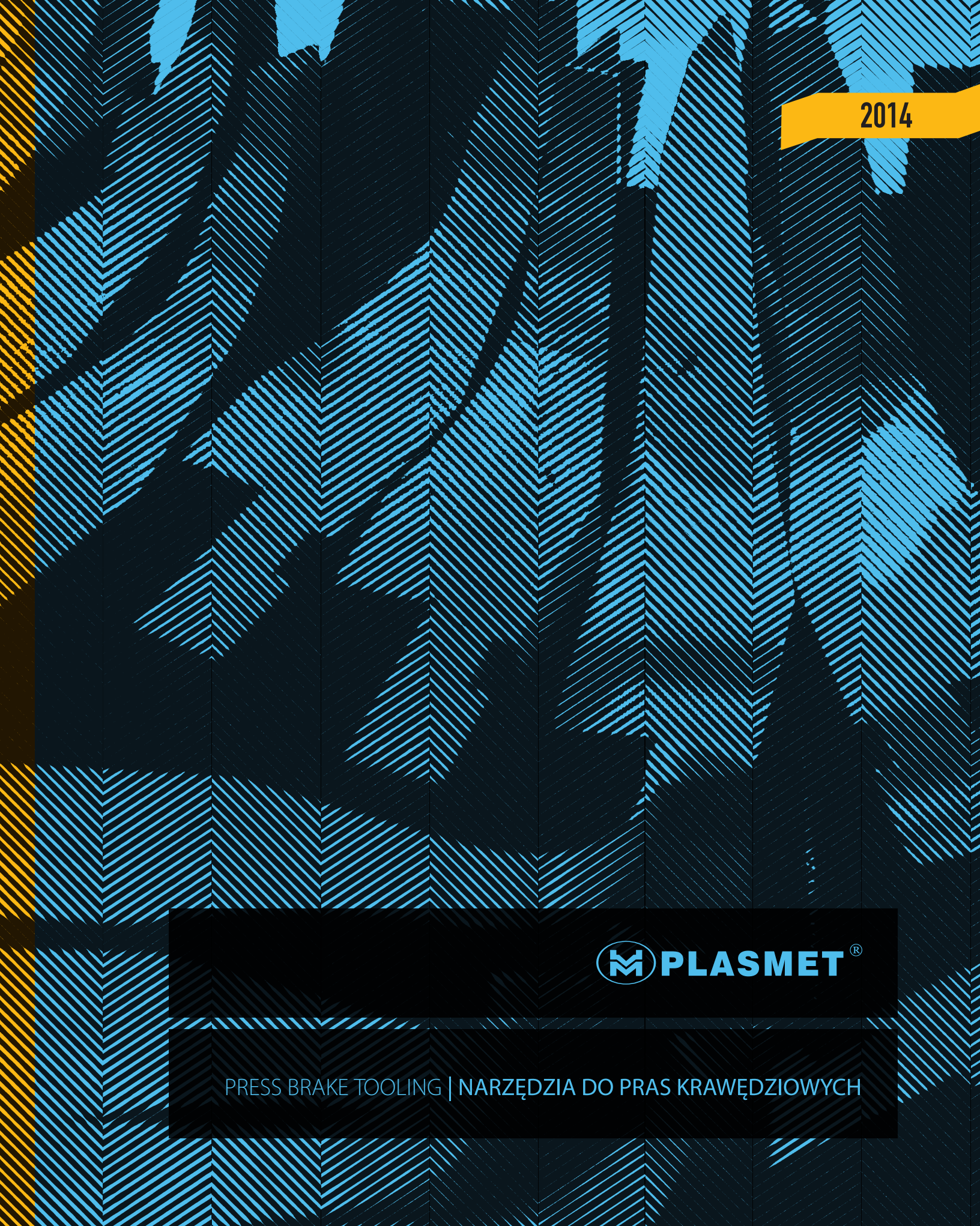

2014
PLASMET®
PRESS BRAKE TOOLING | NARZĘDZIA DO PRAS KRAWĘDZIOWYCH

CONTENT | SPIS TREŚCI

OUR COMPANY | O FIRMIE 3

GENERAL INFORMATION | INFORMACJE OGÓLNE 4

standard tools TYPE "A" | narzędzia standardowe TYPU „A" 4

standard tools TYPE "T" | narzędzia standardowe TYPU „T" 4

standard tools TYPE "L" | narzędzia standardowe TYPU „L" 5

tool ordering code | sposób zamawiania 5

special tools | narzędzia specjalne 5

additional information | oznaczenia symboli 5

TYPE "A" PUNCHES | STEMPLE TYPU „A" 6

flattening tools | zestaw do zagniatania 15

example of use S 2033 and M 3000 | przykład zastosowania S 2033 i M 3000 15

RADIUS PUNCHES | STEMPLE PROMIENIOWE 15

assembly | sposób mocowania 15

z shape tool | zestaw do z 17

MECHANICAL ADAPTORS FOR PUNCHES | ŁĄCZNIKI MECHANICZNE STEMPLI 18

joiners | adaptersy 18

clamping washers | podkładki mocujące (klamry) 18

type "T" adaptor | adapter typu „T" 19

system changing adaptors | adaptery międzysystemowe 19

TYPE "A" DIES | MATRYCE TYPU „A" 20

multiple vee dies | matryce wielorowkowe 20

with groove | rowkowe 21

1V dies | matryce 1V 22

bolt fastened | mocowane śrubami 25

dies with base H = 80 mm | matryce z podstawą H = 80 mm 26

dies with base H = 120 mm | matryce z podstawą H = 120 mm 28

insert dies | matryce wkładkowe 31

flattening dies | matryce do zagniatania 32

dies with plastic inserts | matryce z wkładkami plastikowymi 33

BOX – CLOSING PUNCH | STEMPEL DO ZAMYKANIA PUDEŁEK 35

PROTECTIVE TAPE | TAŚMA OCHRONNA 35

TYPE "T" PUNCHES | STEMPLE TYPU „T" 36

CONTENT | SPIS TREŚCI

flattening tools | zestaw do zagniatania 38
example of use S 2205 and M 2000 | przykład zastosowania S 2205 i M 2000 38
insert punch | stempel z wkładką 39
radius punch | stempel promieniowy 39
RADIUS INSERTS | WKŁADKI PROMIENIOWE 40
TYPE "T" DIES 100 MM | MATRYCE TYPU „T" 100 MM 41
TYPE "T" DIES 55 MM | MATRYCE TYPU „T" 55 MM 42
TYPE "L" PUNCHES | STEMPLE TYPU „L" 43
TYPE "L" DIES 90 MM | MATRYCE TYPU „L" 90 MM 51
TYPE "L" DIES 130 MM | MATRYCE TYPU „L" 130 MM 52
TYPE "L" DIES | MATRYCE TYPU „L" 53
flattening dies | matryce do zagniatania 53
dies with movable inserts | matryce z ruchomymi wkładkami 53
PUNCH MOUNTING EDGE | RODZAJE UCHWYTÓW STEMPLI 54
DIE HOLDERS | MOCOWANIA MATRYC 55
COMPOUND DIES | MATRYCE SKŁADANE 57
ROLL DIES | MATRYCE ROLKOWE 58
SPECIAL DIES | MATRYCE SPECJALNE 59
multiple vee dies | matryce wielorowkowe 59
variable vee die | matryca z regulowaną szerokością wyjęcia 59
SPECIAL TOOLING | NARZĘDZIA SPECJALNE 60
OTHER PRODUCTS | POZOSTAŁE PRODUKTY 62
shear blades | noże do gilotyn 62
tooling cabinets | szafy na narzędzia 62
PRESSURE TABLE | TABELA DOBORU SIŁ 64

Dear customers,

we present to you catalogue of press brake tools and shear knives produced by PPMiU Plasmet.

The content of this catalogue are standard tools available from stock. Produced from high quality steel, they are all ground and induction hardened and we guarantee full exchangeability of unused tools.

All tools in the catalogue can also be made from 1.2312 steel 30 HRC in the body and induction hardened to 55-60 HRC. It is particularily advisable for tools working on hard, plasma or laser cut sheets.

As well as those in the catalogue, we are able to deliver special tools for all types of press brakes also tools designed by you.

We can help in choosing the right tools for the job, and make tools according to the final product with the assist of computer design.

Apart from production of new tools we can offer alteration and regrinding of used tools.

Since 2013 we can offer tools which are laser hardened, and also renovation of tools can be connected with laser hardening.

Szanowni klienci,

przedstawiamy katalog narzędzi do pras krawędziowych i noży do nożyc gilotynowych produkowanych przez P.P.M.i U. Plasmet.

Zawarta w nim oferta to narzędzia standardowe, dostępne z magazynu. Są to narzędzia produkowane ze stali narzędziowej najwyższej jakości, szlifowane i hartowane indukcyjnie. Gwarantujemy pełną zamienność narzędzi.

Wszystkie narzędzia prezentowane w katalogu mogą być również wykonane ze stali 1.2312, ulepszonej do 30 HRC i zahartowanej indukcyjnie na krawędziach pracujących do 55-60 HRC. Jest to szczególnie korzystne dla narzędzi pracujących na blachach twardych, z krawędziami ciętymi laserem.

Poza narzędziami standardowymi oferujemy narzędzia do różnych typów pras krawędziowych, katalogowe lub specjalne wykonane ze stali wysokostopowych.

Jesteśmy w stanie, przy pomocy programu komputerowego, pomóc w doborze narzędzi do profilu końcowego. Oprócz wykonywania narzędzi, proponujemy także przeróbki i regenerację narzędzi używanych.

Od 2013 roku oferujemy również narzędzia hartowane laserowo, oraz renowacje narzędzi używanych w połączeniu z ponownym hartowaniem laserem.

Zapraszamy do skorzystania z naszej oferty.

GENERAL INFORMATION | INFORMACJE OGÓLNE

standard tools TYPE "A" | narzędzia standardowe TYPU „A"

Material

C45, C50, 41Cr4 or 42CrMo4

Working edge hardened

55 ±2 HRC

Standard lengths

835 and 415 mm

Segment length

as shown on drawing

Materiał

C45, C50, 40H lub 40HM

Część robocza hartowana

55 ±2 HRC

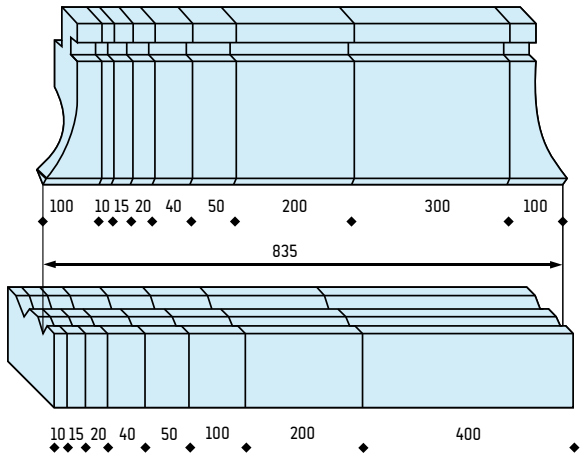
Długość standardowa

835 i 415 mm

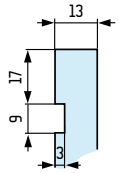
Narzędzia segmentowe

jak na rysunku

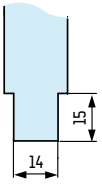
Sectionalized tool TYPE "A"
Schemat narzędzia segmentowego TYPU „A"

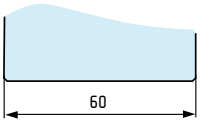


Punch mounting edge
Uchwyt stempla



Die mounting edge
Uchwyt matrycy





standard tools TYPE "T" | narzędzia standardowe TYPU „T"

Material

C45, 42CrMo4 or 1.2312

Thermal enhancement to*

30 ±2 HRC (950 – 1100 MPa)

Working edge hardened

55 ±2 HRC (1500 – 1600 MPa)

Length

835, 500 and 550 mm segmented

** applies to 1.2312*

Materiał

C45, 40HM lub 1.2312

Ulepszenie cieplne*

30 ±2 HRC (950 – 1100 MPa)

Część robocza hartowana

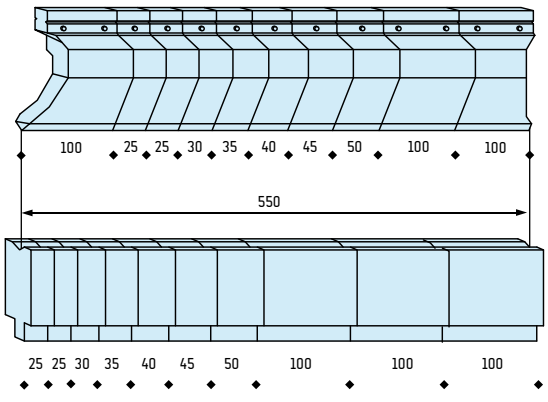
55 ±2 HRC (1500 – 1600 MPa)

Długość

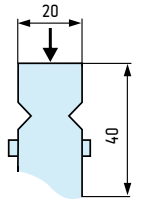
835, 500 i 550 mm segmentowa

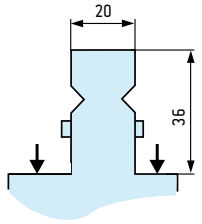
** dotyczy 1.2312*

Sectionalized tool TYPE "T"
Schemat narzędzia segmentowego TYPU „T"

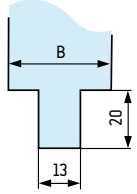


Punch mounting edge
Uchwyt stempla





Die mounting edge
Uchwyt matryc



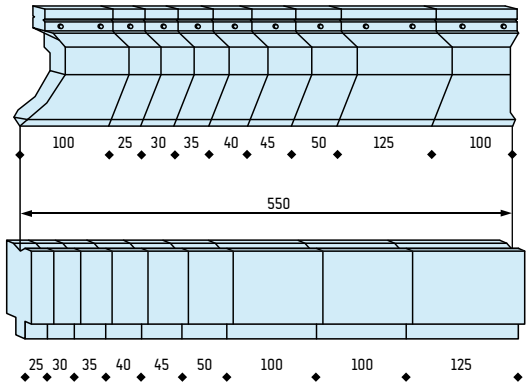
GENERAL INFORMATION | INFORMACJE OGÓLNE

standard tools TYPE "L" | narzędzia standardowe TYPU „L"

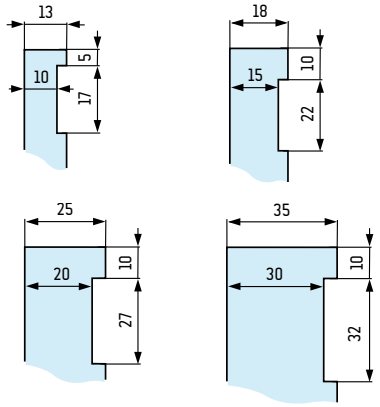
Material
C45, 42CrMo4 or 1.2312
Thermal enhancement to*
30 ±2 HRC (950 – 1100 MPa)
Working edge hardened
55 ±2 HRC (1500 – 1600 MPa)
Length
508 and 550 mm segmented
** applies to 1.2312*

Materiał
C45, 40HM lub 1.2312
Ulepszenie cieplne*
30 ±2 HRC (950 – 1100 MPa)
Część robocza hartowana
55 ±2 HRC (1500 – 1600 MPa)
Długość
508 i 550 mm segmentowa
** dotyczy 1.2312*

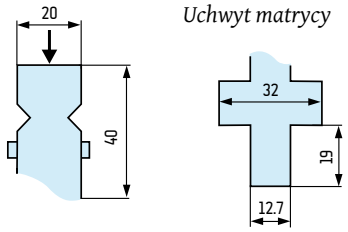
Sectionalized tool TYPE "L"
Schemat narzędzia segmentowego TYPU „L"



Punches type "L" have five different clampings
Narzędzia typu „L" występują z pięcioma typami mocowań



Die mounting edge
Uchwyt matrycy



tool ordering code | sposób zamawiania

Punches i.e 2010/88/R0.8/835
2010/88/R0.8/835 – *Catalogue number*
2010/**88**/R0.8/835 – *Angle α = 30°, 35°, 60°, 75°, 80°, 88°, 90°*
2010/88/**R0.8**/835 – *Working edge type – thus "F" or "R" and size*
2010/88/R0.8/**835** – *Length of tool – thus 835 mm, 415 mm, 835 mm sectionalized*

Dies i.e 6112/35/835
6112/35/835 – *Catalogue number*
6112/**35**/835 – *Angle α = 30°, 35°, 60°, 85°, 88°, 90°*
6112/35/**835** – *Length of tool – thus 835 mm, 415 mm, 835 mm sectionalized*

Stemple np. 2010/88/R0.8/835
2010/88/R0.8/835 – *Numer katalogowy stempla*
2010/**88**/R0.8/835 – *Kąt α = 30°, 35°, 60°, 75°, 80°, 88°, 90°*
2010/88/**R0.8**/835 – *Część robocza stempla („F" lub „R" oraz wielkość)*
2010/88/R0.8/**835** – *Długość elementu 835 mm, 415 mm, 835 mm segmentowy*

Matryce np. 6112/35/835
6112/35/835 – *Numer katalogowy matrycy*
6112/**35**/835 – *Kąt α = 30°, 35°, 60°, 85°, 88°, 90°*
6112/35/**835** – *Rodzaj elementu 835 mm, 415 mm, 835 mm segmentowy*

special tools | narzędzia specjalne

Materiał
C45, 40HM lub 1.2312
Ulepszenie cieplne*
30 ±2HRC (950 – 1100 MPa)
Część robocza hartowana
55 ±2HRC (1500 – 1600 MPa)
Długość
do 4100 mm
** dotyczy 1.2312*

Material
C45, 42CrMo4 or 1.2312
Thermal enhancement to*
30 ±2HRC (950 – 1100 MPa)
Working edge hardened
55 ±2HRC (1500 – 1600 MPa)
Length
up to 4100 mm
** applies to 1.2312*

additional information | oznaczenia symboli

in stock / dostępne z magazynu

fast delivery possible / możliwość szybkiej dostawy

42CrMo4 *42CrMo4 steel as standard / narzędzie wykonane ze stali 42CrMo4*

Narzędzia wykonywane w szczególności z wymienionych gatunków stali lub z innej stali o podobnej wytrzymałości.

Prezentowany katalog nie stanowi oferty handlowej w rozumieniu Kodeksu Cywilnego, a ma jedynie charakter informacyjny.

