ROLLERI

TOOLING LAB

LASER CONSUMABLES

PUNCHING TOOLS - IRON WORKER

SHEAR BLADES

PANEL BENDING TOOLS

BENDING

R2-R3 TOOLS TYPE

ISO 9001 - ISO 45001
CERTIFIED
COMPANY

Click on QR codes or scan them to watch videos. Follow our official Youtube channel www.youtube.com/Rollerispa or watch videos in our website https://www.rolleritools.com/media

Download Rolleri Bending App
It contains not only a lot of interesting contents but also sheet metal development calculator and bending ruler. Furthermore this free app contains a useful tool to scan the QR codes in this catalogue.

Ask for our punching tooling, ironworker, laser consumables, panel bending tooling and shear blades catalogues at www.rolleritools.com/download

The Bending handbook target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

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You can use Rolleri website to check the delivery time, request quotes, stay update with the news, check prices and place orders directly.

Clic on the QR code or scan it to find prices and availability. Create your account on www.rolleritools.com

Check standard available sectioning.
You can also ask for customized tool sectioning.
Contact sales@rolleri.it to ask for feasibility and for customized products.

Download Rolleri Clamping App
Rolleri App contains a lot of useful information about our fast clamping systems, details for their installation and all user manuals.

BENDING TOOLS

R1 TOOLS TYPE
Compatible with press brakes: Accurl, Accurpress, ACL, Adira, Amada, Atlantic, Baykal, BL, Boschert, Boutillon, Bystronic Beyeler, Euro-B, Coastone, Colgar, Dener, Deratech, Durmazlar, Ermaksan, Farina, Gade, Gasparini, Gecko, Gilardi, Gizelis, Haco, Hindustan, HPM, Iturrospe, Jfy, JMT, LFK, Metfab, MVD, Oriance, Prima Power, Promecam, Rico, Salvagnini, Schiavi, SMD, Sorg, Somo, Vicla, Vimercati, Warcom, Yawei,...

R2-R3 TOOLS TYPE
Compatible with press brakes: Darley, LVD, Safan, Trumpf and press brakes with NSCL system, Bystronic Beyeler RFA, RF, R, S

R4 TOOLS TYPE
Compatible with press brakes: LVD

R5 TOOLS TYPE
Compatible with press brakes: American

R6 TOOLS TYPE
Compatible with press brakes: Hämmerle-Bystronic

R7 TOOLS TYPE
Compatible with press brakes: Colly

R8 TOOLS TYPE
Compatible with press brakes: Colgar

R9 TOOLS TYPE
Compatible with press brakes: Gasparini (axial)

R10 TOOLS TYPE
Compatible with press brakes: Ajial Axial

Rx TOOLS TYPE
Compatible with press brakes: EHT, Ursviken and Weinbrenner

ROLLERI TECH, MODIFICATIONS AND SERVICES
Compatible with all types of press brakes

CLAMPING SYSTEMS, INTERMEDIATES AND ADAPTERS
Compatible with all types of press brakes

ROLLA-V AND SPECIAL DIES
Compatible with all types of press brakes

MARK FREE BENDING AND ACCESSORIES
Compatible with all types of press brakes

PANEL BENDING TOOLS

SHEAR BLADES

PUNCHING TOOLS

R1 TOOLS TYPE
Compatible with punching machines Amada, Amada ABS, Wilson HP, Wilson HP WLS, Mate Ultra Tec

R2 TOOLS TYPE
Compatible with Trumpf punching machines

RS TOOLS TYPE
Compatible with Salvagnini punching machines

SPECIAL TOOLS
Compatible with different types of punching machines

ACCESSORIES
Compatible with different types of punching machines

IRON WORKER
Iron cutting tools

LASER CONSUMABLES

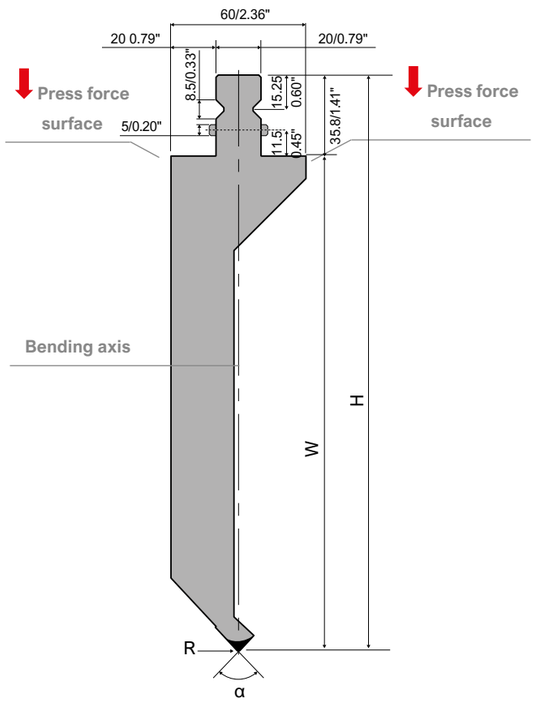
Find our wide range of laser consumables: one of the widest in the market.

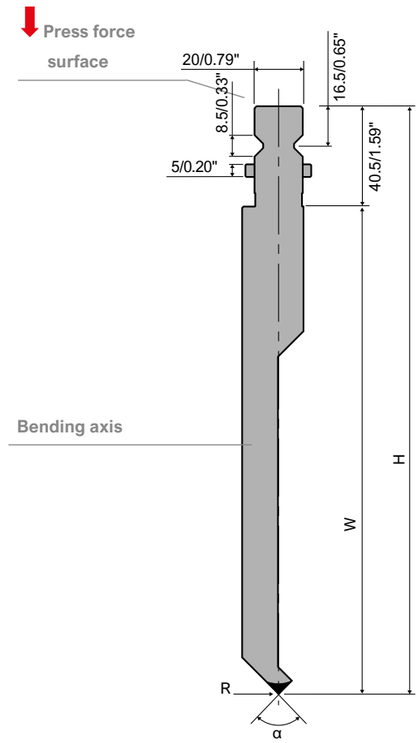
R2
PUNCHES

Darley, LVD, Safan, Trumpf and press brake machines with System NSCL

Our tool codes are listed according to the **tool angle**

STANDARD TANG



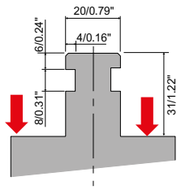


STANDARD LENGTH

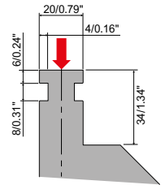
	TOP Series	Serie CLASSIC
250 mm | *9.84"*	○	●
415 mm | *16.34"*		○
500 mm | *19.68"*	○	○
515 mm | *20.28"*	○	○
525 mm | *20.67"*		○
835 mm | *32.87"*		○

○ available for some tool models only

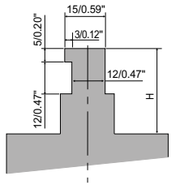
SAFETY GROOVES MODIFICATION



Modification of shoulder-bearing tools



Modification of head-bearing tools



Rolleri BLACKFIRE is a surface treatment against steel oxidation. After such treatment tools become black and laser marking golden.

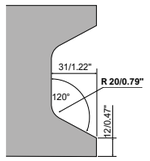
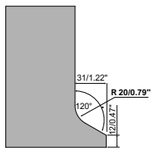
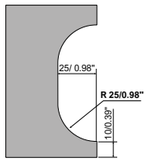
Rolleri FREEZINC is a surface treatment to avoid metal residues of galvanized steel or aluminium from remaining on tools during bending. Tools are also protected from oxidation.

Punches: content explanation

sales@rolleri.it

HORN TYPES

Check the standard horn in each code. All the other horns are available on request based on the series of the tool - check the feasibility with sales@rolleri.it

	Serie TOP	Serie CLASSIC
 1		●
 1/A	●	
 2	●	

SEGMENTATION

Customized sectioning is also available on request.
sales@rolleri.it to know more about price and availability.

◁ = horn left ▷ = horn right

FW: 550 mm *21.65"*
mm: ◁100-100-50-45-40-35-30-25-25-100▷
***in:* ◁*3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94*▷**

FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
***in*: 1.97-1.77-1.57-1.37-1.18-0.98-0.98**

F: 495 mm *19.49"*
mm: 170 - 100 - 50 - 45 - 40 - 35 - 30 - 25
in: 1.70-3.94-1.97-1.77-1.57 -1.37-1.18-0.98

Available on request:

FA mm: 1250-2050-2550-3050-4050
FA in: 49.21-80.71-100.39-120.08-159.45

Lenght mm	*in*	25 *0.98*	30 *1.18*	35 *1.18*	40 *1.18*	45 *1.18*	50 *1.97*	100 *3.94*	100 *3.94*	100 *3.94*
1250	*49.21*	2	1	1	1	1	1	◁1	1▷	8
2050	*80.71*	2	1	1	1	1	1	◁1	1▷	16
2550	*100.39*	2	1	1	1	1	1	◁1	1▷	21
3050	*120.08*	2	1	1	1	1	1	◁1	1▷	26
4050	*159.45*	2	1	1	1	1	1	◁1	1▷	36

FB mm: 1250-2050-2550-3050-4050
FB in: 49.21-80.71-100.39-120.08-159.45

Lenght mm	*in*	25 *0.98*	30 *1.18*	35 *1.18*	40 *1.18*	45 *1.18*	50 *1.97*	100 *3.94*	100 *3.94*	100 *3.94*	200 *7.87*	300 *11.81*	500 *19.68*
1250	*49.21*	2	1	1	1	1	1	1	◁1	1▷	2	1	0
2050	*80.71*	2	1	1	1	1	1	1	◁1	1▷	1	1	2
2550	*100.39*	2	1	1	1	1	1	1	◁1	1▷	1	1	3
3050	*120.08*	2	1	1	1	1	1	1	◁1	1▷	1	1	4
4050	*159.45*	2	1	1	1	1	1	1	◁1	1▷	1	1	6

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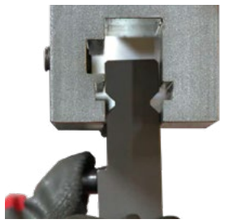
CLAMPING SYSTEMS

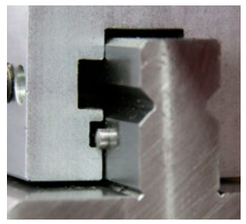
QuickLock - Standard

- Vertical tool change
- Easy handling
- Reduced setup time and costs
- Standard for tooling weight <12.5kg and segmented sets
- According to local regulation about weight limit to be lifted manually, QL can be applied with extra charge. For further information contact rolleritech@rolleritools.com



Safety pins (Standard)

- Orizontal tool change



ROL1 system - on request

- Vertical tool change through spring-loaded ball bearings, which are mounted in the punch
- Increased longevity
- Easy handling
- To be used in hardened clamping systems only
- Applicable on tools < 12.5 kg

Scan the QRCode or click on it and watch the video to discover more about QuickLock system

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TOPW237.85.R08

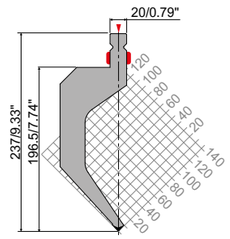
515 mm *20.82"* 33.5 kg
250 mm *9.84"* 16.3 kg
550 mm *21.65"* 35.8 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

85°
W=196.5 | H=237 | R=0.8 mm
W=7.74 | H=9.33 | R=0.031 in

NEW

85° >



TOPW200.85.R08

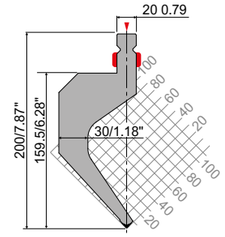
515 mm *19.68"* 28.3 kg
250 mm *9.84"* 13.8 kg
550 mm *21.65"* 30.3 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

85°
W= 159.5 | H=200 | R=0.8 mm
W=6.28 | H=7.87 | R=0.031 in

NEW

85° >



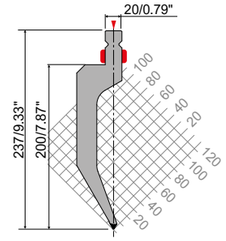
TPR237.60.R1

500 mm *19.68"* 21.6 kg
250 mm *9.84"* 10.8 kg FC
550 mm *21.65"* 23.8 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.
Horn 2

60°
W=200 | H=237 | R=1 mm
W=7.87 | H=9.33 | R=0.039 in

60° >

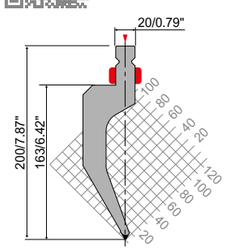


TPR200.60.R1

500 mm *19.68"* 18.3 kg
250 mm *9.84"* 9.2 kg FC
550 mm *21.65"* 20.2 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.
Horn 2

60°
W=163 | H=200 | R=1 mm
W=6.42 | H=7.87 | R=0.039 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
***in*: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐**

FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
***in*: 1.97-1.77-1.57-1.37-1.18-0.98-0.98**

TOPW.200.26.R08

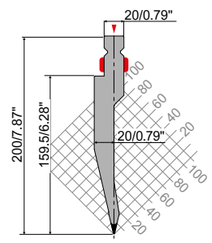
515 mm *19.68"* 13.9 kg
250 mm *9.84"* 6.8 kg
550 mm *21.65"* 14.9 kg FW

26° >

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

26°
W=159.5 | H=200 | R=0.8 mm
W=6.28 | H=7.87 | R=0.031 in

NEW



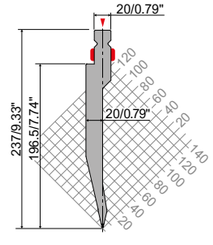
TOPW237.26.R08

515 mm *19.68"* 17.5 kg
250 mm *9.84"* 8.5 kg
550 mm *21.65"* 18.7 kg FW

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

26°
W=196.5 | H=237 | R=0.8 mm
W=7.74 | H=9.33 | R=0.031 in

NEW



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

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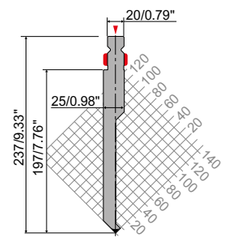
TPR237.90.R06

515 mm *20.82"* 17.5 kg
250 mm *9.84"* 8.5 kg
550 mm *21.65"* 18.7 kg FW

90° >

42Cr: 900-1150 N/mm²
600 kN/m max.
Horn 2

90°
W=197 | H=237 | R=0.6 mm
W=7.76 | H=9.33 | R=0.024 in

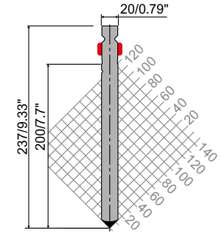


TPR237.90.R12

515 mm *20.82"* 19 kg
250 mm *9.84"* 9.2 kg
550 mm *21.65"* 20.3 kg FW

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 2

90°
W=200 | H=237 | R=1.2 mm
W=7.87 | H=9.33 | R=0.047 in



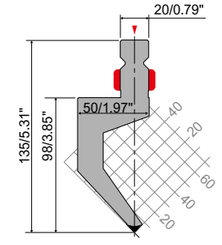
TPR135.86.R1

515 mm *20.82"* 12.3 kg
250 mm *9.84"* 6 kg
550 mm *21.65"* 13.1 kg FW

86° >

42Cr: 900-1150 N/mm²
650 kN/m max.
Horn 1/A

86°
W=98 | H=135 | R=1 mm
W=3.85 | H=5.31 | R=0.039 in

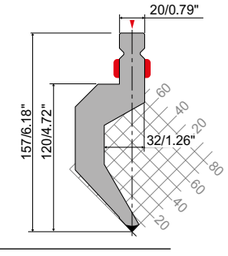


TPR157.86.R1

500 mm *19.68"* 14 kg
250 mm *9.84"* 7.5 kg FC
550 mm *21.65"* 15 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1/A

86°
W=120 | H=157 | R=1 mm
W=4.72 | H=6.18 | R=0.039 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

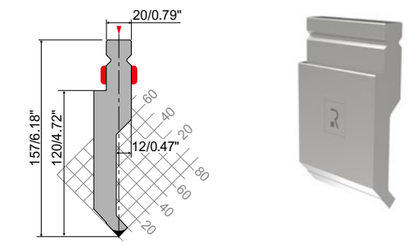
FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

TPR157.86.R1-A

500 mm *19.68"* 12.5 kg
250 mm *9.84"* 6.2 kg FC
550 mm *21.65"* 12.5 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1/A

86°
W=120 | H=157 | R=1 mm
W=4.72 | H=6.18 | R=0.039 in

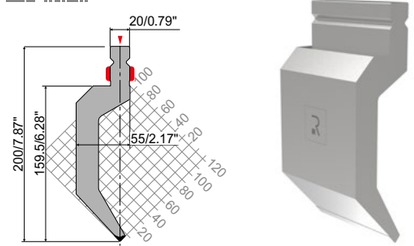


TPR200.86.R1

515 mm *20.82"* 19.1 kg
250 mm *9.84"* 6.1 kg
550 mm *21.65"* 20.4 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 2

