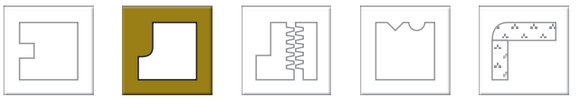
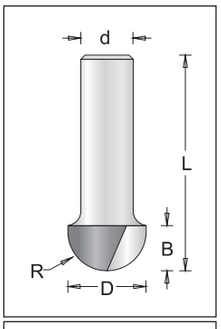


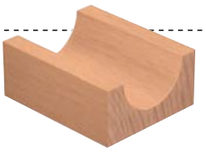
NOVA Routing - Portable Machines



Frezy do rowkowania | Profilowanie i fazowanie | Frezy do łączeń i wręgowania | Frezy do kształtowania | Frezy do Corianu

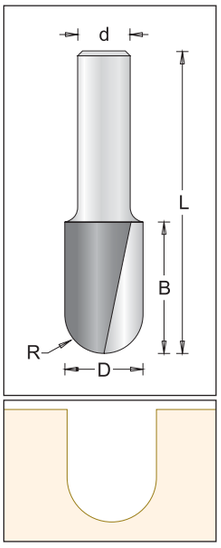
Frez - półwałek

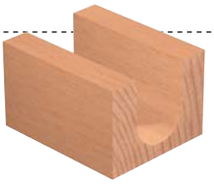




D	R	B	Kod	L	d
9.5	4.8	6.3	1060 09 3	38.0	6
	4.8	6.3	1060 09 5	42.5	8
12.7	6.3	9.5	1060 12 3	38.0	6
	6.3	9.5	1060 12 5	41.5	8
15.9	7.9	11.0	1060 15 3	40.0	6
	7.9	11.0	1060 15 5	43.5	8
19.1	9.5	11.0	1060 18 3	40.0	6
	9.5	11.0	1060 18 5	43.0	8
22.2	11.0	13.8	1060 21 3	44.5	6
	11.0	13.8	1060 21 5	46.0	8
25.4	12.7	17.5	1060 24 3	46.5	6
	12.7	17.5	1060 24 5	50.0	8
9.5	4.8	6.3	1060 09 9	52.0	12
12.7	6.3	9.5	1060 12 9	55.5	12
15.9	7.9	11.0	1060 15 9	51.0	12
19.1	9.5	11.0	1060 18 9	49.5	12
22.2	11.0	13.8	1060 21 9	52.0	12
25.4	12.7	17.5	1060 24 9	56.0	12
32.0	16.0	32.0	1060 33 9	70.0	12
38.1	19.1	32.0	1060 37 9	70.0	12
50.8	25.4	32.0	1060 40 9	70.0	12

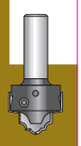
Frez półwałek wydłużony





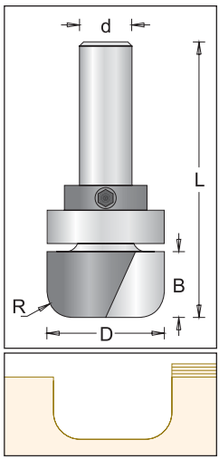
D	R	B	Kod	L	d
3.2	1.6	9.5	1060 01 3 *	44.0	6
	1.6	9.5	1060 01 5 *	44.0	8
4.8	2.4	11.0	1060 03 3 *	47.0	6
	2.4	11.0	1060 03 5 *	47.0	8
6.3	3.2	11.0	1060 06 3 *	47.0	6
	3.2	11.0	1060 06 5 *	47.0	8
8.0	4.0	12.7	1060 07 3	47.0	6
	4.0	12.7	1060 07 5	50.0	8
14.0	7.0	18.0	1060 17 3	46.5	6
	7.0	18.0	1060 17 5	50.0	8
	7.0	18.0	1060 17 9	60.0	12
18.0	9.0	19.0	1060 20 3	48.0	6
	9.0	19.0	1060 20 5	51.0	8
9.5	4.8	25.4	1060 11 5	58.0	8
	4.8	25.4	1060 11 9	70.0	12
12.7	6.3	32.0	1060 13 9	73.0	12
14.2	7.1	32.0	1060 14 9	73.0	12
16.0	8.0	32.0	1060 16 9	70.0	12
19.1	9.5	32.0	1060 19 9	70.0	12
22.2	11.1	32.0	1060 29 9	70.0	12
25.4	12.7	32.0	1060 30 9	70.0	12

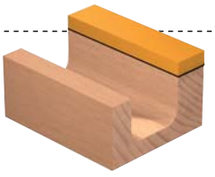
⚠ * Ostrze monolityczne HM





Wypukły frez kształtujący z łożyskiem





D	R	B	Kod	L	d	
12.7	3.0	12.7	1062 62 3	54	6	A
19.1	6.5	16.0	1062 63 3	60	6	B
	6.5	16.0	1062 63 9	67	12	C
28.6	6.5	16.0	1062 69 9	67	12	D
	10.0	12.7	1062 80 9	73	12	E

Części zamienne:



A.Łożysko
#191 003 0
1/4 x 1/2 x 3/16



B.Łożysko
#191 014 0
1/4 x 3/4 x 9/32



C.Łożysko
#191 020 0
1/2 x 3/4 x 5/32

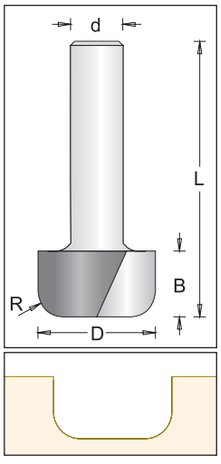


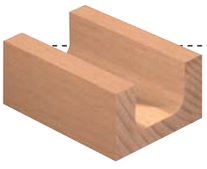
D.Łożysko
#191 018 0
1/2 x 11/8 x 12



E.Łożysko
#191 944 0
15 x 28.6 x 8.5

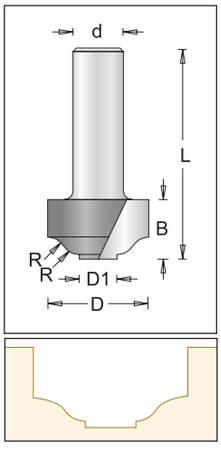
Wypukły frez kształtujący

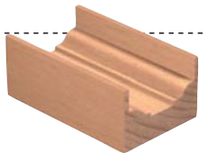




D	R	B	Kod	L	d
11.0	3.0	12.7	1060 60 3	54	6
12.7	3.0	12.7	1060 62 3	54	6
19.1	6.5	16.0	1060 63 3	60	6
	6.5	16.0	1060 63 9	67	12
28.6	6.5	16.0	1060 69 9	67	12
28.6	10.0	12.7	1060 80 9	73	12

Frez kształtujący do zagłębień



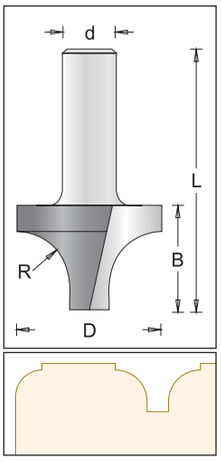


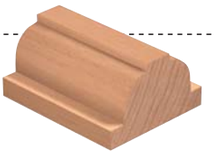
•D	•D1	B	Kod	R	L	•d
25.4	9.5	15.1	1473 05 9	4.8	53.2	12
30.2	11.9	15.1	1473 10 9	5.9	53.2	12



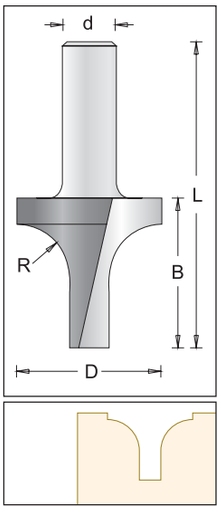
NOVA Routing - Portable Machines

Frez do zaokrągleń wypukły





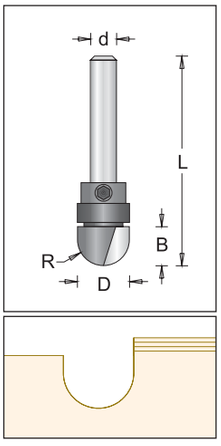
D	R	B	Kod	L	d
19.1	6.3	12.7	1170 01 3	41.0	6
	6.3	12.7	1170 01 5	44.5	8
22.2	7.9	14.3	1170 04 3	43.0	6
	7.9	14.3	1170 04 5	46.5	8
25.4	9.5	15.9	1170 07 3	44.0	6
	9.5	15.9	1170 07 5	47.5	8
15.9	4.8	11.1	1170 03 9	49.0	12
19.1	6.3	12.7	1170 01 9	51.0	12
22.2	7.9	14.3	1170 04 9	52.5	12
25.4	9.5	15.9	1170 07 9	54.0	12
34.9	12.7	25.4	1170 10 5	57.5	8
	12.7	25.4	1170 10 9	63.5	12
44.5	15.9	31.8	1170 13 5	63.5	8
	15.9	31.8	1170 13 9	70.0	12
50.8	19.1	36.5	1170 17 9	75.0	12

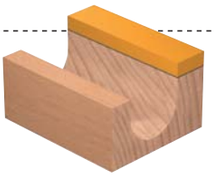




D	D1	R	B	Kod	L	d
22	12	3	31	117 150 5	63	8
	12	3	31	117 150 9	69	12
30	12	6	35	117 155 5	67	8
	12	6	35	117 155 9	73	12
34	12	8	38	117 160 5	70	8
	12	8	38	117 160 9	76	12

Frez półwałek





D	R	B	Kod	L	d
12.7	6.35	9.5	1062 12 3	51	6

Części zamienne:

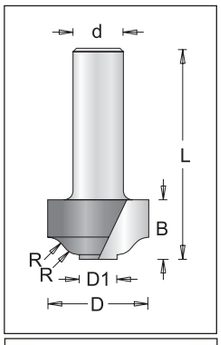


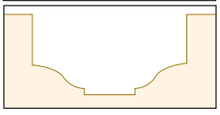
Łożysko
#191 003 0
6.3 x 12.7 x 4.7



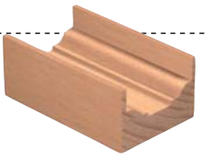
NOVA Routing - Portable Machines

Frez wypukły

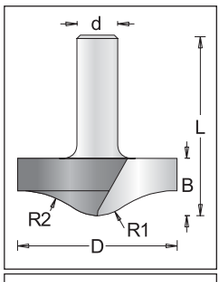


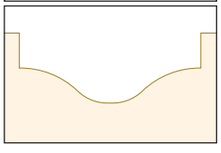


D	D1	R	B	Kod	L	d
25.4	9.5	4.8	15.1	1473 05 9	53.2	12
30.2	11.9	5.9	15.1	1473 10 9	53.2	12

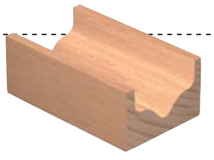


Frez wklęsło-wypukły

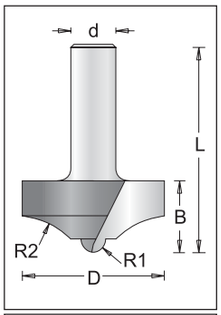


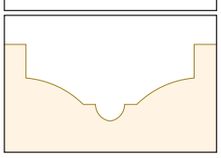


D	R1	R2	B	Kod	L	d
41.5	9.5	19	18	1373 02 9	56	12
50.0	16.0	30	18	1373 06 9	56	12

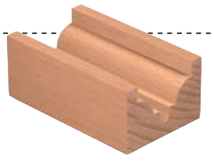


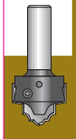
Frez wklęsło-wypukły





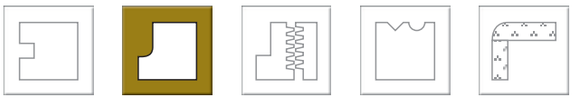
D	R1	R2	B	Kod	L	d
40	4	22	20	1373 04 9	58	12





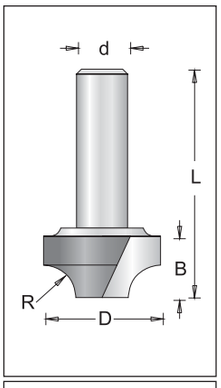


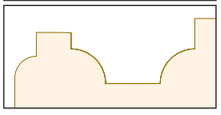
NOVA Routing - Portable Machines

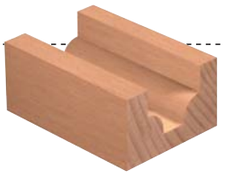


Frezy do rowkowania | Profilowanie i fazowanie | Frezy do łączeń i wręgowania | Frezy do kształtowania | Frezy do Corianu

Frez rowkujący

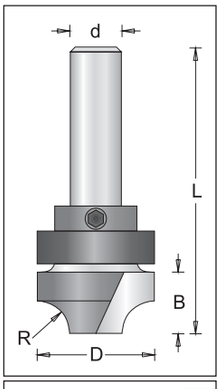


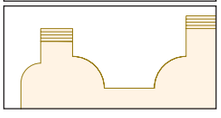


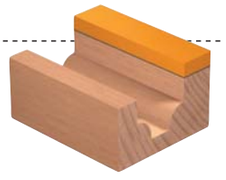


D	R	B	Kod	L	d
9.8	2.5	9	1270 01 3	49	6
	2.5	9	1270 01 5	49	8
12.7	3.0	10	1270 02 3	48	6
19.1	3.0	10	1270 04 3	51	6
20.0	4.0	9	1270 05 3	38	6
	4.0	9	1270 05 5	41	8
22.0	5.0	12	1270 06 3	55	6
	5.0	12	1270 06 5	44	8
24.0	6.0	11	1270 07 5	43	8
26.0	7.0	12	1270 10 3	41	6
	7.0	12	1270 10 5	44	8
28.6	8.0	14	1270 08 3	58	6
	8.0	14	1270 08 5	46	8
28.6	8.0	14	1270 08 9	68	12

