



CODE	ØD	R	l1	d1	l2	d	L
Y6720005061	0,5	0,25	0,5	0,46	6	3	50
Y6720005081	0,5	0,25	0,5	0,46	8	3	50
Y672000506041	0,5	0,25	0,5	0,46	6	4	50
Y6720005101	0,5	0,25	0,5	0,46	10	4	60
Y6720006061	0,6	0,3	0,6	0,56	6	4	50
Y6720006081	0,6	0,3	0,6	0,56	8	4	50
Y6720006101	0,6	0,3	0,6	0,56	10	4	60
Y6720010051	1,0	0,5	1,0	0,95	5	4	50
Y6720010081	1,0	0,5	1,0	0,95	8	4	50
Y6720010101	1,0	0,5	1,0	0,95	10	4	50
Y6720010121	1,0	0,5	1,0	0,95	12	4	50
Y6720010141	1,0	0,5	1,0	0,95	14	4	50
Y6720010161	1,0	0,5	1,0	0,95	16	4	50
Y6720010181	1,0	0,5	1,0	0,95	18	4	60
Y6720015071	1,5	0,75	1,5	1,45	7	4	50
Y6720015101	1,5	0,75	1,5	1,45	10	4	50
Y6720015121	1,5	0,75	1,5	1,45	12	4	50

Roughing / Sgrossatura		Semi-Finishing / Semi-Finitura		Finishing / Finitura		 Dry Machining		 MQL (mist)		 Coolant Emulsion		
Acciai al carbonio, Acciai non legati Carbon steels, Steel non-alloyed	Acciai per utensili altamente legati Tools steels high alloyed	Acciai temprati Hardened Steels				Acciai inossidabili Stainless steels	Ghisa, Ghisa duttile Cast iron, Ductile cast iron	Leghe di alluminio Aluminium alloys	Leghe di rame Copper alloys	Grafite Graphite	Leghe di titanio Titanium alloys	Leghe resistenti al calore Heat-resisting alloy

CODE	ØD	R	l1	d1	l2	d	L
Y6720015151	1,5	0,75	1,5	1,45	15	4	60
Y6720015181	1,5	0,75	1,5	1,45	18	4	60
Y6720015201	1,5	0,75	1,5	1,45	20	4	60
Y6720020101	2,0	1,0	2,0	1,94	10	4	50
Y6720020121	2,0	1,0	2,0	1,94	12	4	50
Y6720020141	2,0	1,0	2,0	1,94	14	4	50
Y6720020161	2,0	1,0	2,0	1,94	16	4	50
Y6720020181	2,0	1,0	2,0	1,94	18	4	50
Y6720020201	2,0	1,0	2,0	1,94	20	4	60
Y6720020251	2,0	1,0	2,0	1,94	25	4	70
Y6720030151	3,0	1,5	3,0	2,90	15	4	60
Y6720030201	3,0	1,5	3,0	2,90	20	4	60
Y6720030301	3,0	1,5	3,0	2,90	30	4	70
Y6720040001	4,0	2,0	7,0	-	-	4	50
Y6720040251	4,0	2,0	12,0	3,90	25	4	60
Y6720040371	4,0	2,0	12,0	3,90	37	4	70
Y6720050001	5,0	2,5	7,0	-	-	5	50
Y6720050301	5,0	2,5	15,0	4,90	30	5	70
Y6720050371	5,0	2,5	15,0	4,90	37	5	70
Y6720060001	6,0	3,0	10,0	-	-	6	60
Y6720060401	6,0	3,0	18,0	5,90	40	6	100
Y6720060571	6,0	3,0	18,0	5,90	57	6	100
Y6720080001	8,0	4,0	10,0	-	-	8	60
Y6720080401	8,0	4,0	20,0	7,90	40	8	100
Y6720080571	8,0	4,0	20,0	7,90	57	8	100
Y6720100001	10,0	5,0	15,0	-	-	10	75
Y6720100451	10,0	5,0	25,0	9,90	45	10	100
Y6720100601	10,0	5,0	25,0	9,90	60	10	100
Y6720120001	12,0	6,0	15,0	-	-	12	75
Y6720120451	12,0	6,0	25,0	11,90	45	12	100

Roughing / Sgrossatura		Semi-Finishing / Semi-Finitura		Finishing / Finitura		 Dry Machining		 MQL (mist)		 Coolant Emulsion		
Acciai al carbonio, Acciai non legati Carbon steels, Steel non-alloyed	Acciai per utensili altamente legati Tools steels high alloyed	Acciai temprati Hardened Steels				Acciai inossidabili Stainless steels	Ghisa, Ghisa duttile Cast iron, Ductile cast iron	Leghe di alluminio Aluminium alloys	Leghe di rame Copper alloys	Grafite Graphite	Leghe di titanio Titanium alloys	Leghe resistenti al calore Heat-resisting alloy
		-45HRC	-55HRC	-60HRC	-65HRC							
												

lavorazioni di grafite / graphite machining / umformung von graphit / 石墨加工

652

653

Materiali Material			Grafite Graphite		
Ap Ae			 $Ae = 0.5xR$ $Ap = D$		
Vc m/min.			200 ~ 400		
ØD	R	Z	rpm	F	Fz
0,5	0,05	2	40000	510	0,006
1	0,05	2	40000	580	0,007
1	0,05	4	40000	1020	0,006
1,5	0,05	4	40000	2560	0,016
2	0,1	4	31847	2960	0,023
3	0,1	4	21231	2380	0,028
4	0,2	4	16000	3070	0,048
4	0,5	4	16000	3200	0,050
5	0,5	4	13000	2960	0,057
6	0,3	6	10616	3570	0,056
6	0,5	4	10616	2630	0,062
8	0,3	6	7962	3820	0,080
8	0,5	4	7962	2800	0,088
10	0,5	4	6500	2600	0,100
12	0,5	4	5500	2640	0,120

Materiali Material			Grafite Graphite		
Ap Ae			 $Ae = 0.1xD$ $Ap = D$		
Vc m/min.			200 ~ 400		
ØD	R	Z	rpm	F	Fz
2	0,15	3	41400	1580	0,013
3	0,15	3	27600	1410	0,017
4	0,2	3	20700	2640	0,043
5	0,3	3	16560	2960	0,060
6	0,3	3	13800	3170	0,077
8	0,5	3	10350	2900	0,094
10	0,5	3	8280	2740	0,111
12	0,5	3	6900	2640	0,128

672

Materiali Material			Grafite Graphite		
Ap Ae			 $Ap = 0.03xD$ $Ae = 0.05xD$		
Vc m/min.			200 ~ 400		
ØD	R	Z	rpm	F	Fz
0,5	0,25	2	40000	640	0,008
0,6	0,3	2	40000	720	0,009
1	0,5	2	40000	960	0,012
1,5	0,75	2	40000	1600	0,02
2	1	2	31847	1850	0,029
3	1,5	2	21231	1490	0,035
4	2	2	15924	1530	0,048
5	2,5	2	12739	1530	0,06
6	3	2	10616	1490	0,07
8	4	2	7962	1590	0,1
10	5	2	6369	1530	0,12
12	6	2	5308	1590	0,15

▲ con aria soffiata esternamente / external blown air / von aussen geblasene Luft / 外部强制风冷
Per utensili più lunghi adeguare Fz riducendo fino al 30%