86°
W=159.5 | H=200 | R=1 mm
W=6.28 | H=7.87 | R=0.039 in

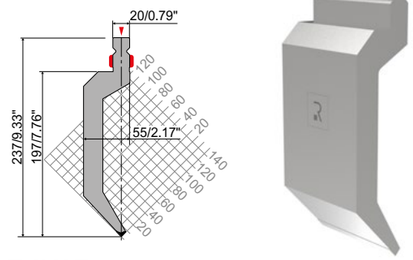


TPR237.86.R1

515 mm *20.82"* 23 kg
250 mm *9.84"* 11.2 kg
550 mm *21.65"* 24.6 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 2

86°
W=197 | H=237 | R=1 mm
W=7.76 | H=9.33 | R=0.039 in

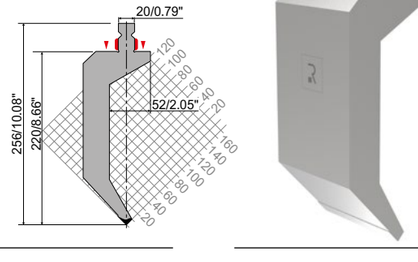


TPR256.86.R1

500 mm *19.68"* 33 kg
250 mm *9.84"* 16.5 kg FC
550 mm *21.65"* 33 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

86°
W=220 | H=256 | R=1 mm
W=8.66 | H=10.08 | R=0.039 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

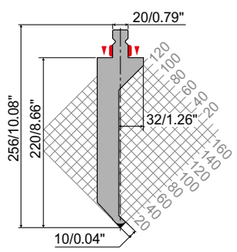
FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

TPR256.86.R1-A

500 mm *19.68"* 28.5 kg
250 mm *9.84"* 12.5 kg FC
550 mm *21.65"* 28.5 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

86°
W=220 | H=256 | R=1 mm
W=8.66 | H=10.08 | R=0.039 in



PW200.85.R08

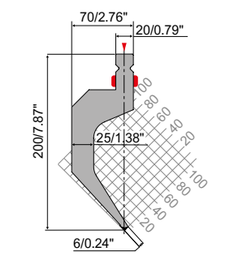
85° >

515 mm *19.68"* 22.1 kg
250 mm *9.84"* 10,7 kg
550 mm *21.65"* 23.6 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.
Horn 1

85°
W=159.5 | H=200 | R=0.8 mm
W=6.28 | H=7.87 | R=0.031 in

! NEW



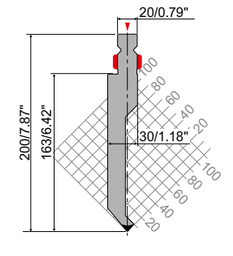
TPR200.80.R1

80° >

515 mm *20.82"* 19 kg
250 mm *9.84"* 9.2 kg
550 mm *21.65"* 21 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 2

80°
W=163 | H=200 | R=1 mm
W=6.42 | H=7.87 | R=0.039 in

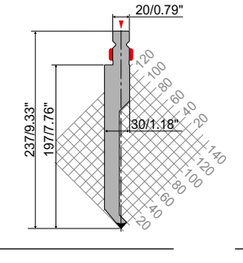


TPR237.80.R1

515 mm *20.82"* 19.7 kg
250 mm *9.84"* 9.6 kg
550 mm *21.65"* 21 kg FW

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 2

80°
W=197 | H=237 | R=1 mm
W=7.76 | H=9.33 | R=0.039 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

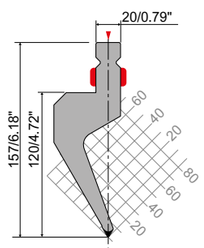
TPR157.60.R1

500 mm *19.68"* 15 kg
250 mm *9.84"* 7.5 kg FC
550 mm *21.65"* 16.5 kg FW

60° >

42Cr: 900-1150 N/mm²
700 kN/m max.
Horn 1/A

60°
W=120 | H=157 | R=1 mm
W=4.72 | H=6.18 | R=0.039 in

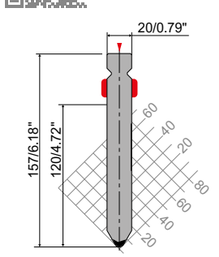


TPR157.60.R4

500 mm *19.68"* 12 kg
250 mm *9.84"* 6 kg FC
550 mm *21.65"* 12 kg FW

42Cr: 900-1150 N/mm²
1600 kN/m max.
Horn 1/A

60°
W=120 | H=157 | R=4 mm
W=4.72 | H=6.18 | R=0.157 in

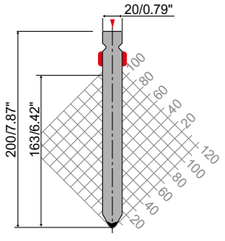


TPR200.60.R3

515 mm *20.82"* 15.6 kg
250 mm *9.84"* 7.6 kg
550 mm *21.65"* 16.7 kg FW

42Cr: 900-1150 N/mm²
1600 kN/m max.
Horn 2

60°
W=163 | H=200 | R=3 mm
W=6.42 | H=7.87 | R=0.118 in

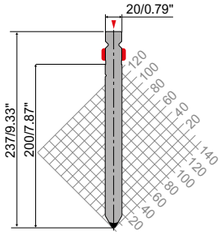


TPR237.60.R3

515 mm *20.82"* 18.8 kg
250 mm *9.84"* 9.1 kg
550 mm *21.65"* 20.1 kg FW

42Cr: 900-1150 N/mm²
1600 kN/m max.
Horn 2

60°
W=200 | H=237 | R=3 mm
W=7.87 | H=9.33 | R=0.118 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

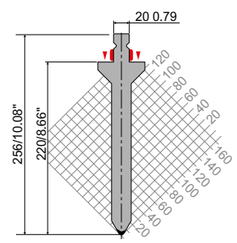
FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

TPR256.60.R4

500 mm *19.68"* 26.1 kg
250 mm *9.84"* 13.5 kg FC
550 mm *21.65"* 28.7 kg FW

42Cr: 900-1150 N/mm²
2500 kN/m max.
Horn 1

60°
W=220 | H=256 | R=4 mm
W=8.66 | H=10.08 | R=0.157 in



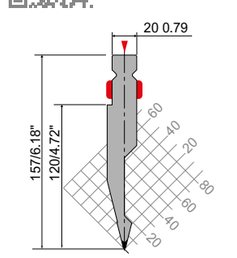
TPR157.28.R1

500 mm *19.68"* 10 kg
250 mm *9.84"* 5 kg FC
550 mm *21.65"* 10 kg FW

28° >

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1/A

28°
W=120 | H=157 | R=1 mm
W=4.72 | H=6.18 | R=0.039 in

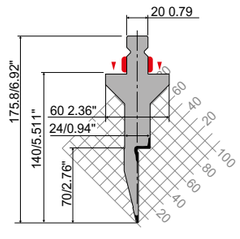


TPR176.28.R1

500 mm *19.68"* 7.5 kg
250 mm *9.84"* 15 kg FC
550 mm *21.65"* 10 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.
Horn 1/A

28°
W=140 | H=175.8 | R=1 mm
W=5.51 | H=6.92 | R=0.039 in

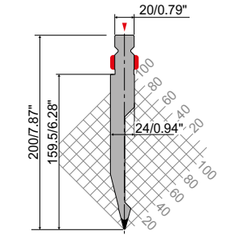


TPR200.28.R1

515 mm *20.82"* 12.6 kg
250 mm *9.84"* 6.1 kg
550 mm *21.65"* 13.5 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.
Horn 2

28°
W=159.5 | H=200 | R=1 mm
W=6.28 | H=7.87 | R=0.039 in



FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

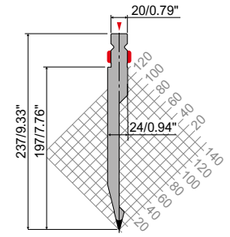
FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

TPR237.28.R1

515 mm *20.82"* 15 kg
250 mm *9.84"* 7.3 kg
550 mm *21.65"* 16 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.
Horn 2

28°
W=197 | H=237 | R=1 mm
W=7.76 | H=9.33 | R=0.039 in

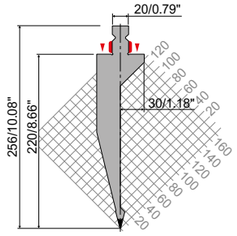


TPR256.28.R1

500 mm *19.68"* 25 kg
250 mm *9.84"* 12.5 kg FC
550 mm *21.65"* 28 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.
Horn 1

28°
W=220 | H=256 | R=1 mm
W=8.66 | H=10.08 | R=0.039 in

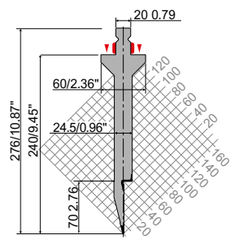


TPR276.28.R1

500 mm *19.68"* 24 kg
250 mm *9.84"* 12 kg FC
550 mm *21.65"* 26.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.
Horn 1

28°
W=240 | H=276 | R=1 mm
W=9.45 | H=10.87 | R=0.039 in

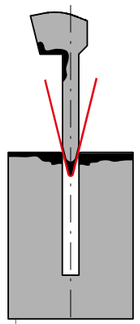


FW: 550 mm *21.65"*
mm: ⧏100-100-50-45-40-35-30-25-25-100⧐
in: ⧏3.94-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98-3.94⧐

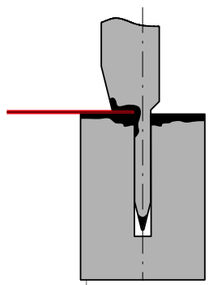
FC: 250 mm *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.97-1.77-1.57-1.37-1.18-0.98-0.98

Hemming tools are used to prebend and afterwards flatten a sheet metal edge by using the same tool set.
Thanks to this operation you can strengthen sheet metal edges and avoid burr on their external side. For this reason, this operation is especially used for safety reason, in order to avoid operators' accidental injuries which may occurr to those who have to handle sheet metal parts.
The maximum sheet metal thickness usually recommended for this operation is 3mm mild steel and 2mm stainless steel. However, for thicker sheet metal special solutions can be proposed, which consider the necessary bending force involved to flatten.
There are 2 types of flattening: partial flattening and total flattening.
Partial flattening is a kind of flattening which doesn't win against the sheet metal springback. For this reason, if you measure the flattened point, it won't be twice the sheet metal thickness but a bigger measure; for example, if you flatten 1.5mm partially, the flattened point will be about 4mm. This dimension depends on the bending force only. Hence, if you want to flatten 1.5mm mild steel and get 3mm high flattened point, you have to increase the tonnage.
In the table below you can check the necessary tonnage according to sheet metal thickness and type.
The choice of hemming tools should be influenced by the sheet metal type to be flattened; 35° punch and dies are recommended to flatten aluminium and mild steel, which have small springback, whereas more resitant sheet metal types like stainless steel require at least 30°, or better 26°, punch and die.
Springback control is fundamental to win against sheet metal resistance during the flattening phase. In fact, if the angle obtained during the pre-bending phase is too wide, sheet metal will slip towards the operator during the flattening phase.
The choice of TOP serie hemming tools with dies with U shape opening has to take into consideration the fact that the U opening of the die has to match perfectly with the punch tip width. These tools are 525mm long and the sectioned set is also available.

MAX CAPACITY



500 kN/m max.



1000 kN/m max.

S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	3.0	*0.12*	90	150
0.80	*0.03*	3.0	*0.12*	120	200
1.00	*0.04*	3.5	*0.14*	150	250
1.25	*0.05*	3.5	*0.14*	170	260

S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	1.2	*0.05*	230	350
0.80	*0.03*	1.6	*0.06*	320	500
1.00	*0.04*	1.0	*0.04*	400	600
1.25	*0.05*	2.5	*0.10*	500	800

The **Bending handbook** target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

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TPR.SP.195.28.8

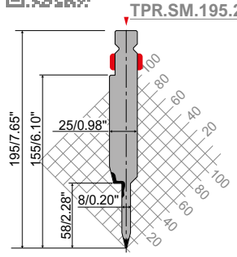
525 mm *20.67"* 15.1 kg
495 mm *19.49"* 8.9 kg F

28° >

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max

28°
W=155 | H=195 | R=0.6 mm
W=6.10 | H=7.68 | R=0.024 in

To use with:
TPR.SM.195.28.8
TPR.SM.195.24.8



TPR.SP.195.24.8

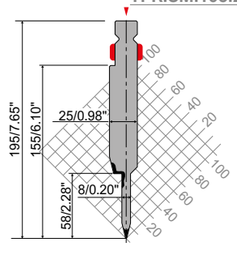
525 mm *20.67"* 15 kg
495 mm *19.49"* 8.9 kg F

24° >

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max.

24°
W=155 | H=195 | R=0.6 mm
W=6.10 | H=7.68 | R=0.024 in

To use with:
TPR.SM.195.28.8
TPR.SM.195.24.8



TPR.SP.195.24.10

525 mm *20.67"* 15.5 kg
495 mm *19.49"* 9.3 kg F

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max.

24°
W=155 | H=195 | R=0.6 mm
W=6.10 | H=7.68 | R=0.024 in

To use with:
TPR.SM.195.24.10

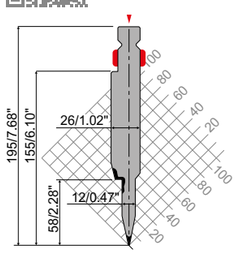
TPR.SP.195.24.12

525 mm 20.67" 16 kg
495 mm 19.49" 9.5 kg F

42Cr: 900-1150 N/mm²
950 kN/m max.

24°
W=155 | H=195 | R=0.6 mm
W=6.10 | H=7.68 | R=0.024 in

To use with:
TPR.SM.195.24.12



F: 495 mm *19.49"*
mm: 170 - 100 - 50 - 45 - 40 - 35 - 30 - 25
in: 1.70-3.94-1.97-1.77-1.57 -1.37-1.18-0.98

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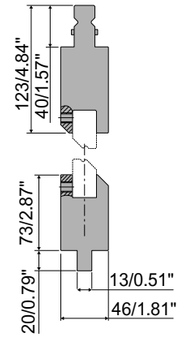
TPZ

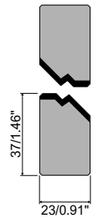
835 mm *32.87"* 46.7 kg
415 mm *16.34"* 23.2 kg

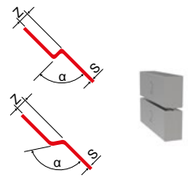
42Cr: 900-1150 N/mm²
600 kN/m max.

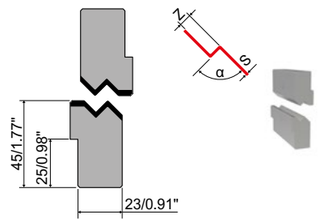


JOGGLE TOOL INSERTS

	Z mm	Z *in*	α	Thickness ! mm	Thickness ! *in*	835 mm *32.87 in*	415 mm *16.34 in*	
CEZ 1.0	1	*0.04*	160°	1.2	*0.05*	11 kg	5.5 kg	160°
CEZ 1.5	1.5	*0.06*	160°	1.5	*0.06*	11 kg	5.5 kg	
CEZ 2.0	2	*0.08*	150°	1.4	*0.06*	11 kg	5.5 kg	150°
CEZ 2.5	2.5	*0.10*	140°	1.3	*0.05*	11 kg	5.5 kg	140°
CEZ 1.0/90	1	*0.04*	90°	0.3	*0.01*	11 kg	5.5 kg	
CEZ 1.5/90	1.5	*0.06*	90°	0.3	*0.01*	11 kg	5.5 kg	
CEZ 2.0/90	2	*0.08*	90°	0.4	*0.02*	11 kg	5.5 kg	
CEZ 2.5/90	2.5	*0.10*	90°	0.5	*0.02*	11 kg	5.5 kg	
CEZ 3.0	3	*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 kg	5 kg	
CEZ 4.0	4	*0.16*	90°	1.2	*0.05*	10 kg	5 kg	
CEZ 4.5	4.5	*0.18*	90°	1.2	*0.05*	10 kg	5 kg	90°
CEZ 5.0	5	*0.20*	90°	1.3	*0.05*	10 kg	5 kg	
CEZ 5.5	5.5	*0.22*	90°	1.4	*0.06*	10 kg	5 kg	
CEZ 6.0	6	*0.24*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 6.5	6.5	*0.26*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 7.0	7	*0.28*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 7.5	7.5	*0.30*	90°	1.6	*0.06*	10 kg	5 kg	
CEZ 8.0	8	*0.31*	90°	1.6	*0.06*	10 kg	5 kg	
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	5 kg	
CEZ 11.0	11	*0.43*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 12.0	12	*0.47*	90°	2	*0.08*	13.5 kg	5 kg	90°
CEZ 13.0	13	*0.51*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 14.0	14	*0.55*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 15.0	15	*0.59*	90°	2.3	*0.09*	13.5 kg	5 kg	







C45: 560-710 N/mm²
1000 kN/m max.