24h

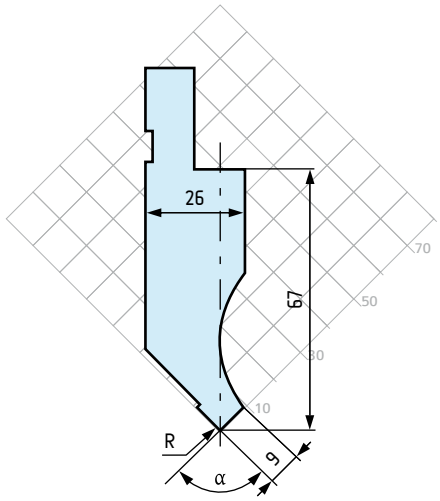
S 2010 100 t/m

α = 75⁰, R = 0.8 mm

α = 85⁰, R = 0.8 mm

α = 88⁰, R = 0.2 mm, 0.8 mm, 1.5 mm, 3 mm

α = 90⁰, R = 0.2 mm, 0.8 mm

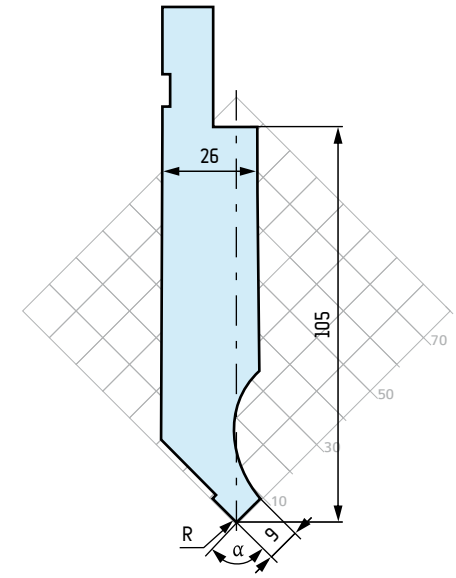


24h

S 2010/105 100 t/m

α = 75⁰, 85⁰, 88⁰

R = 0.8 mm

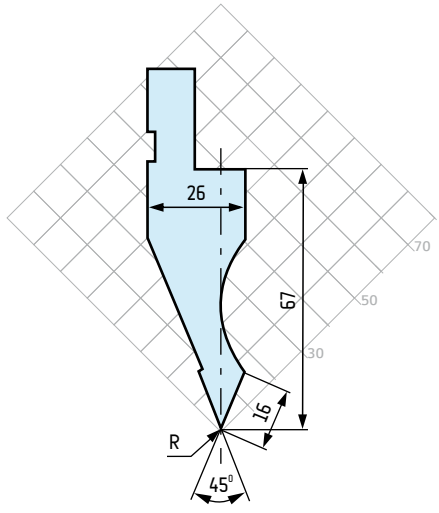


24h

S 2011 80 t/m

α = 45⁰

R = 0.4 mm, 0.8 mm, 1.5 mm

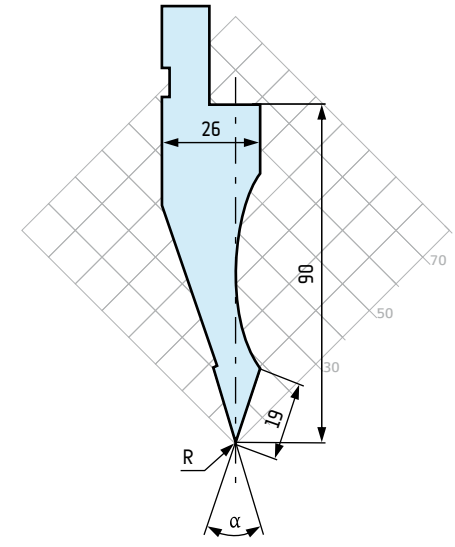


24h

S 2012 70 t/m

α = 30⁰, 35⁰

R = 1 mm



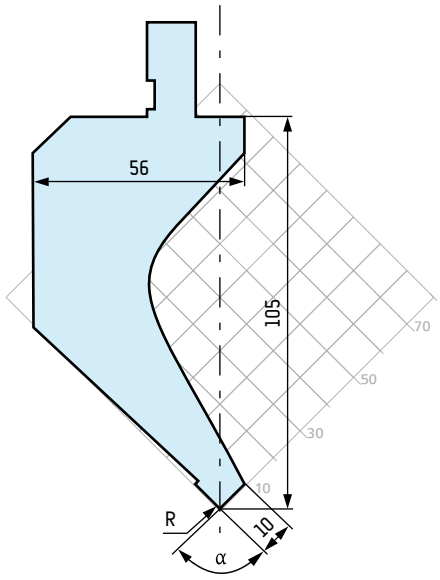
24h

S 2015 50 t/m

α = 85°, R = 0.8 mm

α = 88°, R = 0.2 mm, 0.8 mm,

α = 90°, R = 0.8 mm



24h

S 2016 10 t/m

α = 88°, 90°

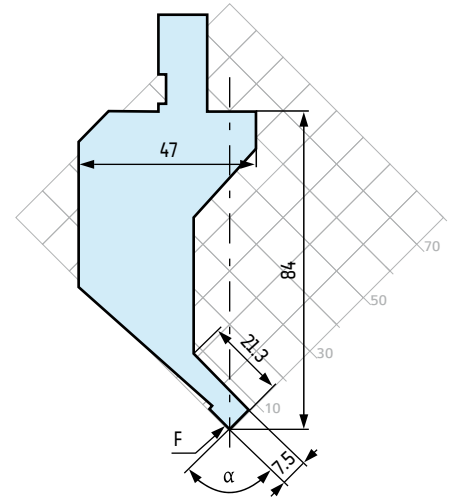
F = 0.6 mm

24h 42CrMo4

S 2016 20 t/m

α = 88°, 90°

F = 0.6 mm

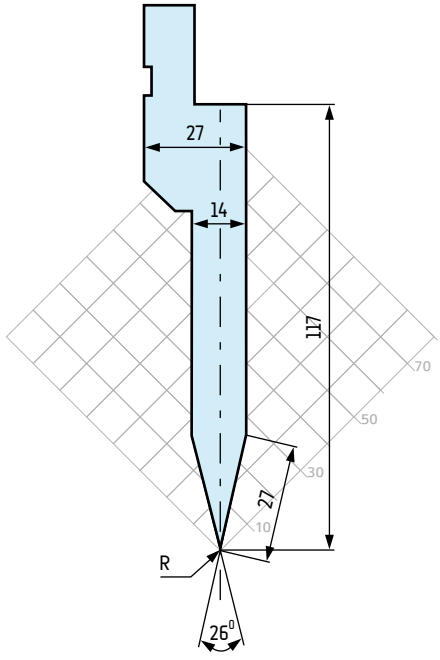


24h

S 2017/26 100 t/m

α = 26°

R/F = 0.8 mm

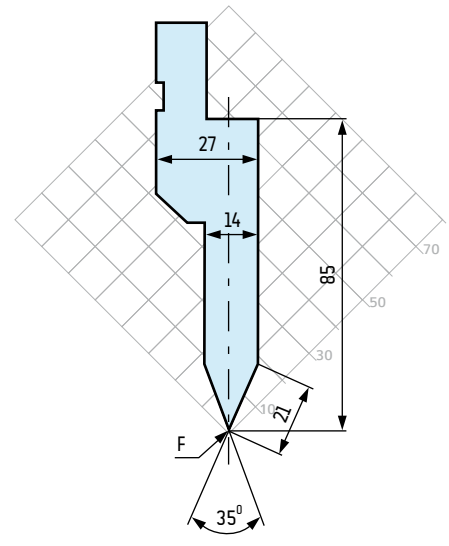


24h

S 2017/35 100 t/m

α = 35°

F = 0.8 mm



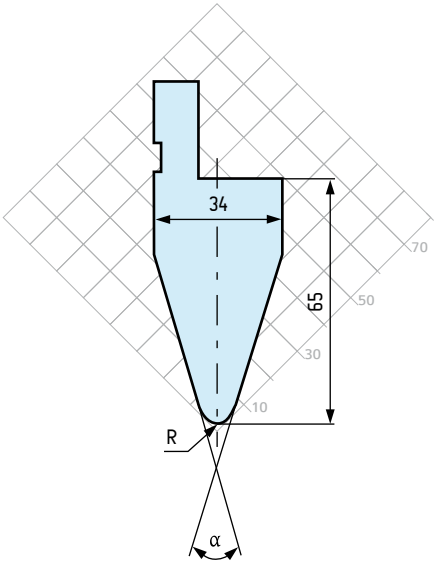
24h

S 2013 100 t/m

α = 35°, R = 5 mm

α = 60°, R = 6 mm

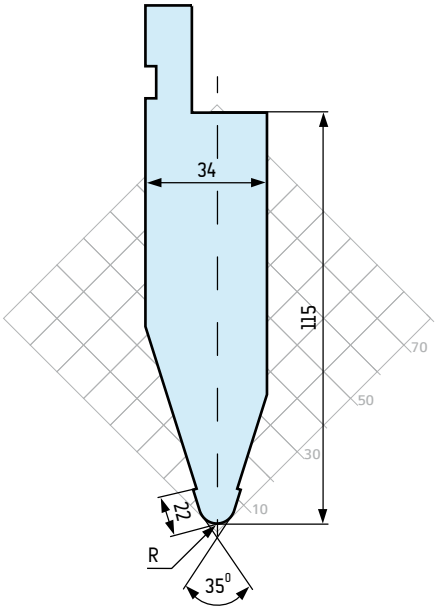
α = 80°, R = 6 mm



24h

S 2013/115 100 t/m

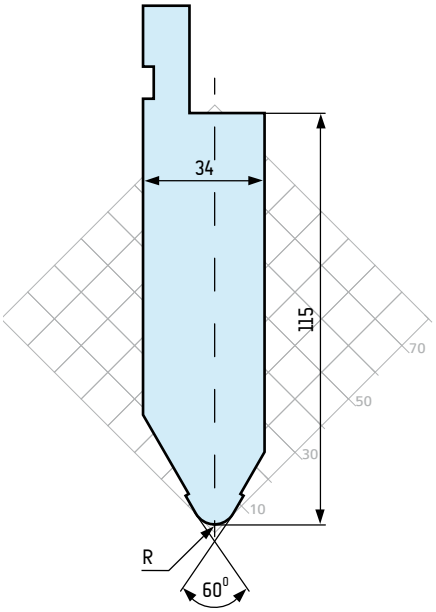
α = 35°, R = 5 mm



24h

S 2013/115 100 t/m

α = 60°, R = 6 mm



24h

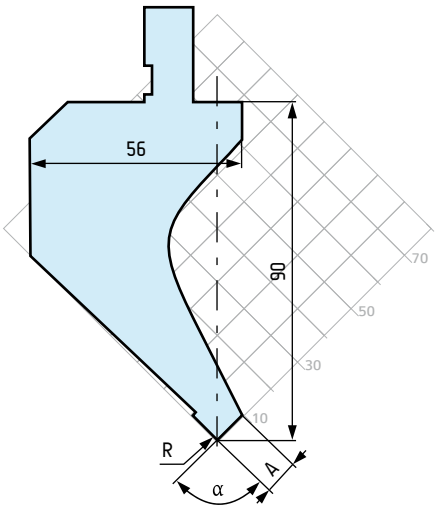
S 2014 60 t/m*

*α = 75°, A = 9 mm, R = 0.8 mm, *30 t/m*

*α = 88°, A = 6 mm, R = 0.2 mm, 0.8 mm *50 t/m*

α = 88°, A = 9 mm, R = 0.2 mm, 0.8 mm

α = 90°, A = 9 mm, R = 0.8 mm

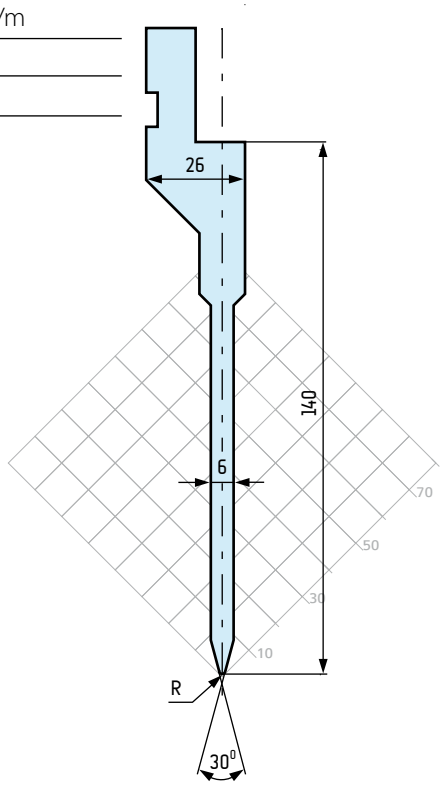


24h 42CrMo4

S 2017/30 40 t/m

α = 30⁰

R = 0.8 mm

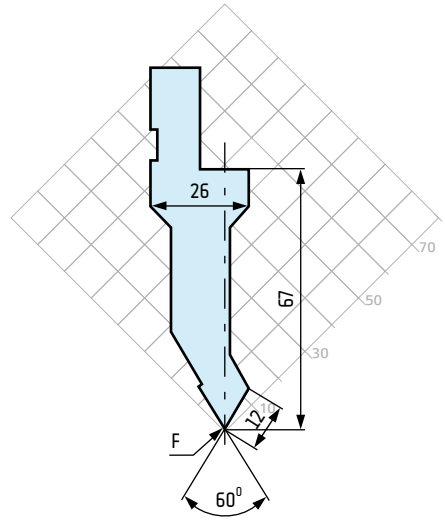


24h

S 2018 60 t/m

α = 60⁰

F = 0.8 mm

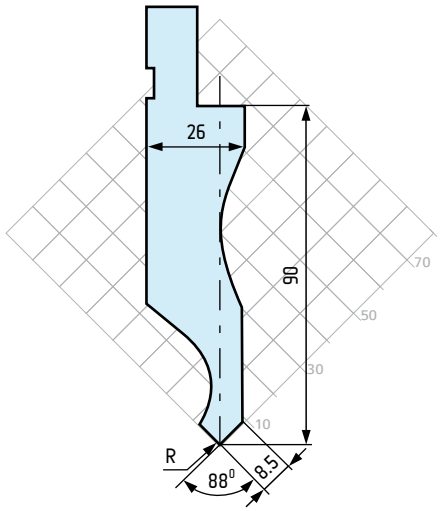


24h

S 2019 70 t/m

α = 88⁰

R = 0.8 mm



24h

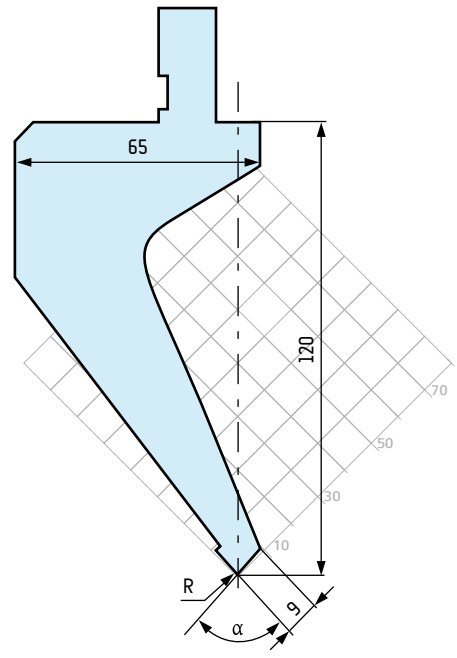
S 2020 50 t/m

α = 75⁰, R = 0.8 mm

*α = 85⁰, R = 0.8 mm**

