

PUNCHES ROLLERI TYPE R3

Content Explanation	122 - 123
Punches Bystronic-Beyeler RFA	124 - 125
Punches Bystronic-Beyeler RF	125
Hemming Punches Bystronic-Beyeler RFA	126
Punches Bystronic-Beyeler R	127
Punches Bystronic-Beyeler S	128
Punch adapters	129
Z-Profile Tools	130 - 131
Radius Tools	132 - 133

Compatibility

Punches Roller Type R3 are compatible with press brake machines from:

- Bystronic-Beyeler RFA
- Bystronic-Beyeler RF
- Bystronic-Beyeler R
- Bystronic-Beyeler S

With Adapter-Systems the punches Roller Type R3 are also applicable on all other press brake machines.

Compatibility

Punches Rolleri Type R3 are:

- compatible with press brake machines from:
 - Bystronic-Beyeler RFA
 - Bystronic-Beyeler RF
 - Bystronic-Beyeler R
 - Bystronic-Beyeler S

Our Advantages – Your Convenience

- own production facilities (no reseller or dealer)
- tracking of every tool possible, with a unique **serial number** on every article after the quality control check.
- precision grinding (tolerance of +/-0.01 mm)
- guaranteed tool reproduction
- exact parallelism
- precise, consistent working height
- tang retrofitting and modifications possible (see pages 248-249)
- very large stock availability

Material

The raw material is obtained from qualified suppliers which compose the chemical formulas according to international standards. Therefore, guaranteeing high resilience and tensile strength.

Material Type	Mechanical resistance of the material and the tool body	Hardness of the material and the tool body	Hardness of the operating surfaces after induction hardening
42CrMo4	900-1150 N/mm ²	29.1 - 36.9 HRC	54 - 60 HRC
C45	560-710 N/mm ²	12 - 15.5 HRC	54 - 60 HRC

- Specifications for the maximum press force kN/m are indicated as such, **1 t = 10 kN**.

Tang

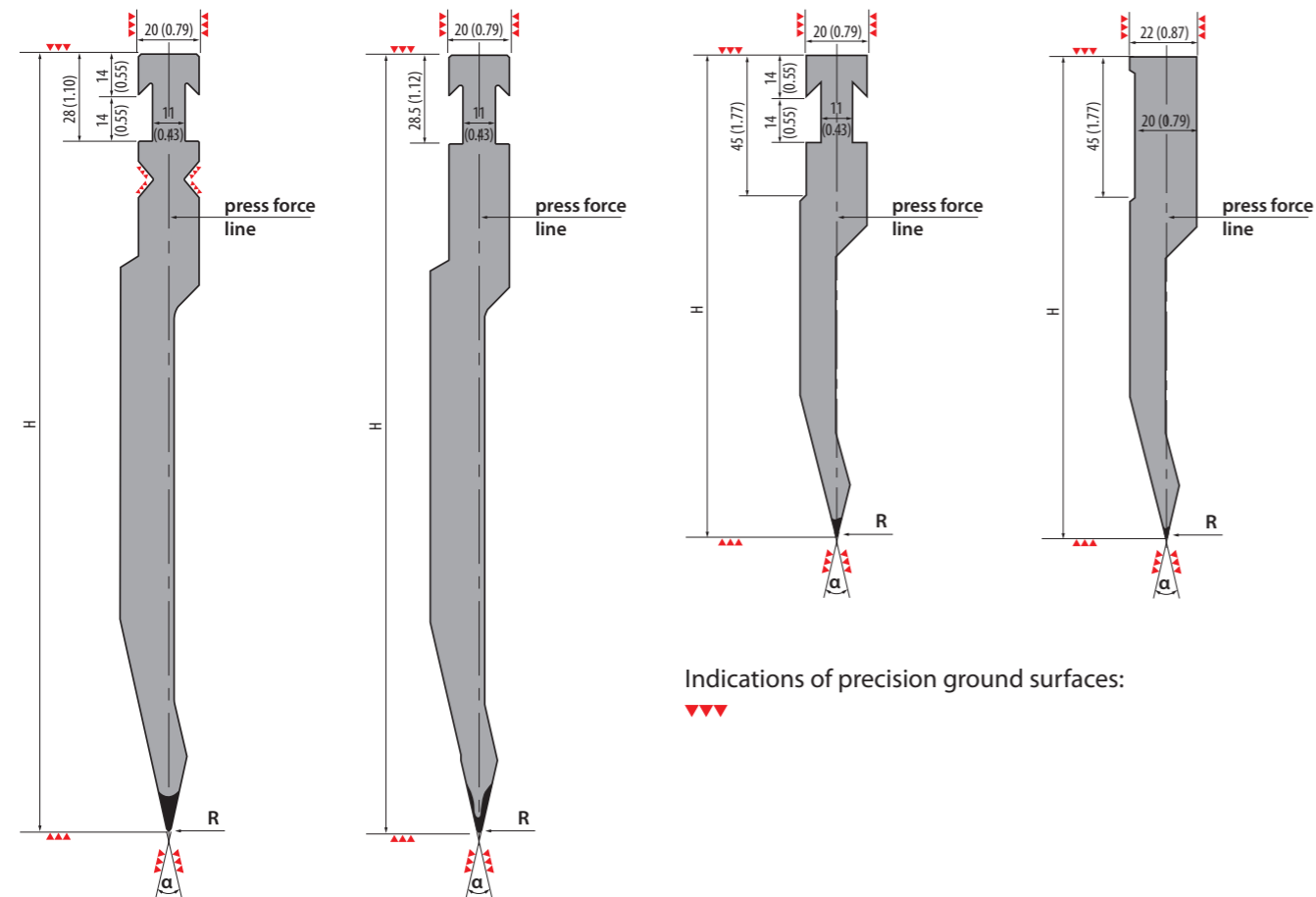
Punches Rolleri Type R3 have the following tangs:

Bystronic-Beyeler RFA

Bystronic-Beyeler RF

Bystronic-Beyeler R

Bystronic-Beyeler S

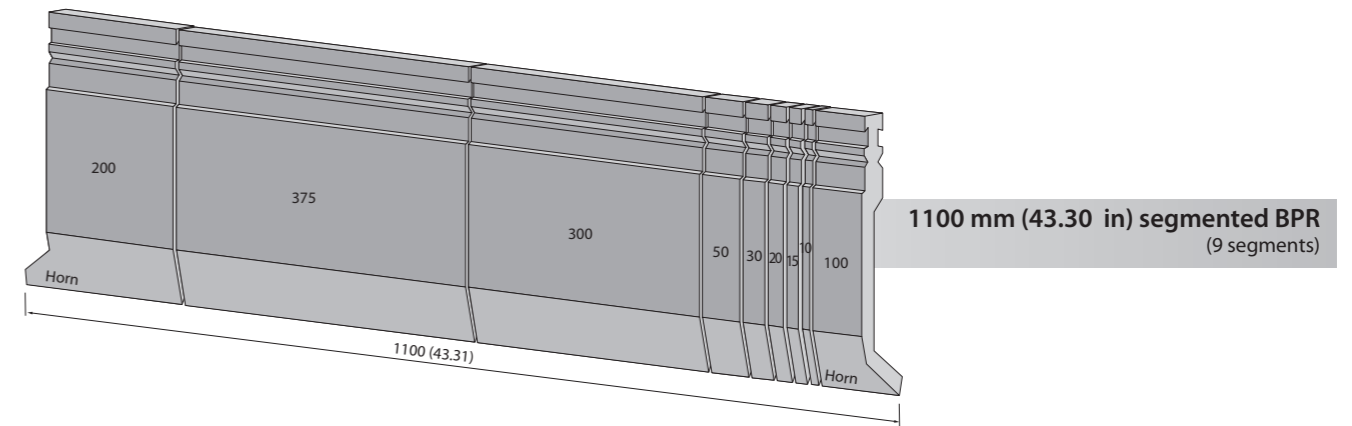
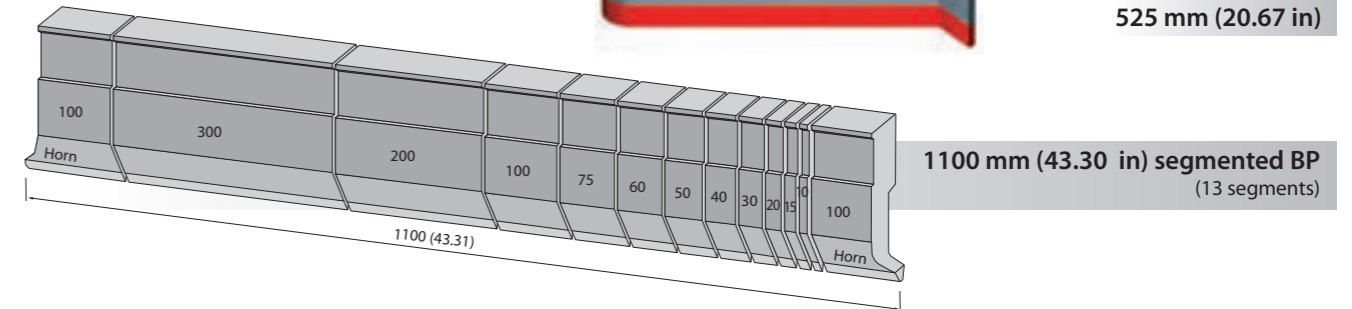


Tool lengths and sectioning

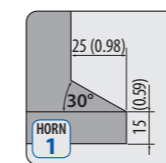
Standard

Segmented tools are delivered in complete sets. Single pieces are also available!
More lengths and sectionings are possible upon request.

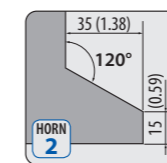
- 1000 mm (39.36 in)
- 500 mm (19.68 in)
- 508 mm (20.00 in)
- 525 mm (20.67 in)



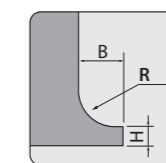
Horn Types



Horn 1
Standard BP
for all segm.
Punches BP
Rolleri Type R3



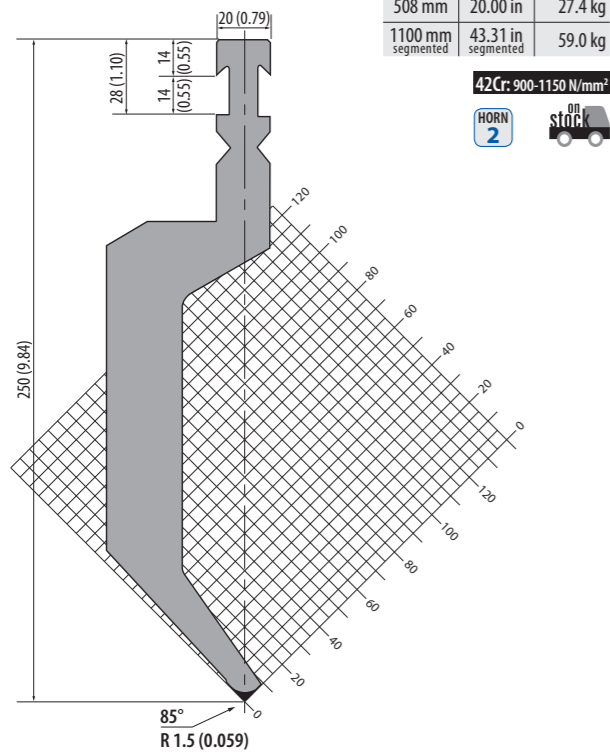
Horn 2
Standard BPR
for all segm.
Punches BPR
Rolleri Type R3



Individual Horn
production
according
to your
specifications

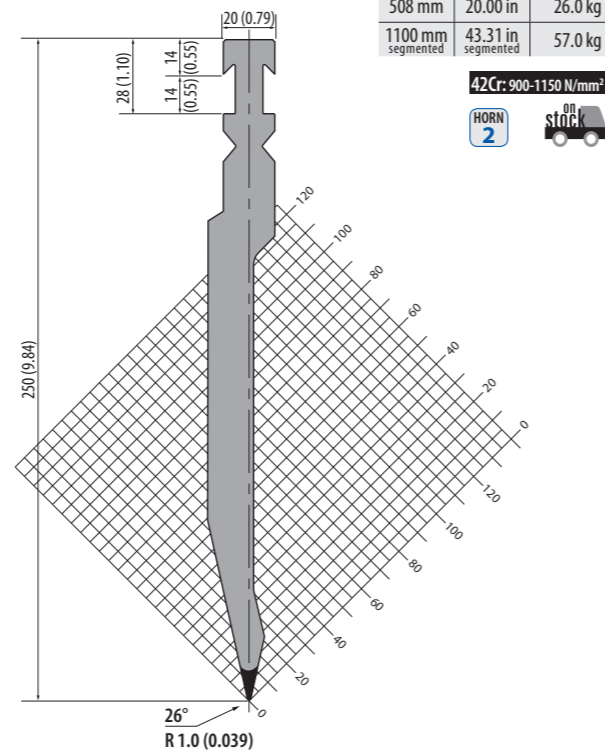
BPR250.P4-RFA

900 kN/m max.



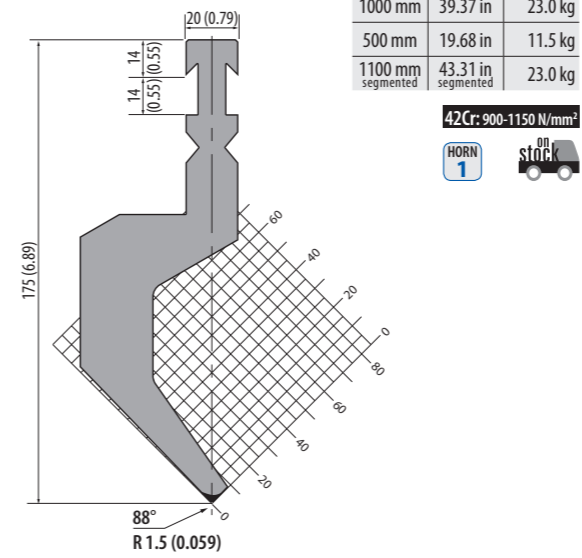
BPR250.P5-RFA

1000 kN/m max.