! Z dimensions and angles mentioned in the above table are valid only to bend mild steel with max. tensile strength 420 N/mm2.
If you have to bend other sheet metal types, please contact our technical department at engineer@rolleritools.com

Joggle tools can make two bends at the same time, so the bending process is extremely quick, as during the bending process sheet metal overturn is not necessary. Furthermore,by using the same CPZ holder you can produce 15 different joggles by changing inserts only and bending result is guaranteed.

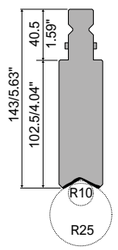
Ask for our punching tooling, ironworker, laser consumables, panel bending tooling and shear blades catalogues at www.rolleritools.com/download

TPR143.10

525 mm *20.67"* 18 kg
495 mm *19.49"* 17 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max

W=102.5 | H=143 mm
W=4.04 | H=5.63 in

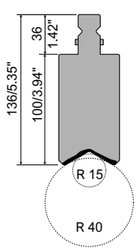


TPR136.15

525 mm *20.67"* 25 kg
495 mm *19.49"* 23.7 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max.

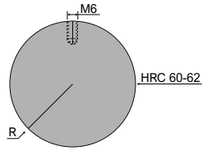
W=100 | H=136 mm
W=3.94 | H=5.35 in



RADIUS TOOLS: R08-R40

	R mm	*R in*	525 mm *20.67 in*	FA
TOP.C08	8.0	*0.31*	0.8 kg	0.8 kg
TOP.C09	9.0	*0.35*	1.0 kg	1.0 kg
TOP.C10	10.0	*0.39*	1.3 kg	1.2 kg
TOP.C11	11.0	*0.43*	1.6 kg	1.5 kg
TOP.C12.5	12.5	*0.49*	2.0 kg	1.9 kg
TOP.C14	14.0	*0.55*	2.5 kg	2.4 kg
TOP.C15	15.0	*0.59*	2.9 kg	2.7 kg
TOP.C16	16.0	*0.63*	3.3 kg	3.1 kg
TOP.C17.5	17.5	*0.69*	4.0 kg	3.7 kg
TOP.C19	19.0	*0.75*	4.7 kg	4.4 kg
TOP.C20	20.0	*0.79*	5.2 kg	4.9 kg
TOP.C21	21.0	*0.83*	5.7 kg	5.4 kg
TOP.C22.5	22.5	*0.88*	6.6 kg	6.2 kg
TOP.C24	24.0	*0.94*	7.5 kg	7.0 kg
TOP.C25	25.0	*0.98*	8.1 kg	7.6 kg
TOP.C27.5	27.5	*1.08*	9.8 kg	9.2 kg
TOP.C30	30.0	*1.18*	11.6 kg	11.0 kg
TOP.C32.5	32.5	*1.28*	13.7 kg	12.9 kg
TOP.C35	35.0	*1.14*	15.9 kg	14.9 kg
TOP.C37.5	37.5	*1.47*	18.2 kg	17.2 kg
TOP.C40	40.0	*1.57*	20.7 kg	19.5 kg

C53: 610 -760 N/mm²
1000 kN/m max.



F: 495 mm *19.49"*
mm: 170 - 100 - 50 - 45 - 40 - 35 - 30 - 25
in: 1.70-3.94-1.97-1.77-1.57 -1.37-1.18-0.98

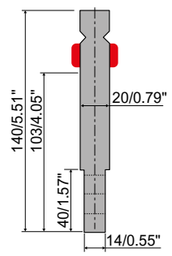
The same holder can be equipped with different radius tools and, in case of TPR140-14, also with E30.22 flat hemming insert to flatten thick sheet metal.
Radius profiles bent with radius tools show a more regular shape and therefore they aesthetically look better.
PU holders and C radius tools have been designed to guarantee the

TPR140-14

830 mm *32.69"* 17 kg
412 mm *16.22"* 9 kg

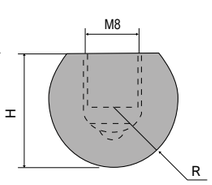
C45: 560-710 N/mm²
800 kN/m max.

W=103 | H=140 mm
W=4.05 | H=5.51 in



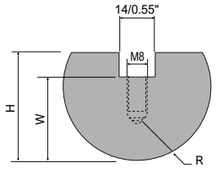
RADIUS TOOLS Ø 16 - 20

	R mm	*R in*	H mm	*H in*	A mm	*A in*	835 mm *32.87 in*	415 mm *16.34 in*
C13.08	8	*0.31*	13	*0.51*	-	-	2.0 kg	1.0 kg
C13.09	9	*0.35*	16	*0.63*	-	-	2.0 kg	1.0 kg
C16.10	10	*0.39*	16	*0.63*	-	-	2.0 kg	1.0 kg



RADIUS TOOLS Ø 25 - 100

	R mm	*R in*	H mm	*H in*	A mm	*A in*	835 mm *32.87 in*	415 mm *16.34 in*
C17.12	12.5	*0.49*	17	*0.67*	22	*0.87*	2.5 kg	1.2 kg
C20.15	15	*0.59*	20	*0.79*	27	*1.06*	3.7 kg	1.8 kg
C22.17	17.5	*0.69*	22	*0.87*	32	*1.26*	5.0 kg	2.4 kg
C24.20	20	*0.79*	24	*0.94*	34	*1.33*	7.0 kg	3.5 kg
C25.22	22.5	*0.89*	25	*0.98*	35	*1.38*	7.5 kg	3.8 kg
C29.25	25	*0.98*	29	*1.14*	39	*1.53*	10.0 kg	4.7 kg
C34.27	27.5	*1.08*	34	*1.33*	44	*1.73*	12.4 kg	6.2 kg
C34.30	30	*1.18*	34	*1.33*	44	*1.73*	13.5 kg	6.7 kg
C37.32	32.5	*1.28*	37	*1.46*	47	*1.85*	15.9 kg	7.9 kg
C45.35	35	*1.38*	45	*1.77*	55	*2.16*	20.3 kg	10.0 kg
C42.37	37.5	*1.48*	42	*1.65*	52	*2.04*	20.5 kg	10.3 kg
C45.40	40	*1.57*	45	*1.77*	55	*2.16*	23.0 kg	11.5 kg
C60.45	22.5	*0.89*	60	*2.36*	70	*2.75*	34.0 kg	17.0 kg
C70.50	50	*1.97*	70	*2.75*	80	*3.15*	43.5 kg	21.7 kg

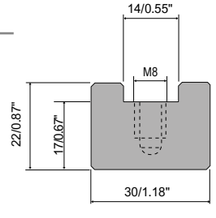


Hemming tools CLASSIC series

E30.22

835 mm *32.87"* 3.5 kg
415 mm *16.34"* 1.7 kg

C45: 560-710 N/mm²
800 kN/m max.



maximum flexibility thanks to the wide range of different radius tools which can be used. For specific needs the same concept can be used for special shapes like U shapes, omega etc..
The assembly system has been studied in order to be flexible and to guarantee the easy and quick radius tool change.

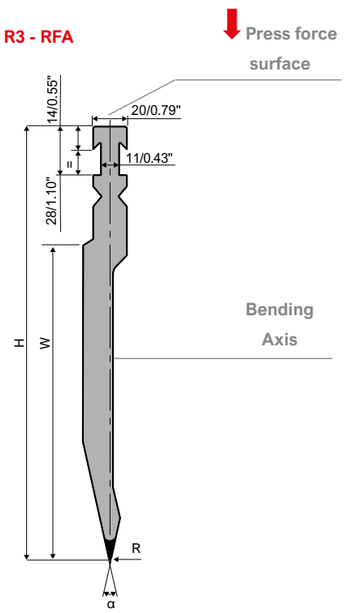
Download Rolleri **Bending App**
You will have access to our online store where you can get what you need. You will also get our sheet metal unfolding software for free and our bending rule.

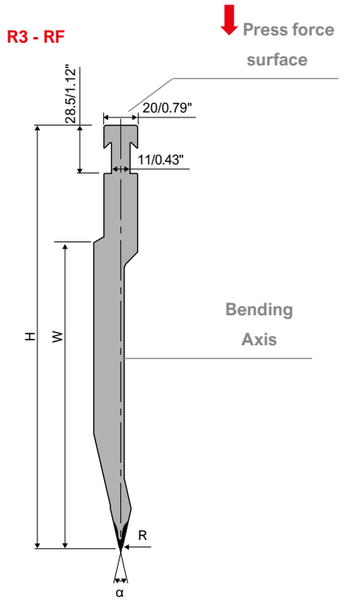
R3
PUNCHES

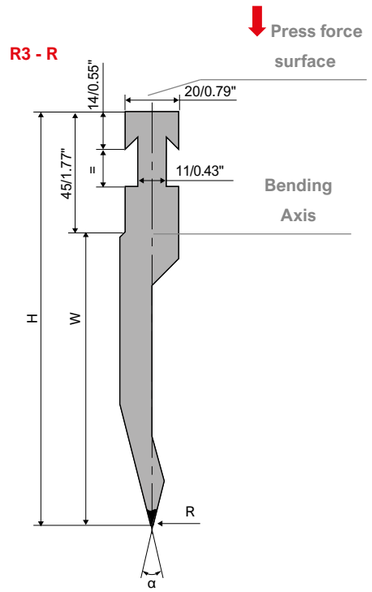
Bystronic Beyeler RFA, RF, R, S

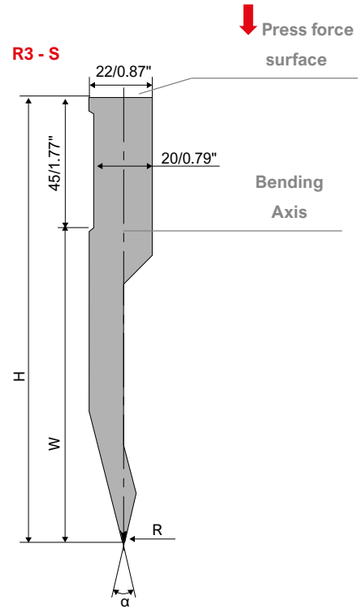
Our tool codes are listed according to the **tool angle**

STANDARD TANG









Rolleri BLACKFIRE is a surface treatment against steel oxidation. After such treatment tools become black and laser marking golden.

Rolleri FREEZINC is a surface treatment to avoid metal residues of galvanized steel or aluminium from remaining on tools during bending. Tools are also protected from oxidation.

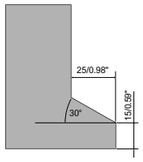
STANDARD LENGTH

	Serie RFA	Serie RF	Serie R	Serie S
415 mm | *16.24"*	○	○	○	○
500 mm | *19.68"*	○		●	●
508 mm | *20.00"*	○	●		
525 mm | *20.67"*	○			
835 mm | 32.87"	○	○	○	○
1000 mm | *39.37"*	○		●	●

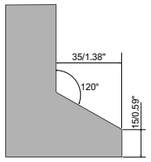
○ available for some tool models only

HORN TYPES

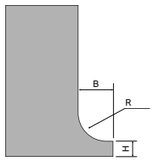
Check the standard horn in each code. All the other horns are available on request based on the series of the tool - check the feasibility with sales@rolleri.it



1 - R3 BP



2 - R3 BPR



X - scarpetta personalizzata su vostra indicazione

SEGMENTATION

Available also special fractioning on request - check the feasibility with sales@rolleri.it.

◁ = Horn left ▷ = Horn right

F-BP: 1100 mm - *43.30"*
mm: ◁100-300-200-100-75-60-50-40-30-20-15-10-100▷
in: ◁3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94▷

F-BPR: 1100 mm - *43.30"*
mm: ◁200-375-300-50-30-20-15-10-100▷
in:◁7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94▷

F: 495 mm - *19.48"*
mm: 170-100-50-45-40-35-30-25
in: 7.87-3.94-1.97-1.77-1.57-1.38-1.18-0.98

Ask for our punching tooling, ironworker, laser consumables, panel bending tooling and shear blades catalogues at www.rolleritools.com/download

Create your account on www.rolleritools.com
You can use Rolleri website to check the delivery time, request quotes, stay update with the news, check prices and place orders directly.

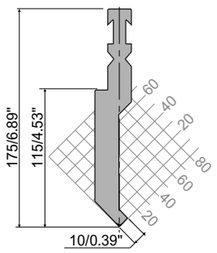
BP175.88.R1-A-RFA

88° >

1000 mm *39.37"* 23 kg
500 mm 19.68" 11.5 kg
1100 mm 43.31" 25.3 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

88°
W=115 | H=175 | R=1.0 mm
W=4.53 | H=6.89 | R=0.039 in

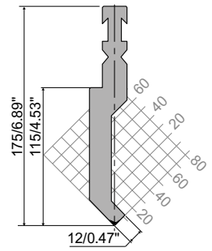


BP175.88.R1-B-RFA

1000 mm *39.37"* 23 kg
500 mm *19.68"* 11.5 kg
1100 mm *43.31"* 25.3 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

88°
W=115 | H=175 | R=1.0 mm
W=4.53 | H=6.89 | R=0.039 in

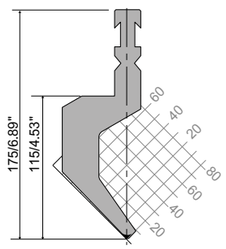


BP175.88.R15-RFA

1000 mm *39.37"* 23 kg
500 mm *19.68"* 11.5 kg
1100 mm *43.31"* 25.3 kg F

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

88°
W=115 | H=175 | R=1.5 mm
W=4.53 | H=6.89 | R=0.059 in



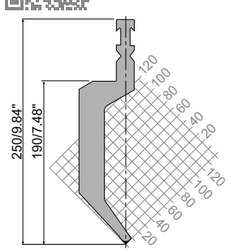
BPR250.P4-RFA

85° >

508 mm *20.00"* 27.4 kg
1100 mm *43.31"* 59 kg F

42Cr: 900-1150 N/mm²
900 kN/m max.
Horn 2

85°
W=190 | H=250 | R=1.5 mm
W=7.48 | H=9.84 | R=0.059 in



F-BPR: 1100 mm - *43.30"*
mm: ⧏200-375-300-50-30-20-15-10-100⧐
in:⧏7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94⧐

F-BP: 1100 mm - *43.30"*
mm: ⧏100-300-200-100-75-60-50-40-30-20-15-10-100⧐
in: ⧏3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94⧐

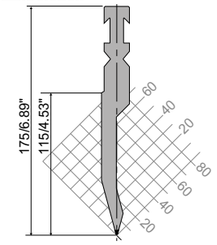
BP.175.30.R1-RFA

30° >

1000 mm *39.37"* 16 kg
500 mm *19.68"* 8 kg
1100 mm *43.31"* 16 kg F

42Cr: 900-1150 N/mm²
750 kN/m max.
Horn 2

30°
W=115 | H=175 | R=1.0 mm
W=4.53 | H=6.89 | R=0.039 in

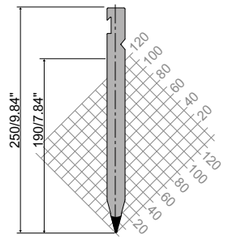


BPR.250.P6-RFA

508 mm *20.00"* 27.4 kg
1100 mm *43.31"* 59 kg F

42Cr: 900-1150 N/mm²
1400 kN/m max.
Horn 2

30°
W=190 | H=250 | R=1.0 mm
W=7.48 | H=9.84 | R=0.039 in

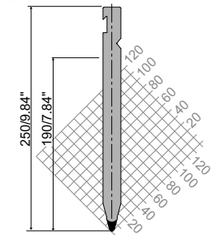


BPR.250.P7-RFA

508 mm *20.00"* 27.4 kg
1100 mm *43.31"* 59 kg F

42Cr: 900-1150 N/mm²
1400 kN/m max.
Horn 2

30°
W=190 | H=250 | R=3.0 mm
W=7.84 | H=9.84 | R=0.11 in

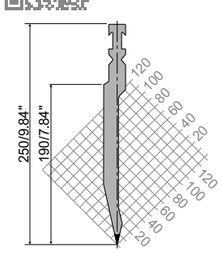


BPR250.P5.30.RFA

508 mm *20.00"* 27.4 kg
1100 mm *43.31"* 59 kg F

42Cr: 900-1150 N/mm²
900 kN/m max.
Horn 2

30°
W=190 | H=250 | R=1.0 mm
W=7.48 | H=9.84 | R=0.039 in



F-BPR: 1100 mm - *43.30"*
mm: ⧏200-375-300-50-30-20-15-10-100⧐
in:⧏7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94⧐

F-BP: 1100 mm - *43.30"*
mm: ⧏100-300-200-100-75-60-50-40-30-20-15-10-100⧐
in: ⧏3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94⧐

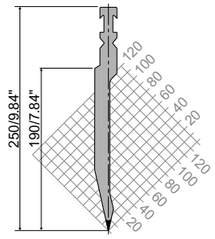
BPR250.P5-RFA

508 mm *20.00"* 27.4 kg
1100 mm *43.31"* 59 kg F

26° >

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 2

26°
W=190 | H=250 | R=1.0 mm
W=7.84 | H=9.84 | R=0.039 in



Hemming tools RFA serie

Hemming tools are used to prebend and afterwards flatten a sheet metal edge by using the same tool set.