α = 88⁰, R = 0.2 mm, R = 0.8 mm

** na zamówienie*

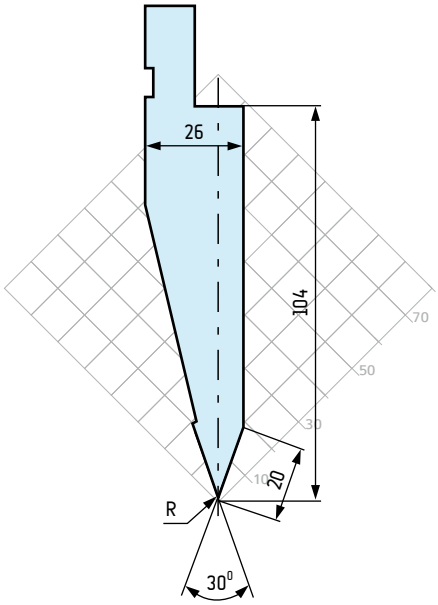


24h

S 2021 100 t/m

α = 30⁰

R = 0.8 mm

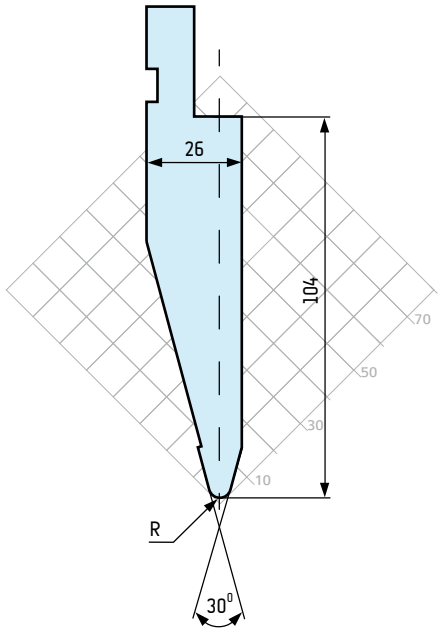


24h

S 2021/R3 100 t/m

α = 30⁰

R = 3 mm



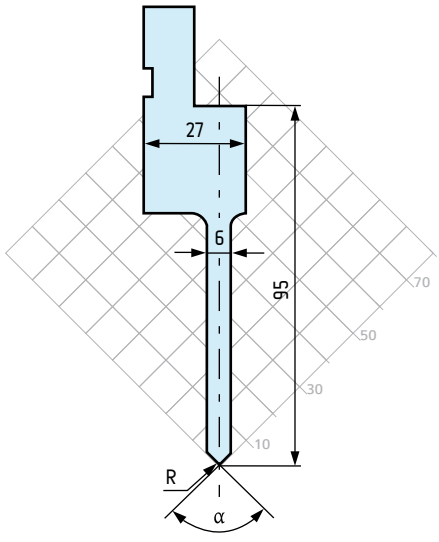
24h

S 2022 50 t/m

α = 75⁰, R = 0.8 mm

α = 88⁰ , R = 0.2 mm

α = 90⁰, R = 0.2 mm

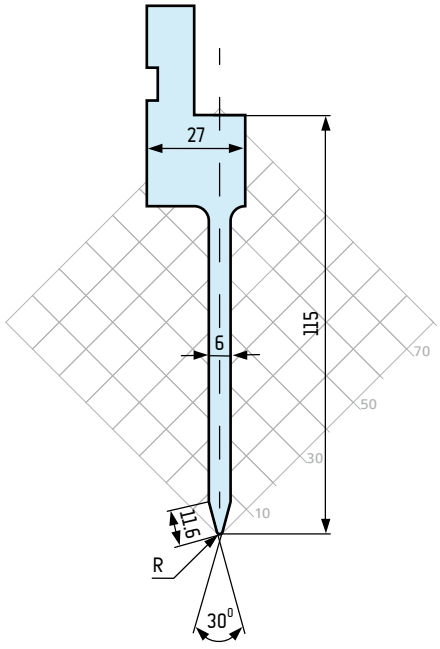


24h

S 2022/115 45 t/m

α = 30⁰

R = 0.8 mm



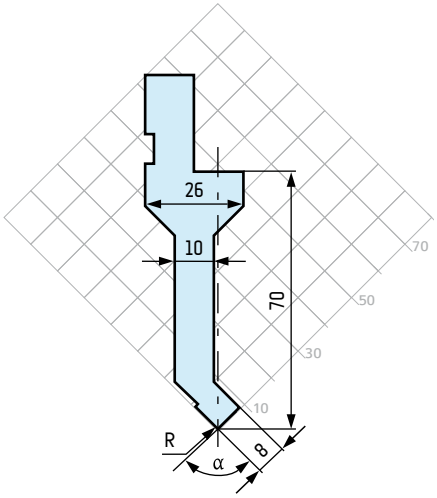
24h

S 2023 50 t/m

α = 88⁰, 85⁰, 90⁰*

R = 0.2 mm

** na zamówienie*



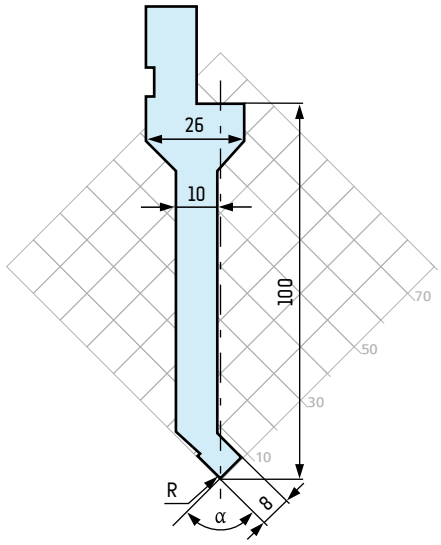
24h

S 2024 50 t/m

α = 88⁰, 85⁰, 90⁰*

R = 0.2 mm

** na zamówienie*

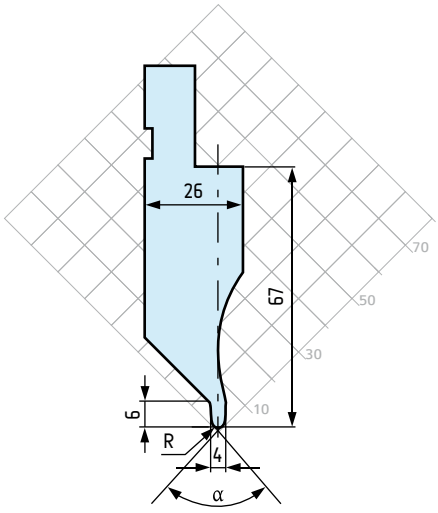


24h

S 2025 40 t/m

α = 88⁰, 90⁰

R = 0.2 mm

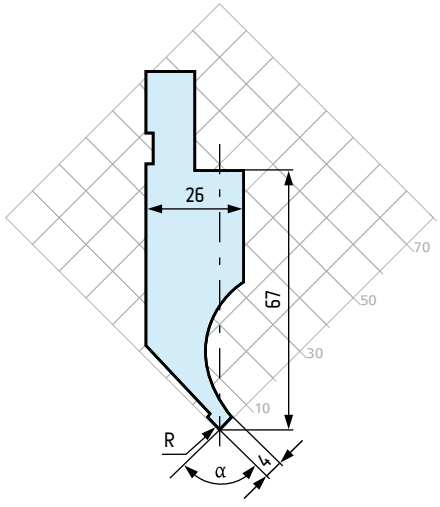


24h

S 2026 35 t/m

α = 88⁰, 90⁰

R = 0.2 mm

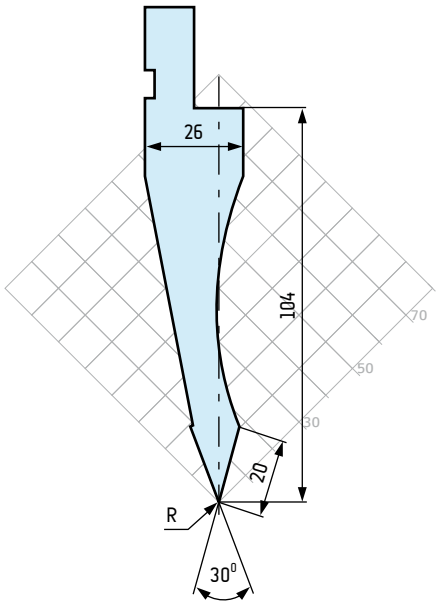


24h

S 2027 70 t/m

α = 30⁰

R = 0.8 mm



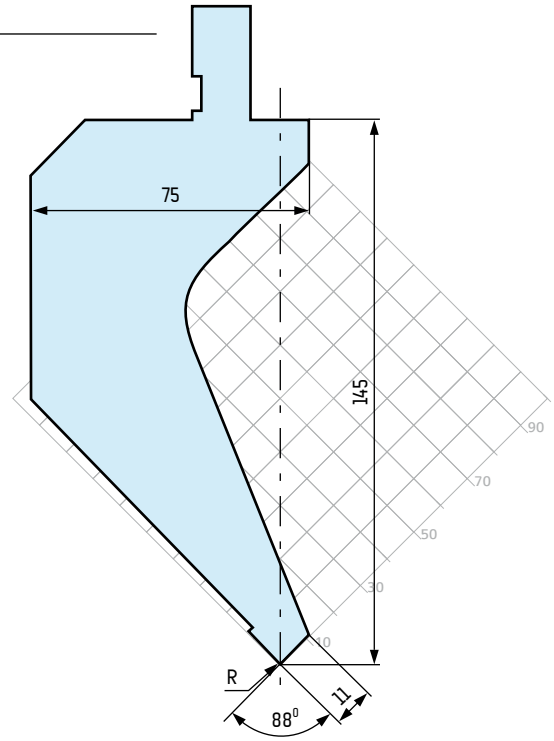
24h

S 2028 80 t/m

α = 85⁰, 88⁰*

R = 0.8 mm

** na zamówienie*

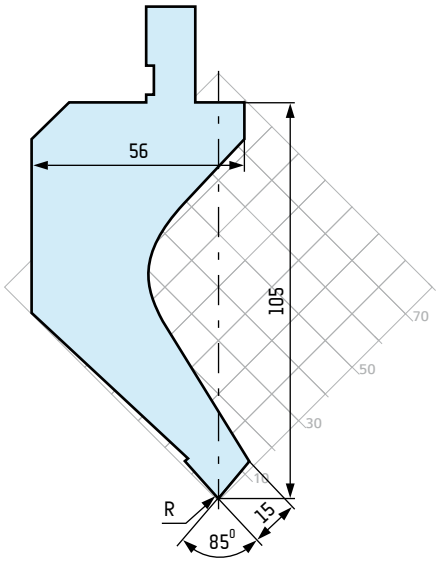


24h

S 2029 60 t/m

α = 85⁰

R = 5 mm, 6.5 mm



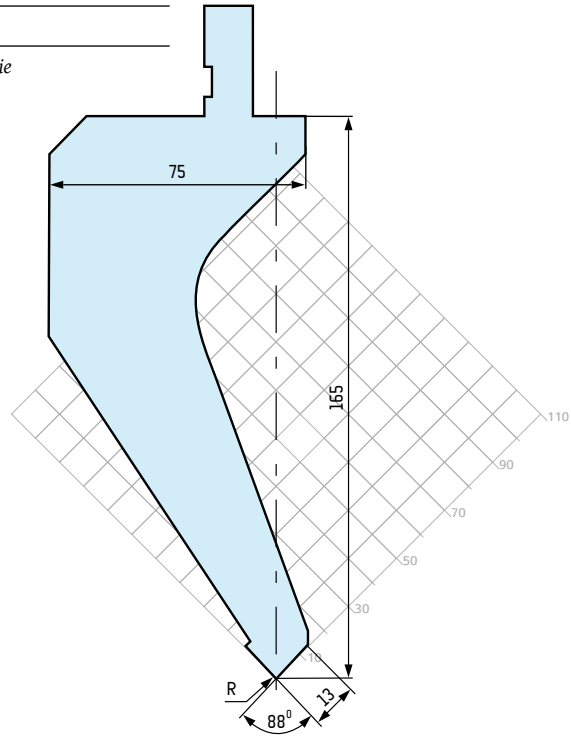
24h

S 2030 60 t/m

α = 85⁰, 88⁰*

R = 0.8 mm

** na zamówienie*

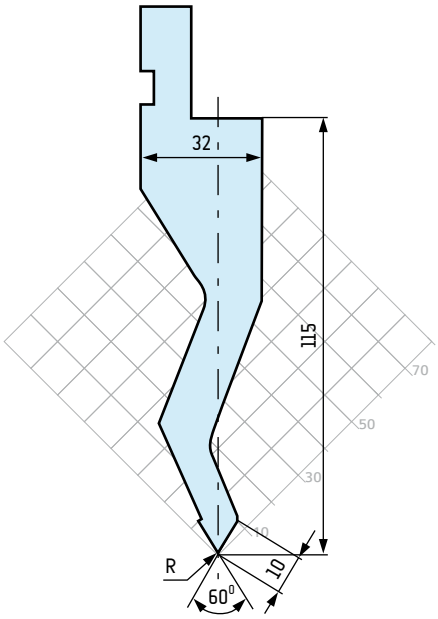


24h

S 2031 60 t/m

α = 60°

R = 0.8 mm

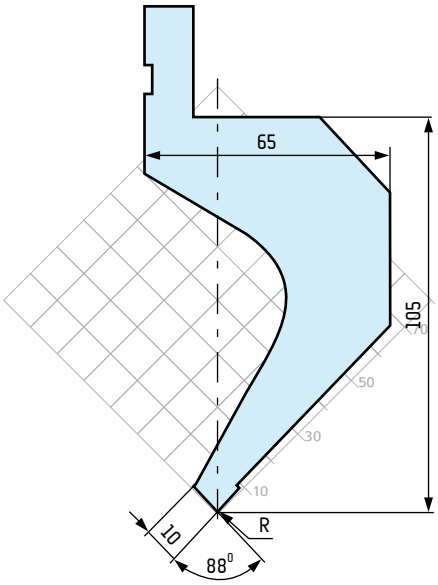


24h

S 2032 45 t/m

α = 88°

R = 0.8 mm

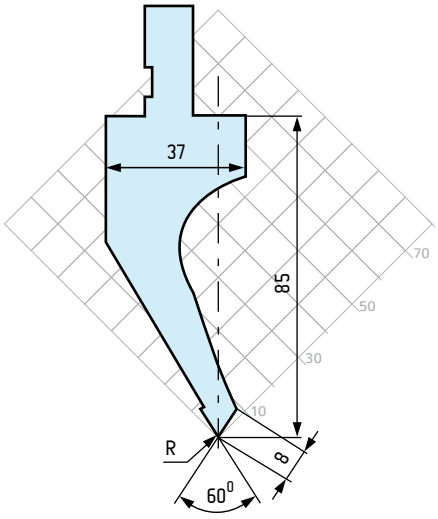


24h

S 2034 35 t/m

α = 60°

R = 0.8 mm

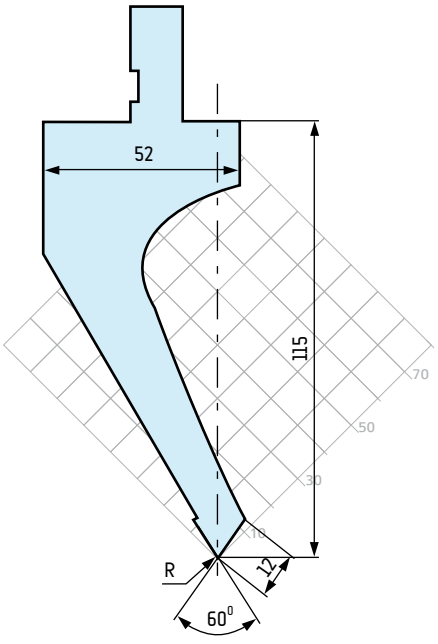


24h

S 2035 35 t/m

α = 60°

R = 0.8 mm

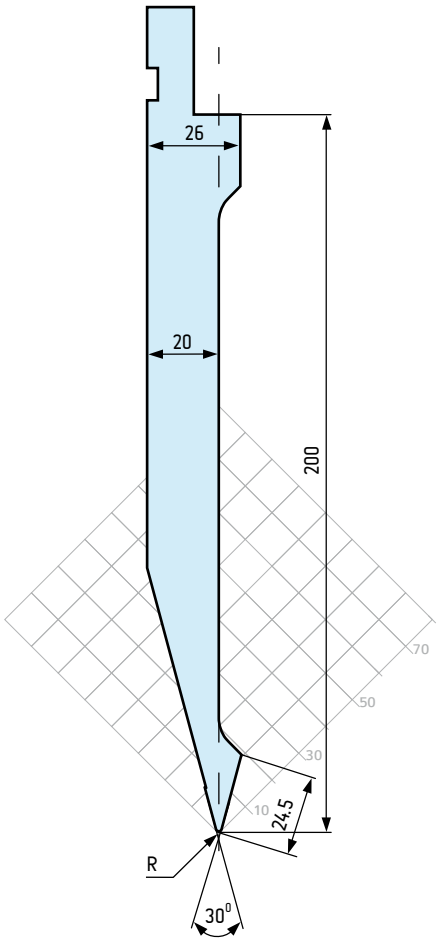


42CrMo4

S 2036 50 t/m

α = 30⁰

R = 0.8 mm

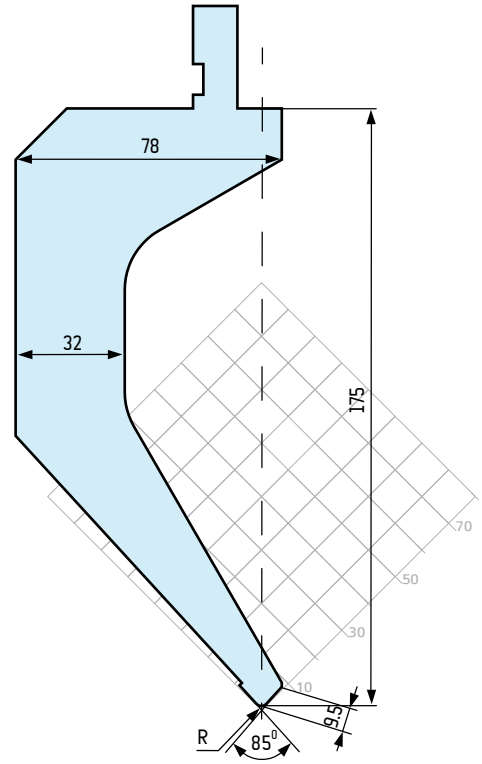


42CrMo4

S 2037 70 t/m

α = 85⁰

R = 0.8 mm



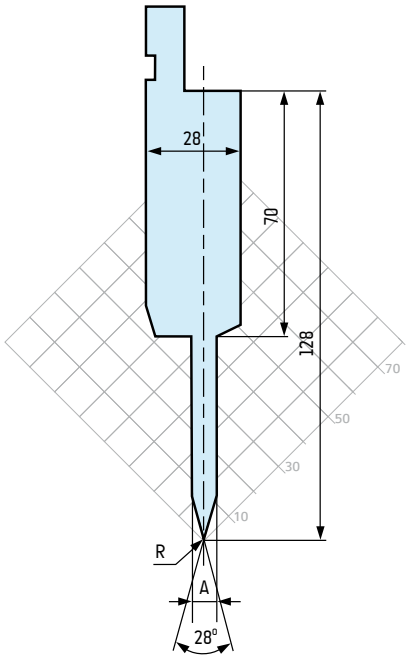
flattening tools | **zestaw do zagniatania**