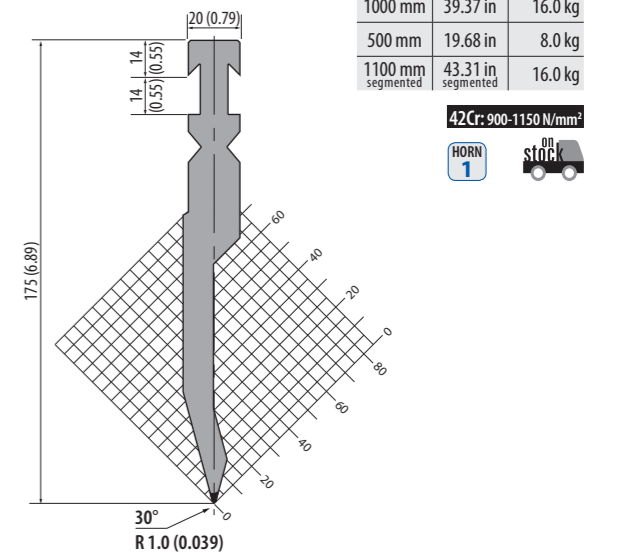
BP175.88.R15-RFA

500 kN/m max.



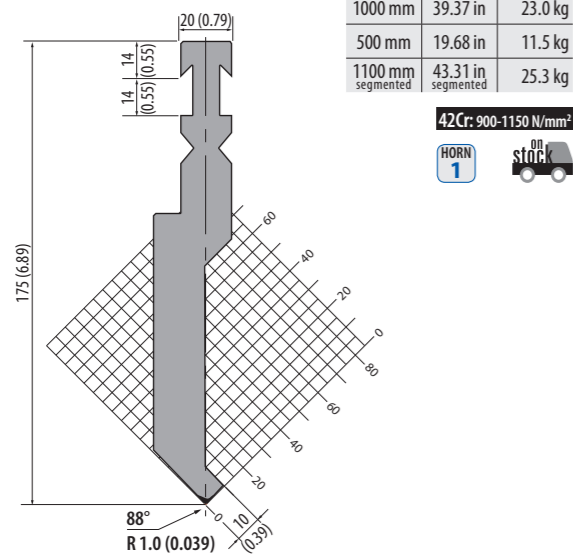
BP175.30.R1-RFA

800 kN/m max.



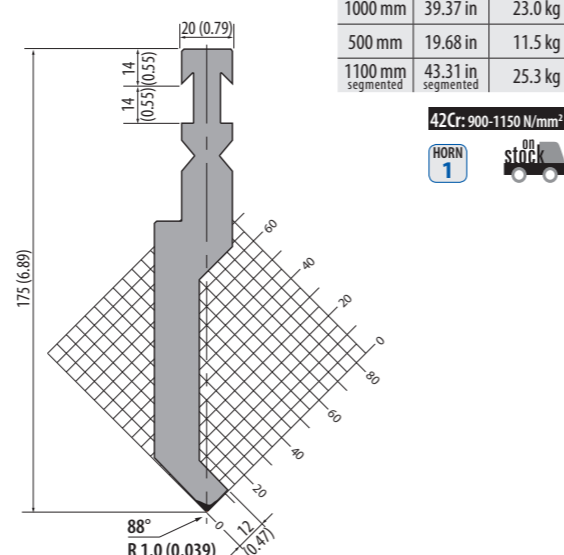
BP175.88.R1-A-RFA

1000 kN/m max.



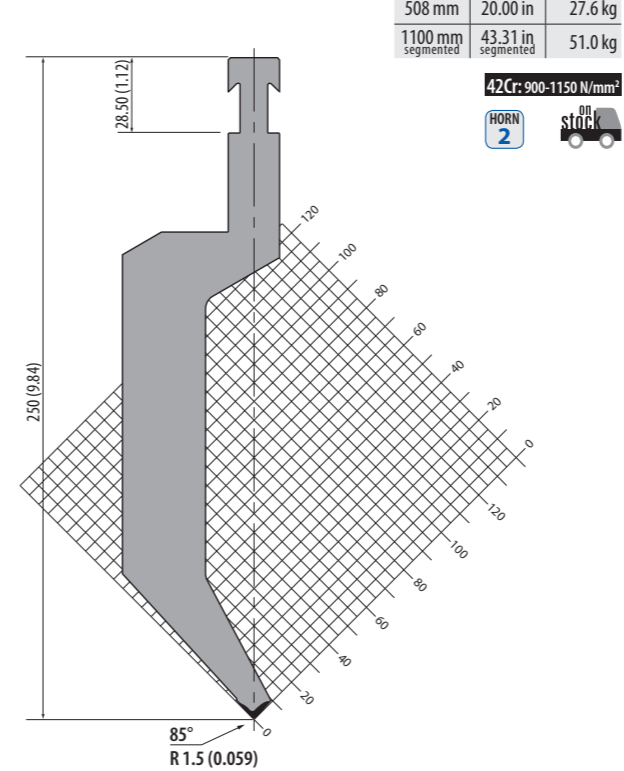
BP175.88.R1-B-RFA

1000 kN/m max.



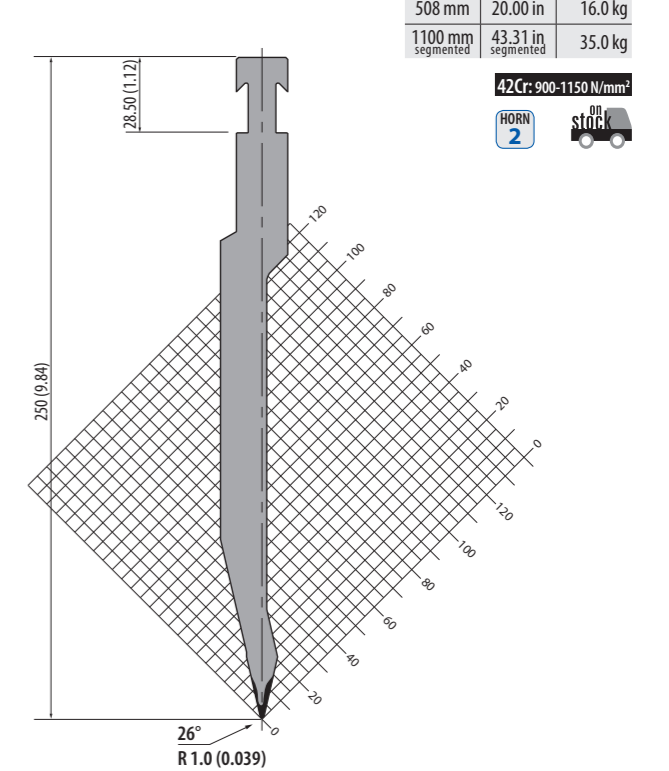
BPR250.P4-RF

1000 kN/m max.