Thanks to this operation you can strengthen sheet metal edges and avoid burr on their external side. For this reason, this operation is especially used for safety reason, in order to avoid operators' accidental injuries which may occurr to those who have to handle sheet metal parts.

The maximum sheet metal thickness usually recommended for this operation is 3mm mild steel and 2mm stainless steel. However, for thicker sheet metal special solutions can be proposed, which consider the necessary bending force involved to flatten.

There are 2 types of flattening: partial flattening and total flattening.

Partial flattening is a kind of flattening which doesn't win against the sheet metal springback. For this reason, if you measure the flattened point, it won't be twice the sheet metal thickness but a bigger measure; for example, if you flatten 1.5mm partially, the flattened point will be about 4mm. This dimension depends on the bending force only. Hence, if you want to flatten 1.5mm mild steel and get 3mm high flattened point, you have to increase the tonnage.

In the table below you can check the necessary tonnage according to sheet metal thickness and type.

The choice of hemming tools should be influenced by the sheet metal type to be flattened; 35° punch and dies are recommended to flatten aluminium and mild steel, which have small springback, whereas more resitant sheet metal types like stainless steel require at least 30°, or better 26°, punch and die.

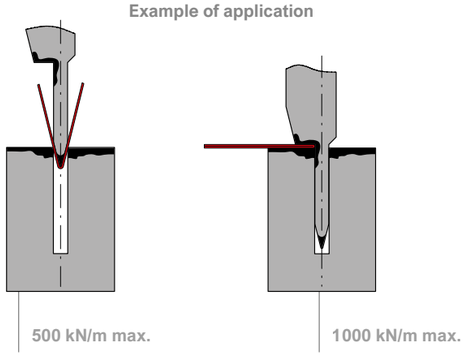
Springback control is fundamental to win against sheet metal resistance during the flattening phase. In fact, if the angle obtained during the pre-bending phase is too wide, sheet metal will slip towards the operator during the flattening phase.

The choice of hemming tools with dies with U shape opening has to take into consideration the fact that the U opening of the die has to match perfectly with the punch tip width. These tools are 525mm long and the sectioned set is also available.

S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	3.0	*0.12*	90	150
0.80	*0.03*	3.0	*0.12*	120	200
1.00	*0.04*	3.5	*0.14*	150	250
1.25	*0.05*	3.5	*0.14*	170	260

S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	1.2	*0.05*	230	350
0.80	*0.03*	1.6	*0.06*	320	500
1.00	*0.04*	1.0	*0.04*	400	600
1.25	*0.05*	2.5	*0.10*	500	800

Example of application



F-BPR: 1100 mm - *43.30"*
mm: ⧏200-375-300-50-30-20-15-10-100⧐
in:⧏7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94⧐

The Bending handbook target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

BPR.SP-195.28.6

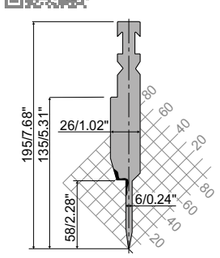
525 mm *20.67"* 8.7 kg
495 mm *19.49"* 8.2 kg F

28° >

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max

28°
W=135 | H=195 | R=0.6 mm
W=5.31 | H=7.68 | R=0.024 in

To use with
Bpr.sm.195.28.6



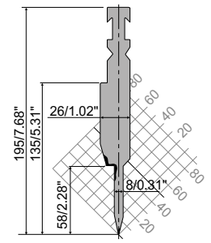
BPR.SP-195.28.8

525 mm *20.67"* 8.7 kg
495 mm *19.49"* 8.2 kg F

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max.

28°
W=135 | H=195 | R=0.6 mm
W=5.31 | H=7.68 | R=0.024 in

To use with
bpr.sm.195.28.8



BPR.SP-195.24.10

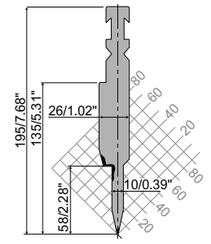
525 mm *20.67"* 8.7 kg
495 mm *19.49"* 8.2 kg F

24° >

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max.

24°
W=135 | H=195 | R=0.6 mm
W=5.31 | H=7.68 | R=0.024 in

To use with
BPR.SM.195.24.10



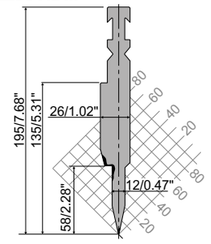
BPR.SP-195.24.12

525 mm *20.67"* 8.7 kg
495 mm *19.49"* 8.2 kg F

42Cr: 900-1150 N/mm²
800 - 1000 kN/m max.

24°
W=135 | H=195 | R=0.6 mm
W=5.31 | H=7.68 | R=0.024 in

To use with
BPR.SM.195.24.12



F-BPR: 1100 mm - *43.30"*
mm: ⧏200-375-300-50-30-20-15-10-100⧐
in:⧏7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94⧐

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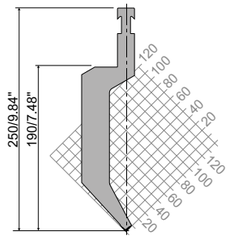
BPR250.P4-RF

508 mm 20.00" 27.6 kg
1100 mm *43.31"* 51 kg F

85° >

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 2

85°
W=190 | H=250 | R=1.5 mm
W=7.48 | H=9.84 | R=0.059 in



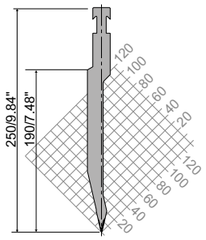
BPR250.P5-RF

508 mm 20.00" 16.6 kg
1100 mm *43.31"* 35 kg F

26° >

42Cr: 900-1150 N/mm²
900 kN/m max.
Horn 2

26°
W=190 | H=250 | R=1.0 mm
W=7.48 | H=9.84 | R=0.039 in



F-BPR: 1100 mm - *43.30"*
mm: ⧏200-375-300-50-30-20-15-10-100⧐
in:⧏7.87-14.76-11.81-1.97-1.18-0.79-0.59-0.39-3.94⧐

The **Bending handbook** target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

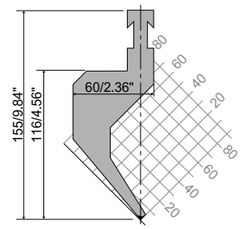
BP155.85.R08-R

1000 mm *39.37"* 22 kg
500 mm *19.68"* 12.5 kg
1100 mm *43.31"* 21.5 kg F

85° >

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

85°
W=116 | H=155 | R=0.8 mm
W=4.56 | H=9.84 | R=0.031 in

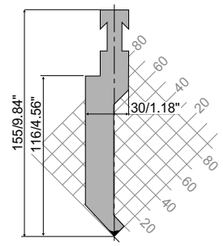


BP155.85.R1-R

1000 mm *39.37"* 23 kg
500 mm *19.68"* 11.5 kg
1100 mm *43.31"* 23 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

85°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=9.84 | R=0.039 in

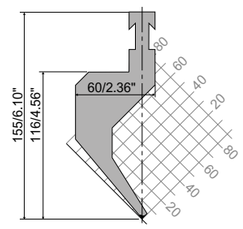


BP155.85.R15-R

1000 mm *39.37"* 32 kg
500 mm *19.68"* 16 kg
1100 mm *43.31"* 32 kg F

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

85°
W=116 | H=155 | R=1.5 mm
W=4.56 | H=6.10 | R=0.059 in



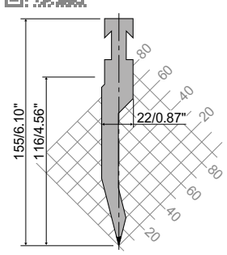
BP155.30.R1-R

1000 mm *39.37"* 16 kg
500 mm *19.68"* 8 kg
1100 mm *43.31"* 18 kg F

30° >

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

30°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=6.10 | R=0.039 in



F-BP: 1100 mm - *43.30"*
mm: ⧏100-300-200-100-75-60-50-40-30-20-15-10-100⧐
in: ⧏3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94⧐

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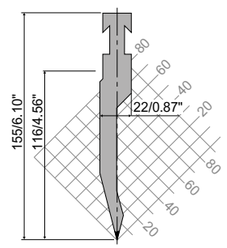
BP155.28.R1-R

1000 mm *39.37"* 16 kg
500 mm *19.68"* 8 kg
1100 mm *43.31"* 17.5 kg F

28° >

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

28°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=6.10 | R=0.039 in

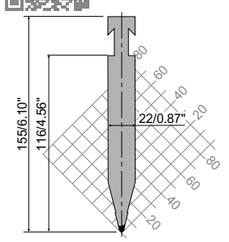


BP155.28.R3-R

1000 mm *39.37"* 21 kg
500 mm *19.68"* 11 kg
1100 mm *43.31"* 23.5 kg F

42Cr: 900-1150 N/mm²
1000 kN/m max.
Horn 1

28°
W=116 | H=155 | R=3.0 mm
W=4.56 | H=6.10 | R=0.118 in



F-BP: 1100 mm - *43.30"*
mm: ⧏100-300-200-100-75-60-50-40-30-20-15-10-100⧐
in: ⧏3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94⧐

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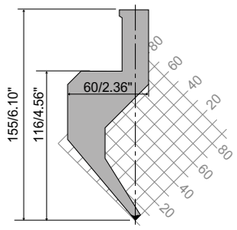
BP155.85.R08-S

1000 mm *39.37"* 16 kg
500 mm *19.68"* 8 kg
1100 mm *43.31"* 17.5 kg F

85° >

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

85°
W=116 | H=155 | R=0.8 mm
W=4.56 | H=6.10 | R=0.031 in



BP155.85.R15-S

1000 mm *39.37"* 32 kg
500 mm *19.68"* 16.5 kg
1100 mm *43.31"* 32 kg F

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

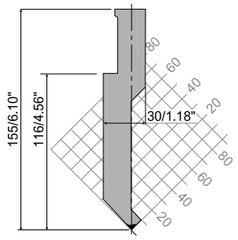
85°
W=116 | H=155 | R=1.5 mm
W=4.56 | H=6.10 | R=0.059 in

BP155.85.R1-S

1000 mm *39.37"* 32 kg
500 mm *19.68"* 16 kg
1100 mm *43.31"* 35.2 kg F

42Cr: 900-1150 N/mm²
800 kN/m max.
Horn 1

85°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=6.10 | R=0.039 in



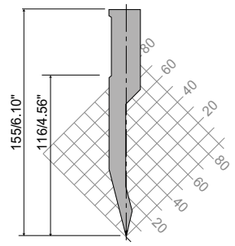
BP155.30.R1-S

1000 mm *39.37"* 32 kg
500 mm *19.68"* 16.5 kg
1100 mm *43.31"* 32 kg F

30° >

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

30°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=6.10 | R=0.039 in



BP155.28.R1-S

1000 mm *39.37"* 16 kg
500 mm *19.68"* 8 kg
1100 mm *43.31"* 17.5 kg F

28° >

42Cr: 900-1150 N/mm²
500 kN/m max.
Horn 1

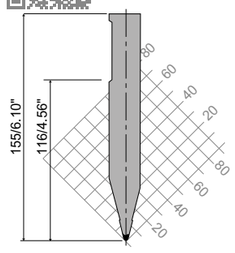
28°
W=116 | H=155 | R=1.0 mm
W=4.56 | H=6.10 | R=0.039 in

BP155.28.R3-S

1000 mm *39.37"* 23.5 kg
500 mm *19.68"* 12 kg
1100 mm *43.31"* 23.5 kg F

C45: 560-710 N/mm²
1000 kN/m max.
Horn 1

28°
W=116 | H=155 | R=3.0 mm
W=4.56 | H=6.10 | R=0.118 in



F-BP: 1100 mm - *43.30"*
mm: ⧏100-300-200-100-75-60-50-40-30-20-15-10-100⧐
in: ⧏3.94-11.81-7.87-3.94-2.95-2.36-1.97-1.57-1.18-0.79-0.59-0.39-3.94⧐

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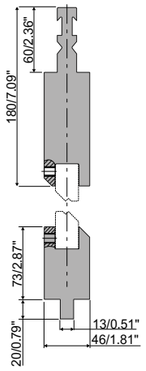
BPZ-RFA

835 mm *32.87"* 37.5 kg
415 mm *16.34"* 18.7 kg

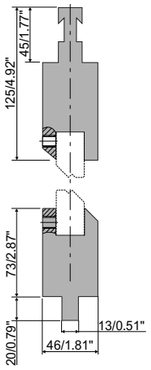
C45: 560-710 N/mm²
1000 kN/m max.



BPZ-R

835 mm *32.87"* 24.7 kg
415 mm *16.34"* 12.3 kg

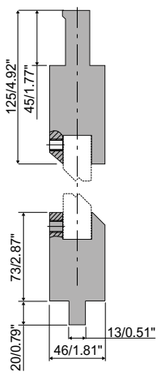
C45: 560-710 N/mm²
1000 kN/m max.



BPZ-S

835 mm *32.87"* 37.5 kg
415 mm *16.34"* 18.5 kg

C45: 560-710 N/mm²
1000 kN/m max.



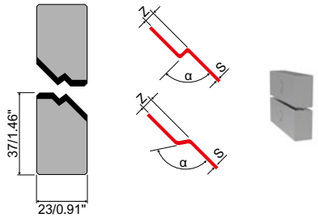
Joggle tools can make two bends at the same time, so the bending process is extremely quick. Furthermore, it is very flexible and convenient, as by using the same BPZ holder you can produce 15 different joggles by changing inserts only.
By using CEZ inserts, the bending result is guaranteed.

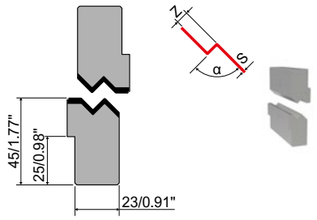
During the bending process sheet metal overturn is not necessary, so operators can work in safe conditions and save time.

JOGGLE TOOL INSERTS

	Z mm	Z *in*	α	Thickness ! mm	Thickness ! *in*	835 mm *32.87 in*	415 mm *16.34 in*	
CEZ 1.0	1	*0.04*	160°	1.2	*0.05*	11 kg	5.5 kg	160°
CEZ 1.5	1.5	*0.06*	160°	1.5	*0.06*	11 kg	5.5 kg	
CEZ 2.0	2	*0.08*	150°	1.4	*0.06*	11 kg	5.5 kg	150°
CEZ 2.5	2.5	*0.10*	140°	1.3	*0.05*	11 kg	5.5 kg	140°
CEZ 1.0/90	1	*0.04*	90°	0.3	*0.01*	11 kg	5.5 kg	
CEZ 1.5/90	1.5	*0.06*	90°	0.3	*0.01*	11 kg	5.5 kg	
CEZ 2.0/90	2	*0.08*	90°	0.4	*0.02*	11 kg	5.5 kg	
CEZ 2.5/90	2.5	*0.10*	90°	0.5	*0.02*	11 kg	5.5 kg	
CEZ 3.0	3	*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 kg	5 kg	
CEZ 4.0	4	*0.16*	90°	1.2	*0.05*	10 kg	5 kg	
CEZ 4.5	4.5	*0.18*	90°	1.2	*0.05*	10 kg	5 kg	90°
CEZ 5.0	5	*0.20*	90°	1.3	*0.05*	10 kg	5 kg	
CEZ 5.5	5.5	*0.22*	90°	1.4	*0.06*	10 kg	5 kg	
CEZ 6.0	6	*0.24*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 6.5	6.5	*0.26*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 7.0	7	*0.28*	90°	1.5	*0.06*	10 kg	5 kg	
CEZ 7.5	7.5	*0.30*	90°	1.6	*0.06*	10 kg	5 kg	
CEZ 8.0	8	*0.31*	90°	1.6	*0.06*	10 kg	5 kg	
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	5 kg	
CEZ 11.0	11	*0.43*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 12.0	12	*0.47*	90°	2	*0.08*	13.5 kg	5 kg	90°
CEZ 13.0	13	*0.51*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 14.0	14	*0.55*	90°	2	*0.08*	13.5 kg	5 kg	
CEZ 15.0	15	*0.59*	90°	2.3	*0.09*	13.5 kg	5 kg	

C45: 560-710 N/mm²
1000 kN/m max.