Frez rowkujący z łożyskiem







D	R	B	Kod	L	d	
12.7	3	10	1272 02 3	48	6	A
19.1	3	10	1272 04 3	51	6	B
22.0	5	12	1272 06 3	55	6	C
	5	12	1272 06 5	58	8	C
28.6	8	14	1272 08 3	58	6	D
	8	14	1272 08 5	61	8	D
	8	14	1272 08 9	68	12	D

Części zamienne:



A.Łożysko
#191 003 0
12.7x6.3x4.7



B.Łożysko
#191 014 0
19x6.3x7

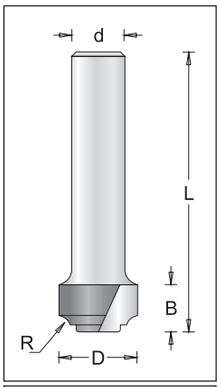


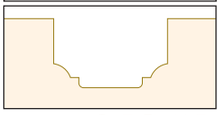
C.Łożysko
#191 013 0
22x8x7

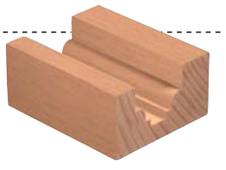


D.Łożysko
#1910180
28.5x12.78

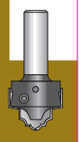
Frez tradycyjny







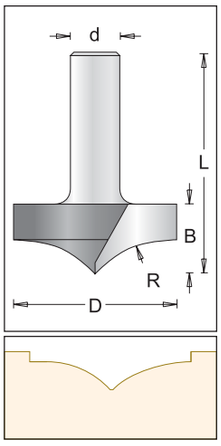
D	R	B	Kod	L	d
12.7	2.0	10.5	1280 01 5	52	8
19.1	3.5	11.1	1280 04 5	52	8
	3.5	11.1	1280 04 9	68	12



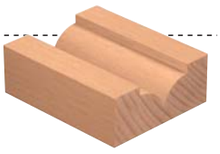


NOVA Routing - Portable Machines

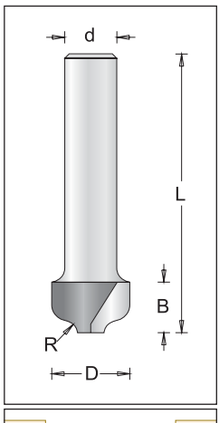
Frez do zagłębień



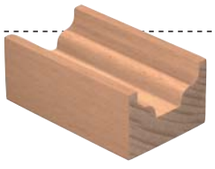
D	R	B	Kod	L	d
44.5	18.3	18.3	1173 02 9	56.3	12
41.3	25.4	18.3	1173 04 9	56.3	12



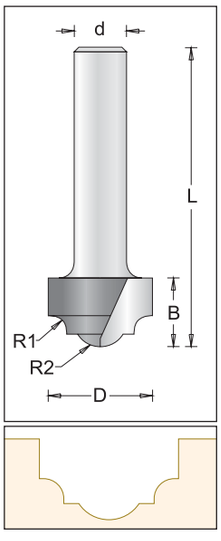
Frez wklęsło-wypukły z płaskim wierzchołkiem



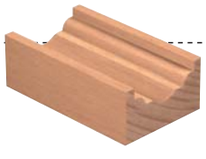
D	R	B	Kod	L	d
12.7	2.0	9.5	1300 04 3	51	6
	2.0	9.5	1300 04 5	51	8
19.1	3.5	12.7	1300 07 3	53	6
	3.5	12.7	1300 07 5	53	8
	3.5	12.7	1300 07 9	68	12



Frez klasyczny



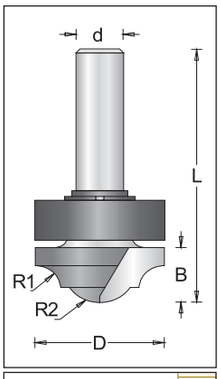
D	R1	R2	B	Kod	L	d
12.7	2.5	3.5	10.5	1310 01 3	51	6
	2.5	3.5	10.5	1310 01 5	51	8
19.1	3.7	4.0	12.7	1310 04 3	54	6
	3.7	4.0	12.7	1310 04 5	54	8
	3.7	4.0	12.7	1310 04 9	70	12
25.4	5.0	6.3	16.5	1310 07 5	57	8
	5.0	6.3	16.5	1310 07 9	73	12
38.1	6.3	6.3	19.1	1310 09 9	76	12

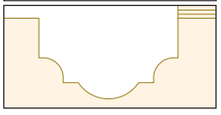


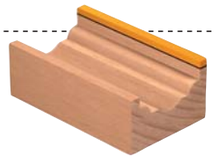


NOVA Routing - Portable Machines

Frez rowkujący ozdobny







D	R1	R2	Kod	B	L	d	
22	4.0	5.5	1312 05 3	12	52	6	A
	4.0	5.5	1312 05 5	12	55	8	A
35	6.5	10.0	1312 22 9	15	68	12	B

Części zamienne:

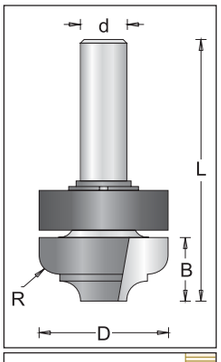


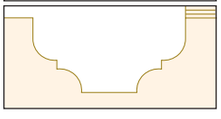
A.Łożysko
1910130
8x22x7

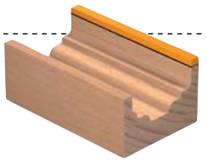


B.Łożysko
1910190
15x35x11

Frez z płaskim wierzchołkiem ozdobny







D	R	Kod	B	L	d	
22	3.5	1352 05 3	11.1	51	6	A
	3.5	1352 05 5	11.1	54	8	A
35	5.0	1352 22 9	14.3	67	12	B

Części zamienne:



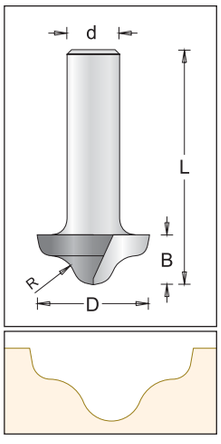
A.Łożysko
#191 013 0
8x22x7



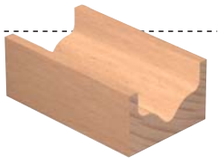
B.Łożysko
191 019 0
15x35x11



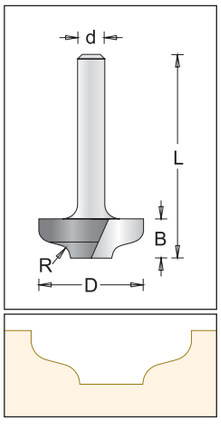
Frez wklęsło-wypukły



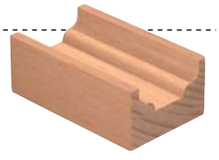
D	R	Kod	B	L	d
27	6	1370 04 3	12	52	6
	6	1370 04 5	12	52	8
	6	1370 04 9	12	57	12



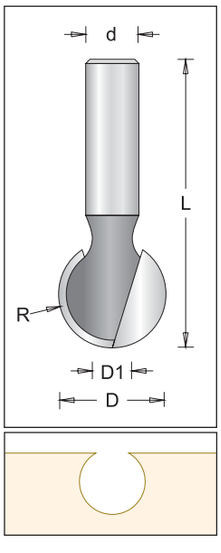
Frez wklęsło-wypukły z płaskim wierzchołkiem



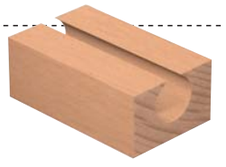
D	R	Kod	B	L	d
25.4	3.2	1470 06 3	9.5	49	6
	3.2	1470 06 5	9.5	49	8
	3.2	1470 06 9	9.5	49	12
35.0	3.2	1470 10 9	9.5	59	12



Frez kulisty

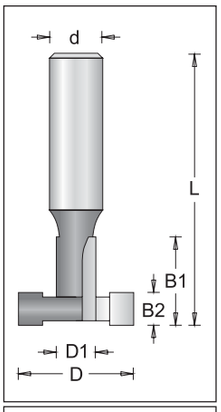


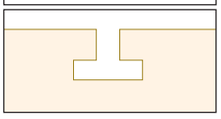
D	D1	R	Kod	L	d
12.7	6.35	6.35	1066 04 9	58	12
16.0	7.0	8.0	1066 07 9	63	12
19.0	8.0	9.5	1066 10 9	64	12
22.2	8.0	11.1	1066 13 9	68	12
25.4	8.7	12.7	1066 16 9	70	12
28.6	10.3	14.3	1066 19 9	74	12
32.0	11.1	16.0	1066 22 9	75	12

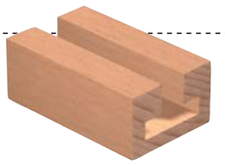




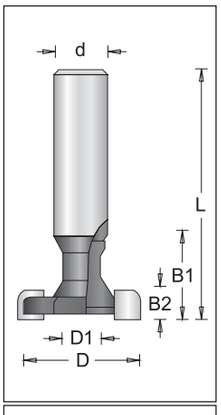
Frez do otworów T-kształtnych

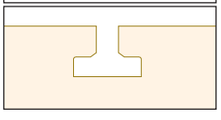


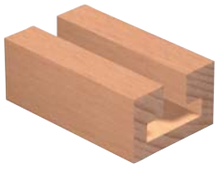




D	D1	Kod	B1	B2	L	d
28	9.5	1460 20 6	20.7	8.0	60	9.5
	9.5	1460 20 9	20.7	8.0	66	12.0
35	12.7	1460 23 9	22.2	9.5	65	12.0

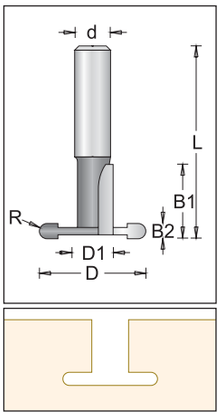




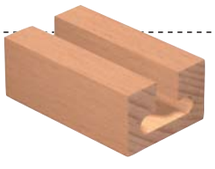


D	D1	Kod	B1	B2	L	d
30	10.5	1460 70 9	17	7	60	12

Frez do otworów T-kształtnych z promieniem



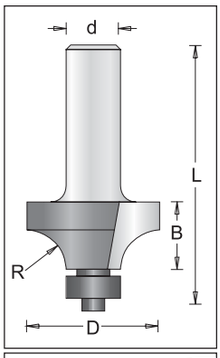


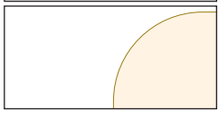


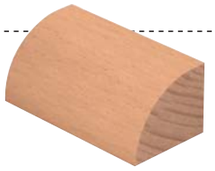
D	D1	Kod	B1	B2	R	L	d
40.8	9.7	1460 14 6	20.7	4	2	52	9.5
28.8	11.1	1460 10 6	20.7	4	2	52	9.5
	11.1	1460 10 9	20.7	4	2	55	12.0



Frez profilujący ćwierćwałek z łożyskiem







D	R	B	Kod	L	d	n	
15.9	1.7	7.9	1090 01 3	47.0	6		
	1.7	7.9	1090 01 5	50.0	8		
19.1	3.2	9.5	1090 04 3	50.0	6		
	3.2	9.5	1090 04 5	53.0	8		
20.7	4.0	9.5	1090 05 3	49.5	6		
	4.0	9.5	1090 05 5	53.0	8		
22.2	4.8	12.7	1090 07 3	52.0	6		
	4.8	12.7	1090 07 5	55.5	8		
25.4	6.3	12.7	1090 10 3	51.5	6		
	6.3	12.7	1090 10 5	55.0	8		
28.6	7.9	13.5	1090 13 3	53.0	6		
	7.9	13.5	1090 13 5	56.0	8		
31.8	9.5	15.9	1090 16 3	55.5	6		
	9.5	15.9	1090 16 5	59.0	8		
35.4	11.1	17.0	1090 50 3	57.0	6		
	11.1	17.0	1090 50 9	66.0	8		
38.1	12.7	19.1	1090 19 3	58.0	6		
	12.7	19.1	1090 19 5	61.0	8		
15.9	1.7	7.9	1090 01 9	57.0	12		
19.1	3.2	9.5	1090 04 9	59.0	12		
20.7	4.0	9.5	1090 05 9	59.0	12		
22.2	4.8	12.7	1090 07 9	62.0	12		
25.4	6.3	12.7	1090 10 9	62.0	12		
28.6	7.9	13.5	1090 13 9	62.0	12		
31.8	9.5	15.9	1090 16 9	65.0	12		
38.1	12.7	19.1	1090 19 9	67.0	12		
41.3	14.3	20.0	1090 20 9	70.0	12		
44.5	15.9	22.2	1090 22 9	71.0	12		
50.8	19.1	25.4	1090 25 9	75.0	12		
57.1	22.2	29.4	1090 26 9	79.0	12		
63.5	25.4	31.8	1090 28 9	91.5	12		
69.9	28.6	34.9	1090 30 9	95.0	12	18,000	Max. RPM
76.3	31.8	38.1	1090 31 9	98.0	12	18,000	
82.5	35.0	41.3	1090 33 9	101.0	12	16,000	
88.9	38.1	44.5	1090 34 9	105.0	12	16,000	

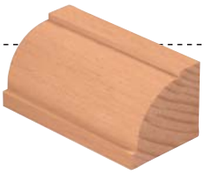
Części zamienne:

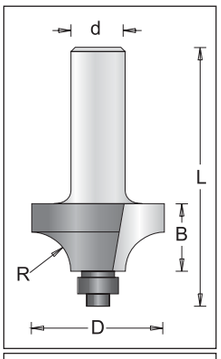


Łożysko
#191 007 0
12.7x4.7x5



Frez ćwierćwałek z odsadzeniem





D	R	B	Kod	L	d	n	
15.9	1.7	7.9	1190 01 3	47.0	6		
	1.7	7.9	1190 01 5	50.0	8		
19.1	3.2	9.5	1190 04 3	50.0	6		
	3.2	9.5	1190 04 5	53.0	8		
20.7	4.0	9.5	1190 05 3	49.5	6		
	4.0	9.5	1190 05 5	53.0	8		
22.2	4.8	12.7	1190 07 3	52.0	6		
	4.8	12.7	1190 07 5	55.5	8		
25.4	6.3	12.7	1190 10 3	50.0	6		
	6.3	12.7	1190 10 5	55.0	8		
28.6	7.9	13.5	1190 13 3	53.0	6		
	7.9	13.5	1190 13 5	56.0	8		
31.8	9.5	15.9	1190 16 3	55.5	6		
	9.5	15.9	1190 16 5	59.0	8		
35.4	11.1	17.0	1190 50 3	57.0	6		
	11.1	17.0	1190 50 9	66.0	8		
38.1	12.7	19.1	1190 19 3	58.0	6		
	12.7	19.1	1190 19 5	61.0	8		
15.9	1.7	7.9	1190 01 9	57.0	12		
19.1	3.2	9.5	1190 04 9	59.0	12		
20.7	4.0	9.5	1190 05 9	59.0	12		
22.2	4.8	12.7	1190 07 9	62.0	12		
25.4	6.3	12.7	1190 10 9	62.0	12		
28.6	7.9	13.5	1190 13 9	62.0	12		
31.8	9.5	15.9	1190 16 9	65.0	12		
38.1	12.7	19.1	1190 19 9	67.0	12		
41.3	14.3	20.0	1190 20 9	70.0	12		
44.5	15.9	22.2	1190 22 9	71.0	12		
50.8	19.1	25.4	1190 25 9	75.0	12		
57.1	22.2	29.4	1190 26 9	79.0	12		
63.5	25.4	31.8	1190 28 9	91.5	12		
69.9	28.6	34.9	1190 30 9	95.0	12	18,000	Max. RPM
76.3	31.8	38.1	1190 31 9	98.0	12	18,000	
82.5	35.0	41.3	1190 33 9	101.0	12	16,000	
88.9	38.1	44.5	1190 34 9	105.0	12	16,000	

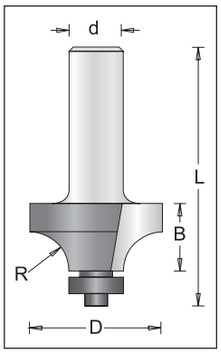
Części zamienne:

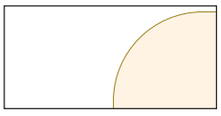


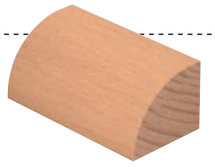
Łożysko
#191 004 0
9.5x4.7x3



Frez ćwierćwałek z łożyskiem







D	R	B	Kod	L	d	n
16.7	2	7.7	1099 01 3	47.5	6	
	2	7.7	1099 01 5	51.0	8	
18.7	3	9.5	1099 04 3	49.5	6	
	3	9.5	1099 04 5	53.0	8	
22.7	5	12.0	1099 07 3	52.0	6	
	5	12.0	1099 07 5	55.5	8	
24.7	6	12.0	1099 10 3	51.5	6	
	6	12.0	1099 10 5	55.0	8	
28.7						
	8	13.5	1099 13 3	53.5	6	
36.7	8	13.5	1099 13 5	57.0	8	
	12	17.5	1099 19 3	57.5	6	
32.7	12	17.5	1099 19 5	61.0	8	
	10	16.0	1099 16 9	65.0	12	
42.0	12	17.5	1099 19 9	67.0	12	
	15	21.2	1099 22 9	70.0	12	
48.7	18	25.7	1099 25 9	72.5	12	
52.7	20	25.4	1099 26 9	74.0	12	
62.7	25	31.2	1099 28 9	90.5	12	
72.6	30	38.7	1099 31 9	98.0	12	18,000
82.7	35	42.0	1099 33 9	91.0	12	16,000

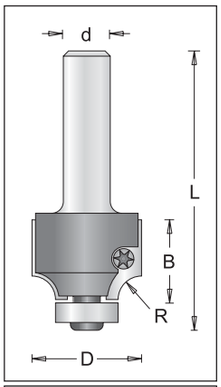
Max. RPM

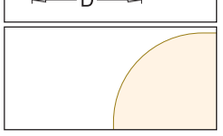
Części zamienne:

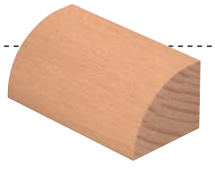


Łożysko
#191 007 0
12.7x4.7x5

Frez ćwierćwałek z płytką wymienną HM







D	R	B	Kod	L	d
25	3	20	1093 01 9	68	12
28	6	20	1093 02 9	68	12
32	8	30	1093 03 9	78	12
36	10	30	1093 04 9	78	12

Części zamienne:



Płytka HM
#310 930 3
R3x1.5x9x20



Płytka HM
#310 930 6
R6x1.5x9 x20



Płytka HM
#310 930 8
R8x1.5x15x30



Płytka HM
#310 931 0
R10x1.5x15x30



Wkręt torx
#193 148 2
M4x5.6



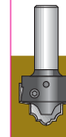
Łożysko
#191 015 0
19x4.7x5



Łożysko
#191 010 0
5x16x5

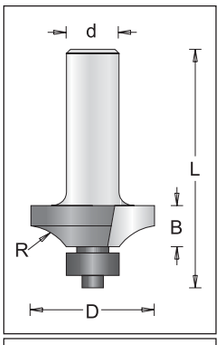


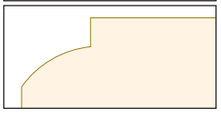
Klucz torx
#194 101 5
T15



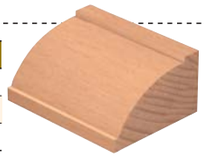


Frez spłaszczony do zaokrągleń





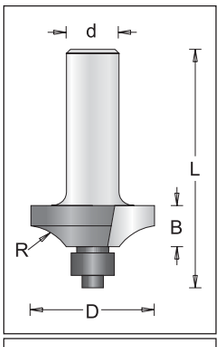
D	R	B	Kod	L	d
30	12	10	1092 18 3	50.0	6
	12	10	1092 18 5	53.5	8
	12	10	1092 18 9	60.0	12

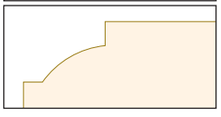


Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5





D	R	B	Kod	L	d
30	12	10	1192 18 3	48.0	6
	12	10	1192 18 5	51.5	8
	12	10	1192 18 9	58.0	12

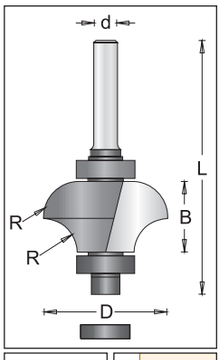
Części zamienne:

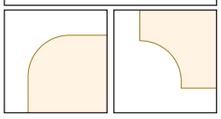


Łożysko
#191 004 0
9.5x4.7x3



Frez z łożyskiem - ćwierćwałek wypukły i wklęsły









D	R	B	Kod	L	d
28.5	6.3	13.7	1722 02 3	65.7	6
	6.3	13.7	1722 02 5	65.7	8
31.8	8.0	17.0	1722 03 3	69.0	6
	8.0	17.0	1722 03 5	69.0	8
34.8	9.5	20.0	1722 04 3	72.0	6
	9.5	20.0	1722 04 5	72.0	8

Części zamienne:



Łożysko
#191 024 0
8x16x5

D	R	B	Kod	L	d
28.5	6.3	13.7	1722 12 3	64.7	6
	6.3	13.7	1722 12 5	64.7	8
31.8	8.0	17.0	1722 13 3	68.0	6
	8.0	17.0	1722 13 5	68.0	8
34.8	9.5	20.0	1722 14 3	71.0	6
	9.5	20.0	1722 14 5	71.0	8

Części zamienne:



Łożysko
#191 024 0
8x16x5

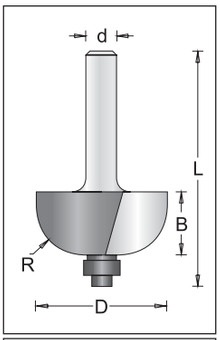


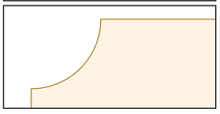
Łożysko *
#191 031 0
8x14x4

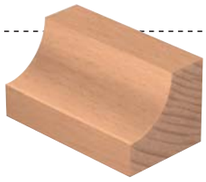


NOVA Routing - Portable Machines

Frez półwałek z łożyskiem







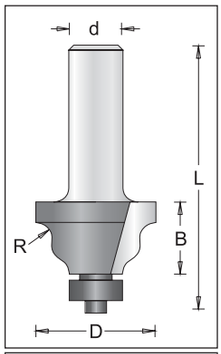
D	R	B	Kod	L	d
12.7	1.6	12.7	1120 02 3	51.0	6
	1.6	12.7	1120 02 5	54.0	8
15.9	3.2	12.7	1120 03 3	51.0	6
	3.2	12.7	1120 03 5	54.0	8
19.1	4.8	14.3	1120 01 3	51.0	6
	4.8	14.3	1120 01 5	54.0	8
22.2	6.3	14.3	1120 04 3	51.0	6
	6.3	14.3	1120 04 5	54.0	8
25.4	7.9	14.3	1120 07 3	51.0	6
	7.9	14.3	1120 07 5	55.0	8
28.6	9.5	14.3	1120 10 3	52.0	6
	9.5	14.3	1120 10 5	55.0	8
34.9	12.7	16.7	1120 13 3	55.0	6
	12.7	16.7	1120 13 5	55.0	8
12.7	1.6	12.7	1120 02 9	60.0	12
15.9	3.2	12.7	1120 03 9	60.0	12
19.1	4.8	14.3	1120 01 9	60.5	12
22.2	6.3	14.3	1120 04 9	60.5	12
25.4	7.9	14.3	1120 07 9	60.5	12
28.6	9.5	14.3	1120 10 9	60.5	12
34.9	12.7	16.7	1120 13 9	64.0	12
41.3	16.0	18.0	1120 15 9	65.0	12
57.1	22.2	31.8	1120 18 9	81.0	12

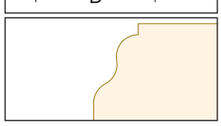
Części zamienne:

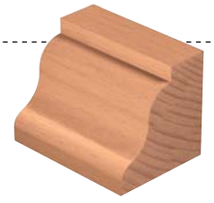


Łożysko
#191 001 0
9.5x3x4

Frez z łożyskiem do falistych zakończeń





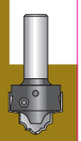


D	R	B	Kod	L	d
31.8	4	17.5	1133 04 3	57	6
	4	17.5	1133 04 5	61	8
	4	17.5	1133 04 9	67	12

Części zamienne:



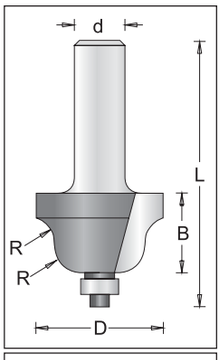
Łożysko
#191 007 0
12.7x4.7x5

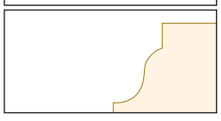




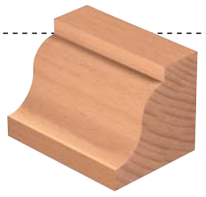
NOVA Routing - Portable Machines

Frez romański





•D	R	B	Kod	L	•d
25.4	4.0	15.9	1130 01 3	54.0	6
	4.0	15.9	1130 01 5	57.0	8
34.9	6.3	20.0	1130 04 3	58.0	6
	6.3	20.0	1130 04 5	61.5	8
25.4	4.0	15.9	1130 01 9	63.0	12
34.9	6.3	20.0	1130 04 9	67.5	12

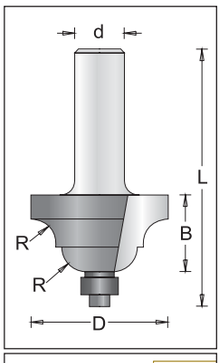


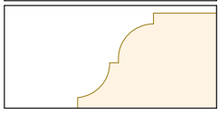
Części zamienne:



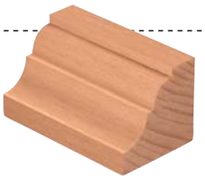
Łożysko
#191 001 0
9.5x3x4

Frez klasyczny z łożyskiem





D	R	B	Kod	L	d
25.4	4.0	16	1340 01 3	54.0	6
	4.0	16	1340 01 5	57.5	8
34.9	6.3	20	1340 04 3	56.5	6
	6.3	20	1340 04 5	60.0	8
25.4	4.0	16	1340 01 9	63.5	12
34.9	6.3	20	1340 04 9	66.0	12

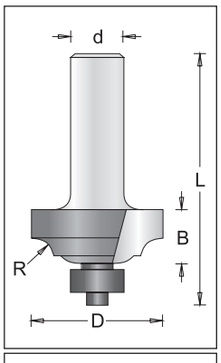


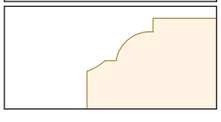
Części zamienne:



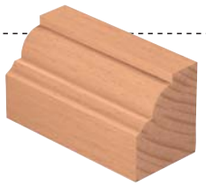
Łożysko
#191 001 0
9.5x3x4

Frez klasyczny spłaszczony z łożyskiem





D	R	B	Kod	L	d
31.8	5	13	1200 01 3	53.0	6
	5	13	1200 01 5	56.5	8
38.1	6	16	1200 04 3	55.5	6
	6	16	1200 04 5	59.0	8
31.8	5	13	1200 01 9	62.5	12
38.1	6	16	1200 04 9	65.0	12



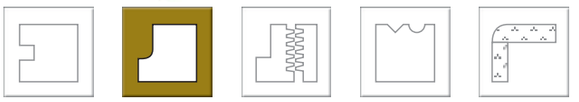
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

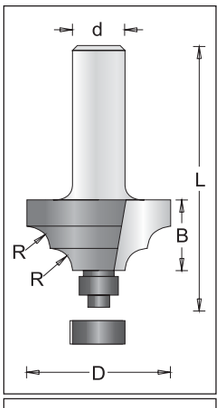


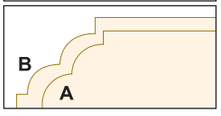
NOVA Routing - Portable Machines



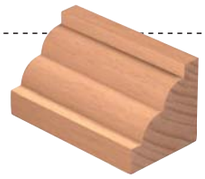
Frezy do rowkowania | Profilowanie i fazowanie | Frezy do łączeń i wręgowania | Frezy do kształtowania | Frezy do Corianu

Frez profilujący klasyczny





D	R	B	Kod	L	d	
28.6	4.0	12.7	1360 02 3	52.5	6	A
	4.0	12.7	1360 02 5	56.5	8	A
34.9	5.5	17.0	1360 01 3	57.0	6	A
	5.5	17.0	1360 01 5	60.5	8	A
28.6	4.0	12.7	1360 02 9	62.0	12	A
34.9	5.5	17.0	1360 01 9	66.0	12	A
28.6	4.0	12.7	1360 03 3	51.0	6	B
	4.0	12.7	1360 03 5	54.0	8	B
34.9	5.5	17.0	1360 04 3	55.0	6	B
	5.5	17.0	1360 04 5	58.0	8	B
28.6	4.0	12.7	1360 03 9	60.0	12	B
34.9	5.5	17.0	1360 04 9	65.0	12	B
38.1	6.3	19.1	1360 06 9	68.5	12	A
50.8	9.5	22.2	1360 08 9	72.0	12	A



Części zamienne:

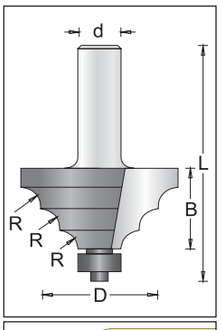


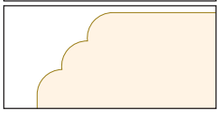
A.Łożysko
#191 007 0
12.7x4.7x5



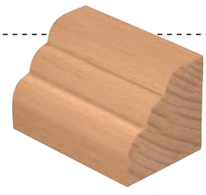
B.Łożysko
#191 004 0
9.5x4.7x3

Frez modelujący klasyczny





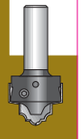
D	R	B	Kod	L	d
47.3	6	23.8	1363 07 9	73	12



Części zamienne:

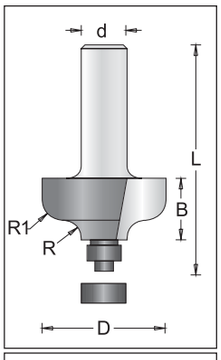


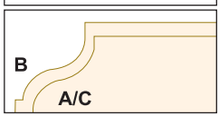
Łożysko
#191 007 0
12.7x4.7x5

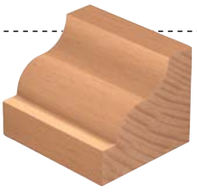




Frez wklęsło-wypukły







D	R1	R2	Kod	B	L	d	
16.3	2.0	2	1380 05 3	9.5	47.0	6	C
	2.0	2	1380 05 5	9.5	50.5	8	C
28.6	4.5	4	1380 02 3	12.7	52.5	6	A
	4.5	4	1380 02 5	12.7	56.0	8	A
34.9	6.0	5	1380 01 3	17.5	57.0	6	A
	6.0	5	1380 01 5	17.5	60.5	8	A
28.6	4.5	4	1380 02 9	12.7	62.0	12	A
34.9	6.0	5	1380 01 9	17.5	67.0	12	A
28.6	4.5	4	1380 03 3	12.7	51.0	6	B
	4.5	4	1380 03 5	12.7	54.0	8	B
34.9	6.0	5	1380 04 3	17.5	56.0	6	B
	6.0	5	1380 04 5	17.5	59.0	8	B
28.6	4.5	4	1380 03 9	12.7	60.0	12	B
34.9	6.0	5	1380 04 9	17.5	65.0	12	B

Części zamienne:



A.Łożysko
#191 0070
12.7x4.7x5

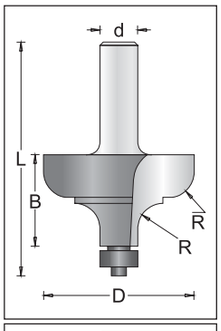


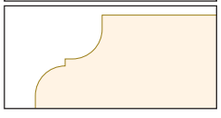
B.Łożysko
#191 004 0
9.5x4.7x3

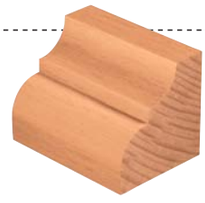


C.Łożysko
#191 002 0
6.3x3x2.8

Frez modelujący klasyczny





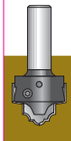


D	R	Kod	B	L	d
51	8.5	1560 41 9	31	80	12

Części zamienne:

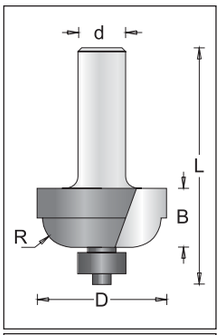


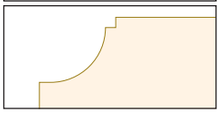
Łożysko
#191 007 0
12.7x4.7x5

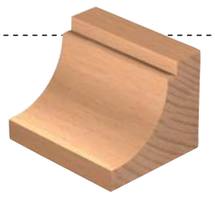




Frez wypukły z wręgiem z łożyskiem







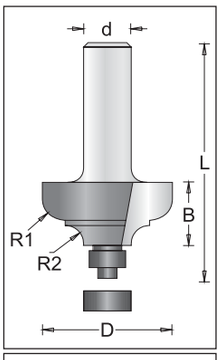
D	R	Kod	B	L	d
28.6	4.8	1400 02 3	12.7	52.0	6
	4.8	1400 02 5	12.7	55.0	8
34.9	7.9	1400 01 3	15.9	55.0	6
	7.9	1400 01 5	15.9	58.0	8
28.6	4.8	1400 02 9	12.7	61.5	12
34.9	7.9	1400 01 9	15.9	65.0	12

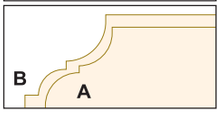
Części zamienne:

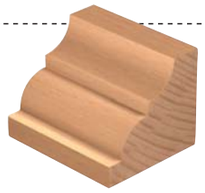


Łożysko
#191 007 0
12.7x4.7x5

Frez wklęsło-wypukły z odsadzeniem







D	R1	R2	Kod	B	L	d	
28.6	4.0	4.0	1350 02 3	12.7	52.5	6	A
	4.0	4.0	1350 02 5	12.7	56.0	8	A
34.9	6.0	5.0	1350 01 3	17.5	56.5	6	A
	6.0	5.0	1350 01 5	17.5	60.0	8	A
28.6	4.5	4.0	1350 02 9	12.7	62.0	12	A
34.9	6.0	4.8	1350 01 9	17.5	66.0	12	A
38.0	4.7	8.0	1350 07 9	16.0	65.0	12	A
51.0	9.5	9.5	1350 06 9	23.0	72.0	12	A
28.6	4.0	4.0	1350 03 3	12.7	51.0	6	B
	4.0	4.0	1350 03 5	12.7	54.0	8	B
34.9	6.0	5.0	1350 04 3	17.5	55.0	6	B
	6.0	5.0	1350 04 5	17.5	58.5	8	B
28.6	4.0	4.0	1350 03 9	12.7	60.0	12	B
34.9	6.0	4.8	1350 04 9	17.5	64.5	12	B
38.0	4.7	8.0	1350 08 9	16.0	65.0	12	B

Części zamienne:



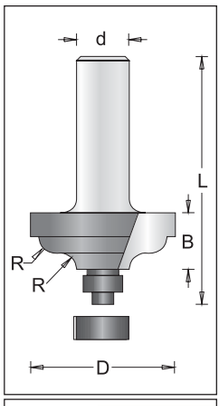
A.Łożysko
#191 007 0
12.7x4.7x5



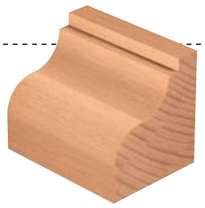
B.Łożysko
#191 004 0
9.5x4.7x3



Frez wklęsło-wypukły z odsadzeniem



D	R	B	Kod	L	d	
34.9	4.0	13.5	1210 01 3	54.0	6	A
	4.0	13.5	1210 01 5	57.5	8	A
	4.0	13.5	1210 07 3	52.0	6	B
	4.0	13.5	1210 07 5	55.5	8	B
	4.0	13.5	1210 01 9	63.5	12	A
	4.0	13.5	1210 07 9	61.0	12	B
41.3	6.3	19.1	1210 04 9	69.0	12	A
	6.3	19.1	1210 10 9	67.0	12	B
57.2	9.5	25.4	1210 14 9	73.0	12	B
	9.5	25.4	1210 15 9	75.0	12	A



Części zamienne:

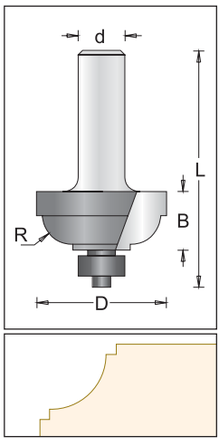


A.Łożysko
#191 007 0
12.7x4.7x5

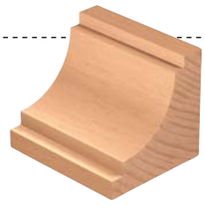


B.Łożysko
#191 004 0
9.5x4.7x3

Frez klasyczny do łuków wklęsłych z odsadzeniem



D	R	Kod	B	L	d
28.6	4.8	1390 02 3	12.7	52.0	6
	4.8	1390 02 5	12.7	55.5	8
34.9	7.9	1390 01 3	15.9	55.5	6
	7.9	1390 01 5	15.9	57.0	8
28.6	4.8	1390 02 9	12.7	61.5	12
34.9	7.9	1390 01 9	15.9	65.0	12

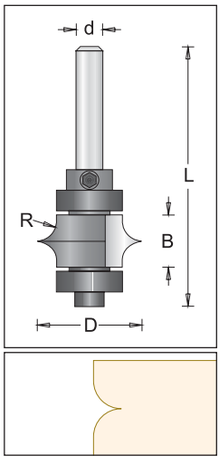


Części zamienne:

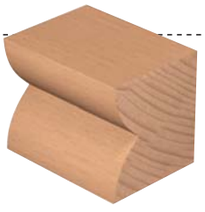


Łożysko
#191 007 0
12.7x4.7x5

Frez zawijający do obrzeży



D	R	Kod	B	L	d
25.4	4.8	1570 04 3	12.7	66	6
28.6	6.3	1570 08 3	15.9	69	6
34.5	9.5	1570 12 3	22.2	75	6



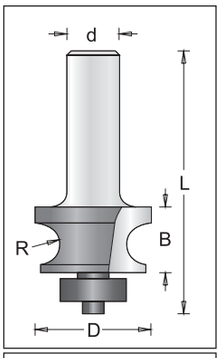
Części zamienne:

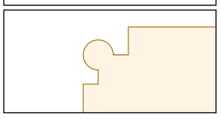


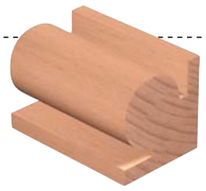
Łożysko
#191 015 0
6.3x16x5



Frez kształtujący do narożników







D	R	Kod	B	L	d	
23.0	2.0	1241 05 3	10.3	50.0	6	B
22.2	3.2	1241 08 3	14.3	54.0	6	A
	3.2	1241 08 5	14.3	57.0	8	A
28.2	5.0	1241 11 3	16.5	57.0	6	B
	5.0	1241 11 5	16.5	57.0	8	B
31.8	6.3	1241 13 3	19.1	58.0	6	B
	6.3	1241 13 5	19.1	60.0	8	B
22.2	3.2	1241 08 9	13.5	63.5	12	A
28.2	4.8	1241 11 9	16.5	66.5	12	B
31.8	6.3	1241 13 9	19.1	68.0	12	B
38.1	9.5	1241 17 9	25.4	75.0	12	B

Części zamienne:

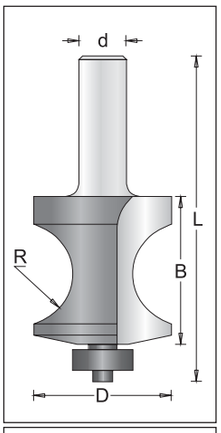


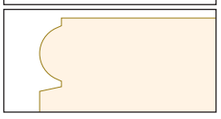
A.Łożysko
#191 007 0
12.7x4.7x5

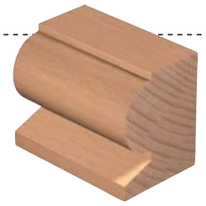


B.Łożysko
#191 010 0
16x5x5

Frez torusowy







D	R	Kod	B	L	d
37.2	13.5	1244 20 9	40	89	12

Części zamienne:

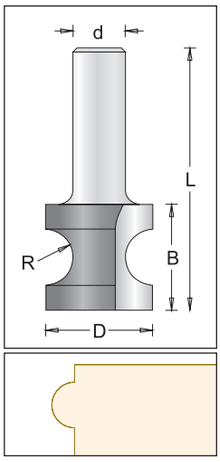


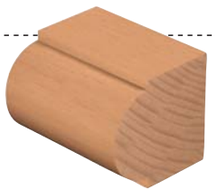
Łożysko
#191 010 0
5x16x5



NOVA Routing - Portable Machines

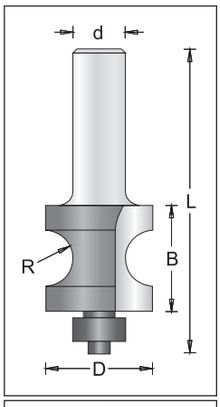
Frez profilujący do półwałków

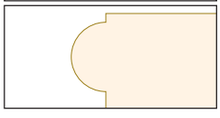


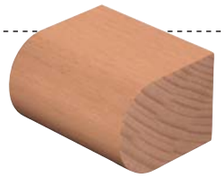


D	R	Kod	B	L	d	n	
13.5	2.0	1240 01 3	12.7	41.3	6		
	2.0	1240 01 5	12.7	45.0	8		
15.1	2.8	1240 04 3	12.7	41.3	6		
	2.8	1240 04 5	12.7	45.0	8		
16.7	3.6	1240 07 3	19.1	47.6	6		
	3.6	1240 07 5	19.1	51.0	8		
22.2	5.2	1240 10 3	19.1	47.6	6		
	5.2	1240 10 5	19.1	51.0	8		
26.2	6.8	1240 13 3	25.4	54.0	6		
	6.8	1240 13 5	25.4	57.5	8		
13.5	2.0	1240 01 9	12.7	55.0	12		
15.1	2.8	1240 04 9	12.7	51.0	12		
16.7	3.6	1240 07 9	19.1	57.0	12		
22.2	5.2	1240 10 9	19.1	57.0	12		
26.1	6.8	1240 13 9	25.4	63.5	12		
28.0	7.9	1240 15 9	25.4	63.5	12		
33.3	9.5	1240 17 9	33.7	72.0	12		
42.0	12.7	1240 20 9	39.7	78.0	12		
50.8	15.9	1240 23 9	50.0	88.0	12		
60.3	19.1	1248 26 9-3T	50.8	88.0	12	18,000	Max. RPM

Frez profilujący do półwałków z łożyskiem







D	R	Kod	B	L	d	
26.2	6.8	1243 13 9	26	75	12	A
35.0	9.5	1243 17 9	34	84	12	B
44.5	12.7	1243 20 9	40	93	12	C
50.8	15.8	1243 23 9	50	103	12	C

Części zamienne:



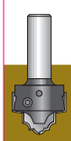
A.Łożysko
#191 007 0
12.7x4.7x5



B.Łożysko
#191 010 0
16x5x5

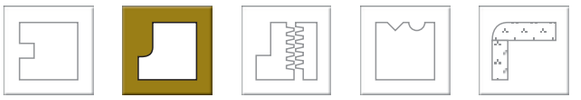


C.Łożysko
#191 014 0
19x6.3x7



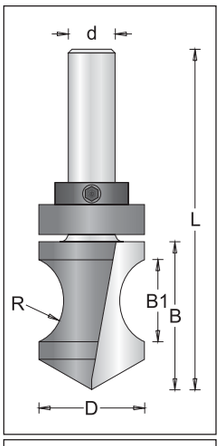


NOVA Routing - Portable Machines



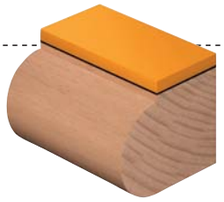
Frezy do rowkowania | Profilowanie i fazowanie | Frezy do łączeń i wręgowania | Frezy do kształtowania | Frezy do Corianu

Frez profilujący do półwałków z łożyskiem





D	R	Kod	B	B1	L	d
28.5	12.7	1240 51 9	40	22.2	92	12
	12.7	1242 51 9 *	40	22.2	92	12

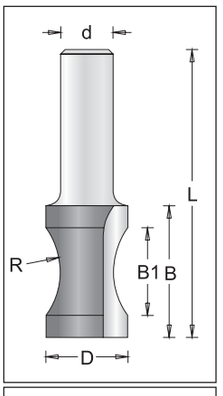


Części zamienne:



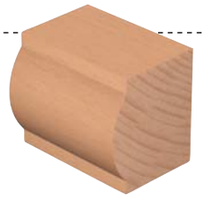
Łożysko *
#191 018 0
28.6x12.7x8

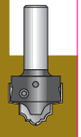
Frez profilujący do półwałków - spłaszczony





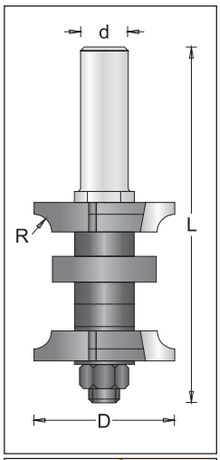
D	R	Kod	B	B1	L	d
20	18	1242 04 3	32	21.3	62	6
	18	1242 04 5	32	21.3	64	8
	18	1242 04 9	32	21.3	70	12

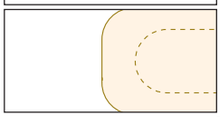


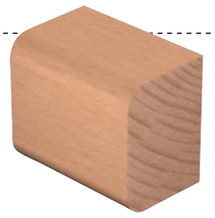




Zestaw nastawny do zaokrągleń







	R	Kod	D	B Min.	B Max	L	d
Zestaw	4.8	158 000 9	38.1	9.5	38	96	12
Frez górny	4.8	158 094 0					
Frez dolny	4.8	158 095 0					

	R	Kod	D	B Min.	B Max	L	d
Zestaw	6.35	158 100 9	40.7	12.7	36	96	12
Frez górny	6.35	158 064 0					
Frez dolny	6.35	158 063 0					

	R	Kod	D	B Min.	B Max	L	d
Zestaw	9.6	158 200 9	47.2	19	36	96	12
Frez górny	9.6	158 084 0					
Frez dolny	9.6	158 083 0					

Części zamienne:


Trzpień z nakrętką
#190 009 9
L=96


Łożysko
#191 016 0
8x28x9


Podkładka
#192 011 0
1x16

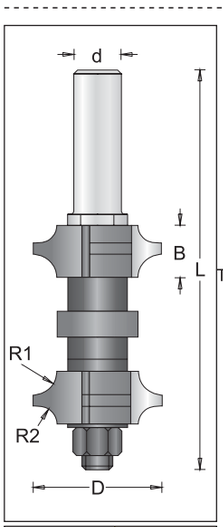

Przekładka
#192 016 0
6x16

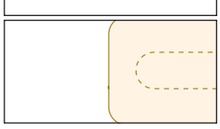

Przekładka
#192 015 0
3x16

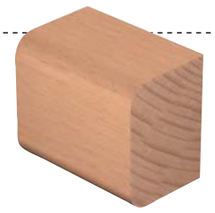

Przekładka
#192 011 0
1x16


Przekładka
#192 013 0
0.5x16

Dwufrezowy zestaw nastawny do zaokrągleń







	R	Kod	D	B Min.	B Max	L	d
Zestaw	4.8/6.3	158 300 9	34.8	9.5/12.7	35/38	108	12
Frez górny	4.8/6.3	158 302 0					
Frez dolny	4.8/6.3	158 301 0					

Części zamienne:


Trzpień z nakrętką
#190 011 9
L=108


Łożysko
#191 013 0
8x22x7


Podkładka
#192 011 0
1x16

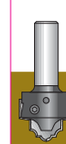

Przekładka
#192 016 0
6x16


Przekładka
#192 015 0
3x16


Przekładka
#192 011 0
1x16

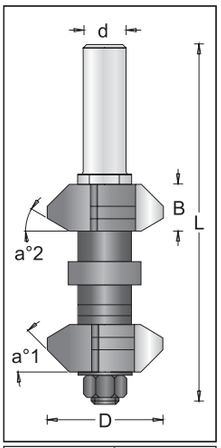

Przekładka
#192 013 0
0.5x16

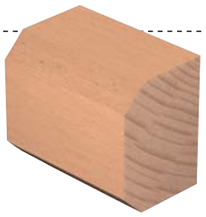

Przekładka
#192 100 0
0.1x16





Zestaw nastawny do fazowania





	a	Kod	D	B Max	L	d
Zestaw	45•/30•	158 400 9	34.8	42/35	108	12
Frez górny	45•/30•	158 401 0	34.8			
Frez dolny	45•/30•	158 402 0	34.8			

Części zamienne:


Trzpień z nakrętką
#190 011 9
L=108


Łożysko
#191 013 0
8x22x7


Podkładka
#192 011 0
1x16


Przekładka
#192 016 0
6x16

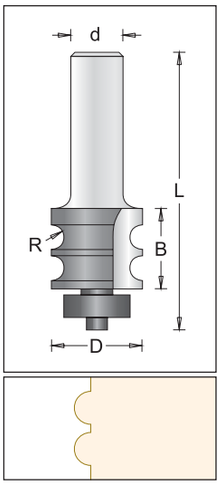

Przekładka
#192 015 0
3x16

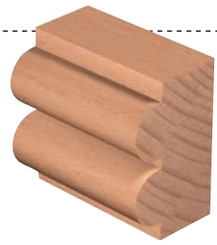

Przekładka
#192 011 0
1x16


Przekładka
#192 013 0
0.5x16


Przekładka
#192 100 0
0.1x16

Podwójny frez do półwałków





D	R	Kod	B	L	d
22.2	3	1243 08 9	19.1	69	12

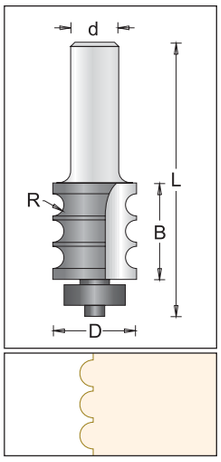
Części zamienne:


Łożysko
#191 010 0
5x16x5



NOVA Routing - Portable Machines

Potrójny frez do półwałków

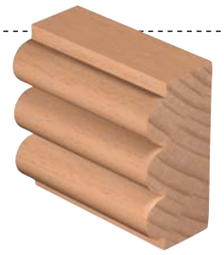


D	R	Kod	B	L	d
22.2	3	1243 32 3	25.4	65	6
	3	1243 32 9	25.4	74	12

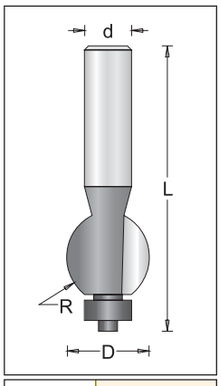
Części zamienne:

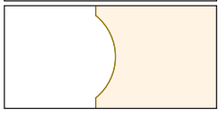


Łożysko
#191 010 0
5x16x5



Frez profilujący do łuków wklęsłych



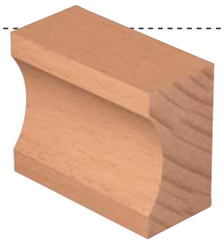


D	R	Kod	B	L	d
19.1	8.0	1623 02 9	12.7	70	12
22.2	12.0	1623 04 9	19.1	78	12
	19.5	1623 05 9	25.4	85	12
25.4	32.0	1623 06 9	38.1	98	12

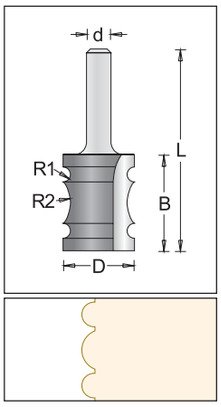
Części zamienne:



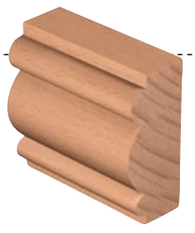
Łożysko
#191 007 0
12.7x4.7x5



Frez boczny ozdobny



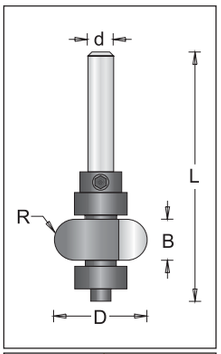
D	R1	R2	Kod	B	L	d
19.1	2	6	1243 09 3	25.4	55	6

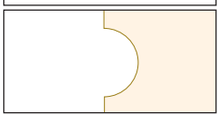




NOVA Routing - Portable Machines

Frez profilujący do łuków wklęsłych





D	R	Kod	B	L	d
19.1	3.2	1622 02 3	6.4	57	6
22.7	5.0	1622 05 3	10.0	61	6

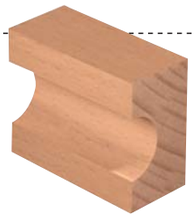
Części zamienne:



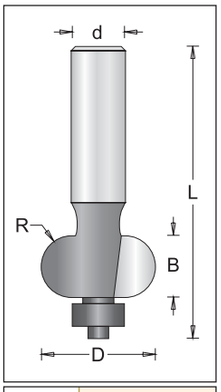
Łożysko
#191 007 0
12.7x4.7x5

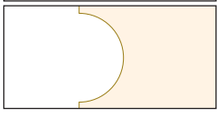


Łożysko
#191 003 0
12.7x6.3x4.7



Frez profilujący do łuków wklęsłych



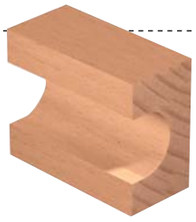


D	R	Kod	B	L	d
20.7	4.0	1620 04 3	8	47	6
22.7	5.0	1620 05 3	10	49	6
24.7	6.0	1620 06 3	12	51	6
27.7	7.5	1620 07 9	15	70	12
32.7	10.0	1620 10 9	20	75	12