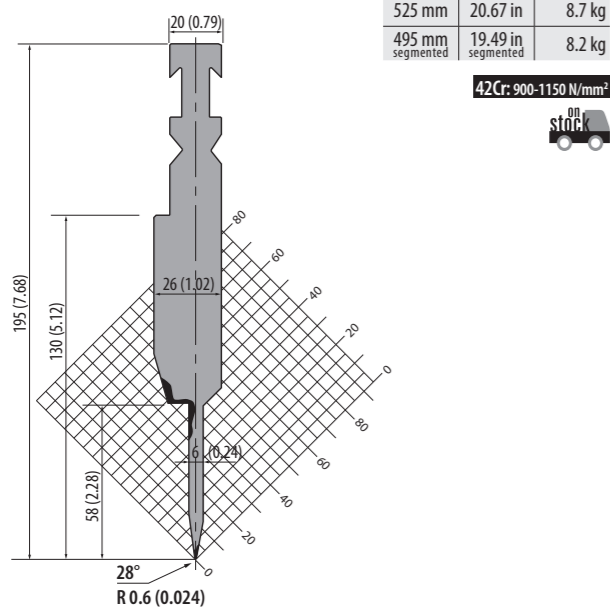


BPR250.P5-RF

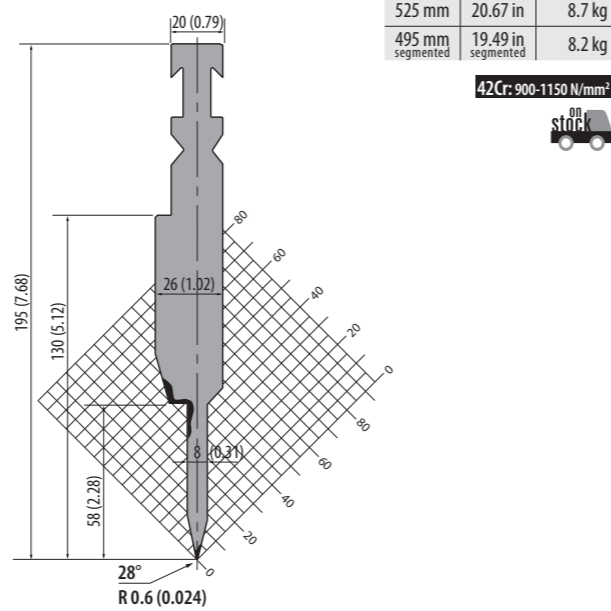
900 kN/m max.



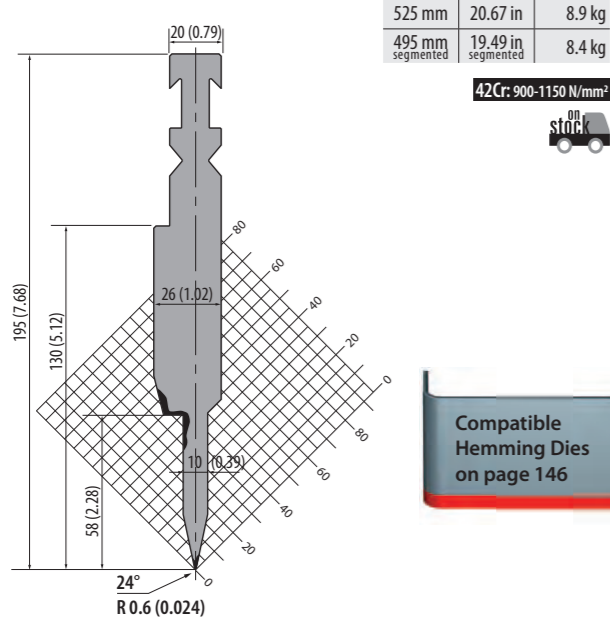
BPR.SP-195.28.6 500 kN/m max.



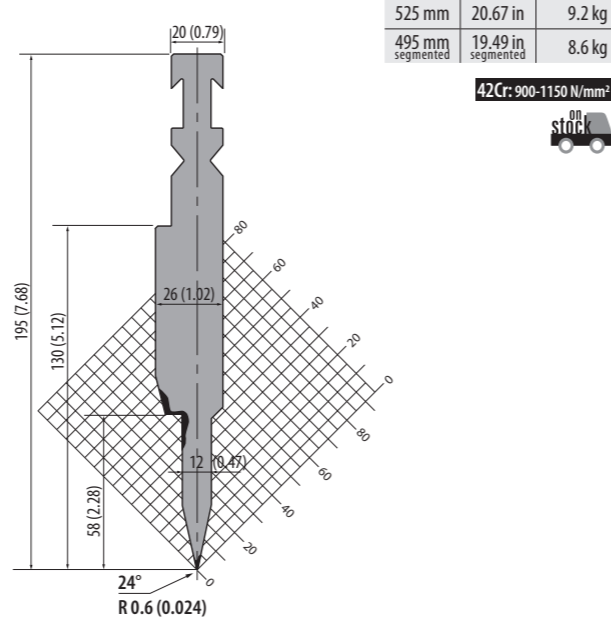
BPR.SP-195.28.8 500 kN/m max.



BPR.SP-195.24.10 500 kN/m max.

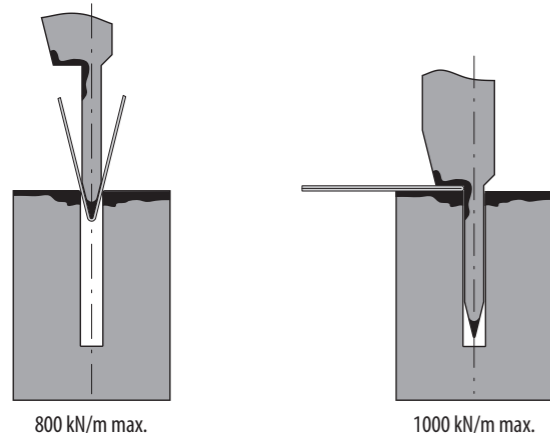


BPR.SP-195.24.12 500 kN/m max.



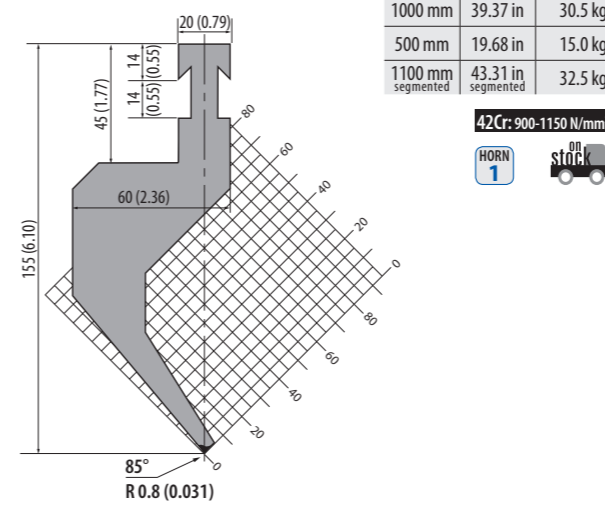
Compatible Hemming Dies on page 146

Example of Application

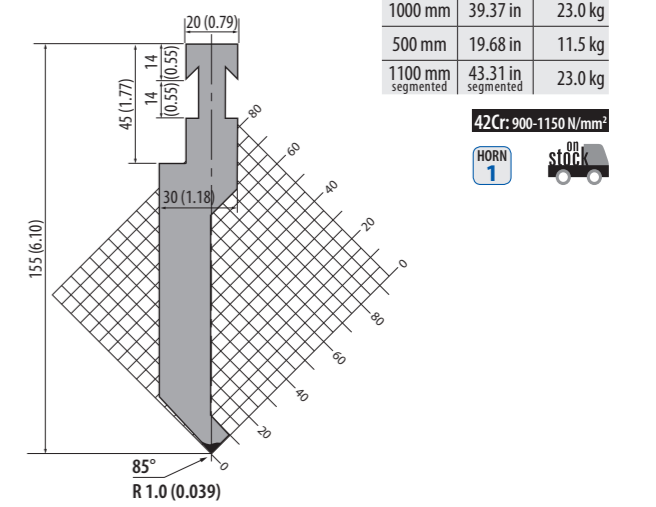


S	S	A	A	R.45	R.70	S	S	A	A	R.45	R.70
mm	in	mm	in	Kgf/mm ²	Kgf/mm ²	mm	in	mm	in	Kgf/mm ²	Kgf/mm ²
0.6	0.02	3.0	0.12	9	15	0.6	0.02	1.2	0.05	23	35
0.8	0.03	3.0	0.12	12	20	0.8	0.03	1.6	0.06	32	50
1.0	0.04	3.5	0.14	15	25	1.0	0.04	1.0	0.04	40	60
1.25	0.05	3.5	0.14	17	26	1.25	0.05	2.5	0.10	50	80