! Z dimensions and angles mentioned in the above table are valid only to bend mild steel with max. tensile strength 420 N/mm².
If you have to bend other sheet metal types, please contact our technical department at tecnico@rolleri.it

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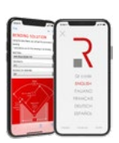

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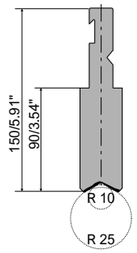
BPR150.P10.10-RFA

522 mm *20.55"* 16.5 kg
495 mm *19.49"* 16 kg

42Cr: 900-1150 N/mm²
1000 kN/m max.

W=90 | H=150 | R=1.0 mm
W=3.54 | H=5.91 | R=0.039 in

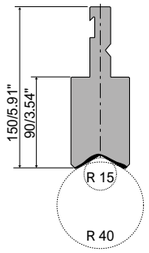


BPR150.P10.15-RFA

522 mm *20.55"* 23 kg
495 mm *19.49"* 21.7 kg

42Cr: 900-1150 N/mm²
1000 kN/m max.

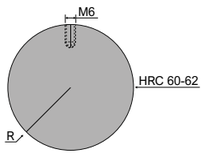
W=90 | H=150 | R=1.0 mm
W=3.54 | H=5.91 | R=0.039 in

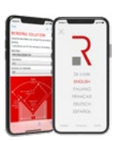


RADIUS TOOLS: R08-R40

	R mm	*R in*	525 mm *20.67 in*	FA
TOP.C08	8.0	*0.31*	0.8 kg	0.8 kg
TOP.C09	9.0	*0.35*	1.0 kg	1.0 kg
TOP.C10	10.0	*0.39*	1.3 kg	1.2 kg
TOP.C11	11.0	*0.43*	1.6 kg	1.5 kg
TOP.C12.5	12.5	*0.49*	2.0 kg	1.9 kg
TOP.C14	14.0	*0.55*	2.5 kg	2.4 kg
TOP.C15	15.0	*0.59*	2.9 kg	2.7 kg
TOP.C16	16.0	*0.63*	3.3 kg	3.1 kg
TOP.C17.5	17.5	*0.69*	4.0 kg	3.7 kg
TOP.C19	19.0	*0.75*	4.7 kg	4.4 kg
TOP.C20	20.0	*0.79*	5.2 kg	4.9 kg
TOP.C21	21.0	*0.83*	5.7 kg	5.4 kg
TOP.C22.5	22.5	*0.88*	6.6 kg	6.2 kg
TOP.C24	24.0	*0.94*	7.5 kg	7.0 kg
TOP.C25	25.0	*0.98*	8.1 kg	7.6 kg
TOP.C27.5	27.5	*1.08*	9.8 kg	9.2 kg
TOP.C30	30.0	*1.18*	11.6 kg	11.0 kg
TOP.C32.5	32.5	*1.28*	13.7 kg	12.9 kg
TOP.C35	35.0	*1.14*	15.9 kg	14.9 kg
TOP.C37.5	37.5	*1.47*	18.2 kg	17.2 kg
TOP.C40	40.0	*1.57*	20.7 kg	19.5 kg

C53: 610 -760 N/mm²
1000 kN/m max.





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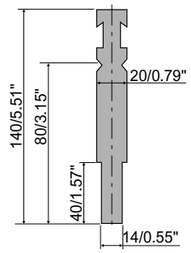
BPU-RFA

830 mm *32.68"* 15.3 kg
410 mm *16.14"* 7.6 kg

C45: 560-710 N/mm²
800 kN/m max.

W=80 | H=140 mm
W=3.15 | H=5.51 in

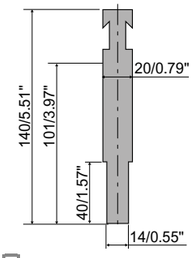


BPU-R

830 mm *32.68"* 15.8 kg
410 mm *16.14"* 7.8 kg

C45: 560-710 N/mm²
800 kN/m max.

W=101 | H=140 mm
W=3.97 | H=5.51 in

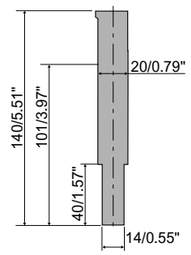


BPU-S

830 mm *32.68"* 16.8 kg
410 mm *16.14"* 8.3 kg

C45: 560-710 N/mm²
800 kN/m max.

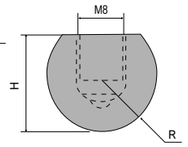
W=101 | H=140 mm
W=3.97 | H=5.51 in



The same holder can be equipped with different radius tools and, in case of BPU, also with E30.22 flat hemming insert to flatten thick sheet metal.
Radius profiles bent with radius tools show a more regular shape and therefore they aesthetically look better.
PU holders and C radius tools have been designed to guarantee the maximum flexibility thanks to the wide range of different radius tools which can be used. For specific needs the same concept can be used for special shapes like U shapes, omega etc..
The assembly system has been studied in order to be flexible and to guarantee the easy and quick radius tool change.

RADIUS TOOLS Ø 16 - 20

	R mm	*R in*	H mm	*H in*	A mm	*A in*	835 mm *32.87 in*	415 mm *16.34 in*
C13.08	8	*0.31*	13	*0.51*	-	-	2.0 kg	1.0 kg
C13.09	9	*0.35*	16	*0.63*	-	-	2.0 kg	1.0 kg
C16.10	10	*0.39*	16	*0.63*	-	-	2.0 kg	1.0 kg



RADIUS TOOLS Ø 25 - 100

	R mm	*R in*	H mm	*H in*	A mm	*A in*	835 mm *32.87 in*	415 mm *16.34 in*
C17.12	12.5	*0.49*	17	*0.67*	22	*0.87*	2.5 kg	1.2 kg
C20.15	15	*0.59*	20	*0.79*	27	*1.06*	3.7 kg	1.8 kg
C22.17	17.5	*0.69*	22	*0.87*	32	*1.26*	5.0 kg	2.4 kg
C24.20	20	*0.79*	24	*0.94*	34	*1.33*	7.0 kg	3.5 kg
C25.22	22.5	*0.89*	25	*0.98*	35	*1.38*	7.5 kg	3.8 kg
C29.25	25	*0.98*	29	*1.14*	39	*1.53*	10.0 kg	4.7 kg
C34.27	27.5	*1.08*	34	*1.33*	44	*1.73*	12.4 kg	6.2 kg
C34.30	30	*1.18*	34	*1.33*	44	*1.73*	13.5 kg	6.7 kg
C37.32	32.5	*1.28*	37	*1.46*	47	*1.85*	15.9 kg	7.9 kg
C45.35	35	*1.38*	45	1.77	55	*2.16*	20.3 kg	10.0 kg
C42.37	37.5	*1.48*	42	*1.65*	52	*2.04*	20.5 kg	10.3 kg
C45.40	40	*1.57*	45	*1.77*	55	*2.16*	23.0 kg	11.5 kg
C60.45	22.5	*0.89*	60	*2.36*	70	*2.75*	34.0 kg	17.0 kg
C70.50	50	1.97	70	*2.75*	80	*3.15*	43.5 kg	21.7 kg

The **Bending handbook** target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

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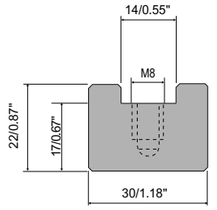
E30.22

835 mm	*32.87"*	3.5 kg
415 mm	*16.34"*	1.7 kg

C45: 560-710 N/mm²
800 kN/m max.



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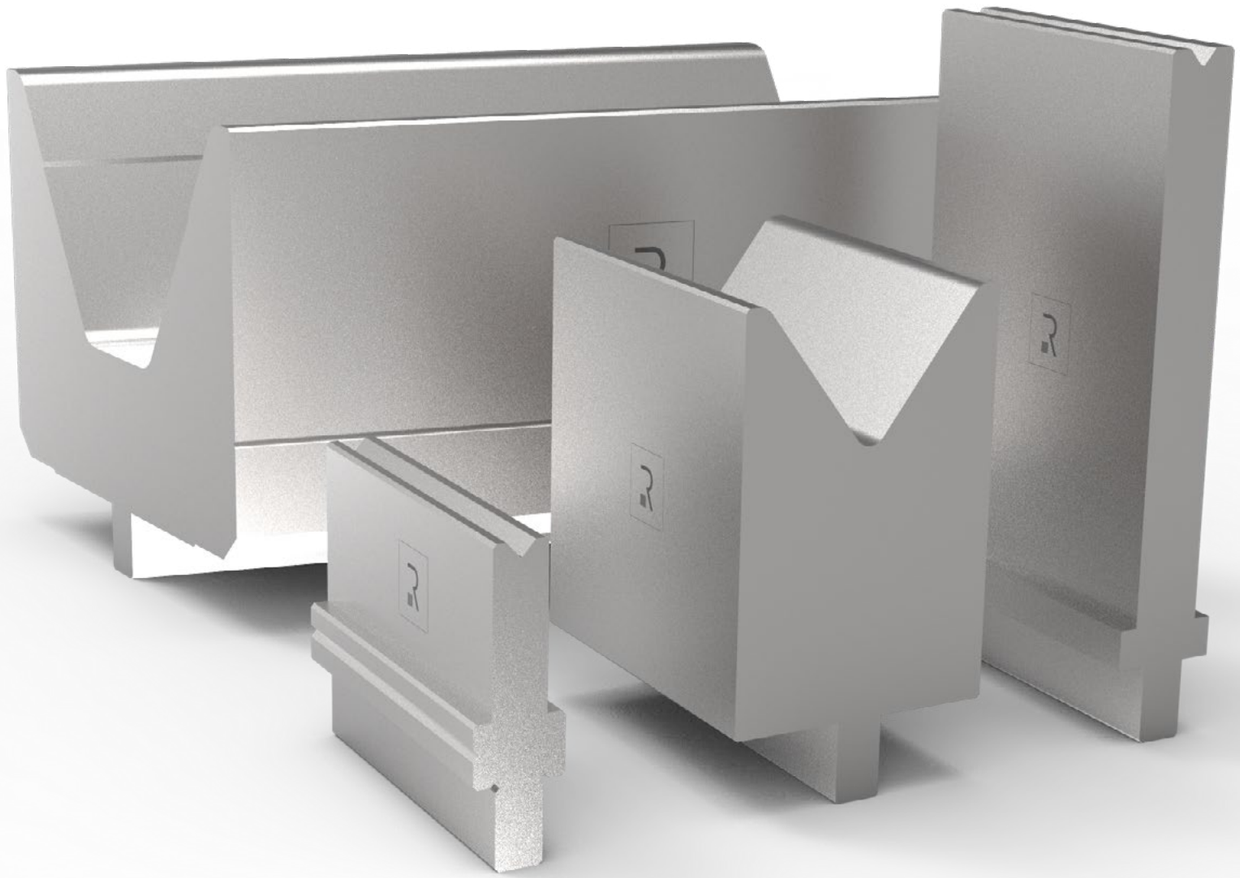
R2-R3 DIES

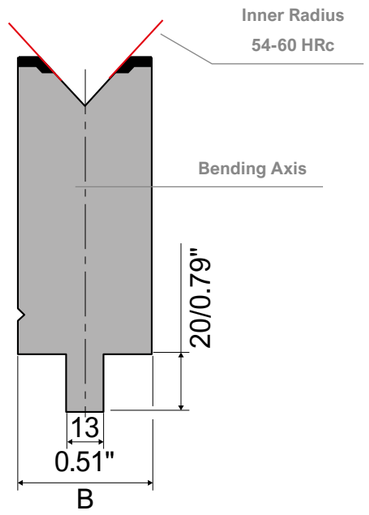
Bystronic Beyeler RFA, Bystronic Beyeler RF, Bystronic Beyeler R, Bystronic Beyeler S, Darley, Safan, SMD, Trumpf, press brake machines with system NSCR.

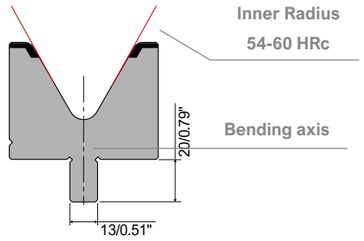
Our tool codes are listed according to the **tool angle**



STANDARD TANG

All Rolleri R2-R3 dies have got 13x20 mm *0.51x0.79 in* tang.





STANDARD LENGTH

100 mm | *3.93"*

500 mm | *19.68"*

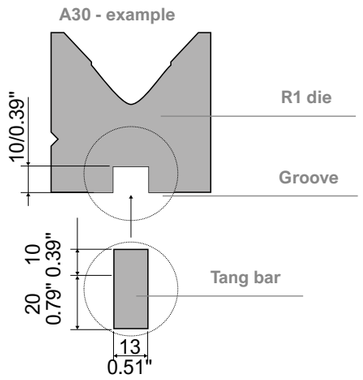
515 mm | *20.28"*

525 mm | *20.67"*

1000 mm | *39.36"*

MODIFICATION WEDGE/BAR TAIL

To use Rolleri Type R1 dies, a 10 mm groove is milled where a ground bar is mounted.



Rolleri BLACKFIRE is a surface treatment against steel oxidation. After such treatment tools become black and laser marking golden.

Rolleri FREEZINC is a surface treatment to avoid metal residues of galvanized steel or aluminium from remaining on tools during bending. Tools are also protected from oxidation.

SEGMENTATION

Single segments are also available on request.

Contact sales@rolleri.it to know more about price and availability

FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

F: 495 mm - *19.49"*
mm: 170-100-50-45-40-35-30-25
in: 6.69-3.94-1.97-1.77-1.57-1.37-1.18-0.98

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

Available on request:

FA mm: 1250-2050-2550-3050-4050
FA in: 49.21-80.71-100.39-120.08-159.45

Lenght		25	30	35	40	45	50	100	100	100
mm	*in*	*0.98*	*1.18*	*1.18*	*1.18*	*1.18*	*1.97*	*3.94*	*3.94*	*3.94*
1250	*49.21*	2	1	1	1	1	1	1	1	8
2050	*80.71*	2	1	1	1	1	1	1	1	16
2550	*100.39*	2	1	1	1	1	1	1	1	21
3050	*120.08*	2	1	1	1	1	1	1	1	26
4050	*159.45*	2	1	1	1	1	1	1	1	36

FB mm: 1250-2050-2550-3050-4050
FB in: 49.21-80.71-100.39-120.08-159.45

Lenght		25	30	35	40	45	50	100	200	300	500
mm	*in*	*0.98*	*1.18*	*1.18*	*1.18*	*1.18*	*1.97*	*3.94*	*7.87*	*11.81*	*19.68*
1250	*49.21*	2	1	1	1	1	1	3	2	1	0
2050	*80.71*	2	1	1	1	1	1	3	1	1	2
2550	*100.39*	2	1	1	1	1	1	3	1	1	3
3050	*120.08*	2	1	1	1	1	1	3	1	1	4
4050	*159.45*	2	1	1	1	1	1	3	1	1	6

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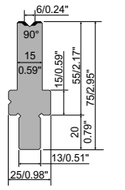
BMR55.06.90

1000 mm *39.37"* 8.5 kg
500 mm *19.68"* 4.2 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

90°
W=55 | H=75 | R=0.4 | V=6
W=2.17 | H=2.36 | R=0.016 | V=0.24

90° >

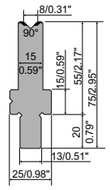


BMR55.08.90

1000 mm *39.37"* 9 kg
500 mm *19.68"* 4.5 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

90°
W=55 | H=75 | R=0.5 | V=8
W=2.17 | H=2.36 | R=0.020 | V=0.31

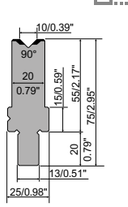


BMR55.10.90

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

90°
W=55 | H=75 | R=1.0 | V=10
W=2.17 | H=2.36 | R=0.039 | V=0.39

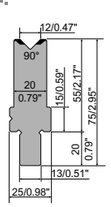


BMR55.12.90

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

90°
W=55 | H=75 | R=1.5 | V=12
W=2.17 | H=2.36 | R=0.059 | V=0.47

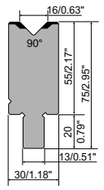


BMR55.16.90

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

90°
W=55 | H=75 | R=2.0 | V=16
W=2.17 | H=2.36 | R=0.079 | V=0.63



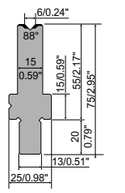
BMR55.06.88

1000 mm *39.37"* 8.5 kg
500 mm *19.68"* 4.2 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

88°
W=55 | H=75 | R=0.4 | V=6
W=2.17 | H=2.36 | R=0.016 | V=0.24

88° >



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

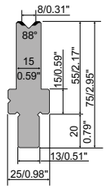
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

BMR55.08.88

1000 mm *39.37"* 8.5 kg
500 mm *19.68"* 4.2 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