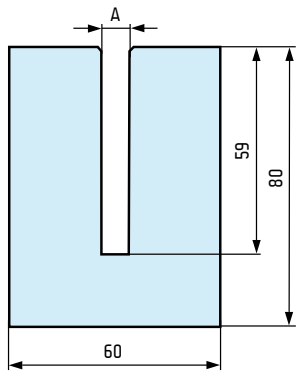
42CrMo4

S 2033 70 t/m

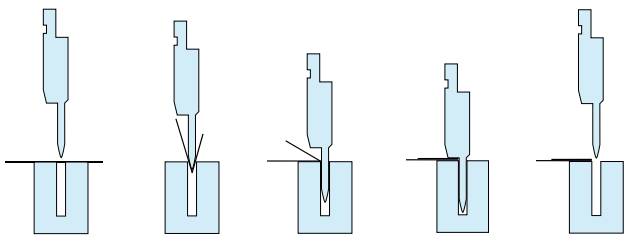
α = 28°

R = 0.6 mm, A=8 mm, 10 mm, 12 mm





example of use S 2033 and M 3000 |
przykład zastosowania S 2033 i M 3000

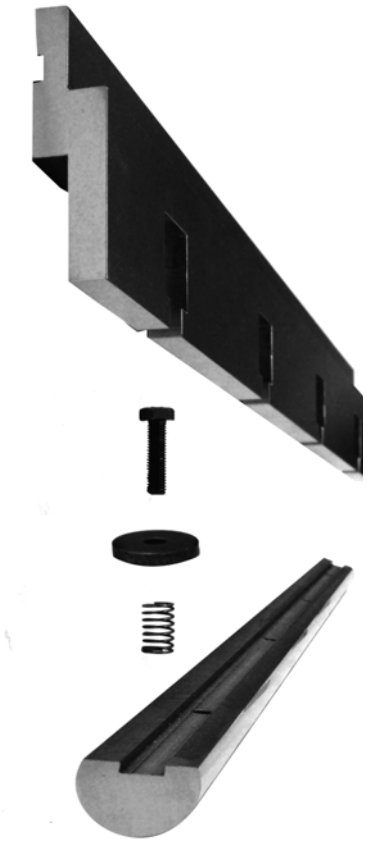


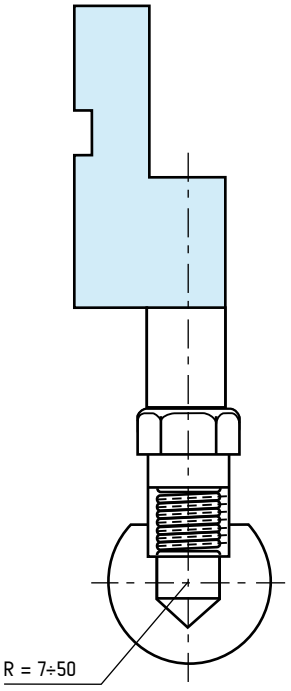
42CrMo4

M 3000 70 t/m

A = 8 mm, 10 mm, 12 mm

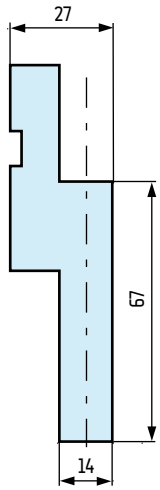
assembly | **sposób mocowania**





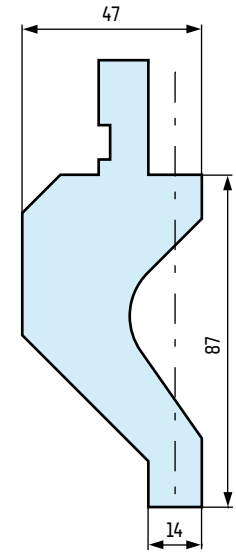
24h

STEMPEL R 80 t/m



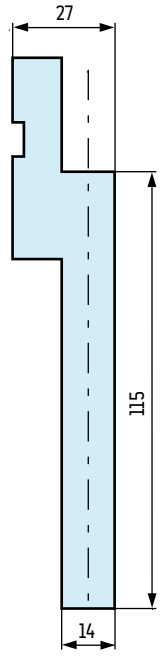
24h

STEMPEL R 2 80 t/m



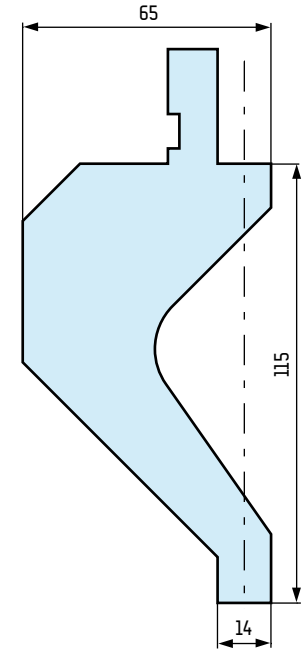
24h

STEMPEL R/115 80 t/m

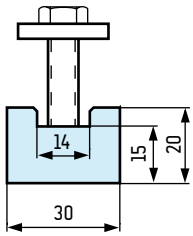


24h

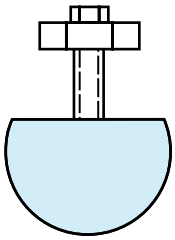
STEMPEL R 2/115 60 t/m



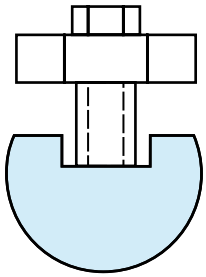
FLATTENING INSERT | WKŁADKA PŁASKA



WKŁADKA R 7 – R 12

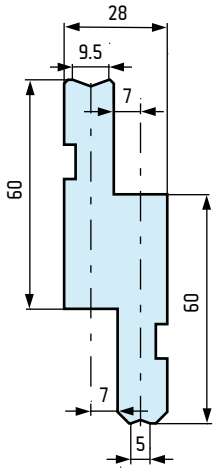


WKŁADKA R 12.5 – R 50

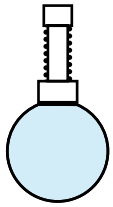


STEMPEL R – R 80 t/m

Double radius punch
Stempel podwójny promieniowy

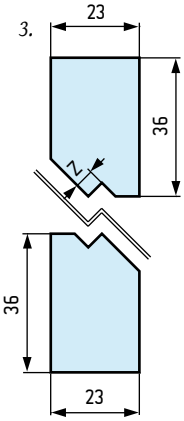


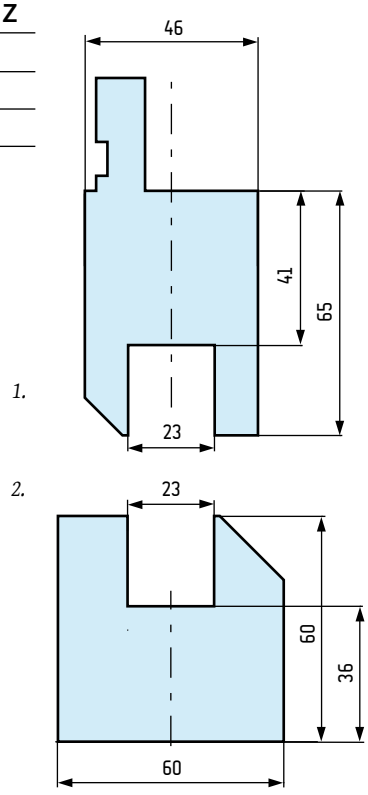
WKŁDKA R 3 – R 6.5



Z SHAPE TOOL | ZESTAW DO Z

1. Z Punch / Stempel Z
2. Z Die / Matryca Z
3. Z Insert (set) / Wkładka Z (kpl)

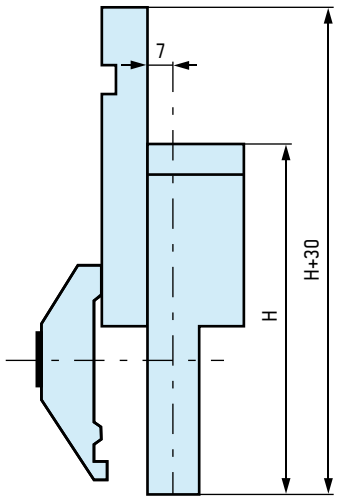




joiners | adaptersy

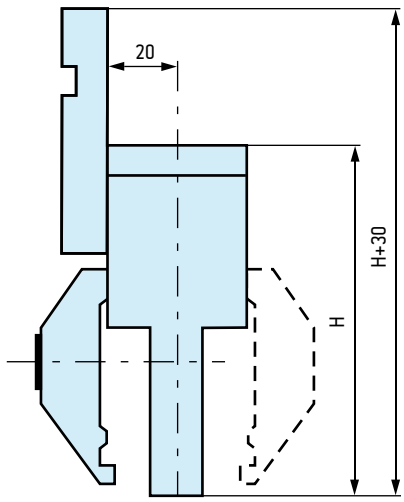
24h

TYPE "A" | **TYP „A"**
H = 100 mm, L = 150 mm
H = 120 mm, L = 150 mm
H = 140 mm, L = 150 mm
H = 150 mm, L = 150 mm



24h

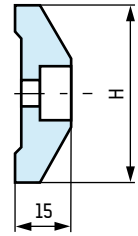
TYPE "B" | **TYP „B"**
H = 120 mm, L = 150 mm
H = 170 mm, L = 150 mm



clamping washers | podkładki mocujące (klamry)

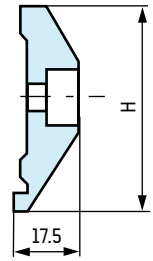
24h

TYPE "A" | **TYP „A"**
H = 50 mm, L = 150 mm



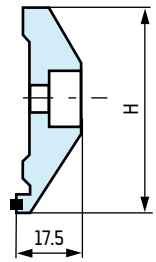
24h

TYPE "S" | **TYP „S"**
H = 58 mm, L = 150 mm



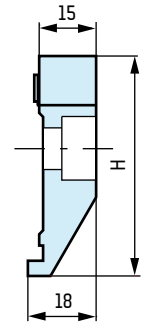
24h

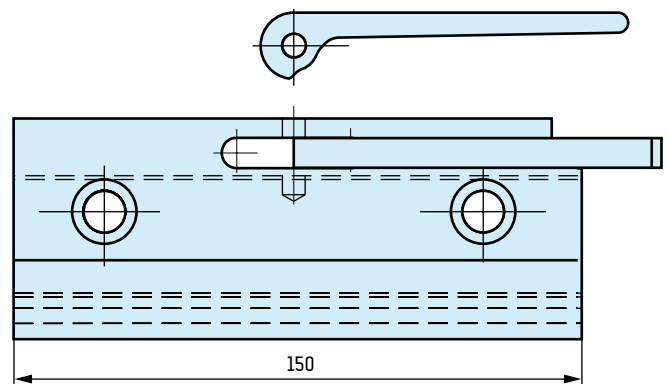
TYPE "P" | **TYP „P"**
with plastic insert / z wkładką plastikową
H = 58 mm, L = 150 mm



24h

TYPE "Q" | **TYP „Q"**
H = 60 mm, L = 150 mm

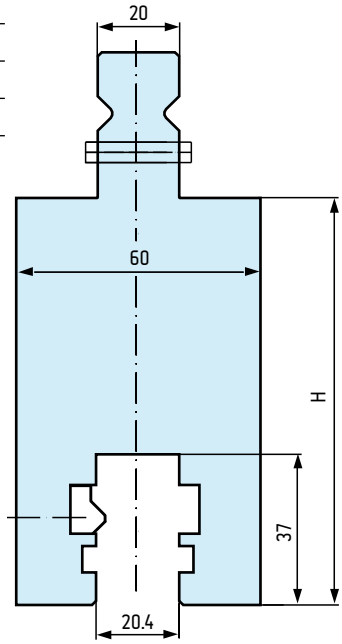




type "T" adaptor | adapter typu „T"

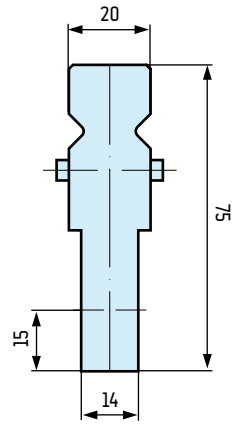
24h

TYPE "T/T" | **TYP „T/T"**
H = 60 mm, L = 100 mm
H = 80 mm, L = 100 mm
H = 100 mm, L = 100 mm
H = 150 mm, L = 100 mm



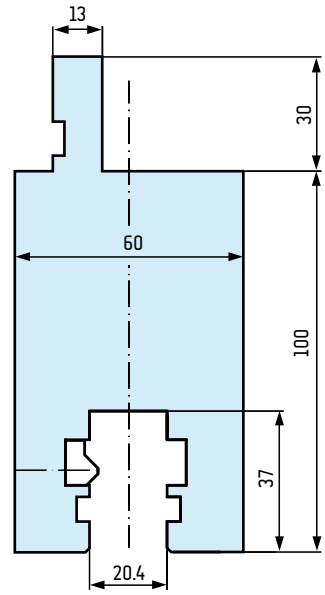
24h

TYPE "T/A" 75 | **TYP „T/A" 75**
H = 75 mm, L = 150 mm



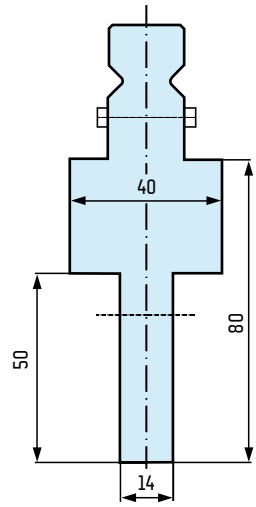
system changing adaptors | adaptery międzysystemowe

TYPE "A/T" | **TYP „A/T"**
H = 100 mm, L = 100 mm



24h

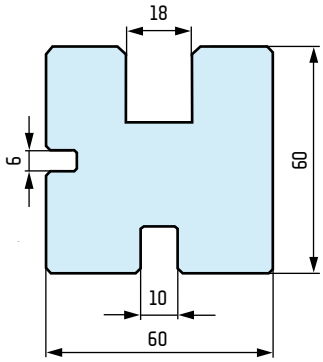
TYPE "T/A" 80 | **TYP „T/A" 80**
H = 80 mm, L = 150 mm