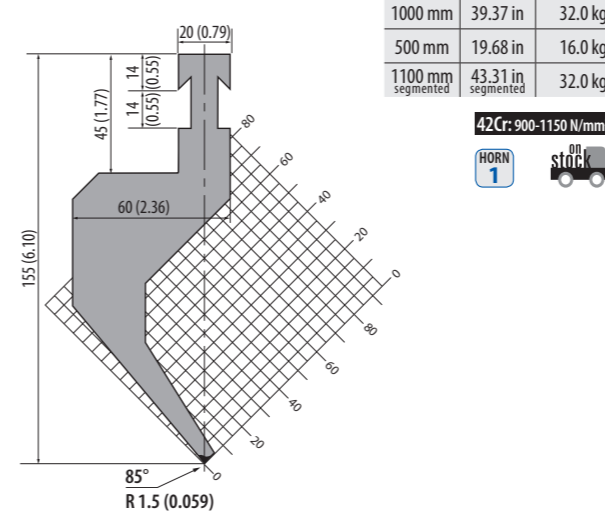
BP155.85.R08-R 500 kN/m max.



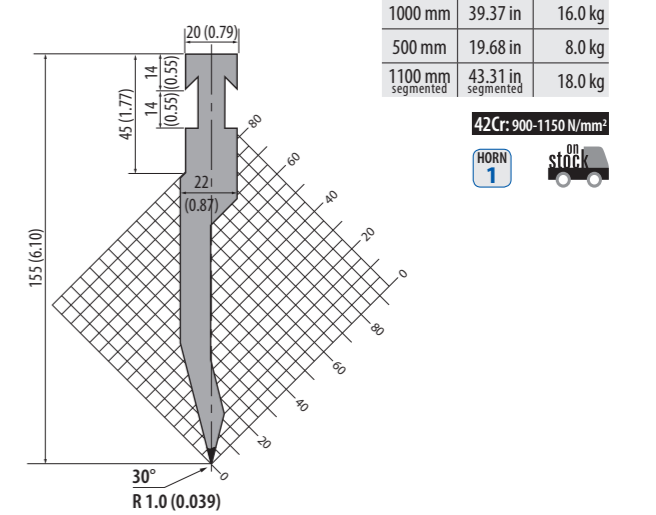
BP155.85.R1-R 1000 kN/m max.



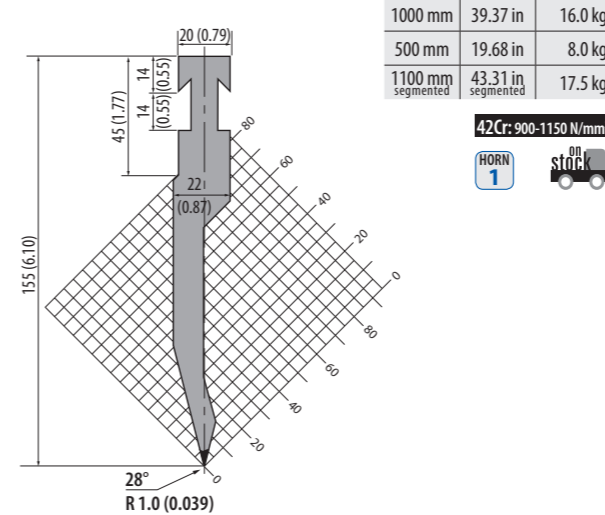
BP155.85.R15-R 500 kN/m max.



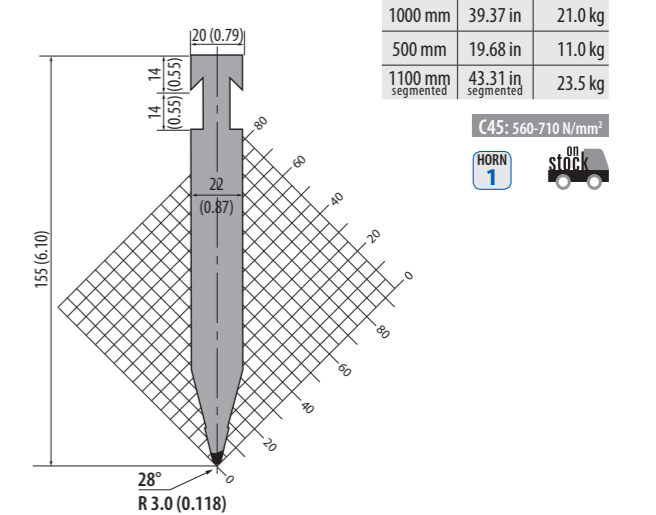
BP155.30.R1-R 800 kN/m max.



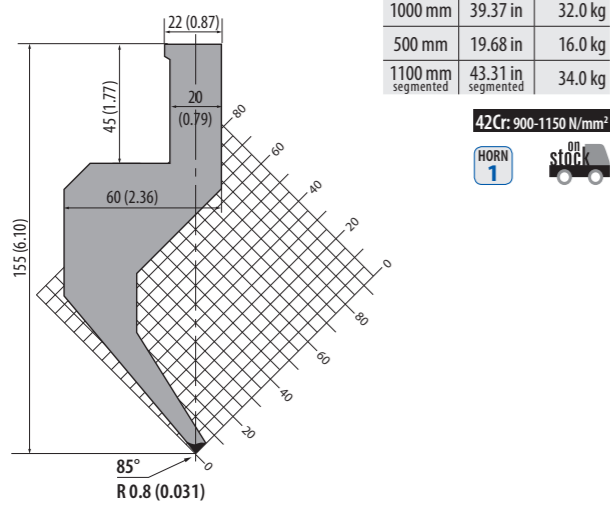
BP155.28.R1-R 800 kN/m max.



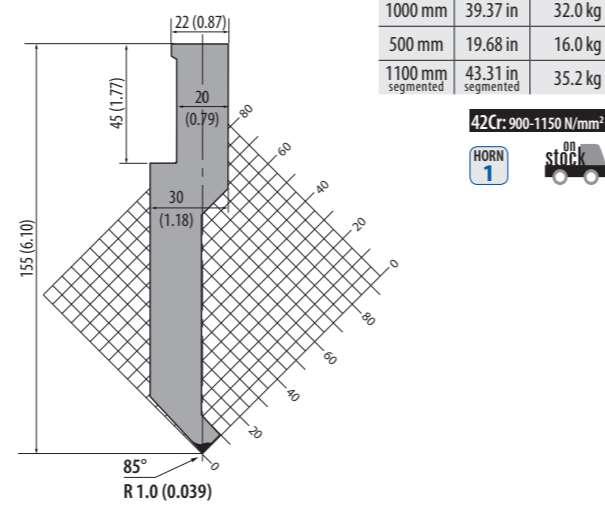
BP155.28.R3-R 1000 kN/m max.