88°
W=55 | H=75 | R=0.5 | V=8
W=2.17 | H=2.36 | R=0.020 | V=0.31

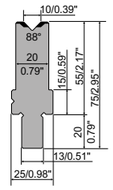


BMR55.10.88

1000 mm *39.37"* 11 kg
500 mm *19.68"* 5 kg
1100 mm *43.31"* 12 kg F
550 mm *21.65"* 5.5 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

88°
W=55 | H=75 | R=1.0 | V=10
W=2.17 | H=2.36 | R=0.039 | V=0.39

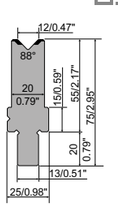


BMR55.12.88

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

88°
W=55 | H=75 | R=1.5 | V=12
W=2.17 | H=2.36 | R=0.059 | V=0.47

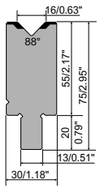


BMR55.16.88

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

88°
W=55 | H=75 | R=2.0 | V=16
W=2.17 | H=2.36 | R=0.079 | V=0.63

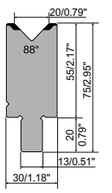


BMR55.20.88

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

88°
W=55 | H=75 | R=2.0 | V=20
W=2.17 | H=2.36 | R=0.079 | V=0.79

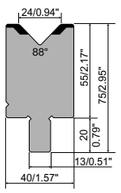


BMR55.24.88

1000 mm *39.37"* 18.5 kg
500 mm *19.68"* 9.2 kg
1100 mm *43.31"* 18 kg F
550 mm *21.65"* 10.1 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

88°
W=55 | H=75 | R=3.0 | V=24
W=2.17 | H=2.36 | R=0.118 | V=0.94



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

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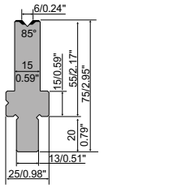
BMR55.06.85

1000 mm *39.37"* 8.5 kg
500 mm *19.68"* 4.2 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

85°
W=55 | H=75 | R=0.4 | V=6
W=2.17 | H=2.36 | R=0.016 | V=0.24

85° >

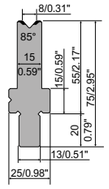


BMR55.08.85

1000 mm *39.37"* 9 kg
500 mm *19.68"* 4.5 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

85°
W=55 | H=75 | R=0.5 | V=8
W=2.17 | H=2.36 | R=0.020 | V=0.31

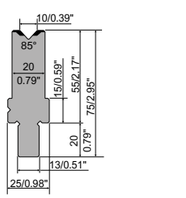


BMR55.10.85

1000 mm *39.37"* 11 kg
500 mm *19.68"* 5 kg
1100 mm *43.31"* 12 kg F
550 mm *21.65"* 5.5 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

85°
W=55 | H=75 | R=1.0 | V=10
W=2.17 | H=2.36 | R=0.039 | V=0.39

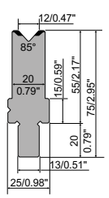


BMR55.12.85

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

85°
W=55 | H=75 | R=1.5 | V=12
W=2.17 | H=2.36 | R=0.059 | V=0.47

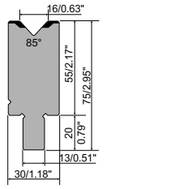


BMR55.16.85

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

85°
W=55 | H=75 | R=2.0 | V=16
W=2.17 | H=2.36 | R=0.079 | V=0.63

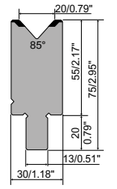


BMR55.20.85

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

85°
W=55 | H=75 | R=2.0 | V=20
W=2.17 | H=2.36 | R=0.079 | V=0.79

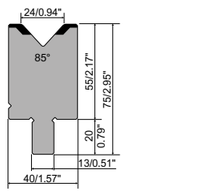


BMR55.24.85

1000 mm *39.37"* 18.5 kg
500 mm *19.68"* 9.2 kg
1100 mm *43.31"* 18 kg F
550 mm *21.65"* 10.1 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

85°
W=55 | H=75 | R=3.0 | V=24
W=2.17 | H=2.36 | R=0.118 | V=0.94

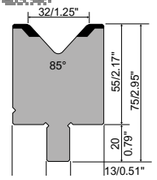


BMR55.32.85

1000 mm *39.37"* 21 kg
500 mm *19.68"* 10.5 kg
1100 mm *43.31"* 20.5 kg F
550 mm *21.65"* 11.5 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

85°
W=55 | H=75 | R=4.0 | V=32
W=2.17 | H=2.36 | R=0.157 | V=1.26



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

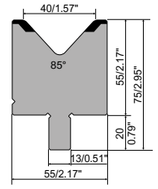
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

BMR55.40.85

1000 mm *39.37"* 21.5 kg
500 mm *19.68"* 10.7 kg
1100 mm *43.31"* 25 kg F
550 mm *21.65"* 11.8 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

85°
W=55 | H=75 | R=4.0 | V=40
W=2.17 | H=2.36 | R=0.157 | V=1.57



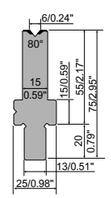
BMR55.06.80

1000 mm *39.37"* 8.5 kg
500 mm *19.68"* 4.2 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.6 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

80°
W=55 | H=75 | R=0.4 | V=6
W=2.17 | H=2.36 | R=0.016 | V=0.24

80° >

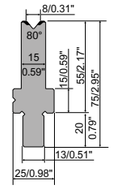


BMR55.08.80

1000 mm *39.37"* 9 kg
500 mm *19.68"* 4.5 kg
1100 mm *43.31"* 8.5 kg F
550 mm *21.65"* 4.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

80°
W=55 | H=75 | R=0.5 | V=8
W=2.17 | H=2.36 | R=0.020 | V=0.31

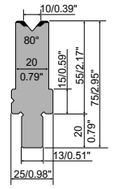


BMR55.10.80

1000 mm *39.37"* 11 kg
500 mm *19.68"* 5 kg
1100 mm *43.31"* 12 kg F
550 mm *21.65"* 5.5 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

80°
W=55 | H=75 | R=1.0 | V=10
W=2.17 | H=2.36 | R=0.039 | V=0.39

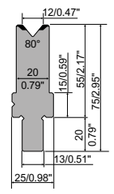


BMR55.12.80

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=55 | H=75 | R=1.5 | V=12
W=2.17 | H=2.36 | R=0.059 | V=0.47



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

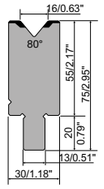
Download Rolleri **Bending App**
You will have access to our online store where you can get what you need. You will also get our sheet metal unfolding software for free and our bending rule.

BMR55.16.80

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=55 | H=75 | R=2.0 | V=16
W=2.17 | H=2.36 | R=0.079 | V=0.63

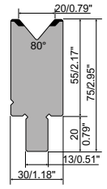


BMR55.20.80

1000 mm *39.37"* 14.5 kg
500 mm *19.68"* 7.2 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

80°
W=55 | H=75 | R=2.0 | V=20
W=2.17 | H=2.36 | R=0.079 | V=0.79

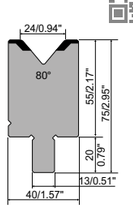


BMR55.24.80

1000 mm *39.37"* 18.5 kg
500 mm *19.68"* 9.2 kg
1100 mm *43.31"* 18 kg F
550 mm *21.65"* 10.1 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=55 | H=75 | R=3.0 | V=24
W=2.17 | H=2.36 | R=0.118 | V=0.94

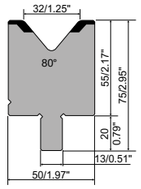


BMR55.32.80

1000 mm *39.37"* 21 kg
500 mm *19.68"* 10.5 kg
1100 mm *43.31"* 20.5 kg F
550 mm *21.65"* 11.5 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=55 | H=75 | R=4.0 | V=32
W=2.17 | H=2.36 | R=0.157 | V=1.26

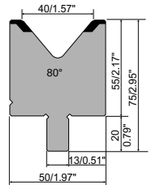


BMR55.40.80

1000 mm *39.37"* 21.5 kg
500 mm *19.68"* 10.7 kg
1100 mm *43.31"* 25 kg F
550 mm *21.65"* 11.8 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=55 | H=75 | R=4.0 | V=40
W=2.17 | H=2.36 | R=0.157 | V=1.57

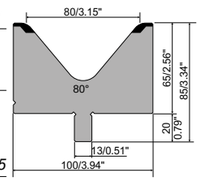


BMR65.80.80

1000 mm *39.37"* 39 kg
500 mm *19.68"* 20 kg
1100 mm *43.31"* 43 kg F
550 mm *21.65"* 22 kg FW

42Cr: 900-1150 N/mm²
1700 kN/m max.

80°
W=65 | H=85 | R=10 | V=80
W=3.35 | H=3.35 | R=0.394 | V=3.15

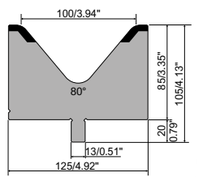


BMR85.100.80

1000 mm *39.37"* 62 kg
500 mm *19.68"* 31 kg
1100 mm *43.31"* 69 kg F
550 mm *21.65"* 34.1 kg FW

42Cr: 900-1150 N/mm²
2300 kN/m max.

80°
W=85 | H=105 | R=12 | V=100
W=3.53 | H=4.13 | R=0.472 | V=3.94



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

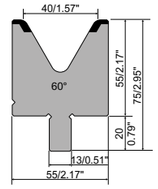
BMR55.40.60

1000 mm *39.37"* 20.3 kg
500 mm *19.68"* 10.5 kg
1100 mm *43.31"* 22.3 kg F
550 mm *21.65"* 11.5 kg FW

60° >

42Cr: 900-1150 N/mm²
1300 kN/m max.

60°
W=55 | H=75 | R=5.0 | V=40
W=2.17 | H=2.36 | R=0.197 | V=1.57

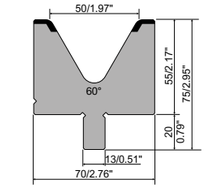


BMR55.50.60

1000 mm *39.37"* 24 kg
500 mm *19.68"* 12 kg
1100 mm *43.31"* 21 kg F
550 mm *21.65"* 13.2 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

60°
W=55 | H=75 | R=5.0 | V=50
W=2.17 | H=2.36 | R=0.197 | V=1.97

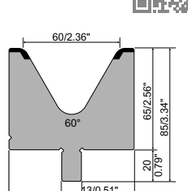


BMR65.60.60

1000 mm *39.37"* 31 kg
500 mm *19.68"* 15.5 kg
1100 mm *43.31"* 34.1 kg F
550 mm *21.65"* 17.0 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

60°
W=65 | H=85 | R=7.0 | V=60
W=3.35 | H=3.35 | R=0.276 | V=2.36



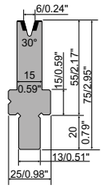
BMR55.06.30

1000 mm *39.37"* 8 kg
500 mm *19.68"* 4 kg
1100 mm *43.31"* 9 kg F
550 mm *21.65"* 4.4 kg FW

30° >

42Cr: 900-1150 N/mm²
350 kN/m max.

30°
W=55 | H=75 | R=0.6 | V=6
W=2.17 | H=2.36 | R=0.024 | V=0.24

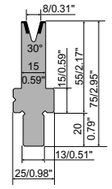


BMR55.08.30

1000 mm *39.37"* 9.2 kg
500 mm *19.68"* 4 kg
1100 mm *43.31"* 10.1 kg F
550 mm *21.65"* 4.4 kg FW

42Cr: 900-1150 N/mm²
200 kN/m max.

30°
W=55 | H=75 | R=0.8 | V=8
W=2.17 | H=2.36 | R=0.031 | V=0.31

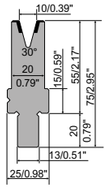


BMR55.10.30

1000 mm *39.37"* 10 kg
500 mm *19.68"* 5 kg
1100 mm *43.31"* 11 kg F
550 mm *21.65"* 5.5 kg FW

42Cr: 900-1150 N/mm²
350 kN/m max.

30°
W=55 | H=75 | R=1.0 | V=10
W=2.17 | H=2.36 | R=0.039 | V=0.39

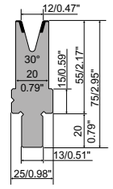


BMR55.12.30

1000 mm *39.37"* 10 kg
500 mm *19.68"* 5 kg
1100 mm *43.31"* 11 kg F
550 mm *21.65"* 5.5 kg FW

42Cr: 900-1150 N/mm²
300 kN/m max.

30°
W=55 | H=75 | R=1.5 | V=12
W=2.17 | H=2.36 | R=0.059 | V=0.47



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

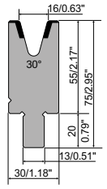
The **Bending handbook** target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

BMR55.16.30

1000 mm *39.37"* 13.5 kg
500 mm *19.68"* 6.7 kg
1100 mm *43.31"* 14.9 kg F
550 mm *21.65"* 7.4 kg FW

42Cr: 900-1150 N/mm²
450 kN/m max.

30°
W=55 | H=75 | R=2.0 | V=16
W=2.17 | H=2.36 | R=0.079 | V=0.63

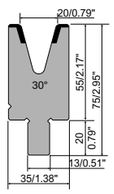


BMR55.20.30

1000 mm *39.37"* 10.5 kg
500 mm *19.68"* 5.2 kg
1100 mm *43.31"* 10 kg F
550 mm *21.65"* 5.7 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

30°
W=55 | H=75 | R=2.5 | V=20
W=2.17 | H=2.36 | R=0.098 | V=0.79

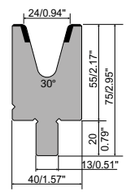


BMR55.24.30

1000 mm *39.37"* 15.5 kg
500 mm *19.68"* 7.8 kg
1100 mm *43.31"* 17 kg F
550 mm *21.65"* 8.6 kg FW

42Cr: 900-1150 N/mm²
550 kN/m max.

30°
W=55 | H=75 | R=3.0 | V=24
W=2.17 | H=2.36 | R=0.118 | V=0.94

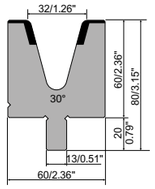


BMR60.32.30

1000 mm *39.37"* 23 kg
500 mm *19.68"* 11.5 kg
1100 mm *43.31"* 22.5 kg F
550 mm *21.65"* 12.7 kg FW

42Cr: 900-1150 N/mm²
650 kN/m max.

30°
W=60 | H=80 | R=4.0 | V=32
W=2.36 | H=3.15 | R=0.157 | V=1.26

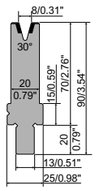


BMR70.08.30

1000 mm *39.37"* 13.1 kg
500 mm *19.68"* 6.5 kg
1100 mm *43.31"* 14 kg F
550 mm *21.65"* 7.1 kg FW

42Cr: 900-1150 N/mm²
200 kN/m max.

30°
W=70 | H=90 | R=0.75 | V=8
W=2.75 | H=3.54 | R=0.030 | V=0.31

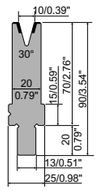


BMR70.10.30

1000 mm *39.37"* 12.8 kg
500 mm *19.68"* 6.4 kg
1100 mm *43.31"* 12.4 kg F
550 mm *21.65"* 7.0 kg FW

42Cr: 900-1150 N/mm²
350 kN/m max.

30°
W=70 | H=90 | R=1.0 | V=10
W=2.75 | H=3.54 | R=0.039 | V=0.39



F: 1100 mm - *43.31"*
mm: 400-200-100-100-75-60-50-40-30-20-15-10
in: 15.75-7.87-3.94-3.94-2.95-2.36-1.97-1.57-1.18-0.78-0.59-0.39

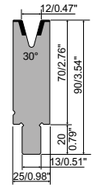
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

BMR70.12.30

1000 mm *39.37"* 14.7 kg
500 mm *19.68"* 7.3 kg
1100 mm *43.31"* 14.3 kg F
550 mm *21.65"* 8.0 kg FW

42Cr: 900-1150 N/mm²
300 kN/m max.

30°
W=70 | H=90 | R=1.5 | V=12
W=2.76 | H=3.54 | R=0.059 | V=0.47

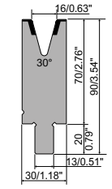


BMR70.16.30

1000 mm *39.37"* 16.7 kg
500 mm *19.68"* 8.3 kg
1100 mm *43.31"* 16.2 kg F
550 mm *21.65"* 9.1 kg FW

42Cr: 900-1150 N/mm²
450 kN/m max.

30°
W=70 | H=90 | R=2.0 | V=16
W=2.76 | H=3.54 | R=0.079 | V=0.63

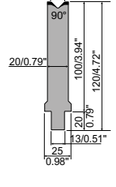


WMR100.12.90

515 mm *20.28"* 9 kg
550 mm *21.651"* 9.6 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

90°
W=100 | H=120 | R=3.0 | V=12
W=3.94 | H=4.72 | R=0.118 | V=0.47



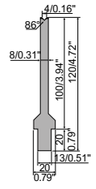
TMR100.04.86

500 mm *19.68"* 4.8 kg
250 mm *9.84"* 2.4 kg FC
550 mm *21.65"* 5.2 kg FW

42Cr: 900-1150 N/mm²
250 kN/m max.