multiple vee dies | matryce wielorowkowe

24h

MR 100 t/m



24h

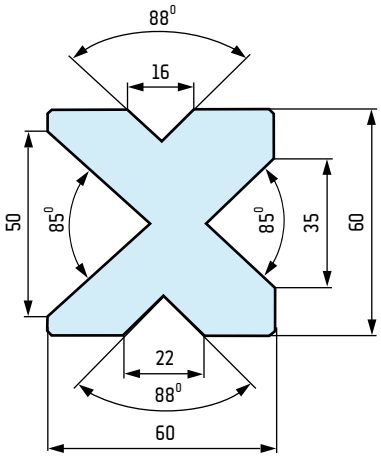
M 4 80 t/m

$\alpha = 85^0, 88^0$

42CrMo4

M 4 80 t/m

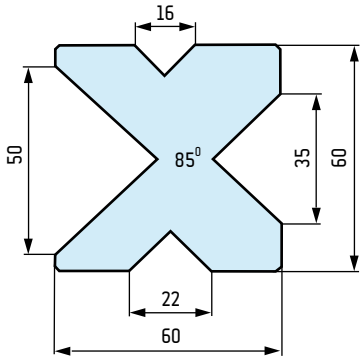
$\alpha = 85^0, 88^0$



24h

M 4/85⁰ 80 t/m

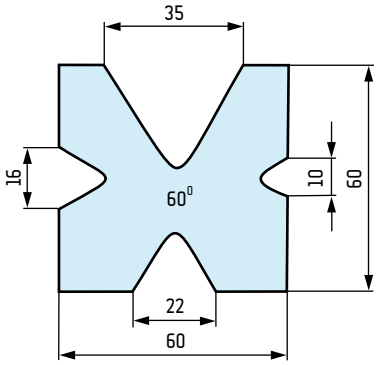
$\alpha = 85^0$



24h

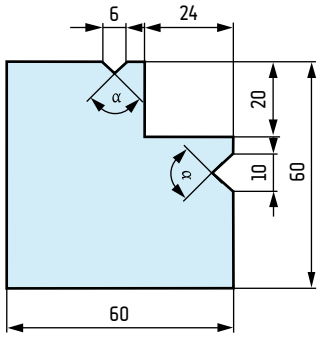
M 4/60⁰ 60 t/m

$\alpha = 60^0$



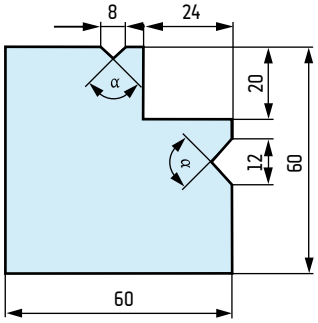
M 2/6 – 10 100 t/m

$\alpha = 90^0$



M 2/8 –12 100 t/m

$\alpha = 90^0$



TYPE "A" DIES | **MATRYCE TYPU „A"**

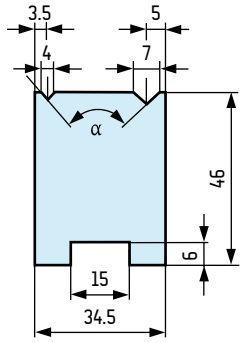
with groove | **rowkowe**

M 6019 100 t/m

α = 90°

M 6119 80 t/m

α = 88°



M 6020 80 t/m

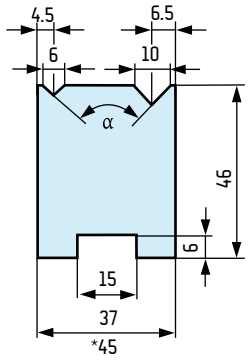
α = 90°

M 6120 80 t/m

α = 88°

M 6220 35 t/m*

α = 30°



M 6021 80 t/m

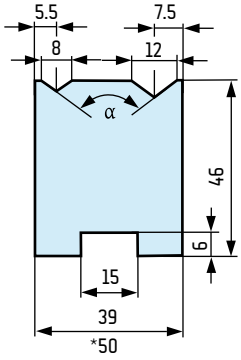
α = 90°

M 6121 80 t/m

α = 88°

M 6221 40 t/m

α = 30°

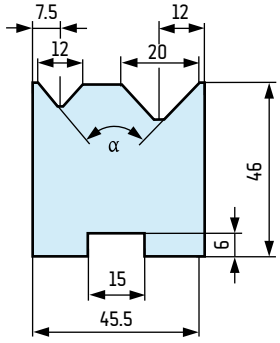


M 6022 80 t/m

α = 90°

M 6122 80 t/m

α = 88°

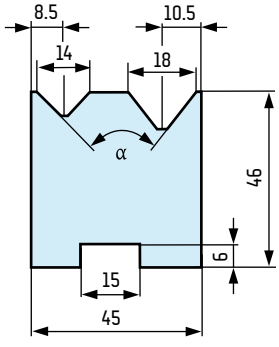


M 6023 80 t/m

α = 90°

M 6123 80 t/m

α = 88°

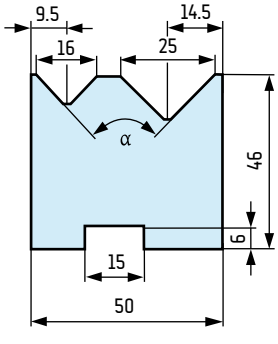


M 6024 80 t/m

α = 90°

M 6124 80 t/m

α = 88°

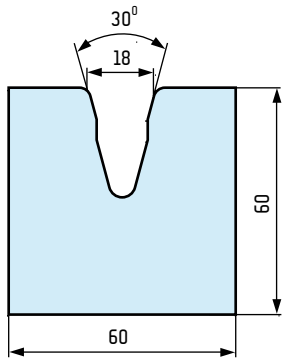


1V dies | matryce 1V

M 3330/18

α = 30⁰

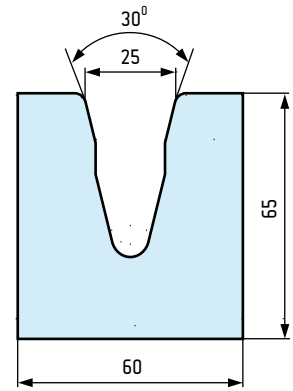
V = 18 mm



M 3330/25

α = 30⁰

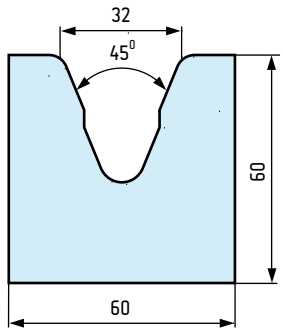
V = 25 mm



M 3345/32

α = 45⁰

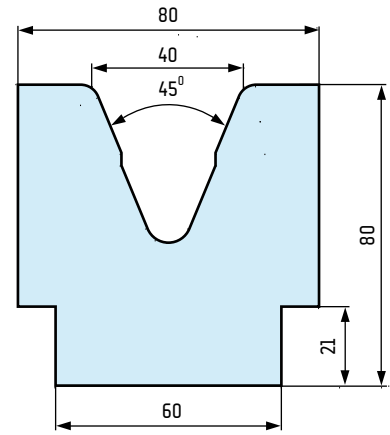
V = 32 mm



M 3345/40

α = 45⁰

V = 40 mm



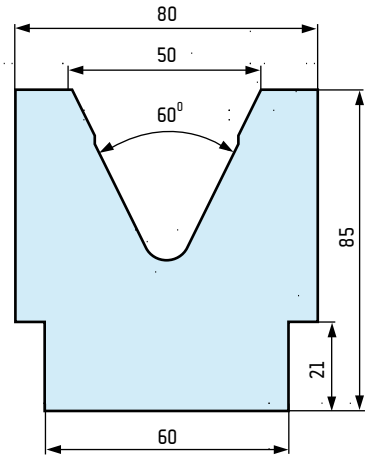
1V dies | matryce 1V

24h

M 3360/50

$\alpha = 60^0$

$V = 50\ mm$

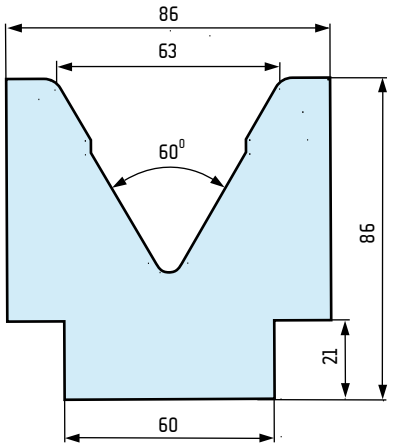


24h

M 3360/63

$\alpha = 60^0$

$V = 63\ mm$

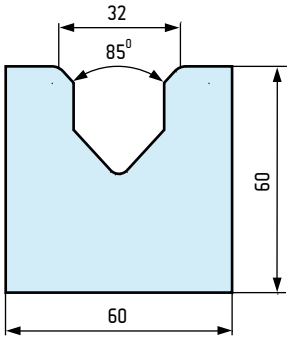


24h

M 3385/32

$\alpha = 85^0$

$V = 32\ mm$

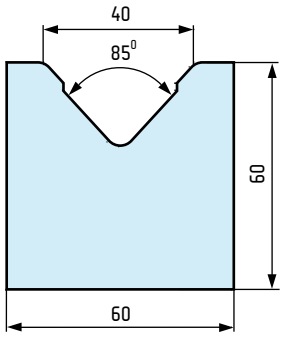


24h

M 3385/40

$\alpha = 85^0$

$V = 40\ mm$

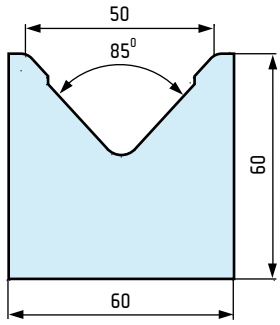


1V dies | matryce 1V

M 3385/50

α = 85⁰

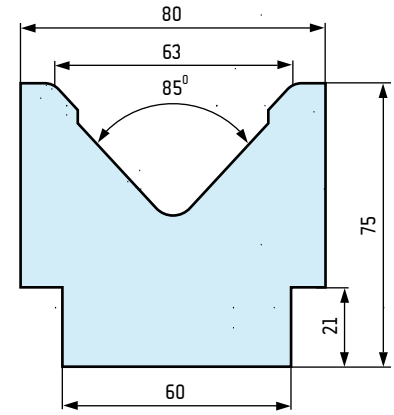
V = 50 mm



M 3385/63

α = 85⁰

V = 63 mm



M 3385/80

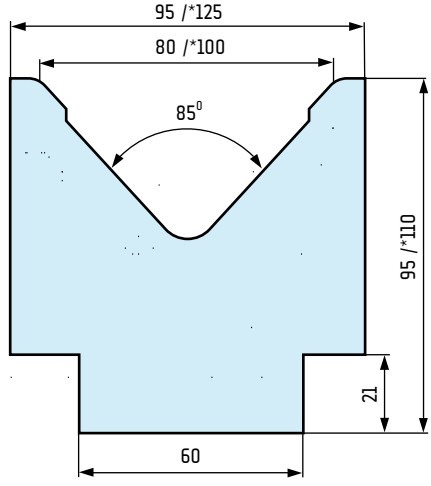
α = 85⁰

V = 80 mm

M 3385/100 *

*α = 85⁰**

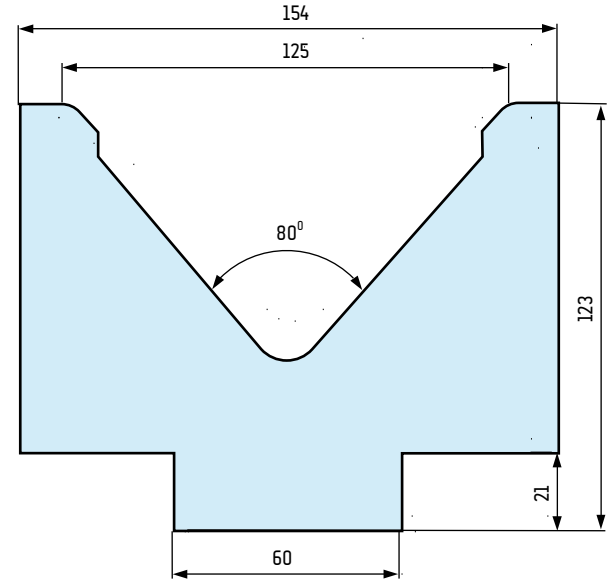
*V = 100 mm **



M 3380/125

α = 80⁰

V = 125 mm



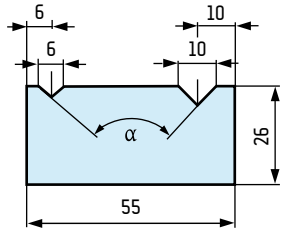
TYPE "A" DIES | MATRYCE TYPU „A"

bolt fastened | mocowane śrubami

24h

M 6112 100 t/m

α = 90°



24h

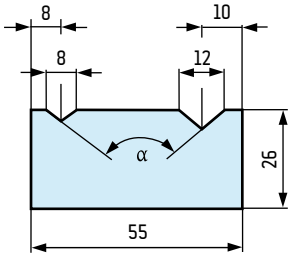
M 6212 80 t/m

α = 60°

24h

M 6113 100 t/m

α = 90°



24h

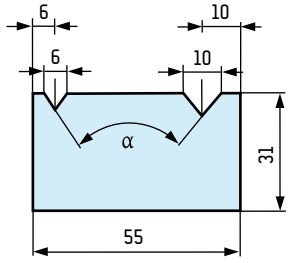
M 6213 80 t/m

α = 60°

24h

M 6312 60 t/m

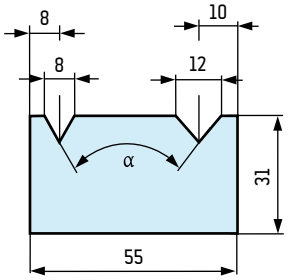
α = 35°



24h

M 6313 60 t/m

α = 35°



24h

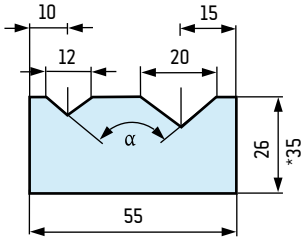
M 6114 100 t/m

α = 88°

24h

M 6214 80 t/m *

α = 60°



24h

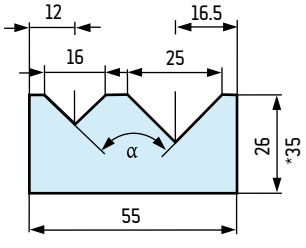
M 6115 100 t/m

α = 88°

24h

M 6215 80 t/m *

α = 60°



TYPE "A" DIES | MATRYCE TYPU „A"

dies with base H = 80 mm | matryce z podstawą H = 80 mm

M 6130 30 t/m

A = 8 mm, B = 16 mm

R_1 = 1 mm, R_2 = 1 mm

M 6230 35 t/m

A = 10 mm, B = 20 mm

R_1 = 1 mm, R_2 = 1 mm

M 6330 35 t/m

A = 12 mm, B = 22 mm

R_1 = 1 mm, R_2 = 1 mm

M 6430 45 t/m

A = 16 mm, B = 30 mm

R_1 = 2 mm, R_2 = 2 mm

M 6530 30 t/m

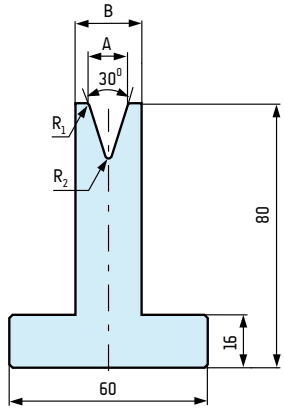
A = 6 mm, B = 14 mm

R_1 = 0.8 mm, R_2 = 0.8 mm

M 6630 50 t/m

A = 20 mm, B = 35 mm

R_1 = 4 mm, R_2 = 4 mm



M 6135 35 t/m

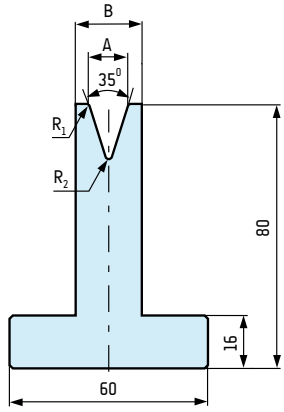
A = 8 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.8 mm

M 6235 40 t/m

A = 12 mm, B = 18 mm

R_1 = 2 mm, R_2 = 1 mm



M 6145 50 t/m

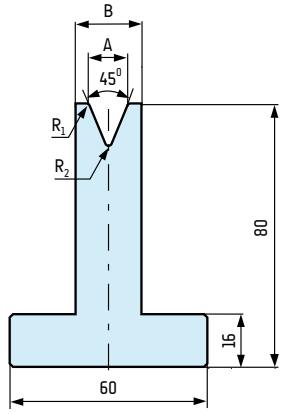
A = 10 mm, B = 16 mm

R_1 = 2 mm, R_2 = 1 mm

M 6245 50 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm



TYPE "A" DIES | MATRYCE TYPU „A"

dies with base H = 80 mm | matryce z podstawą H = 80 mm

24h

M 6160 60 t/m

A = 8 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.8 mm

24h

M 6260 60 t/m

A = 10 mm, B = 16 mm

R_1 = 2 mm, R_2 = 1 mm

24h

M 6360 60 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

24h

M 6460 60 t/m

A = 16 mm, B = 24 mm

R_1 = 1.5 mm, R_2 = 1.5 mm

24h

M 6560 60 t/m

A = 20 mm, B = 30 mm

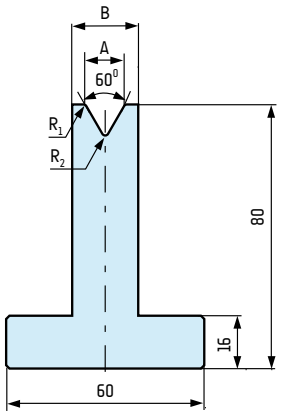
R_1 = 2 mm, R_2 = 2 mm

24h

M 6660 60 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm



24h

M 6085 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1 mm, R_2 = 0.5 mm

24h

M 6185 100 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

24h

M 6285 100 t/m

A = 16 mm, B = 24 mm

R_1 = 2.5 mm, R_2 = 1 mm

24h

M 6385 100 t/m

A = 20 mm, B = 30 mm

R_1 = 3 mm, R_2 = 15 mm

24h

M 6485 100 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm

24h

M 6585 100 t/m

A = 10 mm, B = 18 mm

R_1 = 1 mm, R_2 = 1 mm

24h

M 6688 100 t/m

A = 14 mm, B = 18 mm

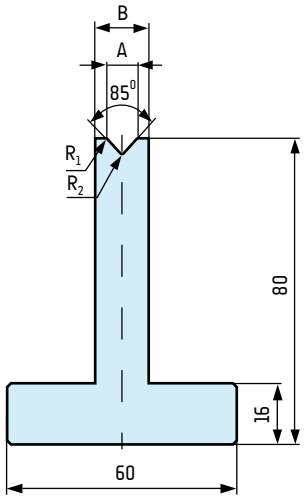
R_1 = 2.6 mm, R_2 = 0.4 mm

24h

M 6785 100 t/m

A = 6 mm, B = 14 mm

R_1 = 0.5 mm, R_2 = 0.5 mm



24h

M 6088 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1 mm, R_2 = 0.5 mm

24h

M 6188 100 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

24h

M 6288 100 t/m

A = 16 mm, B = 24 mm

R_1 = 2.5 mm, R_2 = 1 mm

24h

M 6388 100 t/m

A = 20 mm, B = 30 mm

R_1 = 3 mm, R_2 = 1.5 mm

24h

M 6488 100 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm

24h

M 6588 100 t/m

A = 10 mm, B = 18 mm

R_1 = 1 mm, R_2 = 1 mm

24h

M 6688 100 t/m

A = 14 mm, B = 18 mm

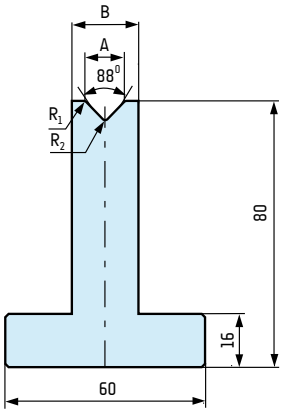
R_1 = 2.6 mm, R_2 = 0.4 mm

24h

M 6788 100 t/m

A = 6 mm, B = 14 mm

R_1 = 0.5 mm, R_2 = 0.5 mm



TYPE "A" DIES | MATRYCE TYPU „A"

dies with base H = 80 mm | matryce z podstawą H = 80 mm

24h

M 6190 100 t/m

A = 6 mm, B = 12 mm

R_1 = 1.5 mm, R_2 = 0.5 mm

24h

M 6290 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.8 mm

24h

M 6390 100 t/m

A = 10 mm, B = 16 mm

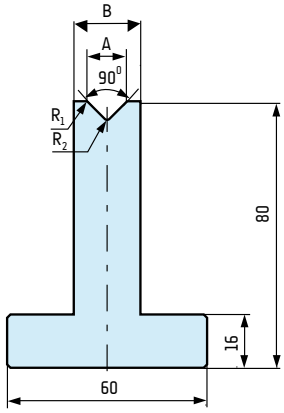
R_1 = 2 mm, R_2 = 1 mm

24h

M 6490 100 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1.5 mm



dies with base H = 120 mm | matryce z podstawą H = 120 mm

24h

M 9130 30 t/m

A = 8 mm, B = 18 mm

R_1 = 1 mm, R_2 = 1 mm

24h

M 9230 35 t/m

A = 10 mm, B = 24 mm

R_1 = 1 mm, R = 1 mm

24h

M 9330 35 t/m

A = 12 mm, B = 24 mm

R_1 = 1 mm, R_2 = 1 mm

24h

M 9430 45 t/m

A = 16 mm, B = 30 mm

R_1 = 2 mm, R_2 = 2 mm

24h

M 9530 30 t/m

A = 6 mm, B = 14 mm

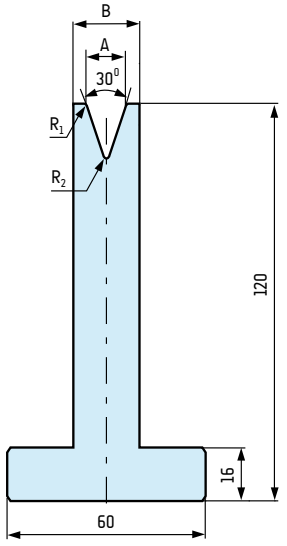
R_1 = 0.8 mm, R = 0.8 mm

24h

M 9630 50 t/m

A = 20 mm, B = 35 mm

R_1 = 4 mm, R_2 = 4 mm



24h

M 9135 35 t/m

A = 8 mm, B = 18 mm

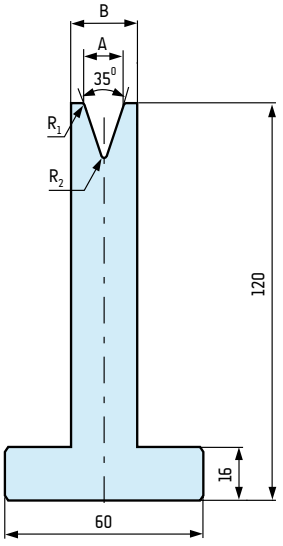
R_1 = 1.5 mm, R_2 = 0.8 mm

24h

M 9235 40 t/m

A = 12 mm, B = 18 mm

R_1 = 2 mm, R_2 = 1 mm



TYPE "A" DIES | MATRYCE TYPU „A"

dies with base H = 120 mm | matryce z podstawą H = 120 mm

M 9145 50 t/m

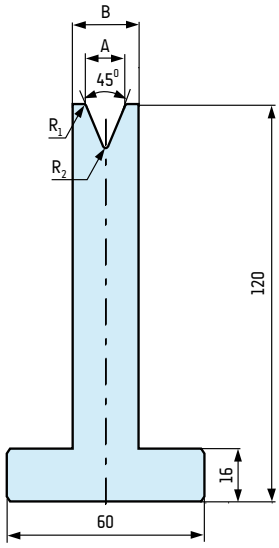
A = 10 mm, B = 18 mm

R_1 = 2 mm, R_2 = 1 mm

M 9245 50 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm



M 9160 60 t/m

A = 8 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.8 mm

M 9260 60 t/m

A = 10 mm, B = 18 mm

R_1 = 2 mm, R_2 = 1 mm

M 9360 60 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

M 9460 60 t/m

A = 16 mm, B = 24 mm

R_1 = 1.5 mm, R_2 = 1.5 mm

M 9560 60 t/m

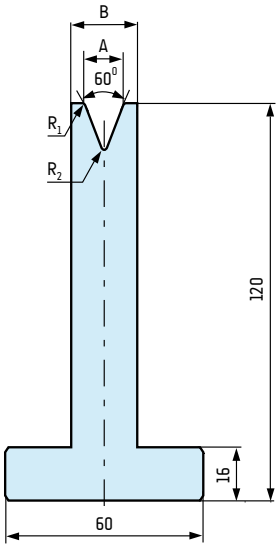
A = 20 mm, B = 30 mm

R_1 = 2 mm, R_2 = 2 mm

M 9660 60 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm



M 9085 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1 mm, R_2 = 0.5 mm

M 9185 100 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

M 9285 100 t/m

A = 16 mm, B = 24 mm

R_1 = 2.5 mm, R_2 = 1 mm

M 9385 100 t/m

A = 20 mm, B = 30 mm

R_1 = 3 mm, R_2 = 1.5 mm

M 9485 100 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm

M 9585 100 t/m

A = 10 mm, B = 18 mm

R_1 = 1 mm, R_2 = 1 mm

M 9685 100 t/m

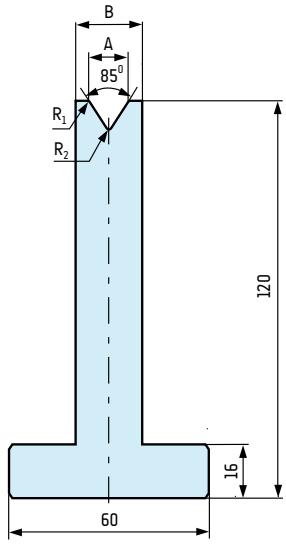
A = 14 mm, B = 18 mm

R_1 = 2.6 mm, R_2 = 0.4 mm

M 9785 100 t/m

A = 6 mm, B = 14 mm

R_1 = 0.5 mm, R_2 = 0.5 mm



TYPE "A" DIES | MATRYCE TYPU „A"

dies with base H = 120 mm | matryce z podstawą H = 120 mm

M 9088 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1 mm, R_2 = 0.5 mm

M 9188 100 t/m

A = 12 mm, B = 18 mm

R_1 = 2.5 mm, R_2 = 1 mm

M 9288 100 t/m

A = 16 mm, B = 24 mm

R_1 = 2.5 mm, R_2 = 1 mm

M 9388 100 t/m

A = 20 mm, B = 30 mm

R_1 = 3 mm, R_2 = 1.5 mm

M 9488 100 t/m

A = 25 mm, B = 40 mm

R_1 = 3 mm, R_2 = 3 mm

M 9588 100 t/m

A = 10 mm, B = 18 mm

R_1 = 1 mm, R_2 = 1 mm

M 9688 100 t/m

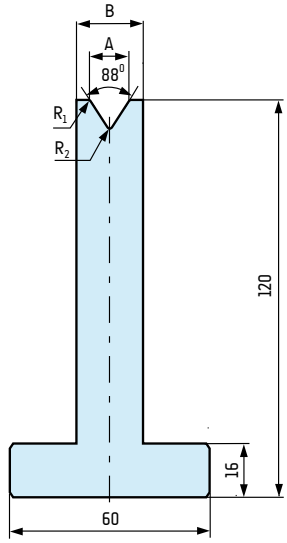
A = 14 mm, B = 18 mm

R_1 = 2.6 mm, R_2 = 0.4 mm

M 9788 100 t/m

A = 6 mm, B = 14 mm

R_1 = 0.5 mm, R_2 = 0.5 mm



M 9190 100 t/m

A = 6 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.5 mm

M 9290 100 t/m

A = 8 mm, B = 14 mm

R_1 = 1.5 mm, R_2 = 0.8 mm

M 9390 100 t/m

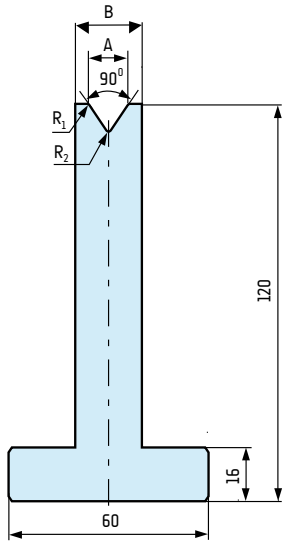
A = 10 mm, B = 18 mm

R_1 = 2 mm, R_2 = 1 mm

M 9490 100 t/m

A = 12 mm, B = 18 mm

R_1 = 3 mm, R_2 = 0.8 mm



TYPE "A" DIES | MATRYCE TYPU „A"