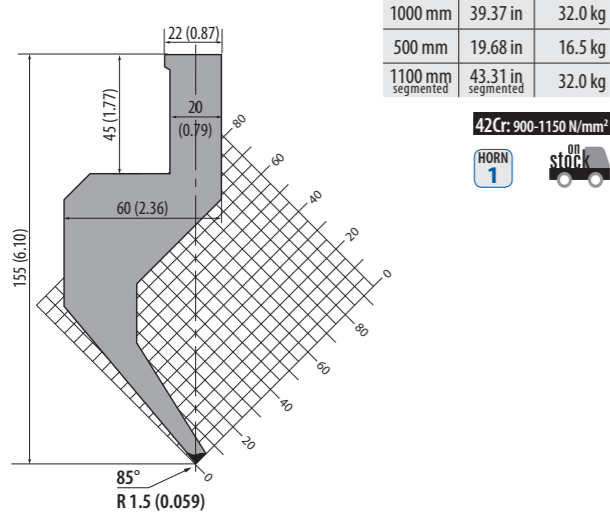
BP155.85.R08-S 500 kN/m max.



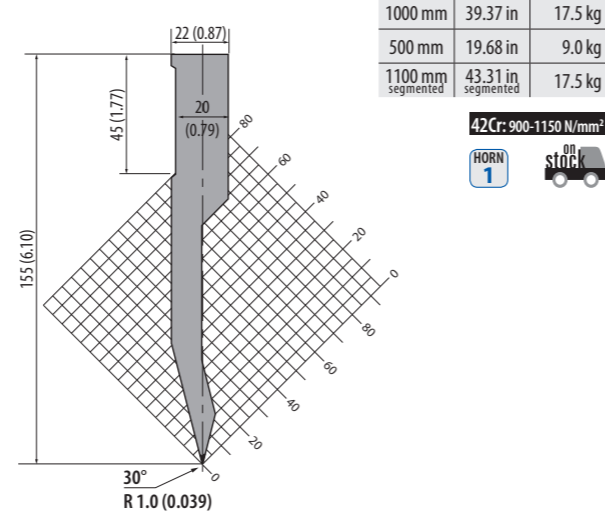
BP155.85.R1-S 1000 kN/m max.



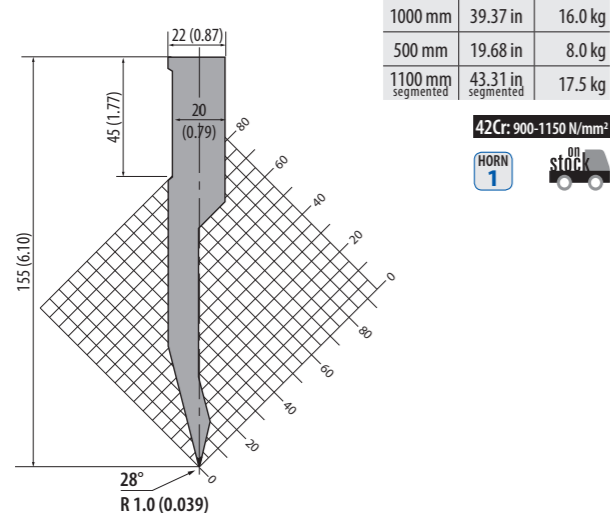
BP155.85.R15-S 500 kN/m max.



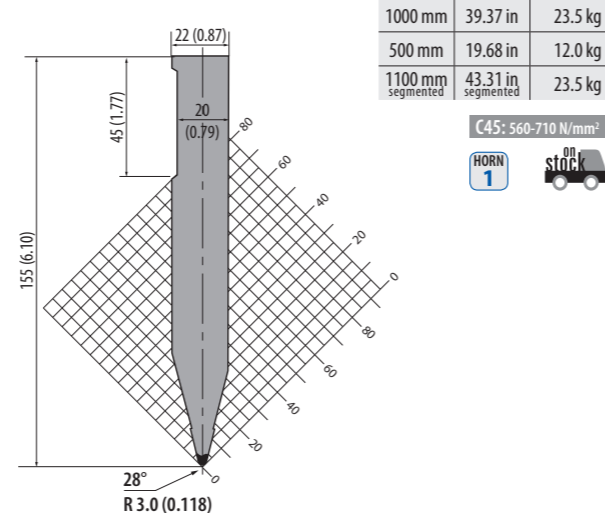
BP155.30.R1-S 800 kN/m max.



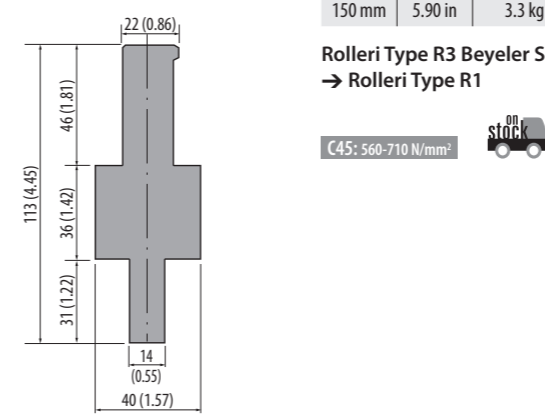
BP155.28.R1-S 800 kN/m max.



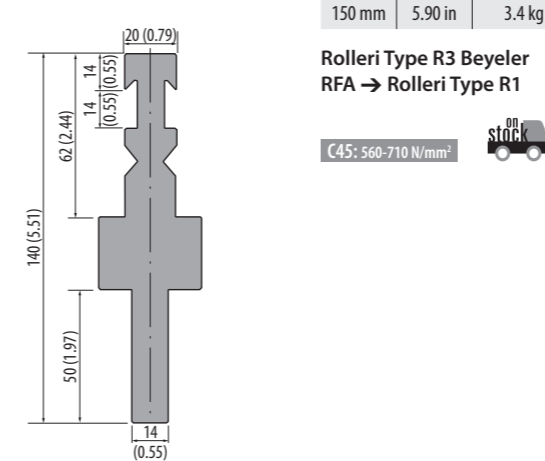
BP155.28.R3-S 1000 kN/m max.



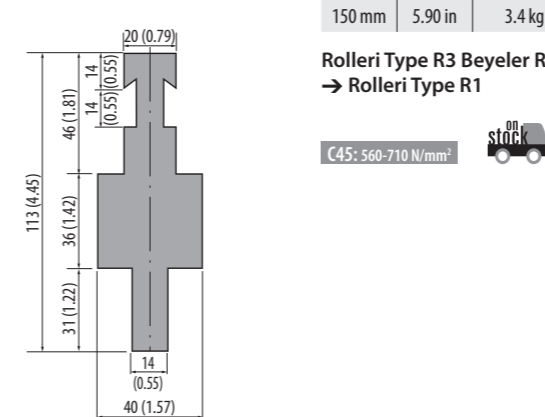
AD3 1000 kN/m max.



AD10 1000 kN/m max.



AD22 1000 kN/m max.



Articles on stock – Please note that delivery time varies according to your location.