86°
W=100 | H=120 | R=0.6 | V=4
W=3.94 | H=4.72 | R=0.024 | V=0.16

86° >

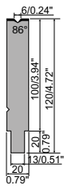


TMR100.06.86

500 mm *19.68"* 8.9 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 8.9 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=0.6 | V=6
W=3.94 | H=4.72 | R=0.024 | V=0.24



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

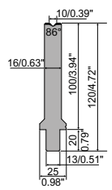
WMR100.06.86

515 mm *20.28"* 7.9 kg
550 mm *21.651"* 7.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

86°
W=100 | H=120 | R=2.0 | V=6
W=3.94 | H=4.72 | R=0.079 | V=0.24

NEW

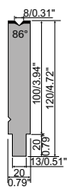


TMR100.08.86

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 9.6 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

86°
W=100 | H=120 | R=0.8 | V=8
W=3.94 | H=4.72 | R=0.031 | V=0.31

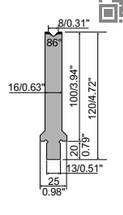


WMR100.08.86

515 mm *20.28"* 7.7 kg
550 mm *21.65"* 8.2 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

86°
W=100 | H=120 | R=2.5 | V=8
W=3.94 | H=4.72 | R=0.098 | V=0.31

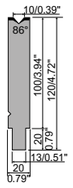


TMR100.10.86

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 9.6 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

86°
W=100 | H=120 | R=1.0 | V=10
W=3.94 | H=4.72 | R=0.039 | V=0.39



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

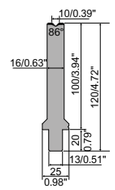
WMR100.10.86

515 mm *20.28"* 9.5 kg
550 mm *21.651"* 8.9 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

86°
W=100 | H=120 | R=2.5 | V=10
W=3.94 | H=4.72 | R=0.098 | V=0.39

NEW

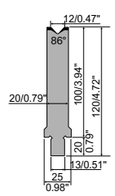


WMR100.12.86

515 mm *20.28"* 9 kg
550 mm *21.65"* 9.6 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=3.0 | V=12
W=3.94 | H=4.72 | R=0.118 | V=0.47

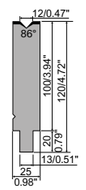


TMR100.12.86

500 mm *19.68"* 10.7 kg
250 mm *9.84"* 5 kg FC
550 mm *21.65"* 11.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=1.0 | V=12
W=3.94 | H=4.72 | R=0.039 | V=0.47

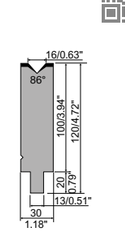


TMR100.16.86

500 mm *19.68"* 12.5 kg
250 mm *9.84"* 6.3 kg FC
550 mm *21.65"* 13.8 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=1.6 | V=16
W=3.94 | H=4.72 | R=0.063 | V=0.63

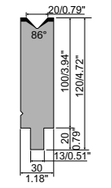


TMR100.20.86

500 mm *19.68"* 12.2 kg
250 mm *9.84"* 6.2 kg FC
550 mm *21.65"* 13.5 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

86°
W=100 | H=120 | R=2.0 | V=20
W=3.94 | H=4.72 | R=0.079 | V=0.79

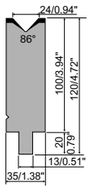


TMR100.24.86

500 mm *19.68"* 14 kg
250 mm *9.84"* 7 kg FC
550 mm *21.65"* 15.5 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=2.5 | V=24
W=3.94 | H=4.72 | R=0.098 | V=0.94



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

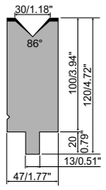
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR100.30.86

500 mm *19.68"* 17.6 kg
250 mm *9.84"* 8.8 kg FC
550 mm *21.65"* 19.4 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=3.0 | V=30
W=3.94 | H=4.72 | R=0.118 | V=1.18

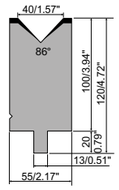


TMR100.40.86

500 mm *19.68"* 6.5 kg
250 mm *9.84"* 14 kg FC
550 mm *21.65"* 22.8 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

86°
W=100 | H=120 | R=3.0 | V=40
W=3.94 | H=4.72 | R=0.118 | V=1.57

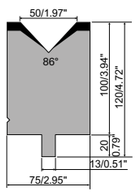


TMR100.50.86

500 mm *19.68"* 6.4 kg
250 mm *9.84"* 12.4 kg FC
550 mm *21.65"* 30.5 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

86°
W=100 | H=120 | R=3.0 | V=50
W=3.94 | H=4.72 | R=0.118 | V=1.97



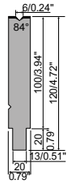
TMR100.06.84

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 8.8 kg FW

84° >

42Cr: 900-1150 N/mm²
1200 kN/m max.

84°
W=100 | H=120 | R=0.6 | V=6
W=3.94 | H=4.72 | R=0.024 | V=0.24

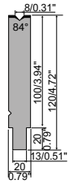


TMR100.08.84

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 9.7 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

84°
W=100 | H=120 | R=0.8 | V=8
W=3.94 | H=4.72 | R=0.031 | V=0.31

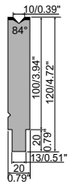


TMR100.10.84

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 9.6 kg FW

42Cr: 900-1150 N/mm²
1100 kN/m max.

84°
W=100 | H=120 | R=1.0 | V=10
W=3.94 | H=4.72 | R=0.039 | V=0.39



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

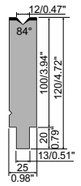
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR100.12.84

500 mm *19.68"* 10.7 kg
250 mm *9.84"* 5.3 kg FC
550 mm *21.65"* 11.7 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

84°
W=100 | H=120 | R=1.0 | V=12
W=3.94 | H=4.72 | R=0.039 | V=0.47

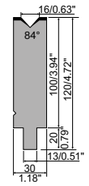


TMR100.16.84

500 mm *19.68"* 12.5 kg
250 mm *9.84"* 6.3 kg FC
550 mm *21.65"* 13.8 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

84°
W=100 | H=120 | R=1.6 | V=16
W=3.94 | H=4.72 | R=0.063 | V=0.63

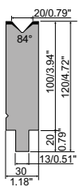


TMR100.20.84

500 mm *19.68"* 12.2 kg
250 mm *9.84"* 6.1 kg FC
550 mm *21.65"* 13.4 kg FW

42Cr: 900-1150 N/mm²
1150 kN/m max.

84°
W=100 | H=120 | R=2.0 | V=20
W=3.94 | H=4.72 | R=0.079 | V=0.79

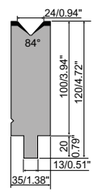


TMR100.24.84

500 mm *19.68"* 14 kg
250 mm *9.84"* 7 kg FC
550 mm *21.65"* 15.4 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

84°
W=100 | H=120 | R=2.5 | V=24
W=3.94 | H=4.72 | R=0.098 | V=0.94



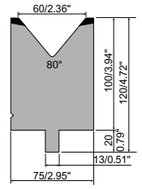
TMR100.60.80

500 mm *19.68"* 25.8 kg
250 mm *9.84"* 13 kg FC
550 mm *21.65"* 28.4 kg FW

80° >

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=100 | H=120 | R=5.0 | V=60
W=3.94 | H=4.72 | R=0.197 | V=2.36

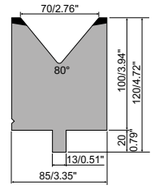


TMR100.70.80

500 mm *19.68"* 28.2 kg
250 mm *9.84"* 14.1 kg FC
550 mm *21.65"* 31 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=100 | H=120 | R=5.0 | V=70
W=3.94 | H=4.72 | R=0.197 | V=2.76

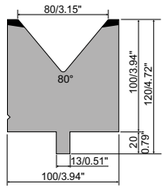


TMR100.80.80

500 mm *19.68"* 32.3 kg
250 mm *9.84"* 16.1 kg FC
550 mm *21.65"* 35.5 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=100 | H=120 | R=5.0 | V=80
W=3.94 | H=4.72 | R=0.197 | V=3.15

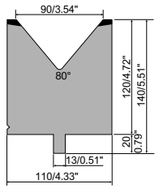


TMR120.90.80

500 mm *19.68"* 42.1 kg
250 mm *9.84"* 21 kg FC
550 mm *21.65"* 46.3 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=120 | H=140 | R=8.0 | V=90
W=4.72 | H=5.51 | R=0.315 | V=3.54



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

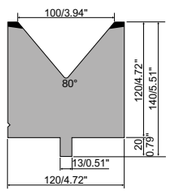
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR120.100.80

500 mm *19.68"* 44.7 kg
250 mm *9.84"* 22.4 kg FC
550 mm *21.65"* 49.2 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=120 | H=140 | R=8.0 | V=100
W=4.72 | H=5.51 | R=0.315 | V=3.94



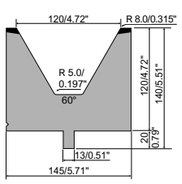
TMR120.120.60

500 mm *19.68"* 44.5 kg
250 mm *9.84"* 22.8 kg FC
550 mm *21.65"* 49 kg FW

60° >

42Cr: 900-1150 N/mm²
1600 kN/m max.

60°
H=60 | V=10
H=2.36 | V=0.39



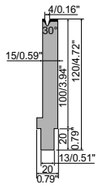
TMR100.04.30

500 mm *19.68"* 7 kg
250 mm *9.84"* 3.5 kg FC
550 mm *21.65"* 7.7 kg FW

30° >

42Cr: 900-1150 N/mm²
150 kN/m max.

30°
W=100 | H=120 | R=0.6 | V=4
W=3.94 | H=4.72 | R=0.024 | V=0.16

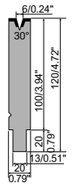


TMR100.06.30

500 mm *19.68"* 8.8 kg
250 mm *9.84"* 4.4 kg FC
550 mm *21.65"* 9.6 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=0.6 | V=6
W=3.94 | H=4.72 | R=0.024 | V=0.24



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

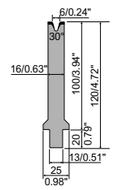
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

WMR100.06.30

515 mm *20.28"* 7.7 kg
550 mm *21.65"* 8.2 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=2.0 | V=6
W=3.94 | H=4.72 | R=0.079 | V=0.24

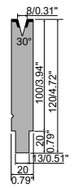


TMR100.08.30

500 mm *19.68"* 12.2 kg
250 mm *9.84"* 6.1 kg FC
550 mm *21.65"* 13.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=1.0 | V=8
W=3.94 | H=4.72 | R=0.039 | V=0.31

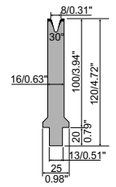


WMR100.08.30

515 mm *20.28"* 14 kg
550 mm *21.65"* 15.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=2.5 | V=8
W=3.94 | H=4.72 | R=0.098 | V=0.31

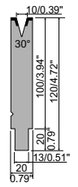


TMR100.10.30

500 mm *19.68"* 8.5 kg
250 mm *9.84"* 4.3 kg FC
550 mm *21.65"* 9.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=1.0 | V=10
W=3.94 | H=4.72 | R=0.039 | V=0.39



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

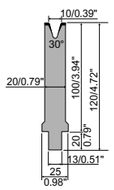
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

WMR100.10.30

515 mm *20.28"* 9 kg
550 mm *43.31"* 9.6 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=2.5 | V=10
W=3.94 | H=4.72 | R=0.098 | V=0.39

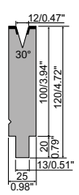


TMR100.12.30

500 mm *19.68"* 10.3 kg
250 mm *9.84"* 5.1 kg FC
550 mm *21.65"* 11.3 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=1.0 | V=12
W=3.94 | H=4.72 | R=0.039 | V=0.47

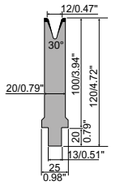


WMR100.12.30

515 mm *20.28"* 8.9 kg
550 mm *43.31"* 9.5 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=100 | H=120 | R=3.0 | V=12
W=3.94 | H=4.72 | R=0.118 | V=0.47

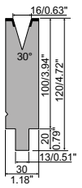


TMR100.16.30

500 mm *19.68"* 11.8 kg
250 mm *9.84"* 6 kg FC
550 mm *21.65"* 13 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

30°
W=100 | H=120 | R=1.6 | V=16
W=3.94 | H=4.72 | R=0.063 | V=0.63



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

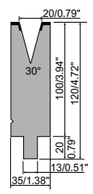
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR100.20.30

500 mm *19.68"* 13.2 kg
250 mm *9.84"* 6.5 kg FC
550 mm *21.65"* 15 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.

30°
W=100 | H=120 | R=2.0 | V=20
W=3.94 | H=4.72 | R=0.079 | V=0.79

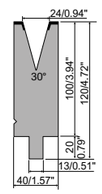


TMR100.24.30

500 mm *19.68"* 14.8 kg
250 mm *9.84"* 7.4 kg FC
550 mm *21.65"* 16.2 kg FW

42Cr: 900-1150 N/mm²
650 kN/m max.

30°
W=100 | H=120 | R=2.5 | V=24
W=3.94 | H=4.72 | R=0.098 | V=0.94

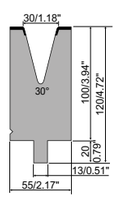


TMR100.30.30

500 mm *19.68"* 19 kg
250 mm *9.84"* 9.5 kg FC
550 mm *21.65"* 21 kg FW

42Cr: 900-1150 N/mm²
900 kN/m max.

30°
W=100 | H=120 | R=3.0 | V=30
W=3.94 | H=4.72 | R=0.118 | V=1.18

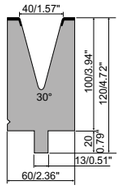


TMR100.40.30

500 mm *19.68"* 18.3 kg
250 mm *9.84"* 9.3 kg FC
550 mm *21.65"* 20.1 kg FW

42Cr: 900-1150 N/mm²
900 kN/m max.

30°
W=100 | H=120 | R=5.0 | V=40
W=3.94 | H=4.72 | R=0.197 | V=1.57



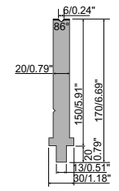
TMR150.06.86

500 mm *19.68"* 13.1 kg
250 mm *9.84"* 6.6 kg FC
550 mm *21.65"* 14.3 kg FW

86° >

42Cr: 900-1150 N/mm²
400 kN/m max.

86°
W=150 | H=170 | R=0.6 | V=6
W=5.91 | H=6.69 | R=0.024 | V=0.24

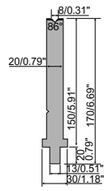


TMR150.08.86

500 mm *19.68"* 13.1 kg
250 mm *9.84"* 6.6 kg FC
550 mm *21.65"* 14.4 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

86°
W=150 | H=170 | R=0.8 | V=8
W=5.91 | H=6.69 | R=0.031 | V=0.31



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

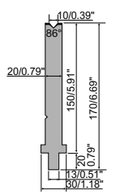
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR150.10.86

500 mm *19.68"* 13 kg
250 mm *9.84"* 6.5 kg FC
550 mm *21.65"* 14.3 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

86°
W=150 | H=170 | R=1.0 | V=10
W=5.91 | H=6.69 | R=0.039 | V=0.39

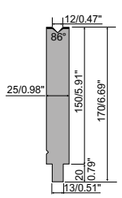


TMR150.12.86

500 mm *19.68"* 15.5 kg
250 mm *9.84"* 7.8 kg FC
550 mm *21.65"* 17 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

86°
W=150 | H=170 | R=1.0 | V=12
W=5.91 | H=6.69 | R=0.039 | V=0.47

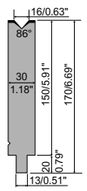


TMR150.16.86

500 mm *19.68"* 18.4 kg
250 mm *9.84"* 9.2 kg FC
550 mm *21.65"* 20.2 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

86°
W=150 | H=170 | R=1.6 | V=16
W=5.91 | H=6.69 | R=0.063 | V=0.63

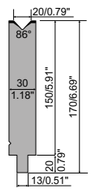


TMR150.20.86

500 mm *19.68"* 18.3 kg
250 mm *9.84"* 9.1 kg FC
550 mm *21.65"* 20 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

86°
W=150 | H=170 | R=2.0 | V=20
W=5.91 | H=6.69 | R=0.079 | V=0.79

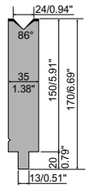


TMR150.24.86

500 mm *19.68"* 20.9 kg
250 mm *9.84"* 10.5 kg FC
550 mm *21.65"* 23 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

86°
W=150 | H=170 | R=2.5 | V=24
W=5.91 | H=6.69 | R=0.098 | V=0.94



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

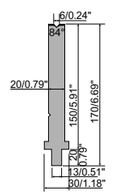
TMR150.06.84

500 mm *19.68"* 13.1 kg
250 mm *9.84"* 6.6 kg FC
550 mm *21.65"* 14.3 kg FW

84° >

42Cr: 900-1150 N/mm²
400 kN/m max.