Dies fixed using die supports A 31 or A 61 –> p. 52
Matryce montowane przy pomocy wkładek A 31 lub A 61 –> str 52

insert dies | matryce wkładkowe

24h 42CrMo4

M 8130

$\alpha = 30^0$

A = 6 mm, B = 16 mm

24h 42CrMo4

M 8230

$\alpha = 30^0$

A = 8 mm, B = 19 mm

24h 42CrMo4

M 8330

$\alpha = 30^0$

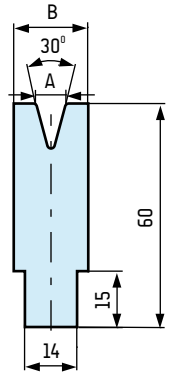
A = 10 mm, B = 24 mm

24h 42CrMo4

M 8430

$\alpha = 30^0$

A = 12 mm, B = 25 mm



24h 42CrMo4

M 8160

$\alpha = 60^0$

A = 6 mm, B = 14 mm

24h 42CrMo4

M 8260

$\alpha = 60^0$

A = 8 mm, B = 15 mm

24h 42CrMo4

M 8360

$\alpha = 60^0$

A = 10 mm, B = 18 mm

24h 42CrMo4

M 8460

$\alpha = 60^0$

A = 12 mm, B = 18 mm

24h 42CrMo4

M 8560

$\alpha = 60^0$

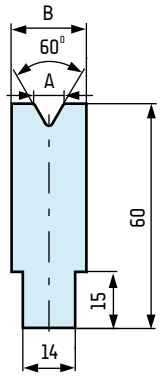
A = 16 mm, B = 24 mm

24h 42CrMo4

M 8660

$\alpha = 60^0$

A = 20 mm, B = 30 mm



24h 42CrMo4

M 8188

$\alpha = 88^0$

A = 6 mm, B = 14 mm

24h 42CrMo4

M 8288

$\alpha = 88^0$

A = 8 mm, B = 14 mm

24h 42CrMo4

M 8388

$\alpha = 88^0$

A = 10 mm, B = 15 mm

24h 42CrMo4

M 8488

$\alpha = 88^0$

A = 12 mm, B = 17 mm

24h 42CrMo4

M 8588

$\alpha = 88^0$

A = 14 mm, B = 18 mm

24h 42CrMo4

M 8688

$\alpha = 88^0$

A = 16 mm, B = 21 mm

24h 42CrMo4

M 8788

$\alpha = 88^0$

A = 18 mm, B = 23 mm

24h 42CrMo4

M 8888

$\alpha = 88^0$

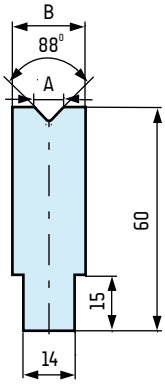
A = 20 mm, B = 25 mm

24h 42CrMo4

M 8988

$\alpha = 88^0$

A = 25 mm, B = 30 mm



24h 42CrMo4

M 8190

$\alpha = 90^0$

A = 6 mm, B = 14 mm

24h 42CrMo4

M 8290

$\alpha = 90^0$

A = 8 mm, B = 14 mm

24h 42CrMo4

M 8390

$\alpha = 90^0$

A = 10 mm, B = 15 mm

24h 42CrMo4

M 8490

$\alpha = 90^0$

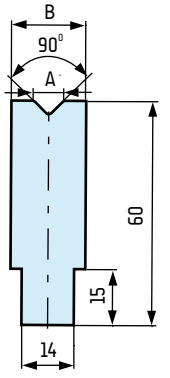
A = 12 mm, B = 17 mm

24h 42CrMo4

M 8590

$\alpha = 90^0$

A = 14 mm, B =18 mm



TYPE "A" DIES | MATRYCE TYPU „A"

flattening dies | matryce do zagniatania

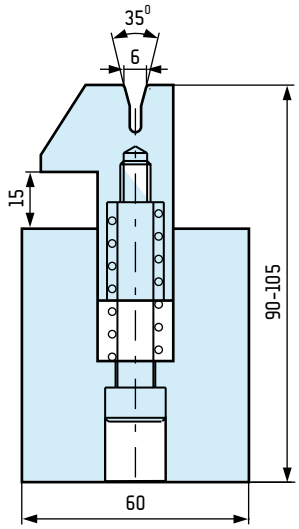
Bending and folding die, upper part moves on springs.
Matryce dwufunkcyjne do gięcia i zagniatania.
Górna część porusza się na sprężynach.

24h

M 3033/6

α = 35°

V = 6 mm

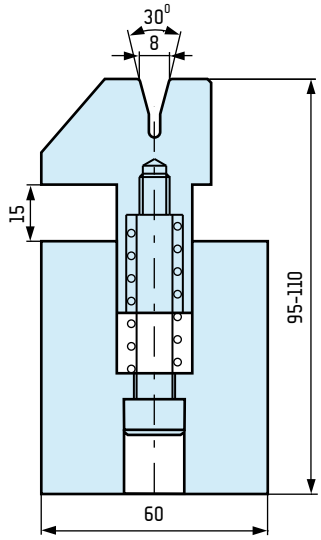


24h

M 3033/8

α = 30°

V = 8 mm

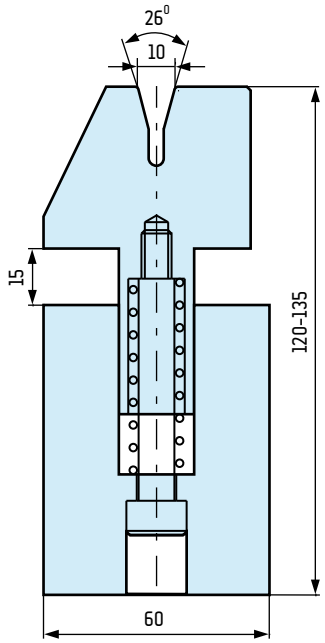


24h

M 3033/10

α = 26°

V = 10 mm

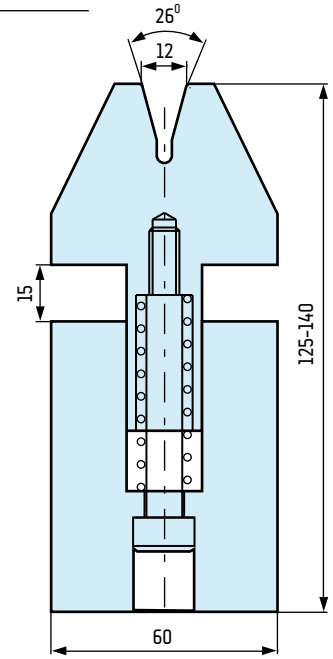


24h

M 3033/12

α = 26°

V = 12 mm



dies with plastic inserts | matryce z wkładkami plastikowymi

W 24

B = 14 mm, H = 15 mm, A = 24 mm

α = 35°, V = 6 mm / 8 mm / 10 mm

α = 45°, V = 6 mm / 8 mm / 10 mm / 12 mm

α = 60°, V = 6 mm / 8 mm / 10 mm / 12 mm / 16 mm

α = 88°, V = 6 mm / 8 mm / 10 mm / 12 mm / 16 mm

W 35

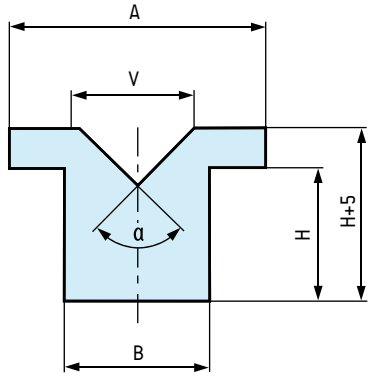
B = 20 mm, H = 19 mm, A = 35 mm

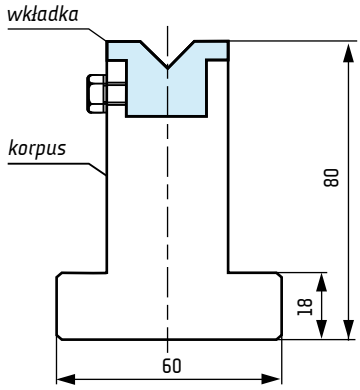
α = 35°, V = 6 mm / 8 mm / 10 mm

α = 45°, V = 6 mm / 8 mm / 10 mm / 12 mm

α = 60°, V = 6 mm / 8 mm / 10 mm / 12 mm / 16 mm / 20 mm

α = 88°, V = 6 mm / 8 mm / 10 mm / 12 mm / 16 mm / 20 mm / 25 mm

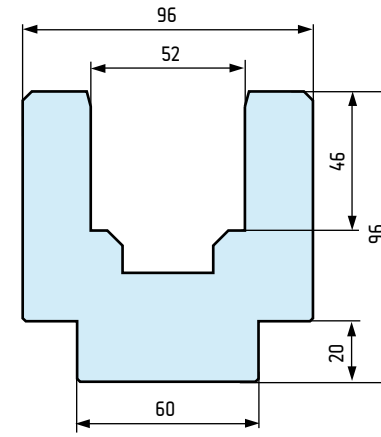




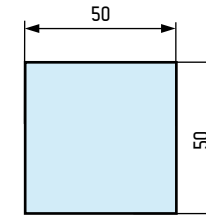
Polyamid inserts allow to minimize bending marks on coated or stainless steel.

Wkładki poliamidowe pozwalają zminimalizować ślady przy gięciu cienkich blach pokrywanych lub nierdzewnych.

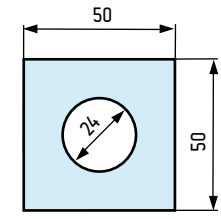
W 50



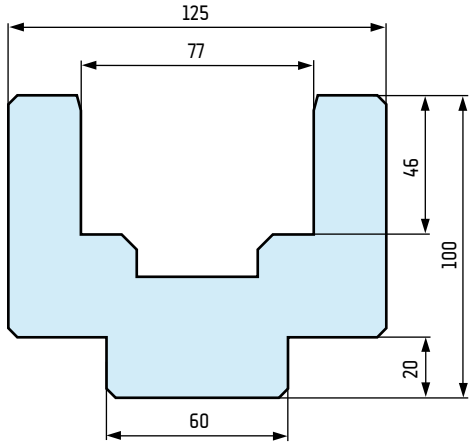
INSERT 50 FULL | WKŁADKA 50 PEŁNA



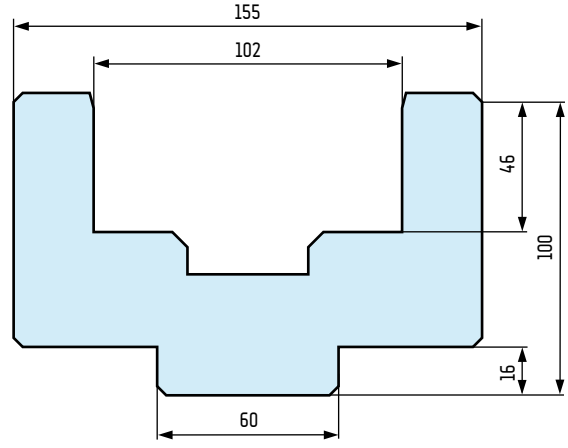
INSERT 50 WITH HOLE | WKŁADKA 50 Z OTWOREM



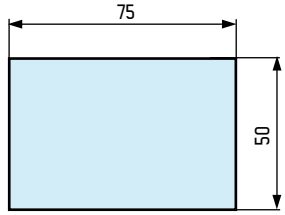
W 75



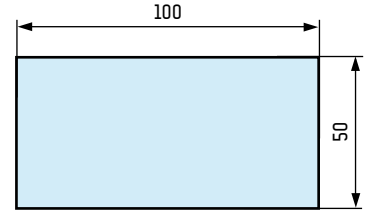
W 100



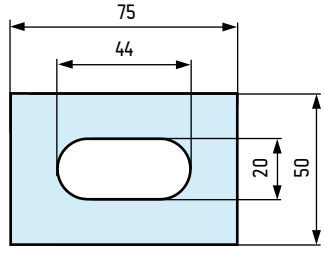
INSERT 75 FULL | **WKŁADKA 75 PEŁNA**



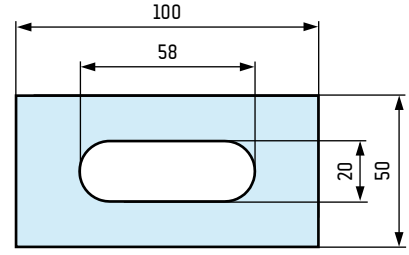
INSERT 100 FULL | **WKŁADKA 100 PEŁNA**



INSERT 75 WITH HOLE | **WKŁADKA 75 Z OTWOREM**



INSERT 100 WITH HOLE | **WKŁADKA 100 Z OTWOREM**

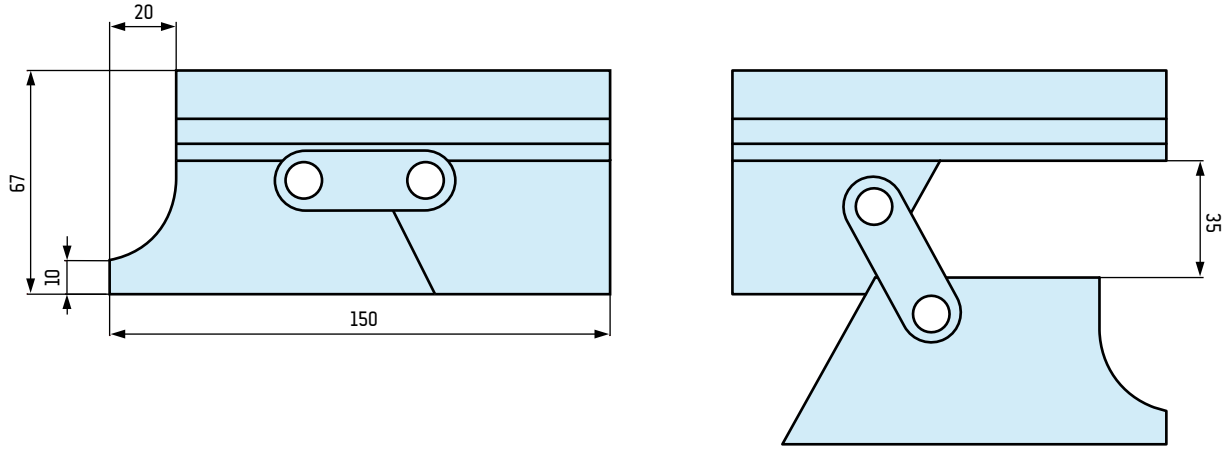


Rubber inserts allow mark free bending. Especially good with type "R" punches.

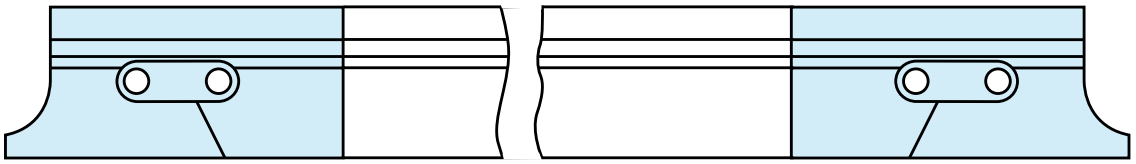
Wkładki gumowe pozwalają na gięcie bez uszkodzeń blachy. Szczególnie polecane ze stemplami „R"

BOX – CLOSING PUNCH | STEMPEL DO ZAMYKANIA PUDEŁEK

Punch with dimensions as S2010/88/R0.8 used for closing boxes.
Stempel o geometrii jak S2010/88/R0.8 służący do zamykania pudełek.



Assembly with S2010.
Złożenie z S2010.



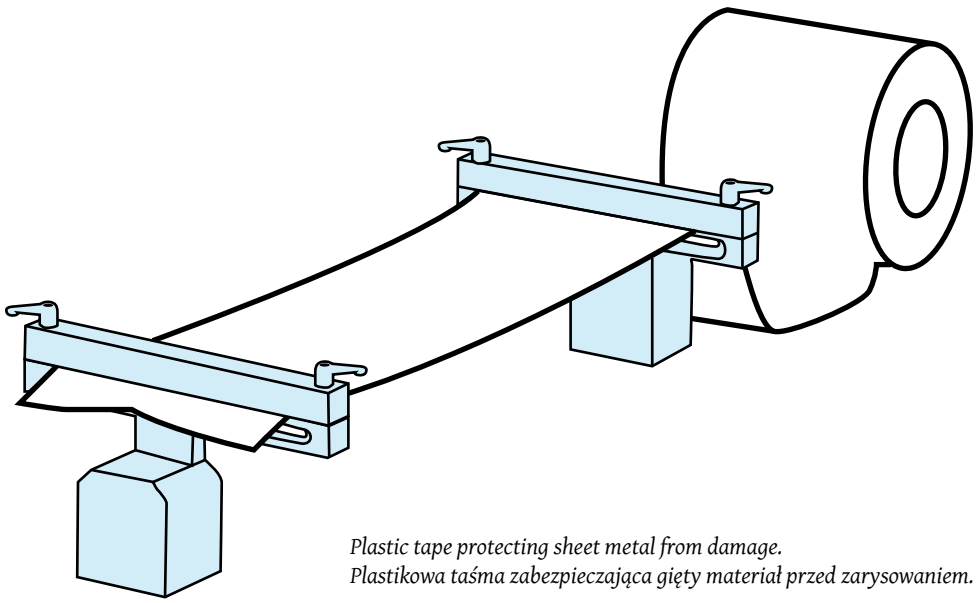
PROTECTIVE TAPE | TAŚMA OCHRONNA

Tape size
thicknes = 0.4 mm, width = 100 mm
thicknes = 0.5 mm, width = 105 mm
thicknes = 0.8 mm, width = 95 mm

Wymiary taśmy
grubość = 0.4 mm, szerokość = 100mm
grubość = 0.5 mm, szerokość = 105 mm
grubość = 0.8 mm, szerokość = 95 mm

Holder for protective tape
suitable for dies size 13 mm to 60 mm

Uchwyt do folii ochronnej
mocowanie do matryc od 13 do 60 mm



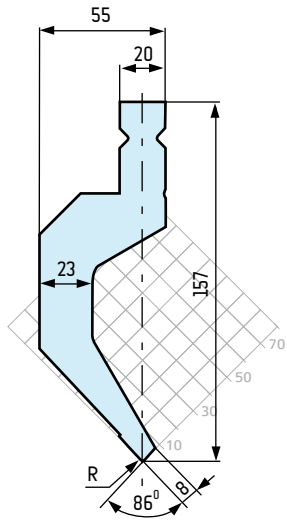
Plastic tape protecting sheet metal from damage.
Plastikowa taśma zabezpieczająca gięty materiał przed zarysowaniem.