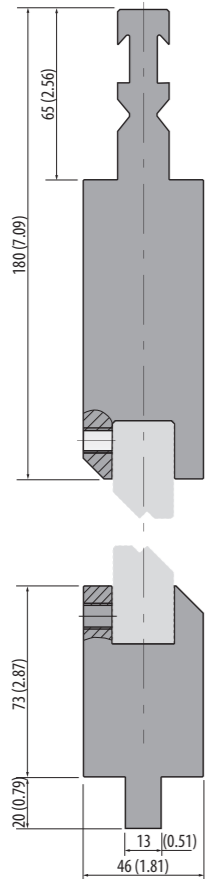
5
R3

BPZ-RFA

1000 kN/m max.

835 mm	32.87 in	37.5 kg
415 mm	16.34 in	18.7 kg

C45: 560-710 N/mm²



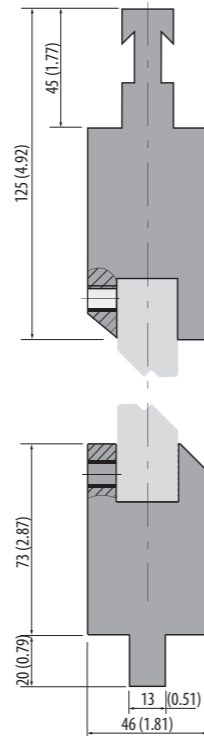
BPZ-R

1000 kN/m max.

NEW

835 mm	32.87 in	24.7 kg
415 mm	16.34 in	12.3 kg

C45: 560-710 N/mm²



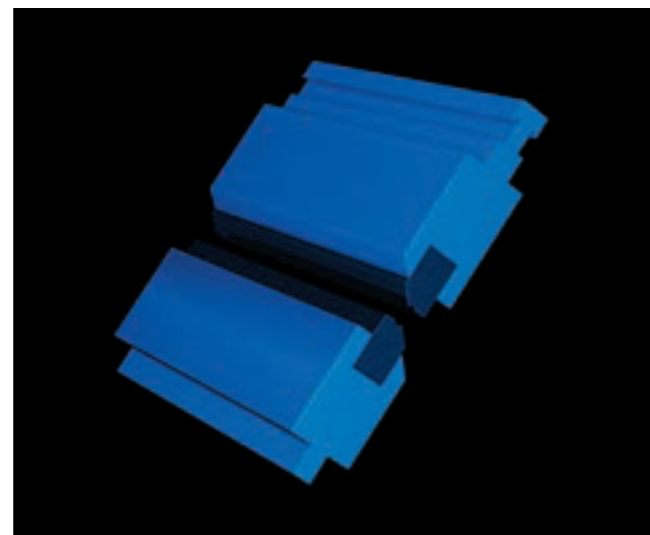
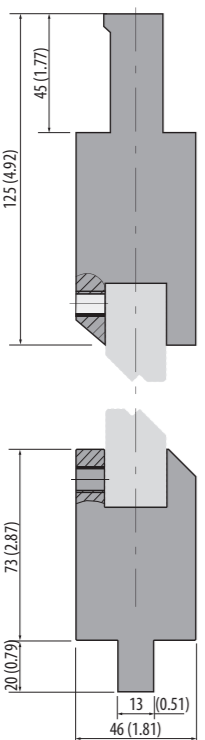
BPZ-S

1000 kN/m max.

NEW

835 mm	32.87 in	37.5 kg
415 mm	16.34 in	18.5 kg

C45: 560-710 N/mm²



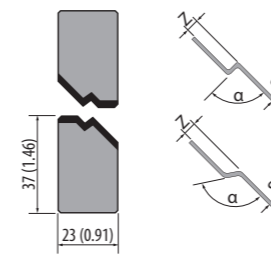
Rolleri Videos

find updated and helpful videos at:
[www.rolleritools.com/
videos/overview](http://www.rolleritools.com/videos/overview)



Z-Tool Inserts 160° / 150° / 140° / 90°

1000 kN/m max.



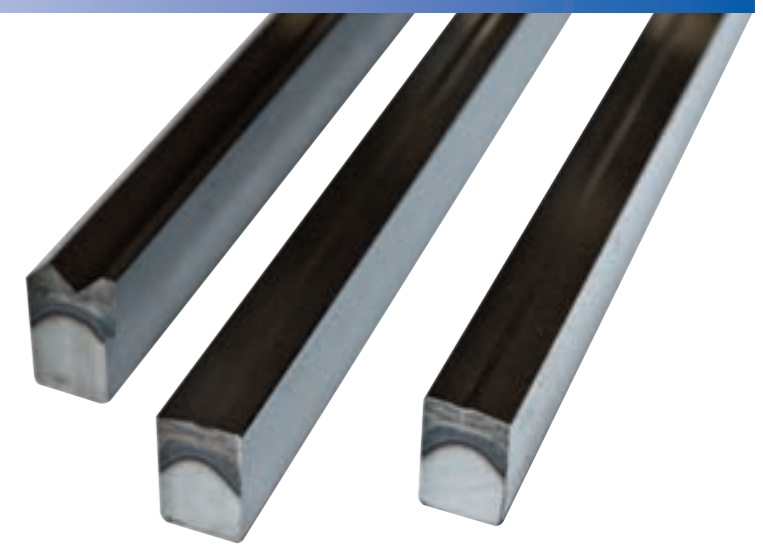
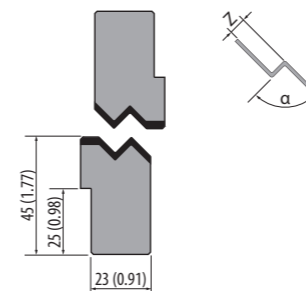
C45: 560-710 N/mm²

Model	Z mm	Z in	α	S* mm	S* inch	Weight	Weight
CEZ 1.0	1.0	0.04	160°	1.2	0.05	11.0 kg	5.5 kg
CEZ 1.5	1.5	0.06	160°	1.5	0.06	11.0 kg	5.5 kg
CEZ 2.0	2.0	0.08	150°	1.4	0.06	11.0 kg	5.5 kg
CEZ 2.5	2.5	0.10	140°	1.3	0.05	11.0 kg	5.5 kg
CEZ 1.0/90	1.0	0.04	90°	0.3	0.01	11.0 kg	5.5 kg
CEZ 1.5/90	1.5	0.06	90°	0.3	0.01	11.0 kg	5.5 kg
CEZ 2.0/90	2.0	0.08	90°	0.4	0.02	11.0 kg	5.5 kg
CEZ 2.5/90	2.5	0.10	90°	0.5	0.02	11.0 kg	5.5 kg
CEZ 3.0	3.0	0.12	90°	1.0	0.04	10.3 kg	5.1 kg
CEZ 3.5	3.5	0.14	90°	1.0	0.04	10.0 kg	5.0 kg
CEZ 4.0	4.0	0.16	90°	1.2	0.05	10.0 kg	5.0 kg
CEZ 4.5	4.5	0.18	90°	1.2	0.05	10.0 kg	5.0 kg
CEZ 5.0	5.0	0.20	90°	1.3	0.05	10.0 kg	5.0 kg
CEZ 5.5	5.5	0.22	90°	1.4	0.06	10.0 kg	5.0 kg
CEZ 6.0	6.0	0.24	90°	1.5	0.06	10.0 kg	5.0 kg
CEZ 6.5	6.5	0.26	90°	1.5	0.06	10.0 kg	5.0 kg
CEZ 7.0	7.0	0.28	90°	1.5	0.06	10.0 kg	5.0 kg
CEZ 7.5	7.5	0.30	90°	1.6	0.06	10.0 kg	5.0 kg
CEZ 8.0	8.0	0.31	90°	1.6	0.06	10.0 kg	5.0 kg

* Fe Rmax = 42 Kg/mm²

Z-Profile Inserts 90°

1000 kN/m max.