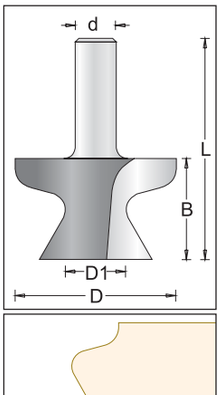
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

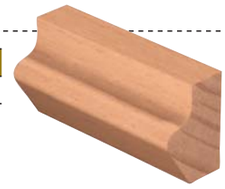


Frez profilujący do parapetów



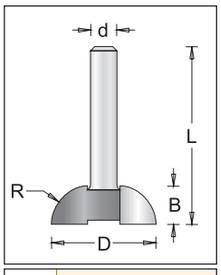


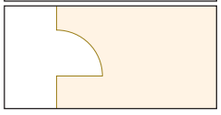
D	D1	Kod	B	L	•d
50.8	19.1	1480 40 9	32	70	12



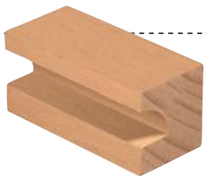


Frez profilujący do uchwytów

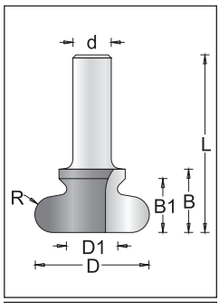


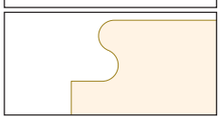


D	R	Kod	B	L	d
19.1	6.5	1320 01 3	6.3	44.5	6
	6.5	1320 01 5	6.3	44.5	8
25.4	9.5	1320 04 3	9.5	44.5	6
	9.5	1320 04 5	9.5	44.5	8

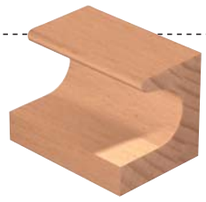


Frez profilujący do uchwytów

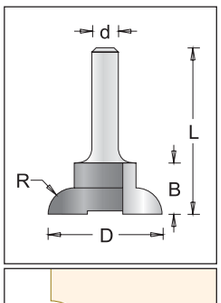




D	D1	Kod	B	B1	R	L	d
19.1	10	1480 19 5	19.1	14.3	4.8	54.5	8
	10	1480 19 9	19.1	14.3	4.8	57.5	12
38.1	17	1480 31 5	21.0	18.0	6.0	53.0	8
	17	1480 31 9	21.0	18.0	6.0	59.0	12
45.0	17	1480 37 9	21.0	17.2	4.8	59.0	12

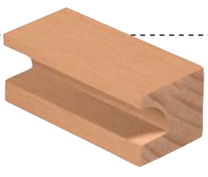


Frez profilujący do uchwytów



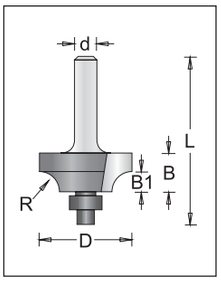


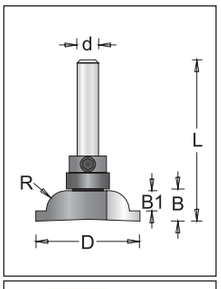
D	R	Kod	B	L	d
28	6.35	1320 10 3	12.7	41	6

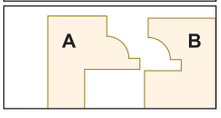




Zestaw frezujący







D	Kod	B	B1	R	L	d	
Zestaw nr	1490 75 3						
27.5	1490 73 3	11.5	6	6	50	6	A
30.7	1492 74 3	9.0	6	6	47	6	B

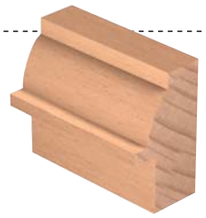
Części zamienne:



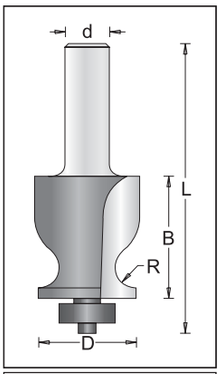
A.Łożysko
#1910010
9.5x3x4



B.Łożysko
#1910030
12.7x6.3x4.7



Frez profilujący



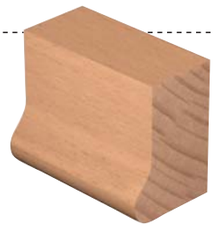


D	R	Kod	B	L	d
30	6	1560 44 9	35	84.5	12

Części zamienne:

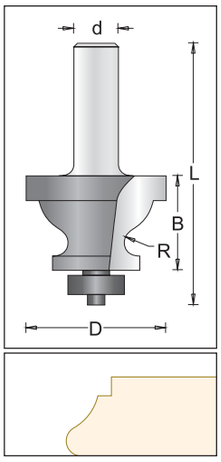


Łożysko
#191 010 0
5x16x5





Frez ozdobny do listew

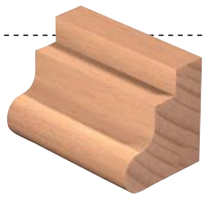


D	R	Kod	B	L	d
40	4	1560 53 9	27	76	12

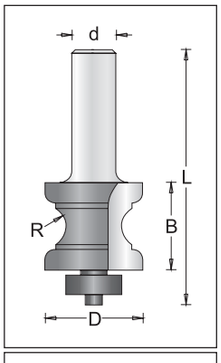
Części zamienne:



Łożysko
#191 010 0
5x16x5



Frez z łożyskiem do profili wypukłych

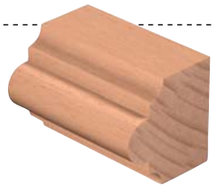


D	R	Kod	B	L	d
28	6	1243 01 9	25	74	12
32	8	1243 04 9	30	79	12
35	13	1243 05 9	40	89	12

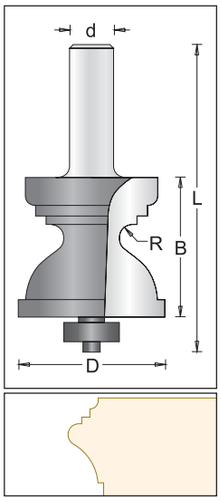
Części zamienne:



Łożysko
#191 010 0
5x16x5



Frez dekorujący do gzymsów

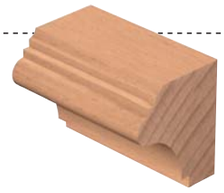


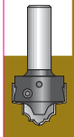
D	R	Kod	B	L	d
42	4	1566 02 9	40	89	12

Części zamienne:



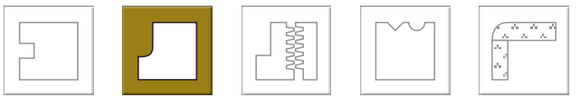
Łożysko
#191 010 0
5x16x5





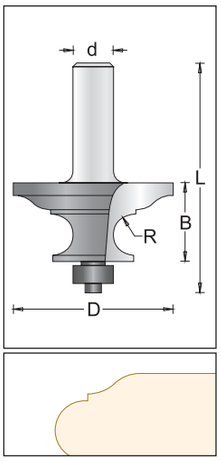


NOVA Routing - Portable Machines



Frezy do rowkowania | Profilowanie i fazowanie | Frezy do łączeń i wręgowania | Frezy do kształtowania | Frezy do Corianu

Frez profilujący klasyczny

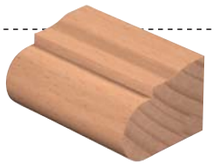


D	R	Kod	B	L	d
50.8	6.5	1560 40 9	25.4	75	12

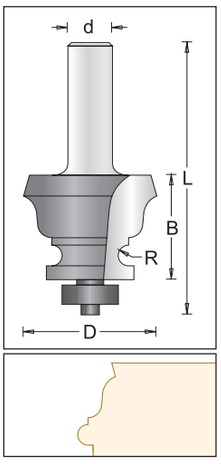
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5



Frez ozdobny do profilowania krawędzi

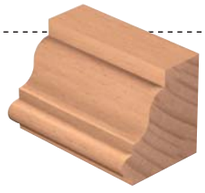


D	R	Kod	B	L	d
38.1	3	1560 56 9	30	79	12

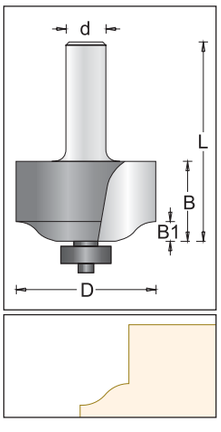
Części zamienne:



Łożysko
#191 010 0
5x16x5



Zestaw profilujący do ram

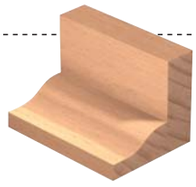


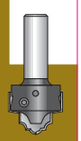
D	Kod	B	B1	L	d
45	1563 06 9	25.4	6.35	75	12

Części zamienne:



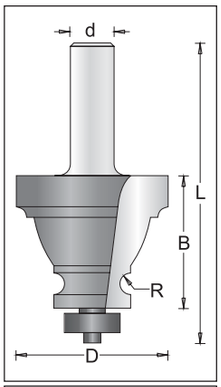
Łożysko
191 006 0
16x4.7x5

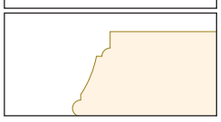






Frez ozdobny do listew



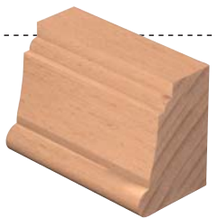


D	R	Kod	B	L	d
43.5	3	1560 50 9	38.1	87	12

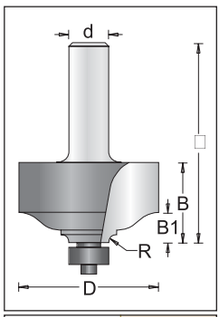
Części zamienne:

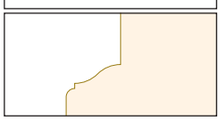


Łożysko
#191 010 0
5x16x5



Frez profilujący do ram



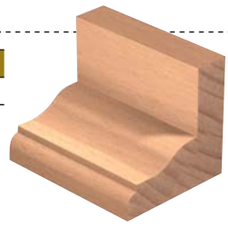


D	R	Kod	B	B1	L	d
44.5	75	1563 07 9	25.4	9.4	2.5	12

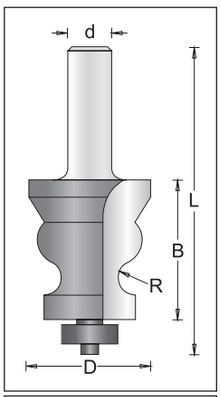
Części zamienne:

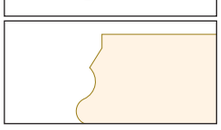


Łożysko
#191 007 0
12.7x4.7x5



Frez ozdobny



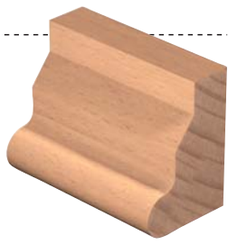


D	R	Kod	B	L	d
35	5	1560 47 9	38.1	87	12

Części zamienne:

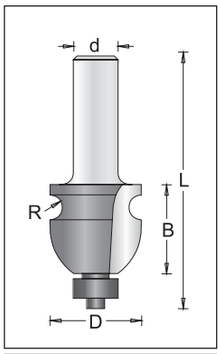


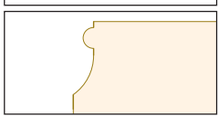
Łożysko
#191 010 0
5x16x5





Frez ozdobny do listew



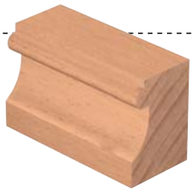


D	R	Kod	B	L	d
26	3.5	1563 03 9	25.4	74	12

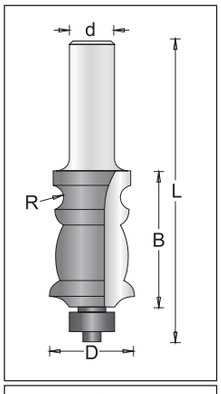
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5



Frez ozdobny do listew



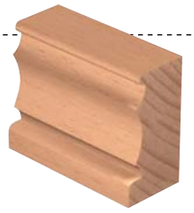


D	R	Kod	B	L	d
24	3.5	1560 09 9	39	89	12

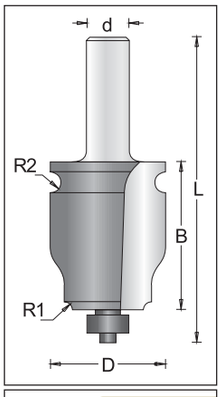
Części zamienne:

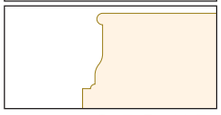


Łożysko
#191 007 0
12.7x4.7x5



Frez ozdobny do listew



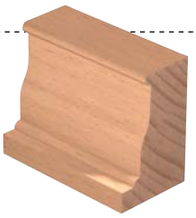


D	R1	R2	Kod	B	L	d
35	2.5	3.2	1563 04 9	45	94	12

Części zamienne:

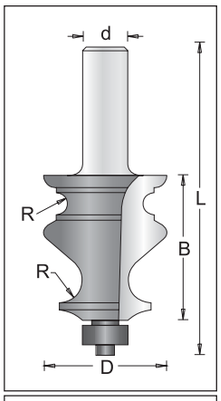


Łożysko
#191 007 0
12.7x4.7x5



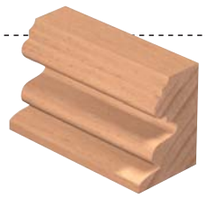


Frez ozdobny do listew





D	R1	R2	Kod	B	L	d
34.7	6.5	3.2	1563 01 9	41.5	90.5	12

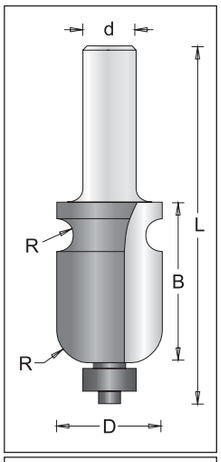


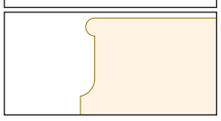
Części zamienne:



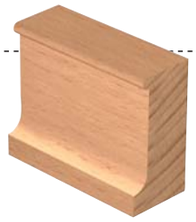
Łożysko
#191 007 0
12.7x4.7x5

Frez ozdobny do listew





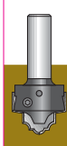
D	R1	R2	Kod	B	L	d
25.4	4	8	1560 06 9	38.1	87	12



Części zamienne:

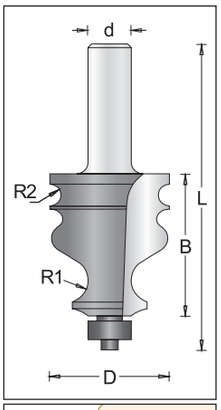


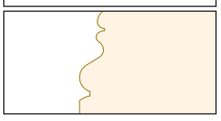
Łożysko
#191 007 0
3/16x1/2x5



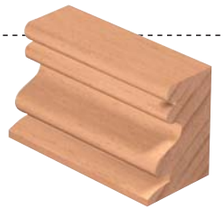


Frez ozdobny do listew





•D	R1	R2	Kod	B	L	•d
35	6.5	3.2	1563 02 9	41.5	91	12

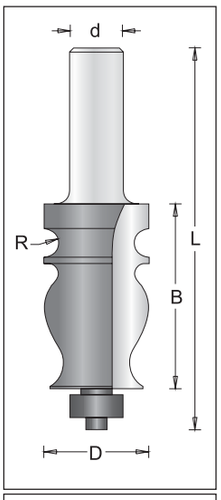


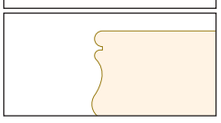
Części zamienne:



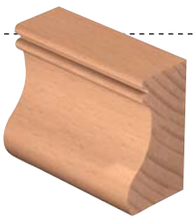
Łożysko
#191 007 0
12.7x4.7x5

Frez ozdobny do listew





D	R	Kod	B	L	d
25.4	3.5	1560 21 9	45	94	12



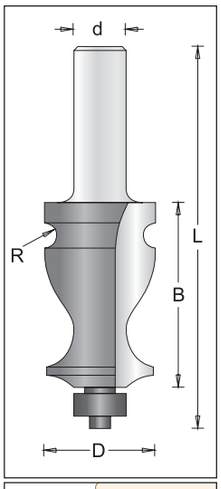
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

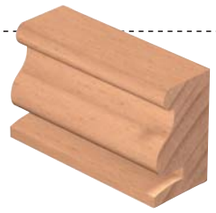


Frez ozdobny do listew





D	R	Kod	B	L	d
27	3	1560 13 9	45	94	12

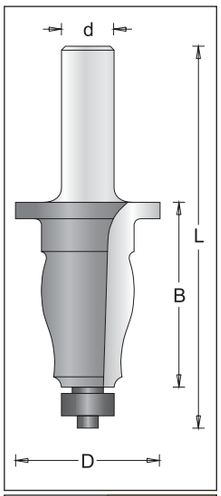


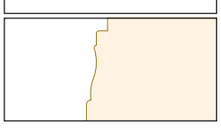
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

Frez ozdobny do listew





D	B	Kod.	L	d
35	44.5	1563 08 9	94	12



Części zamienne:

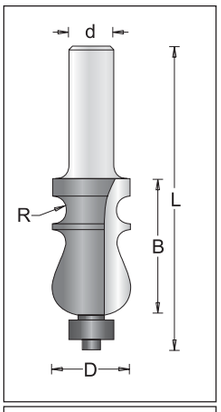


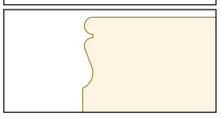
Łożysko
#191 007 0
12.7x4.7x5



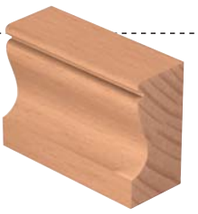
NOVA Routing - Portable Machines

Frez ozdobny do listew





D	R	Kod	B	L	d
22	4	1560 07 9	38	87	12

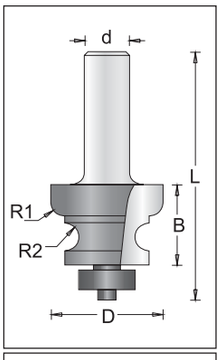


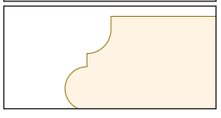
Części zamienne:



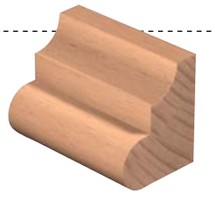
Łożysko
#191 007 0
12.7x4.7x5

Frez ozdobny do listew





D	R1	R2	Kod	B	L	d	
20.7	2.0	2	1566 04 9	15.0	64.3	12	A
32.0	4.0	4	1566 05 9	23.0	72.0	12	B
40.0	5.5	5	1566 03 9	30.0	79.0	12	B



Części zamienne:

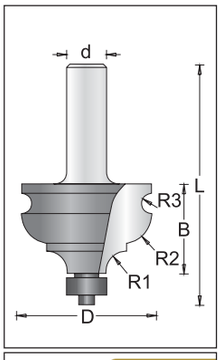


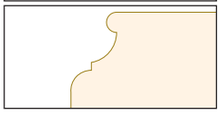
A.Łożysko
#191 007 0
12.7x4.7x5



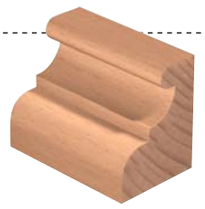
B.Łożysko
#191 100 0
16x5x5

Frez ozdobny francuski





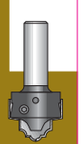
D	R1	R2	R3	Kod	B	L	d
41.3	6.35	9.5	3.2	1560 34 9	28.5	78	12



Części zamienne:

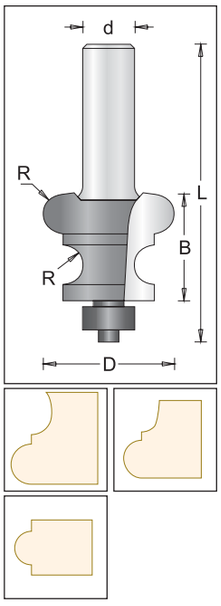


Łożysko
#191 007 0
12.7x4.7x5

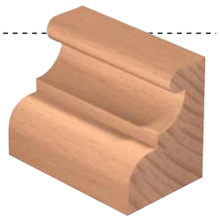




Frez dekoracyjny



D	R	Kod	B	L	d	
25.4	3.2	1560 37 3	16.5	57	6	A
31.8	4.8	1560 38 3	25.4	64	6	A
	4.8	1560 38 9	25.4	74	12	A
50.8	6.5	1560 39 9	32.0	80	12	B



Części zamienne:

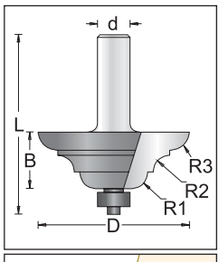


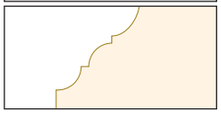
A.Łożysko
#191 007 0
12.7x4.7x5



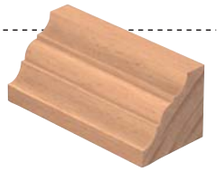
B.Łożysko
#191 010 0
16x5x5

Klasyczny frez dekoracyjny do listew





D	R1	R2	R3	Kod	B	L	d
59	6.5	6.5	7.5	1650 10 9	22	71	12



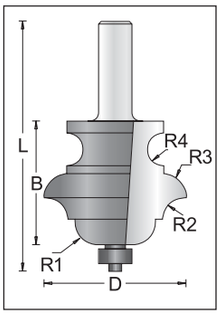
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5



Frez ozdobny Multi Profil



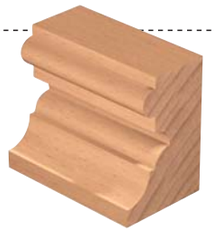
D	R1	R2	R3	R4	Kod	B	L	d	n
54	9	9	8.5	6.3	1660 06 9	47	97	12	18,000

Max. RPM

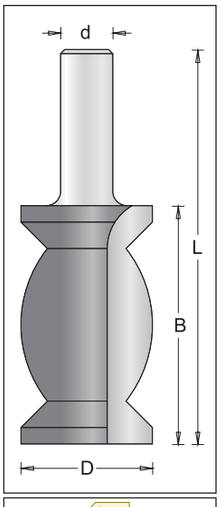
Części zamienne:

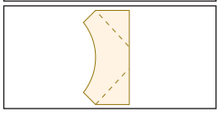


Łożysko
#191 007 0
12.7x4.7x5

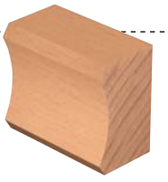


Frez profilujący do gzymsów



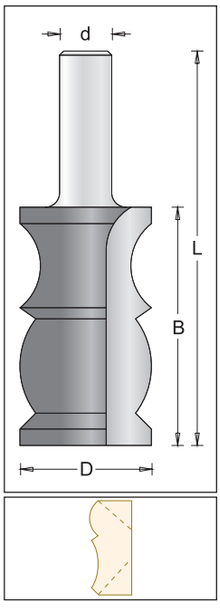


D	B	Kod	L	d
32	58	1560 05 9	96	12

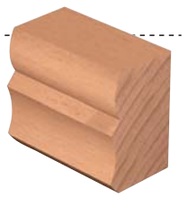




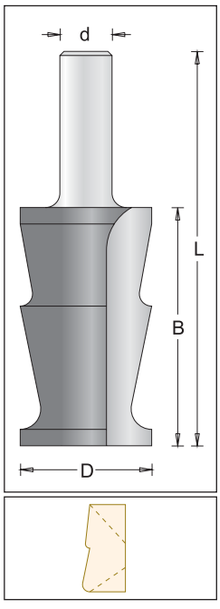
Frez ozdobny do gzymsów



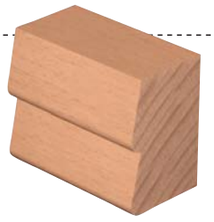
D	B	Kod	L	d
32	58	1560 04 9	96	12



Frez ozdobny do gzymsów

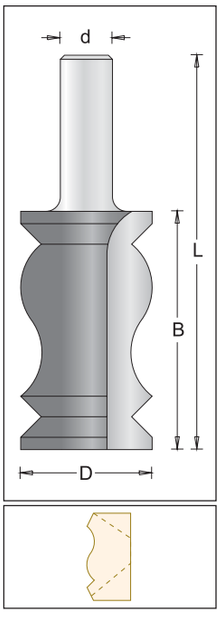


D	B	Kod	L	d
32	58	1560 11 9	96	12

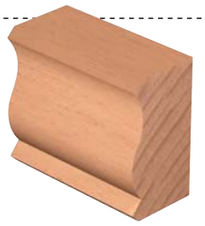




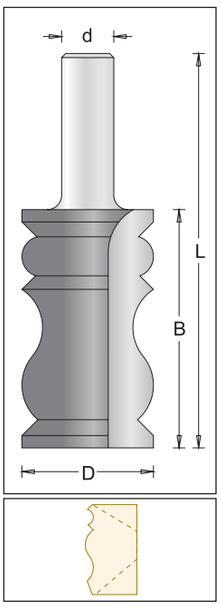
Frez profilujący do gzymsów



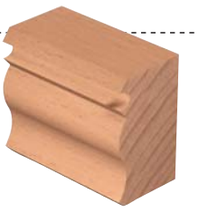
D	B	Kod	L	d
32	58	1560 08 9	96	12



Frez profilujący do gzymsów

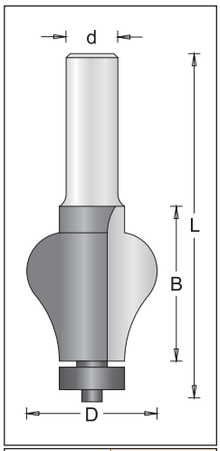


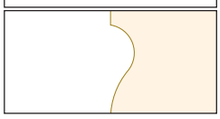
D	B	Kod	L	d
31.4	58	1560 03 9	96	12



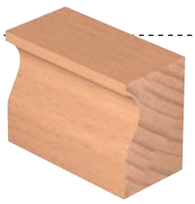


Frez ozdobny do poręczy





D	B	Kod	L	d
32	38	1630 11 9	87	12

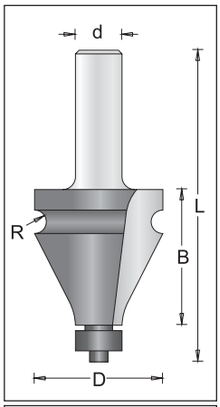


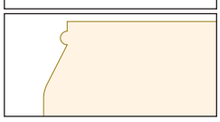
Części zamienne:



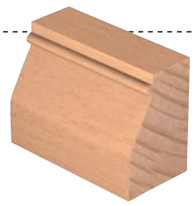
Łożysko
#191 010 0
5x16x5

Frez ozdobny do poręczy





D	R	B	Kod	L	d
35	3.2	37	1630 04 9	86	12

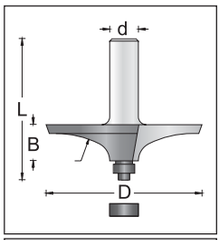


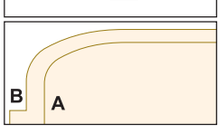
Części zamienne:



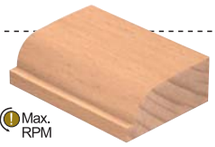
Łożysko
#191 007 0
12.7x4.7x5

Frez dekorujący





D	R	B	Kod	L	d	n	
69.2	43	16	1092 28 9	76	12	18,000	A
	43	16	1192 28 9	74	12	18,000	B



Max. RPM

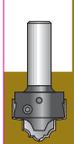
Części zamienne:



A. Łożysko
191 007 0
12.7x4.7x5



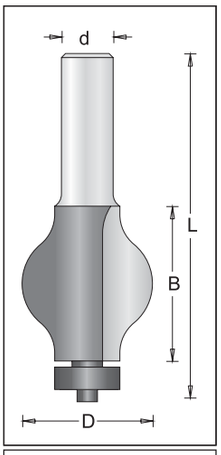
B.Łożysko
#191 004 0
9.5x4.7x3





NOVA Routing - Portable Machines

Frez ozdobny do poręczy



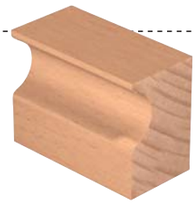


D	B	Kod	L	d
32	38	1630 12 9	87	12

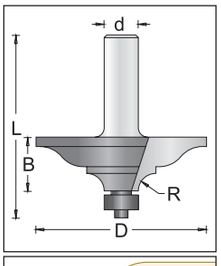
Części zamienne:

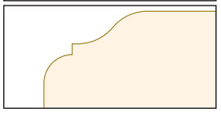


Łożysko
#191 010 0
5x16x5



Klasyczny frez ozdobny



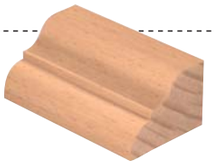


D	R	B	Kod	L	d
63.5	6.5	20	1650 07 9	79	12

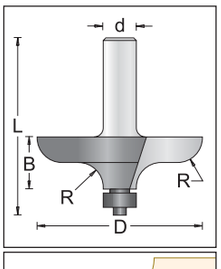
Części zamienne:

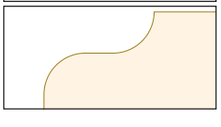


Łożysko
#191 007 0
12.7x4.7x5



Tradycyjny frez ozdobny



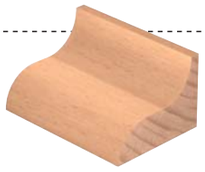


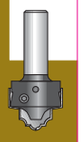
D	R	B	Kod	L	d
63.5	9.5	20	1650 04 9	79	12

Części zamienne:



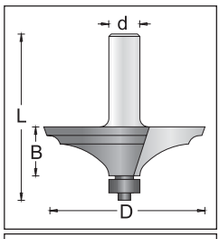
Łożysko
#191 007 0
12.7x4.7x5

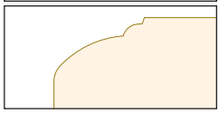






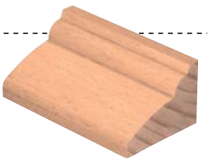
Klasyczny frez ozdobny





D	B	Kod	L	d	n
66	20	1650 13 9	69	12	18,000

Max. RPM

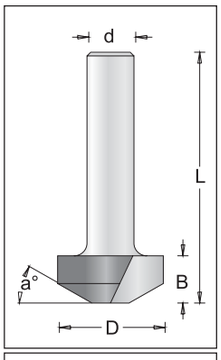


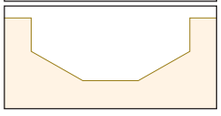
Części zamienne:



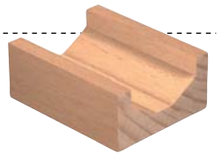
Łożysko
#191 007 0
12.7x4.7x5

Frez profilujący czołowo-ukośny

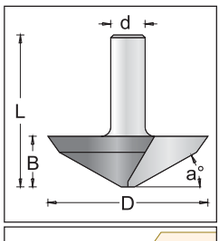


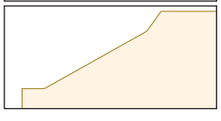


D	a	B	Kod	L	d
28.6	30°	12.7	1290 01 9	69	12



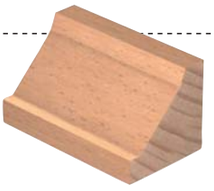
Frez profilujący do ukośny





D	a	B	Kod	L	d	n
67.7	25°	19.1	1291 07 9	57	12	18,000

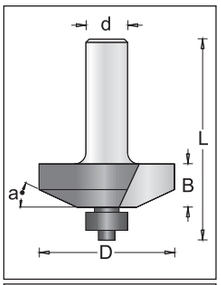
Max. RPM

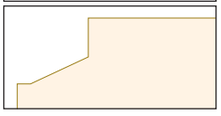




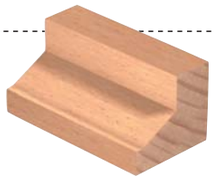
NOVA Routing - Portable Machines

Frez profilujący ukośny





D	a	B	Kod	L	d
41.3	25°	12.7	1230 01 9	62	12

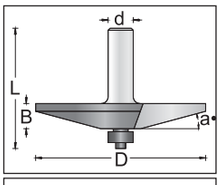


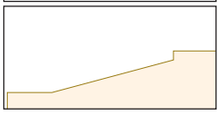
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

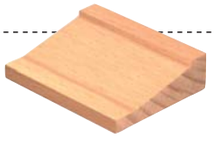
Frez profilujący do płycin





D	a	B	Kod	L	d	n
85.8	15°	12.7	1221 04 9	71	12	16,000

Max. RPM

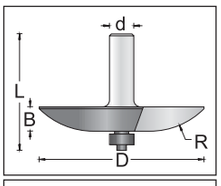


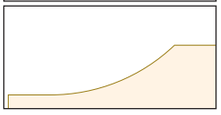
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

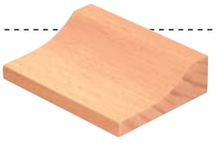
Frez profilujący do płycin





D	R	B	Kod	L	d	n
85.8	40	12.7	1222 07 9	71.5	12	16,000

Max. RPM

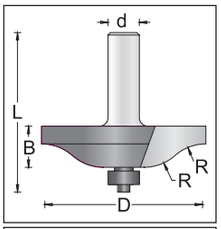


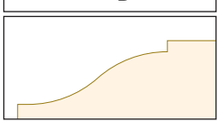
Części zamienne:



Łożysko
#191 007 0
12.7x4.7x5

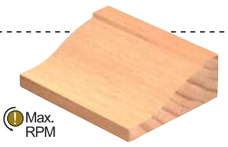
Frez profilujący do płycin





D	R	B	Kod	L	d	n
66.6	19	17.0	1220 01 9	76.1	12	
85.7	22	15.9	1220 12 9	75.0	12	16,000

Max. RPM



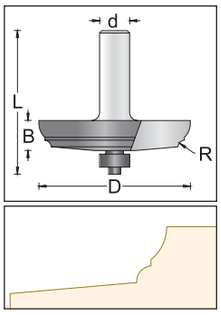
Części zamienne:



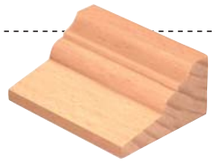
Łożysko
#191 007 0
12.7x4.7x5



Frez profilujący do płycin



D	R	B	Kod	L	d
63.5	3	12.7	1223 11 9	72	12

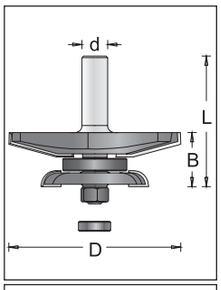


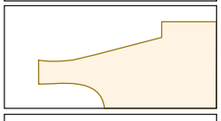
Części zamienne:

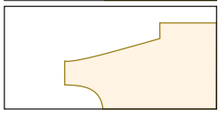


Łożysko
#191 007 0
12.7x4.7x5

Frez profilujący do płycin - obustronny







	D	a	R	Kod	B	L	d	n
Zestaw	85.8			122 904 9	27.5	83.4	12	12,000
Frez profilujący	85.8	15.0		122 504 9	12.7	83.4	12	
Frez	54.0		7.9	122 501 0	7.9			

Max. RPM



Części zamienne:



Łożysko
#191 024 0
16x8x5



Łożysko
#191 971 0
31.7x8x6.2



Przekładka
#192 018 0
1x12



Przekładka
#192 013 5
0.5x12

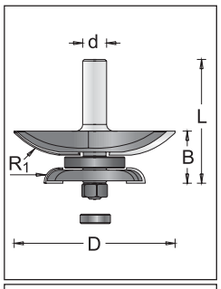


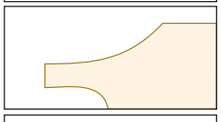
Przekładka
#192 120 0
0.05x12

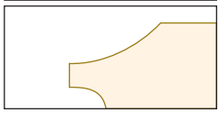


Przekładka
#192 115 0
0.1x12

Frez profilujący obustronny

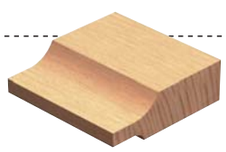






	D	R	R1	Kod	B	L	d	n
Zestaw	85.8			122 907 9	27.5	83.4	12	12,000
Frez profilujący	85.8	40.0		122 507 9	12.7	83.4	12	
Frez	54.0		7.9	122 501 0	7.9			

Max. RPM



Części zamienne:



Łożysko
#191 024 0
16x8x5



Łożysko
#191 971 0
31.7x8x6.2



Przekładka
#192 018 0
1x12



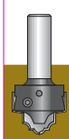
Przekładka
#192 013 5
0.5x12



Przekładka
#192 120 0
0.05x12

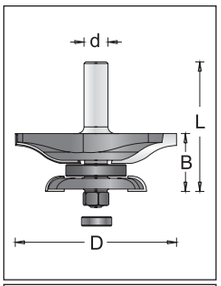


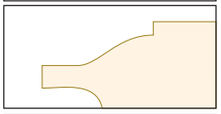
Przekładka
#192 115 0
0.1x12

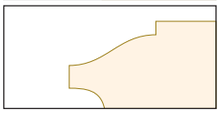




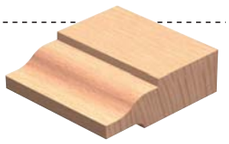
Frez profilujący do płycin - obustronny







	D	B	Kod	L	d	n
Zestaw	85.8	30.7	122 912 9	87.1	12	12,000
Frez profilujący	85.8	15.9	122 512 9	87.1	12	
Frez	54.0	7.9	122 501 0			



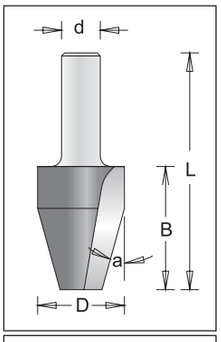
Max. RPM

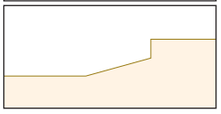
Części zamienne:



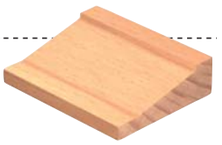
Łożysko	Łożysko	Przekładka	Przekładka	Przekładka	Przekładka
#191 024 0	#191 971 0	#192 018 0	#192 013 5	#192 120 0	#192 115 0
16x8x5	31.7x8x6.2	1x12	0.5x12	0.05x12	0.1x12

Frez do pionowego profilowania paneli

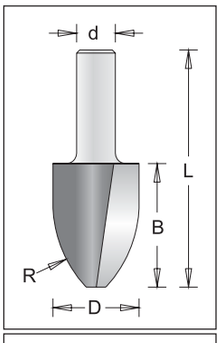


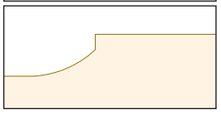


D	B	Kod	a	L	d
28.6	41.3	1224099	15	79.3	12

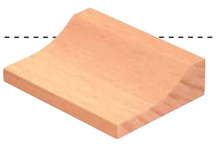


Frez do pionowego profilowania paneli



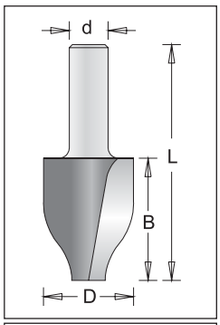


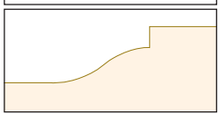
D	B	Kod.	R	L	d
28.6	41.3	1224079	40	79.3	12



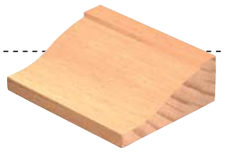


Frez do pionowego profilowania paneli

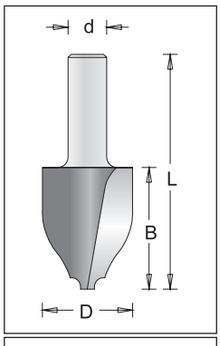


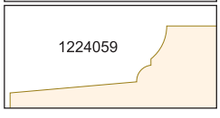


D	B	Kod	L	d
30	41.3	1224089	79.3	12



Frez do pionowego profilowania paneli





D	B	Kod	L	d
30	41.3	1224059	79.3	12