24h 42CrMo4

S 2200 80 t/m

$\alpha = 86^0$

R = 1 mm

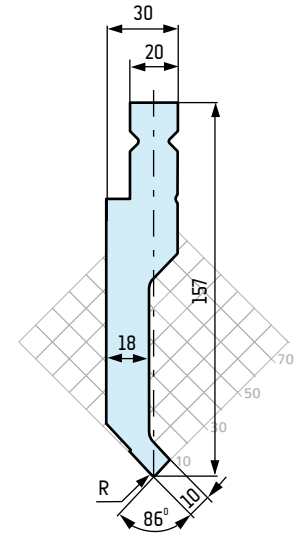


24h 42CrMo4

S 2201 80 t/m

$\alpha = 86^0$

R = 1 mm

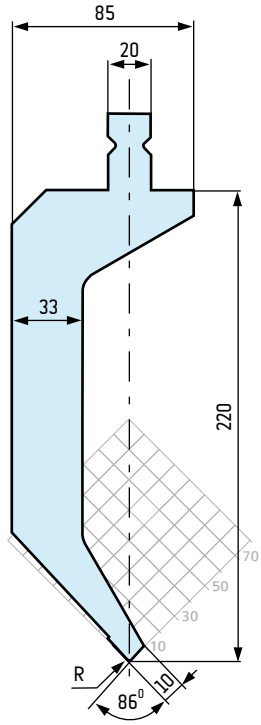


24h 42CrMo4

S 2200 W 80 t/m

$\alpha = 86^0$

R = 1 mm

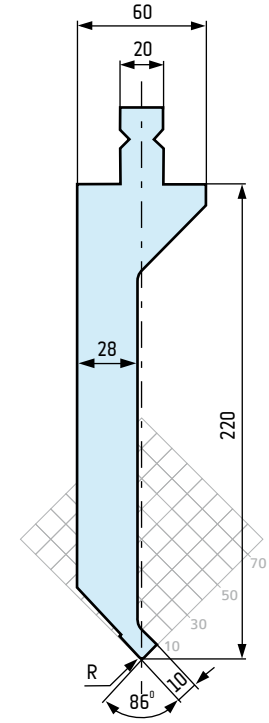


24h 42CrMo4

S 2201 W 80 t/m

$\alpha = 86^0$

R = 1 mm

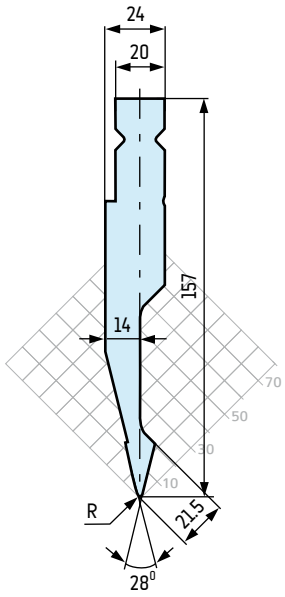


24h 42CrMo4

S 2202 60 t/m

$\alpha = 28^0$

$R = 1\ mm$

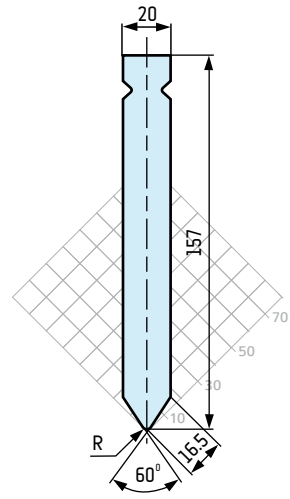


24h 42CrMo4

S 2203 130 t/m

$\alpha = 60^0$

$R = 4\ mm$

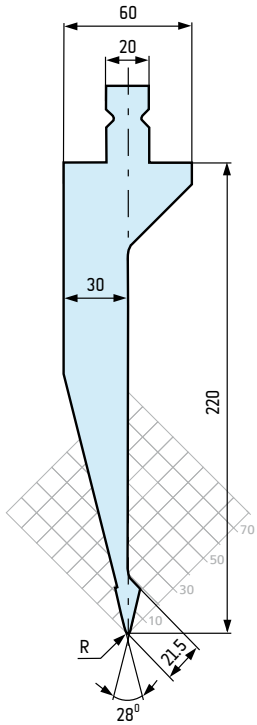


24h 42CrMo4

S 2202 W 60 t/m

$\alpha = 28^0$

$R = 1\ mm$

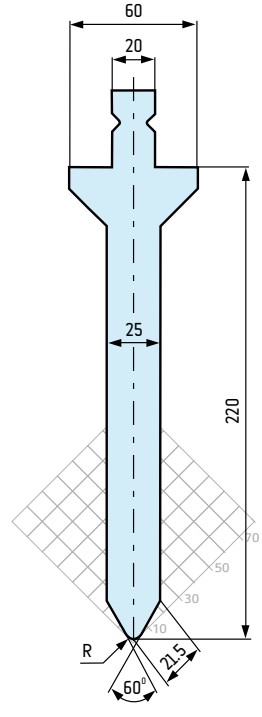


24h 42CrMo4

S 2203 W 130 t/m

$\alpha = 60^0$

$R = 4\ mm$



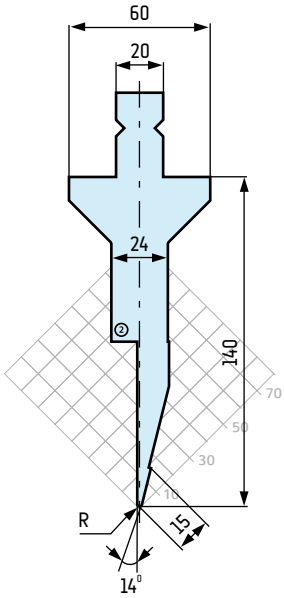
24h 42CrMo4

S 2204 40 t/m

② 130 t/m

$\alpha = 14^0$

R = 1 mm



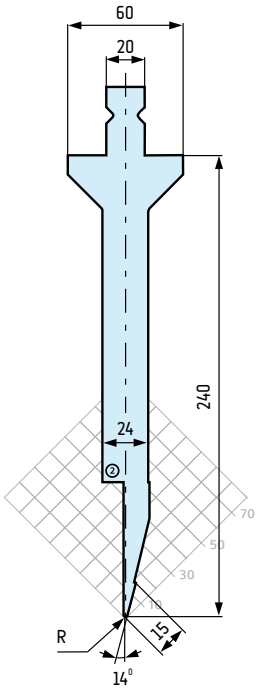
24h 42CrMo4

S 2204 W 40 t/m

② 130 t/m

$\alpha = 14^0$

R = 1 mm



flattening tools | **zestaw do zagniatania**

42CrMo4

S 2205 80 t/m

A = 8 mm, 10 mm, 12 mm

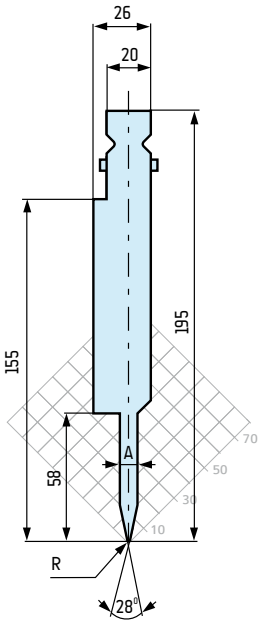
R = 0.6 mm

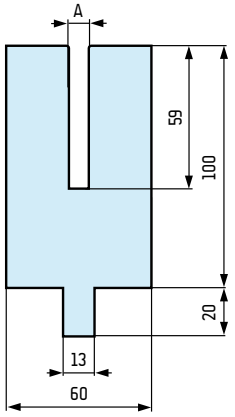
42CrMo4

M 2000 50 t/m

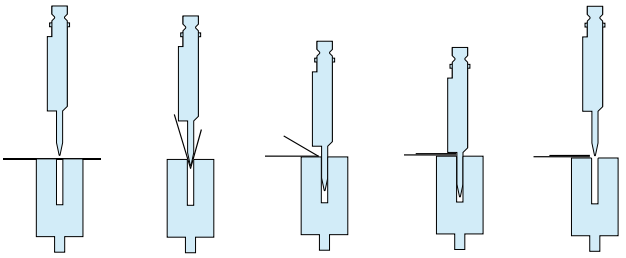
A = 8 mm, 10 mm, 12 mm

R = 0.6 mm





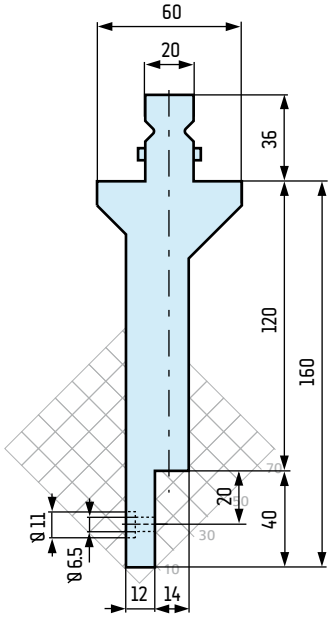
example of use S 2205 and M 2000 | **przykład zastosowania S 2205 i M 2000**



