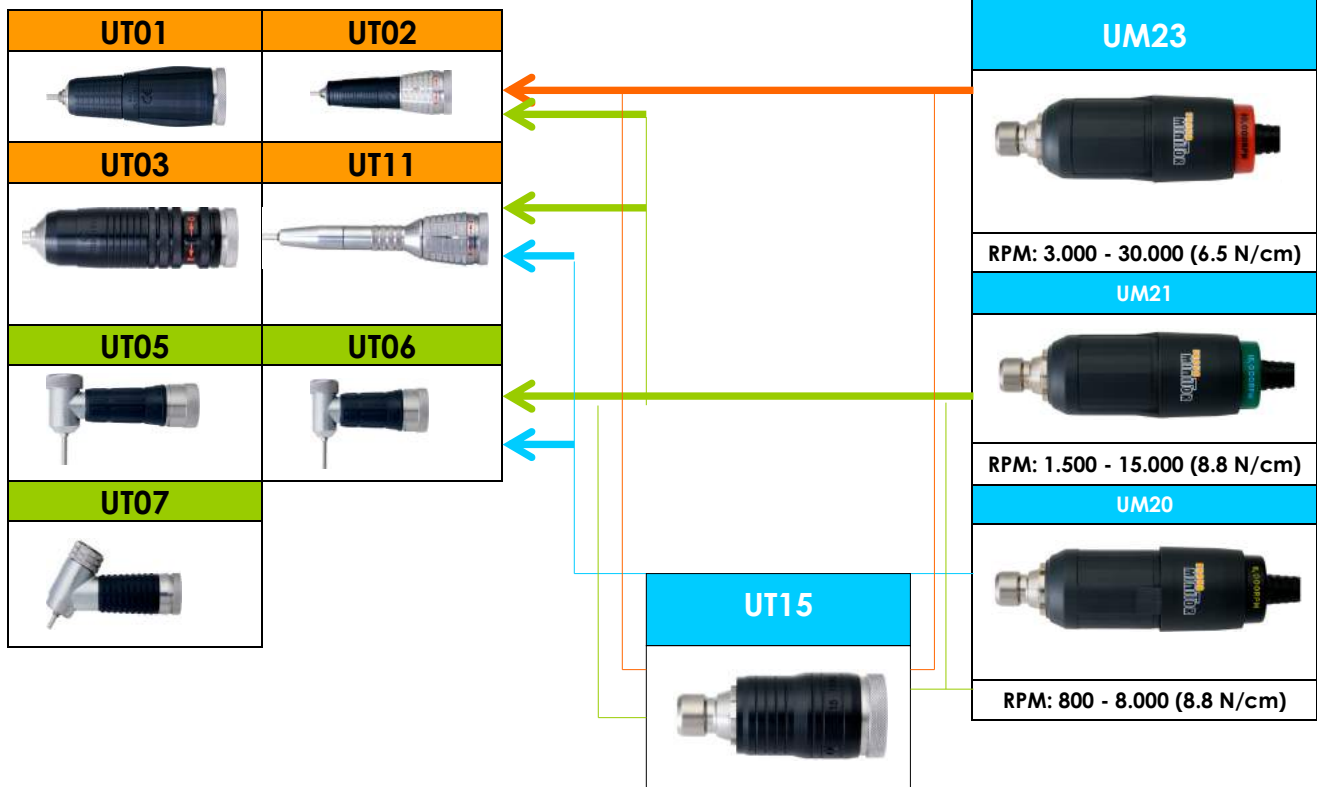
CODE	Giri RPM	Coppia Torque	Peso Weight	Dimensioni Dimensions mm	€URO
	Min'	N/cm	Gr.	Ø Max. X L	
UA12A	2.000-20.000	6,5	175	27,5 X 144,5	
UA13A	3.500-35.000	5,4	175	27,5 X 144,5	
UA14A	4.500-45.000	4,1	175	27,5 X 144,5	

Pinze in dotazione - Standard Collet			
Standard	Optional	Ø mm	€URO
KP-036B	-	2,34	
KP-032B	-	3,0	
-	KP-033B	3,175	