Model	Z mm	Z in	α	S* mm	S* inch	Weight	Weight
CEZ 9.0	9	0.35	90°	1.8	0.07	13.5 kg	6.5 kg
CEZ 10.0	10	0.39	90°	1.8	0.07	13.5 kg	6.5 kg
CEZ 11.0	11	0.43	90°	2	0.08	13.5 kg	6.5 kg
CEZ 12.0	12	0.47	90°	2	0.08	13.5 kg	6.5 kg
CEZ 13.0	13	0.51	90°	2	0.08	13.5 kg	6.5 kg
CEZ 14.0	14	0.55	90°	2	0.08	13.5 kg	6.5 kg
CEZ 15.0	15	0.59	90°	2.3	0.09	13.5 kg	6.5 kg

* Fe Rmax = 42 Kg/mm²

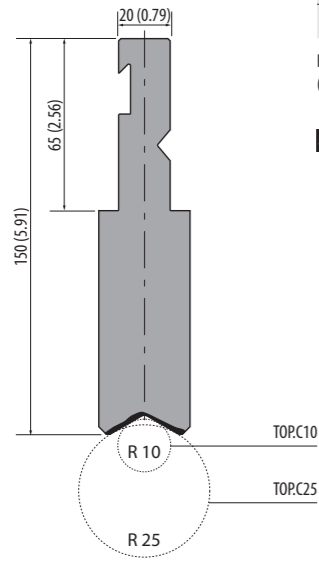
BPR150.P10.10-RFA

1000 kN/m max.

522 mm	20.55 in	16.5 kg
495 mm segmented	19.49 in segmented	16.0 kg

For Radius tools with R10-R25 (TOP.C10-TOP.C25) see below

42Cr: 900-1150 N/mm²



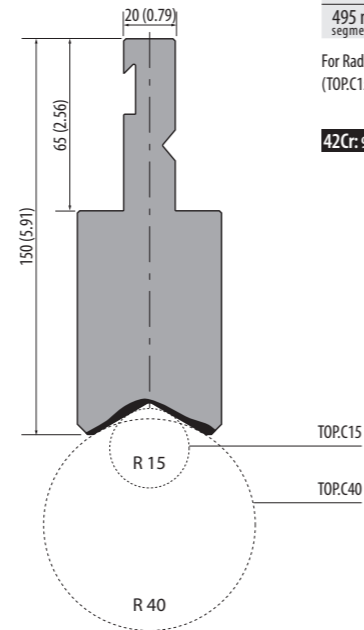
BPR150.P10.15-RFA

1000 kN/m max.

522 mm	20.55 in	23.0 kg
495 mm segmented	19.49 in segmented	21.7 kg

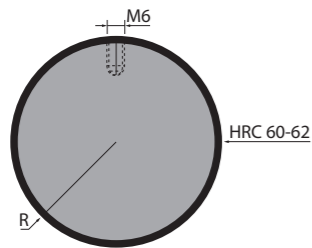
For Radius tools with R15-R40 (TOP.C15-TOP.C40) see below

42Cr: 900-1150 N/mm²



Radius Tools: R10-40

1000 kN/m max.



Material: C53 induction hardened 60-62HRC

C53: 610-760 N/mm²



Model	R mm	R in	Weight	Weight
TOP.C10	10	0.39	1.3 kg	2.7 kg
TOP.C12.5	12.5	0.49	2.0 kg	2.8 kg
TOP.C15	15	0.59	3.0 kg	3.8 kg
TOP.C17.5	17.5	0.69	4.0 kg	4.7 kg
TOP.C20	20	0.79	5.2 kg	6.6 kg
TOP.C25	25	0.98	8.1 kg	7.5 kg
TOP.C30	30	1.18	11.7 kg	11.3 kg
TOP.C35	35	1.38	16.0 kg	15.1 kg
TOP.C40	40	1.57	20.7 kg	19.5 kg

Articles on stock – Please note that delivery time varies according to your location.

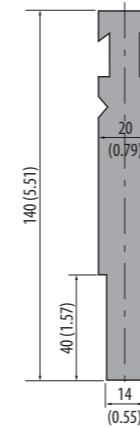


BPU-RFA

800 kN/m max.

830 mm	32.68 in	15.3 kg
410 mm	16.14 in	7.6 kg

C45: 560-710 N/mm²

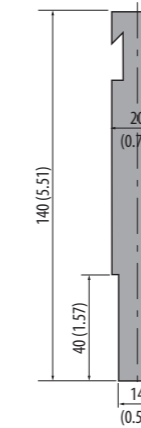


BPU-R

800 kN/m max.

830 mm	32.68 in	15.8 kg
410 mm	16.14 in	7.8 kg

C45: 560-710 N/mm²

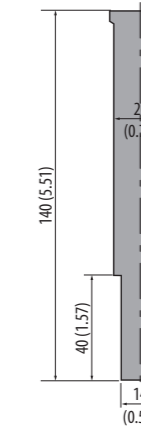


BPU-S

800 kN/m max.

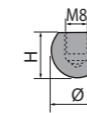
830 mm	32.68 in	16.8 kg
410 mm	16.14 in	8.3 kg

C45: 560-710 N/mm²



Radius Tool: Ø 16-20 mm (0.63-0.79 in)

800 kN/m max.

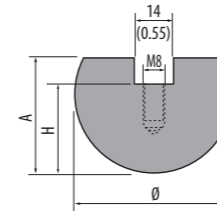


C45: 560-710 N/mm²

Model	Ø mm	Ø in	H mm	H in	Weight	Weight
C13.08	16	0.63	13	0.51	2.00 kg	1.00 kg
C13.09	18	0.71	16	0.63	2.00 kg	1.00 kg
C16.10	20	0.79	16	0.63	2.00 kg	1.00 kg

Radius Tool: Ø 25-100 mm (0.98-3.94)

800 kN/m max.



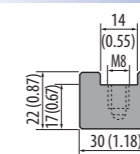
C45: 560-710 N/mm²

Model	Ø mm	Ø in	H mm	H in	A mm	A in	Weight	Weight
C17.12	25	0.98	17	0.67	22	0.87	2.5 kg	1.2 kg
C20.15	30	1.18	20	0.79	27	1.06	3.7 kg	1.8 kg
C22.17	35	1.38	22	0.87	32	1.26	5.0 kg	2.4 kg
C24.20	40	1.57	24	0.94	34	1.34	7.0 kg	3.5 kg
C29.25	50	1.97	29	1.14	39	1.54	10.0 kg	4.7 kg
C34.30	60	2.36	34	1.34	44	1.73	13.5 kg	6.7 kg
C45.35	70	2.76	45	1.77	55	2.17	20.3 kg	10.0 kg
C45.40	80	3.15	45	1.77	55	2.17	23.0 kg	11.5 kg
C60.45	90	3.54	60	2.36	70	2.76	34.0 kg	17.0 kg
C70.50	100	3.94	70	2.76	80	3.15	43.5 kg	21.7 kg



E30.22

800 kN/m max.



835 mm	32.87 in	3.5 kg
415 mm	16.34 in	1.7 kg

C45: 560-710 N/mm²