84°
W=150 | H=170 | R=0.6 | V=6
W=5.91 | H=6.69 | R=0.024 | V=0.24

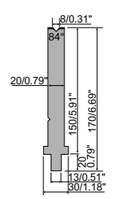


TMR150.08.84

500 mm *19.68"* 13.1 kg
250 mm *9.84"* 6.6 kg FC
550 mm *21.65"* 14.3 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

84°
W=150 | H=170 | R=0.8 | V=8
W=5.91 | H=6.69 | R=0.031 | V=0.31

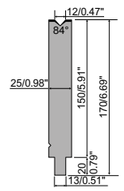


TMR150.12.84

500 mm *19.68"* 15.5 kg
250 mm *9.84"* 7.8 kg FC
550 mm *21.65"* 17 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

84°
W=150 | H=170 | R=1.0 | V=12
W=5.91 | H=6.69 | R=0.039 | V=0.47

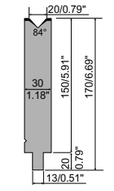


TMR150.20.84

500 mm *19.68"* 18.3 kg
250 mm *9.84"* 9.1 kg FC
550 mm *21.65"* 20 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

84°
W=150 | H=170 | R=2.0 | V=20
W=5.91 | H=6.69 | R=0.079 | V=0.79



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

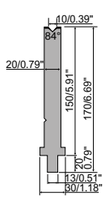
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR150.10.84

500 mm *19.68"* 13 kg
250 mm *9.84"* 6.5 kg FC
550 mm *21.65"* 14.3 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

84°
W=150 | H=170 | R=1.0 | V=10
W=5.91 | H=6.69 | R=0.039 | V=0.39

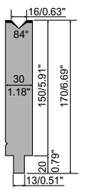


TMR150.16.84

500 mm *19.68"* 18.4 kg
250 mm *9.84"* 9.2 kg FC
550 mm *21.65"* 20.2 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

84°
W=150 | H=170 | R=1.6 | V=16
W=5.91 | H=6.69 | R=0.063 | V=0.63

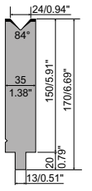


TMR150.24.84

500 mm *19.68"* 20.9 kg
250 mm *9.84"* 10.4 kg FC
550 mm *21.65"* 22.9 kg FW

42Cr: 900-1150 N/mm²
700 kN/m max.

84°
W=150 | H=170 | R=2.5 | V=24
W=5.91 | H=6.69 | R=0.098 | V=0.94



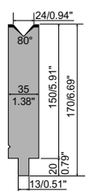
TMR150.24.80

500 mm *19.68"* 20.9 kg
250 mm *9.84"* 10.4 kg FC
550 mm *21.65"* 22.9 kg FW

80° >

42Cr: 900-1150 N/mm²
700 kN/m max.

80°
W=150 | H=170 | R=2.5 | V=24
W=5.91 | H=6.69 | R=0.098 | V=0.94

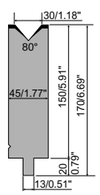


TMR150.30.80

500 mm *19.68"* 26.3 kg
250 mm *9.84"* 13.1 kg FC
550 mm *21.65"* 28.9 kg FW

42Cr: 900-1150 N/mm²
900 kN/m max.

80°
W=150 | H=170 | R=5.0 | V=30
W=5.91 | H=6.69 | R=0.197 | V=1.18

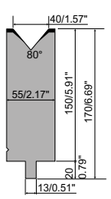


TMR150.40.80

500 mm *19.68"* 31.3 kg
250 mm *9.84"* 15.6 kg FC
550 mm *21.65"* 34.4 kg FW

42Cr: 900-1150 N/mm²
1200 kN/m max.

80°
W=150 | H=170 | R=5.0 | V=40
W=5.91 | H=6.69 | R=0.197 | V=1.57

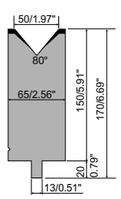


TMR150.50.80

500 mm *19.68"* 36 kg
250 mm *9.84"* 18 kg FC
550 mm *21.65"* 39.6 kg FW

42Cr: 900-1150 N/mm²
1500 kN/m max.

80°
W=150 | H=170 | R=5.0 | V=50
W=5.91 | H=6.69 | R=0.197 | V=1.97



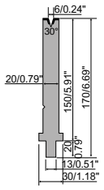
TMR150.06.30

500 mm *19.68"* 13 kg
250 mm *9.84"* 6.5 kg FC
550 mm *21.65"* 14.3 kg FW

30° >

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=150 | H=170 | R=0.6 | V=6
W=5.91 | H=6.69 | R=0.024 | V=0.24

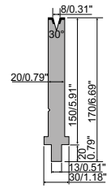


TMR150.08.30

500 mm *19.68"* 13 kg
250 mm *9.84"* 6.7 kg FC
550 mm *21.65"* 14.3 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=150 | H=170 | R=1.0 | V=8
W=5.91 | H=6.69 | R=0.039 | V=0.31

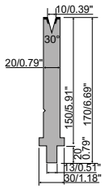


TMR150.10.30

500 mm *19.68"* 12.8 kg
250 mm *9.84"* 6.4 kg FC
550 mm *21.65"* 13.9 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=150 | H=170 | R=1.0 | V=10
W=5.91 | H=6.69 | R=0.039 | V=0.39



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

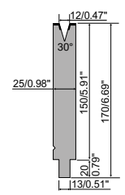
FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

TMR150.12.30

500 mm *19.68"* 15.2 kg
250 mm *9.84"* 7.6 kg FC
550 mm *21.65"* 16.7 kg FW

42Cr: 900-1150 N/mm²
400 kN/m max.

30°
W=150 | H=170 | R=1.0 | V=12
W=5.91 | H=6.69 | R=0.039 | V=0.47

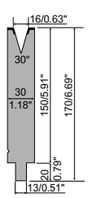


TMR150.16.30

500 mm *19.68"* 17.7 kg
250 mm *9.84"* 8.9 kg FC
550 mm *21.65"* 19.5 kg FW

42Cr: 900-1150 N/mm²
500 kN/m max.

30°
W=150 | H=170 | R=1.6 | V=16
W=5.91 | H=6.69 | R=0.063 | V=0.63

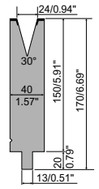


TMR150.24.30

500 mm *19.68"* 22.3 kg
250 mm *9.84"* 11.2 kg FC
550 mm *21.65"* 24.5 kg FW

42Cr: 900-1150 N/mm²
650 kN/m max.

30°
W=150 | H=170 | R=2.5 | V=24
W=5.91 | H=6.69 | R=0.098 | V=0.94

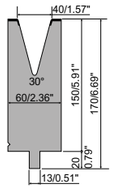


TMR150.40.30

500 mm *19.68"* 30.1 kg
250 mm *9.84"* 15.1 kg FC
550 mm *21.65"* 33.1 kg FW

42Cr: 900-1150 N/mm²
900 kN/m max.

30°
W=150 | H=170 | R=5.0 | V=40
W=5.91 | H=6.69 | R=0.197 | V=1.57

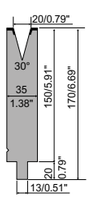


TMR150.20.30

500 mm *19.68"* 20.1 kg
250 mm *9.84"* 10 kg FC
550 mm *21.65"* 22 kg FW

42Cr: 900-1150 N/mm²
600 kN/m max.

30°
W=150 | H=170 | R=2.0 | V=20
W=5.91 | H=6.69 | R=0.079 | V=0.79

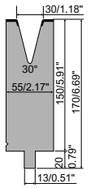


TMR150.30.30

500 mm *19.68"* 30 kg
250 mm *9.84"* 15 kg FC
550 mm *21.65"* 33 kg FW

42Cr: 900-1150 N/mm²
900 kN/m max.

30°
W=150 | H=170 | R=3.0 | V=30
W=5.91 | H=6.69 | R=0.118 | V=1.18



FC: 250 mm - *9.84"*
mm: 50-45-40-35-30-25-25
in: 1.96-1.77-1.57-1.37-1.18-0.98-0.98

FW: 550 mm - *21.65"*
mm: 200-100-50-45-40-35-30-25-25
in: 7.87-3.94-1.97-1.77-1.57-1.37-1.18-0.98-0.98

Hemming tools are used to prebend and afterwards flatten a sheet metal edge by using the same tool set.

Thanks to this operation you can strengthen sheet metal edges and avoid burr on their external side. For this reason, this operation is especially used for safety reason, in order to avoid operators' accidental injuries which may occurr to those who have to handle sheet metal parts.

The maximum sheet metal thickness usually recommended for this operation is 3mm mild steel and 2mm stainless steel. However, for thicker sheet metal special solutions can be proposed, which consider the necessary bending force involved to flatten.

There are 2 types of flattening: partial flattening and total flattening.

Partial flattening is a kind of flattening which doesn't win against the sheet metal springback. For this reason, if you measure the flattened point, it won't be twice the sheet metal thickness but a bigger measure; for example, if you flatten 1.5mm partially, the flattened point will be about 4mm. This dimension depends on the bending force only. Hence, if you want to flatten 1.5mm mild steel and get 3mm high flattened point, you have to increase the tonnage.

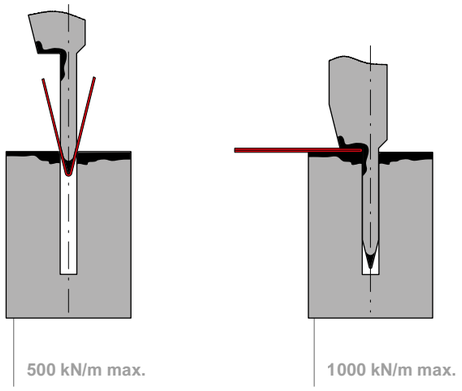
In the table below you can check the necessary tonnage according to sheet metal thickness and type.

The choice of hemming tools should be influenced by the sheet metal type to be flattened; 35° punch and dies are recommended to flatten aluminium and mild steel, which have small springback, whereas more resitant sheet metal types like stainless steel require at least 30°, or better 26°, punch and die.

Springback control is fundamental to win against sheet metal resistance during the flattening phase. In fact, if the angle obtained during the pre-bending phase is too wide, sheet metal will slip towards the operator during the flattening phase.

The choice of TOP serie hemming tools with dies with U shape opening has to take into consideration the fact that the U opening of the die has to match perfectly with the punch tip width. These tools are 525mm long and the sectioned set is also available.

MAX CAPACITY



S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	3.0	*0.12*	90	150
0.80	*0.03*	3.0	*0.12*	120	200
1.00	*0.04*	3.5	*0.14*	150	250
1.25	*0.05*	3.5	*0.14*	170	260

S mm	S *in*	A mm	A *in*	R.420 N/mm² kN/m	R.700 N/mm² kN/m
0.60	*0.02*	1.2	*0.05*	230	350
0.80	*0.03*	1.6	*0.06*	320	500
1.00	*0.04*	1.0	*0.04*	400	600
1.25	*0.05*	2.5	*0.10*	500	800

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The **Bending handbook** target is to supply practicle and useful information to reach quickly the required result. A lot of examples, easy formulas and information which explain the proper attitude towards the bending process.

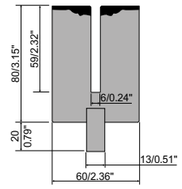
BPR.SM.195.28.6

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=6
W=3.15 | H=3.94 | R=0.039 | V=0.24

28° >



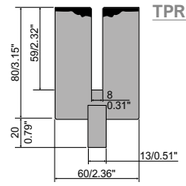
To use with:
BPR.SP-195.28.6

BPR.SM.195.28.8

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=8
W=3.15 | H=3.94 | R=0.039 | V=0.31



To use with:
BPR.SP-195.28.8
TPR.SP.195.24.8
TPR.SP.195.28.8

TPR.SM.195.28.8/TPR.SM.195.24.8

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=8
W=3.15 | H=3.94 | R=0.039 | V=0.31

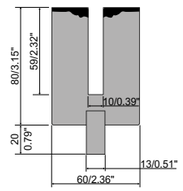
BPR.SM.195.24.10

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=10
W=3.15 | H=3.94 | R=0.039 | V=0.39

24° >



To use with:
BPR.SP-195.24.10
TPR.SP.195.24.10

TPR.SM.195.24.10

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

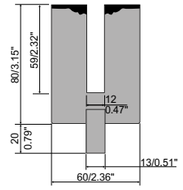
W=80 | H=100 | R=1.0 | V=10
W=3.15 | H=3.94 | R=0.039 | V=0.39

BPR.SM.195.24.12

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=12
W=3.15 | H=3.94 | R=0.039 | V=0.47



To use with:
BPR.SP-195.24.12
TPR.SP.195.24.12

TPR.SM.195.24.12

525 mm *20.67"* 12 kg
495 mm *19.49"* 11 kg F

42Cr: 900-1150 N/mm²
500 - 1000 kN/m max.

W=80 | H=100 | R=1.0 | V=12
W=3.15 | H=3.94 | R=0.039 | V=0.47

F: 495 mm - *19.49"*
mm: 170-100-50-45-40-35-30-25
in: 6.69-3.94-1.97-1.77-1.57-1.37-1.18-0.98

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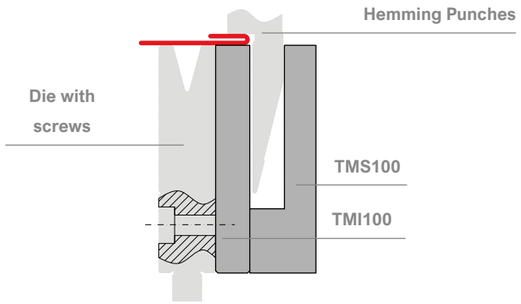
R2 type dies offers a further solution to get flattened profiles with press brakes with movable table. Such solution is for those press brakes having a table which moves along a dedicated axis in order to centre die for the pre-bending phase and then to centre TMI100 or TML100 insert to carry out flattening.
Both TMI100 or TML100 inserts are induction hardened to 56-58HRc to resist against wear and compression during flattening phase.
On request R2 type dies can be supplied with holes with standard pitch to be screwed to TMI100 or TML100 inserts.
The insert choice depends on sheet metal type and thickness to be flattened.

For thin sheet metal TMI100 is enough but for thicker and more resistant sheet metal, you need TML100 or TMS100 inserts to keep punch tip more stable.
TML100 is a good compromise, as according to its orientation, it can be used as a flattening surface or as a guide for punch.
Punch models used for this applications are TPR176.28.R1 and TPR276.28.R1.
In case you have to flatten 2.5mm or 3mm sheet metal, we recommend you use TMI100 with TMS100. TMS100 is very robust and is equipped with an insert made of a ductile material which can keep punch stable without wearing its own surface excessively.

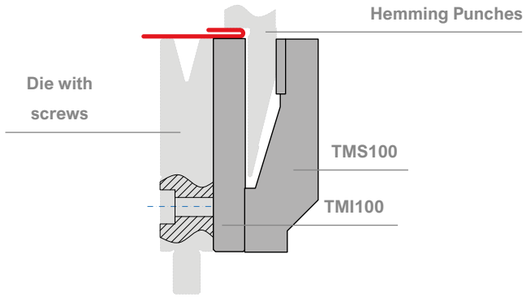
These inserts are as long as dies, which need to have 30° opening.
Sectioned sets are also available.
You don't need a set of inserts for each die set, as mounting and dismantling operations are very easy as you only have to tighten and untighten some allen screws on the operator side.

A very important parameter to take into consideration is the necessary press force to get a complete flattened or a partially flattened profile. In this case tools are the same but it's fundamental to set the CNC up for the type of flattening required. An important feature for TMI, TML and TMS inserts is their capacity, ranging from 1200kN/m for TMI and TML and 1300 kN/m for TMS.

TMI100 + TML100 Ex. of application



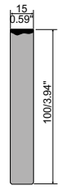
TMI100 + TMS100 Ex. of application



TMI100

500 mm	*19.68"*	5 kg	
250 mm	*9.84"*	2.5 kg	FC
550 mm	*21.65"*	5.5 kg	FW

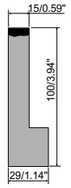
C45: 560-710 N/mm²
1200 kN/m max.



TML100

500 mm	*19.68"*	5 kg	
250 mm	*9.84"*	2.5 kg	FC
550 mm	*21.65"*	5.5 kg	FW

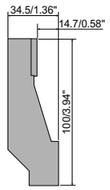
C45: 560-710 N/mm²
1200 kN/m max.



TMS100

500 mm	*19.68"*	5 kg	
250 mm	*9.84"*	2.5 kg	FC
550 mm	*21.65"*	5.5 kg	FW

C45: 560-710 N/mm²
1300 kN/m max.



English edition 1.0 | 2020

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