Motore e testina non sono intercambiabili
The head and Motor are not interchangeable

Motori - Motors

CODE	Giri RPM	Coppia Torque	Peso Weight	Dimensioni Dimensions	€URO
	Min'	N/cm	Gr.	Ø X L mm	
UM23	1.000-8.000	9,8	170	31,6 X 80	
UM21	1.000-15.000	8,8	170	31,6 X 80	
UM20	1.000-30.000	6,8	170	31,6 X 80	



Limatrici a Moto Rettilineo - Recipro

CODE	Frequency	Oscillazione	Peso	Dimensioni	EURO
	Strokes/min	Stroke	Weight	Dimensions	
RE35	420 - 4.200	0 - 6	675	140 X 128	
RE55	700 - 7.000	0 - 2	675	140 X 128	



- Movimento alternato
- Il mandrino utilizza utensili con gambo da Ø2 a Ø6,35mm
- Nella testata è alloggiato il meccanismo per una semplice regolazione della corsa da 0 a 6mm a mezzo di ghiera di regolazione graduata.
- Sistema di autoventilazione incorporato

- Seesaw
- The spindle uses tools with shank Ø2 to Ø6,35mm
- In the head is housed the mechanism for a simple adjustment of the stroke of 0 to 6mm to means of adjustment ring graduated
- Built-in self-ventilation system

Levigratrice a Nastro - Belt Sander

CODE	Velocità del Nastro Belt speed	Peso Weight Gr.	Dimensioni Dimensions	EURO
BS33	77.7 - 777 m/min	400	160 x 119 X 40 mm	



- Idoneo per largo impiego di applicazioni
- Diversi tipi di bracci consentono la massima versatilità
- Meccanismo incorporato per la sostituzione rapida del nastro
- Sistema di autoventilazione incorporato
- Il nastro abrasivo non è incluso nel prezzo

- Suitable for wide use of applications
- Different types of arms allow for maximum versatility
- Built-in mechanism for the quick replacement of the belt
- Built-in self-ventilation system
- The abrasive belt is not included on the price

Bracci Tendi Nastro - Belt Arms				Nastri Abrasivi - Abrasive Belts					
CODE	Type	Larghezza Nastro Belt Width	EURO	CODE	Larghezza Nastro Belt Width	EURO (30 pcs. Pack)			
						D181/80	D126/120	D91/180	D46/320
BS1-100-1		4 - 6mm	80,05	U1013	4 mm				
				U1014					
				U1015					
				U1016					
BS1-100-2		6 - 8mm	89,86	U1017	6 mm				
				U1018					
				U1019					
BS1-100-3		6 - 8mm	157,00	U1020	8 mm				
				U1021					
				U1022					

PNEUMATICKÉ PRÍSTROJE



SMERIGLIATRICI PNEUMATICHE

Air Grinder Machines

UG-500: Alta Velocità, Pinza Sostituibile - High Speed , Replace Collet Chuck



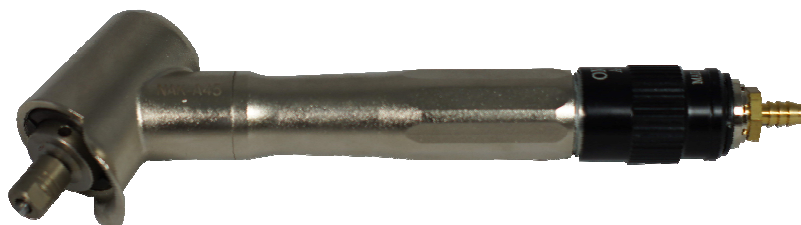
CODE	Giri RPM	Pinza Collet	Pinza Collet Optional	Peso Weight	Dimensioni Dimensions	EURO
	Min'	Ø mm	mm	Gr.	Ø Max. X L mm	
UG-500	60.000	3,0	2,35 - 3,175	110	20 x 160	

UG-300: Elevata Coppia, Pinza Sostituibile – High Torque, Replace chuck



CODE	Giri RPM	Pinza Collet	Pinza Collet Optional	Peso Weight	Dimensioni Dimensions	EURO
	Min'	Ø mm	mm	Gr.	Ø Max. X L mm	
UG-300	35.000	3,0 – 6,0	3,17 – 6,35	170	22 x 180	

UG-045: Testa ad Angolo 45°, Pinza Fissa – Angle Head 45°, Fix Collet



CODE	Giri RPM	Pinza Collet	Pinza Collet Optional	Consumo Aria Air consumption	Peso Weight	Dimensioni Dimensions	EURO
	Min'	Ø mm	mm	Psi	Gr.	Ø Max. X L mm	
UG-045	35.000	3,0	-	90	265	18 x 145	

UG-090: Testa ad Angolo 90°, Pinza Fissa – Angle Head 120°, Fix Collet

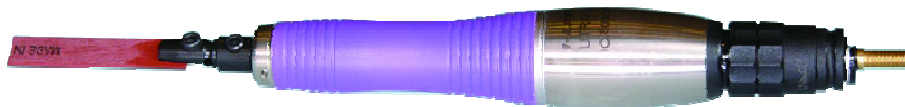


CODE	Giri RPM	Pinza Collet	Pinza Collet Optional	Consumo Aria Air consumption	Peso Weight	Dimensioni Dimensions	EURO
	Min'	Ø mm	mm	Psi	Gr.	Ø Max. X L mm	
UG-090	35.000	3,0	-	90	265	18 x 145	

LIMATRICI PNEUMATICHE

Lapper Pneumatic Recipro Handpiece

UTR-20: Alta Velocità, Micro Oscillazione – High Speed, Micro Strokes



CODE	Frequency	Oscillazione Stroke	Peso Weight	Dimensioni Dimensions	EURO
	Strokes/min'	mm	Gr.	Ø Max. x L mm	
UTR-20	35.000	0,15	190	28 x 200	
UTR-50	45.000	0.50	190	28X200	

UTR-30: Alta Potenza, Media Velocità -High Torque, Medium Speed



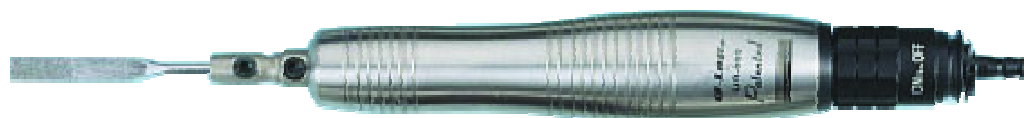
CODE	Frequency	Oscillazione Stroke	Peso Weight	Dimensioni Dimensions	EURO
	Strokes/min'	mm	Gr.	Ø Max. x L mm	
UTR-30	30.000	0.3	190	28 x 200	

UTR-70: Alta Potenza, Media Velocità - High Torque, Medium Speed








CODE	Frequency	Oscillazione Stroke	Peso Weight	Dimensioni Dimensions	EURO
	Strokes/min'	mm	Gr.	Ø Max. x L mm	
UTR-70	28.000	0,7	190	28 x 200	

UR-120-300: Alta Potenza, Bassa Velocità - High Torque, Low Speed



CODE	Frequency	Oscillazione Stroke	Peso Weight	Dimensioni Dimension	EURO
	Strokes/min'	mm	Gr.	Ø Max. x L mm	
UR-120	12.000	1,2	250	18 x 180	
UR-300	10.000	3,0	250	18X180	

Mandri in Dotazione per Limatrici ad Aria – Standard Tool Holder for Air Lappers

						
DIMENSIONS	Ø + FLAT	FLAT				REGOLABILE ADJUSTABLE
	Ø3 - 1 mm	1 mm	3,2 mm	3,2 x 13 mm	6,3 x 13 mm	
CODE	UR-01	UR-02	UR-03	UR-04	UR-05	UR-06
UTR-20	☉	☉	☉	X	X	X
UTR-30	☉	☉	☉	▲	X	☉
UTR-50	☉	▲	☉	▲	▲	☉
UTR-70	☉	☉	☉	▲	▲	☉
UR-120	☉	▲	X	☉	☉	☉
UR-300	☉	▲	X	☉	☉	☉
€URO						
☉ = Standard ▲ = Optional X = Non Consigliato - Not Recommended						



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