insert punch | **stempel z wkładką**

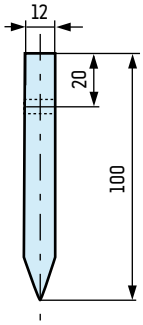
24h 42CrMo4

S 2206 100 t/m



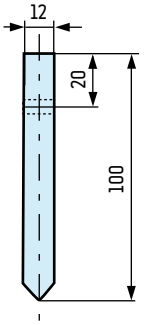
WKŁADKA R 0.3 – R 6

$\alpha = 28^0$



WKŁADKA R 0.2 – R 1.5

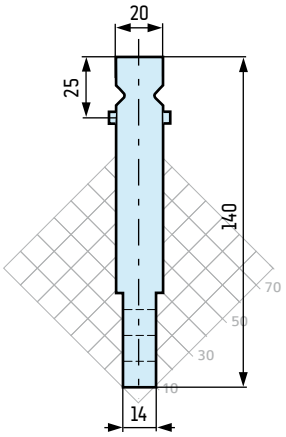
$\alpha = 84^0, 86^0, 90^0$



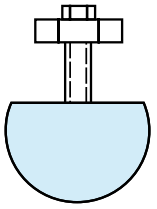
radius punch | **stempel promieniowy**

24h 42CrMo4

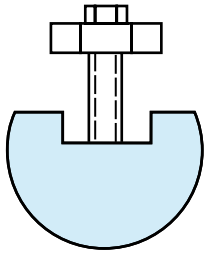
S 2207 80 t/m



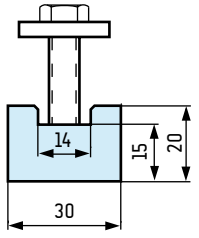
WKŁADKA R 7 – R 12



WKŁADKA R 12.5 – R 50

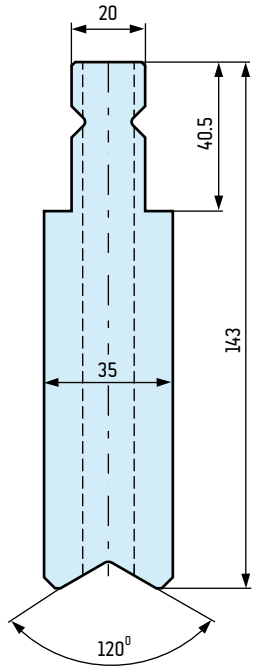


FLATTENING INSERT | **WKŁADKA PŁASKA**



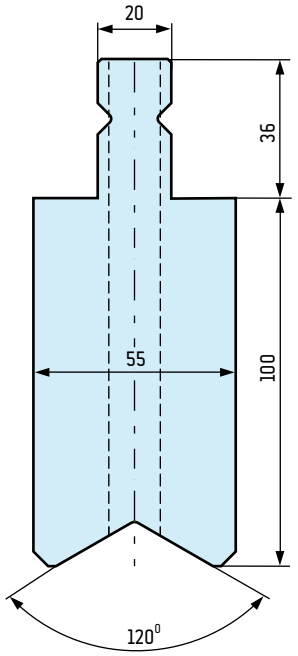
24h 42CrMo4

S 2208 R 10 – R 25

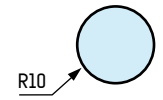


24h 42CrMo4

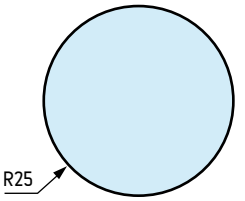
S 2208 W R 25 – R 75



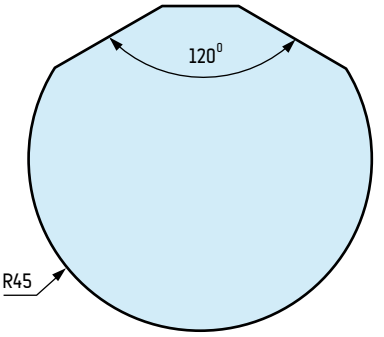
R 10



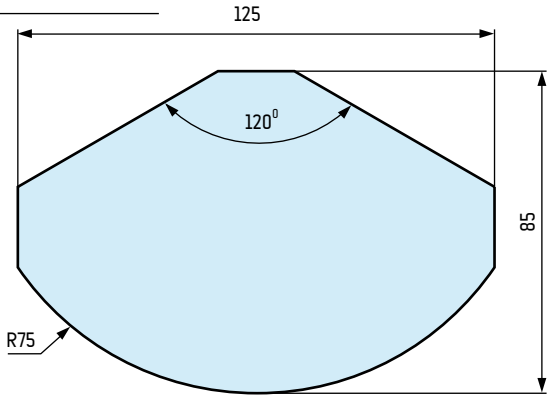
R 25



R 45



R 75



TYPE "T" DIES 100 MM | MATRYCE TYPU „T" 100 MM

24h 42CrMo4

M 7106 100 t/m

A = 6 mm, B = 20 mm

24h 42CrMo4

M 7108 100 t/m

A = 8 mm, B = 20 mm

24h 42CrMo4

M 7110 100 t/m

A = 10 mm, B = 20 mm

24h 42CrMo4

M 7112 100 t/m

A = 12 mm, B = 25 mm

24h 42CrMo4

M 7116 100 t/m

A = 16 mm, B = 30 mm

24h 42CrMo4

M 7120 100 t/m

A = 20 mm, B = 30 mm

24h 42CrMo4

M 7124 100 t/m

A = 24 mm, B = 35 mm

24h 42CrMo4

M 7130 100 t/m

A = 30 mm, B = 45 mm

24h 42CrMo4

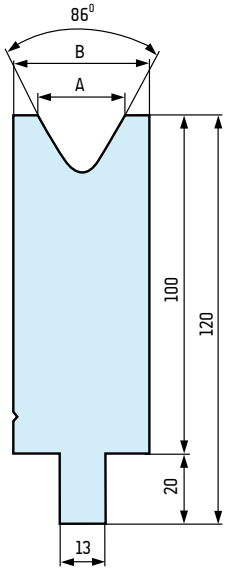
M 7140 100 t/m

A = 40 mm, B = 55 mm

24h 42CrMo4

M 7150 100 t/m

A = 50 mm, B = 75 mm



42CrMo4

M 7260 100 t/m

A = 60 mm, B = 75 mm

42CrMo4

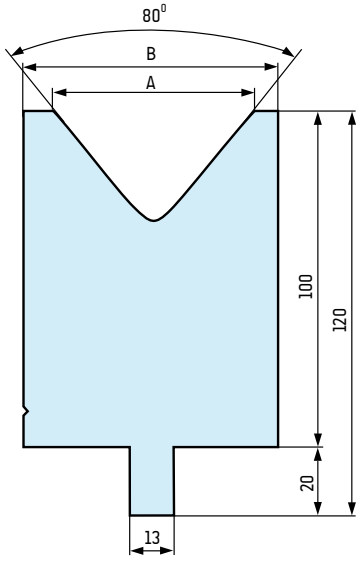
M 7280 100 t/m

A = 80 mm, B = 100 mm

42CrMo4

M 72100 100 t/m

A = 100 mm, B = 120 mm



42CrMo4

M 7306 50 t/m

A = 6 mm, B = 20 mm

42CrMo4

M 7308 40 t/m

A = 8 mm, B = 20 mm

42CrMo4

M 7310 40 t/m

A = 10 mm, B = 20 mm

42CrMo4

M 7312 40 t/m

A = 12 mm, B = 25 mm

42CrMo4

M 7316 45 t/m

A = 16 mm, B = 30 mm

42CrMo4

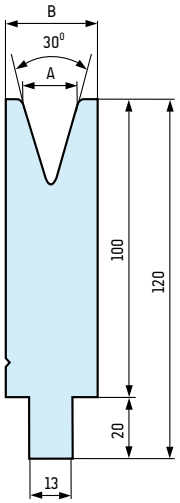
M 7320 50 t/m

A = 20 mm, B = 35 mm

42CrMo4

M 7324 50 t/m

A = 24 mm, B = 40 mm



TYPE "T" DIES 55 MM | MATRYCE TYPU „T" 55 MM

42CrMo4

M 7406 100 t/m

α = 90⁰

A = 6 mm, B = 15 mm

42CrMo4

M 7408 100 t/m

α = 90⁰

A = 8 mm, B = 15 mm

42CrMo4

M 7410 100 t/m

α = 90⁰

A = 10 mm, B = 20 mm

42CrMo4

M 7412 100 t/m

α = 88⁰

A = 12 mm, B = 20 mm

42CrMo4

M 7416 100 t/m

α = 88⁰

A = 16 mm, B = 30 mm

42CrMo4

M 7420 100 t/m

α = 88⁰

A = 20 mm, B = 30 mm

42CrMo4

M 7424 100 t/m

α = 88⁰

A = 24 mm, B = 40 mm

42CrMo4

M 7432 100 t/m

α = 85⁰

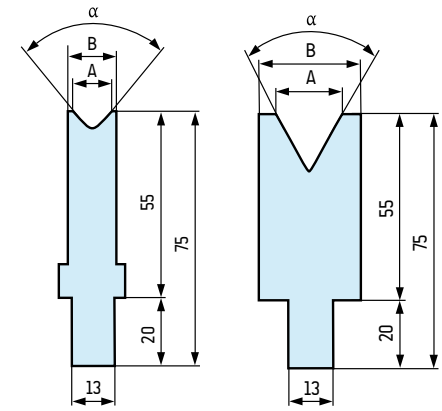
A = 32 mm, B = 50 mm

42CrMo4

M 7440 100 t/m

α = 85⁰

A = 40 mm, B = 55 mm



42CrMo4

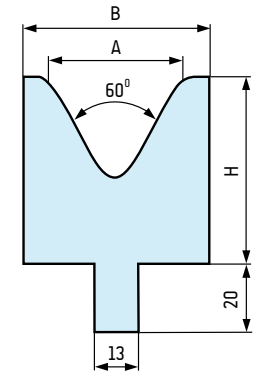
M 7540 80 t/m

A = 40 mm, B = 55 mm, H = 55 mm

42CrMo4

M 7560 60 t/m

A = 60 mm, B = 80 mm, H = 65 mm



42CrMo4

M 7606 35 t/m

A = 6 mm, B = 15 mm

42CrMo4

M 7608 100 t/m

A = 8 mm, B = 15 mm

42CrMo4

M 7610 100 t/m

A = 10 mm, B = 15 mm

42CrMo4

M 7612 40 t/m

A = 12 mm, B = 20 mm

42CrMo4

M 7616 45 t/m

A = 16 mm, B = 30 mm, H = 55 mm

42CrMo4

M 7620 50 t/m

A = 20 mm, B = 35 mm, H = 55 mm

42CrMo4

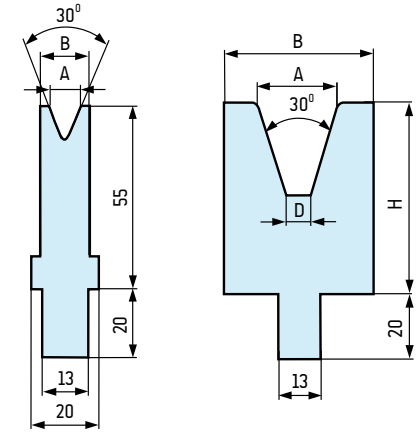
M 7624 50 t/m

A = 24 mm, B = 40 mm, H = 55 mm

42CrMo4

M 7632 50 t/m

A = 32 mm, B = 60 mm, H = 60 mm

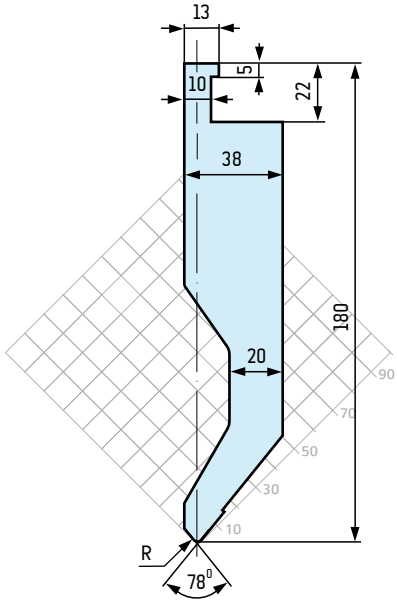


42CrMo4

S 2510 C 70 t/m

$\alpha = 78^0$

$R = 2$ mm

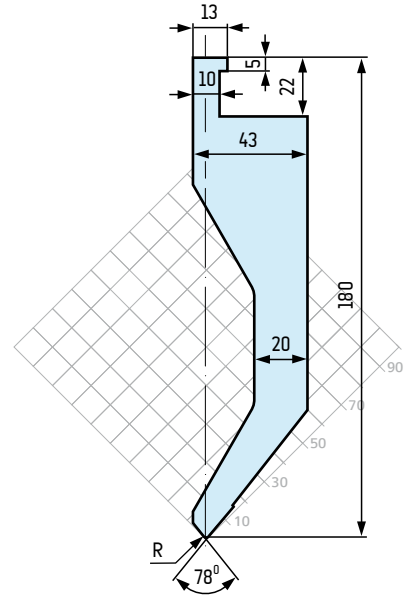


24h 42CrMo4

S 2510 D 40 t/m

$\alpha = 78^0$

$R = 1$ mm

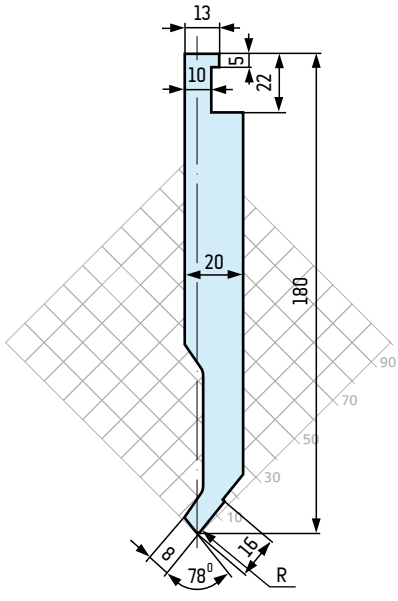


24h 42CrMo4

S 2510 E 40 t/m

$\alpha = 78^0$

$R = 1$ mm

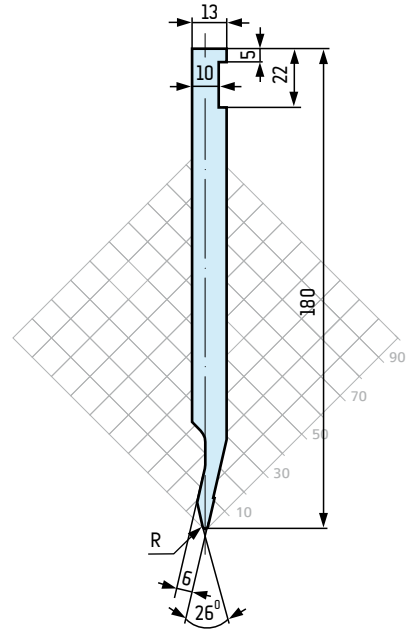


24h 42CrMo4

S 2510 F 40 t/m

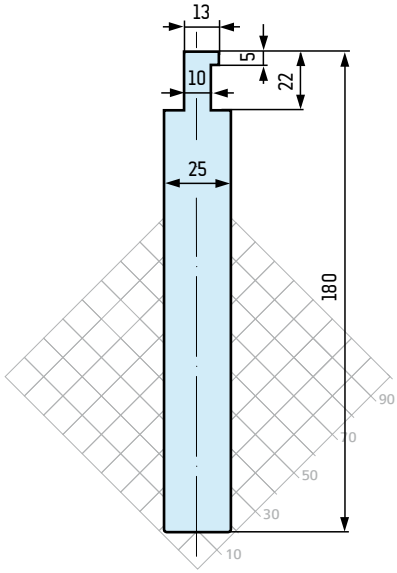
$\alpha = 26^0$

$R = 1$ mm



42CrMo4

S 2510 H 150 t/m

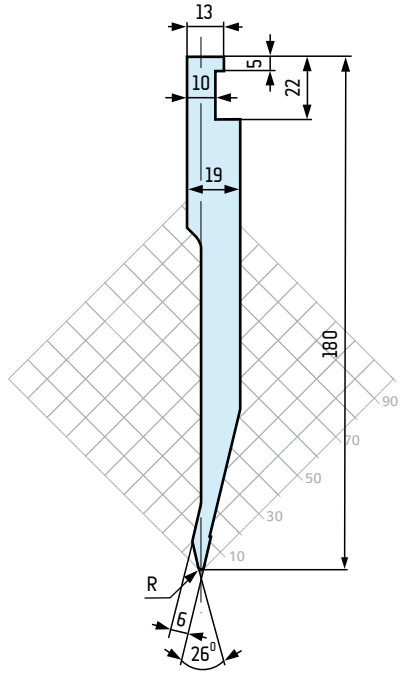


42CrMo4

S 2510 J 40 t/m

α = 26°

R = 1 mm



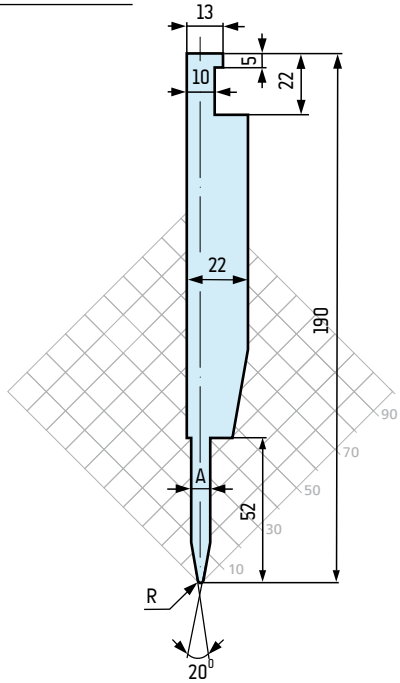
42CrMo4

S 2510 P 40 t/m

α = 20°

R = 1 mm

A = 8 mm, 10 mm, 12 mm

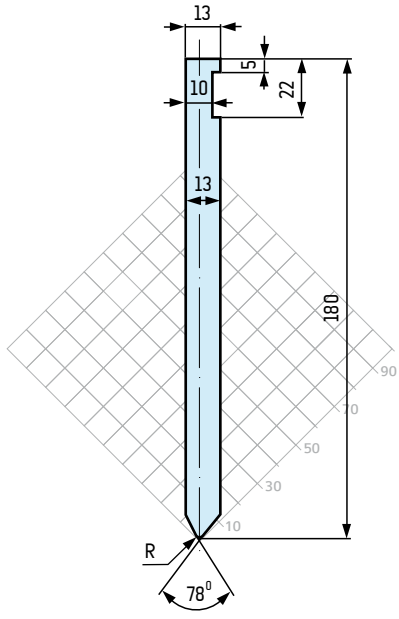


42CrMo4

S 2510 R 80 t/m

α = 78°

R = 2 mm

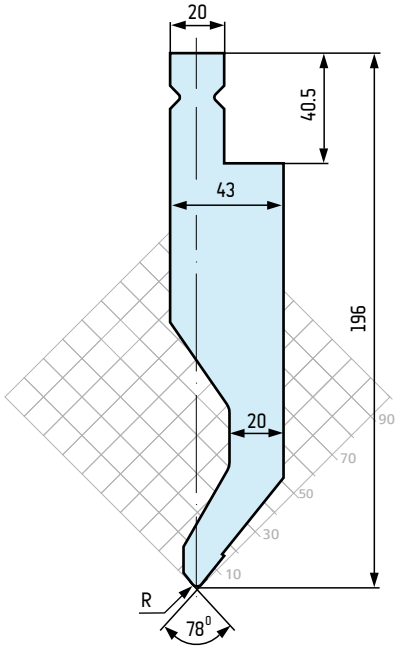


42CrMo4

S 2610 C 70 t/m

$\alpha = 78^0$

$R = 2$ mm

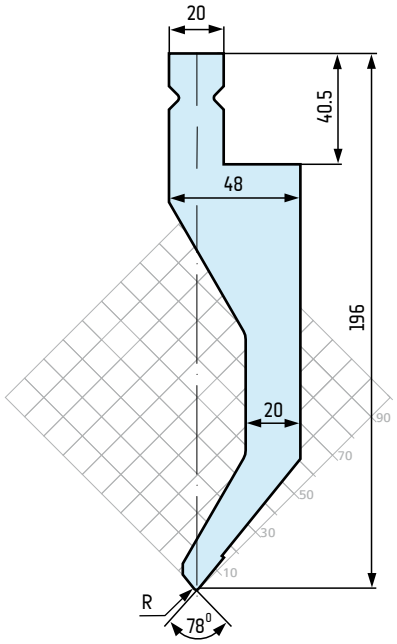


24h 42CrMo4

S 2610 D 40 t/m

$\alpha = 78^0$

$R = 1$ mm

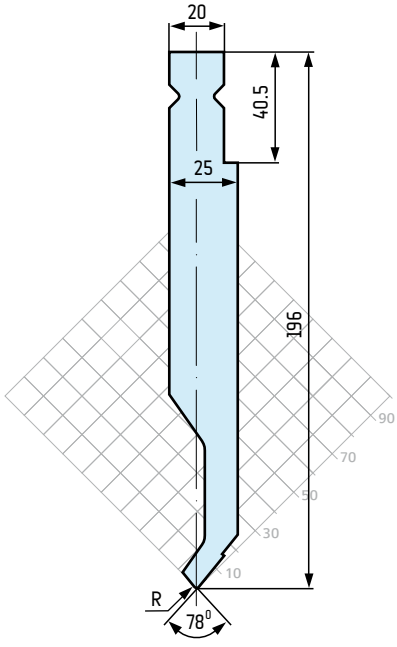


24h 42CrMo4

S 2610 E 40 t/m

$\alpha = 78^0$

$R = 1$ mm

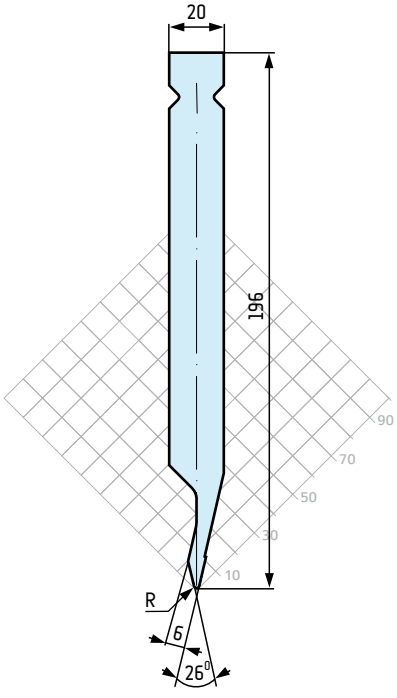


24h 42CrMo4

S 2610 F 40 t/m

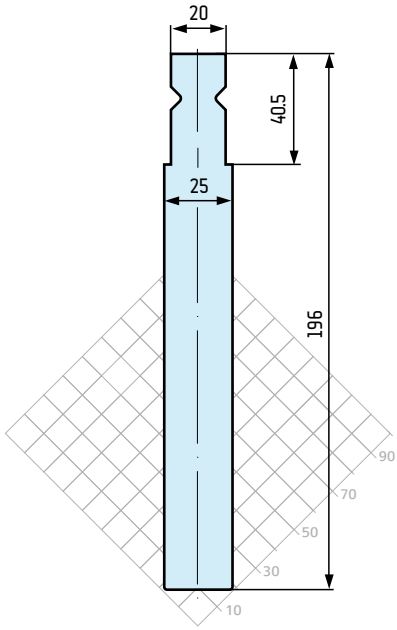
$\alpha = 26^0$

$R = 1$ mm



42CrMo4

S 2610 H 160 t/m

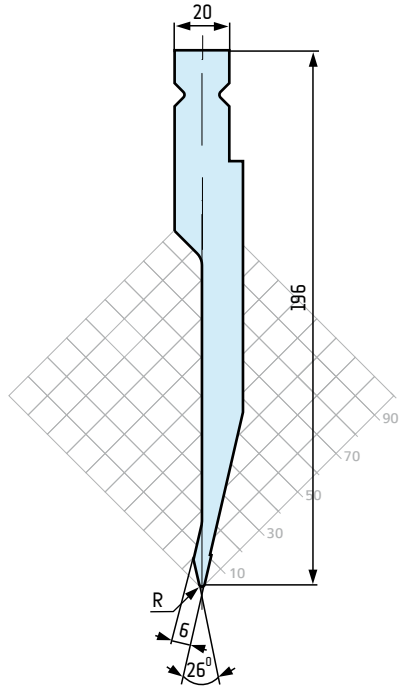


42CrMo4

S 2610 J 40 t/m

α = 26°

R = 1 mm



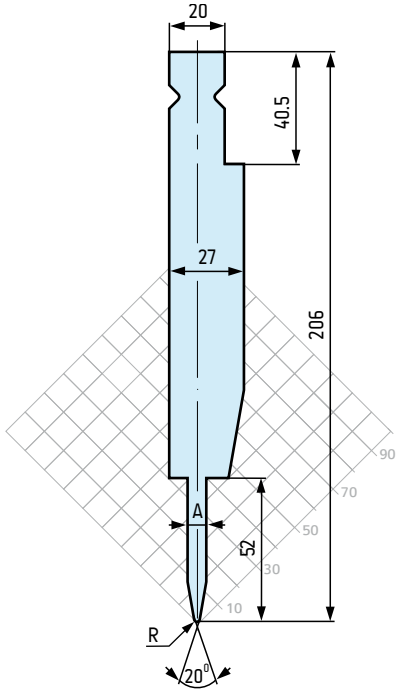
42CrMo4

S 2610 P 40 t/m

α = 20°

R = 1 mm

A = 8 mm, 10 mm, 12 mm

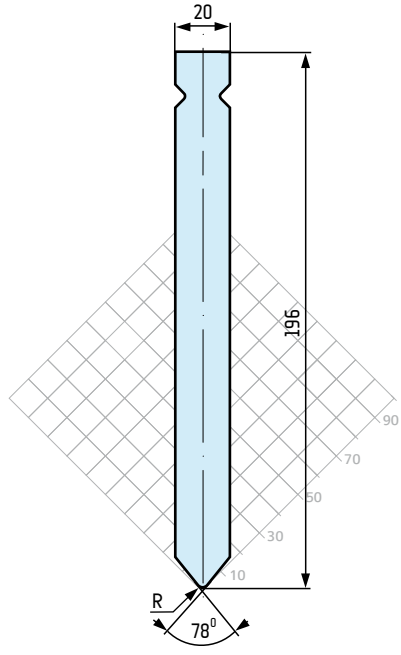


42CrMo4

S 2610 R 80 t/m

α = 78°

R = 2 mm

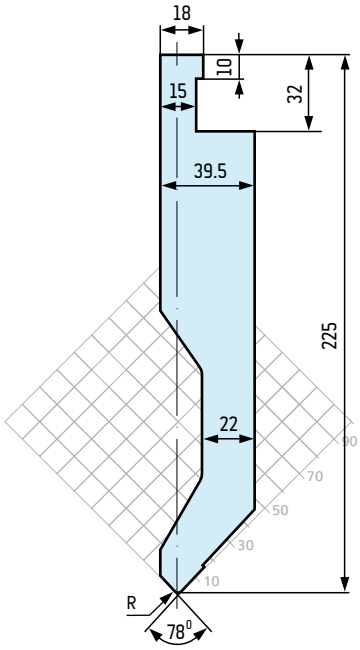


42CrMo4

S 2515 C 80 t/m

$\alpha = 78^0$

$R = 2\ mm$

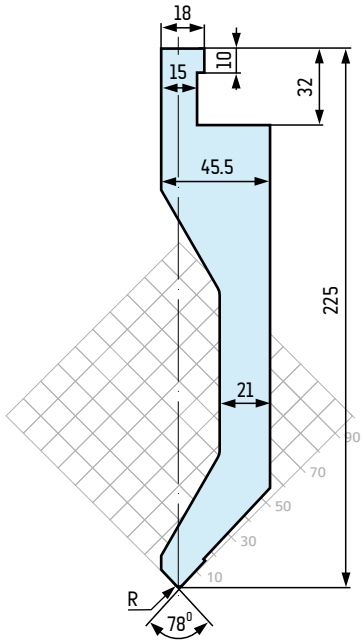


42CrMo4

S 2515 D 75 t/m

$\alpha = 78^0$

$R = 2\ mm$

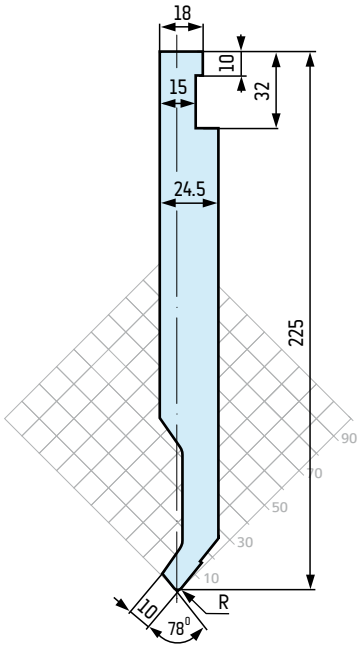


42CrMo4

S 2515 E 50 t/m

$\alpha = 78^0$

$R = 2\ mm$

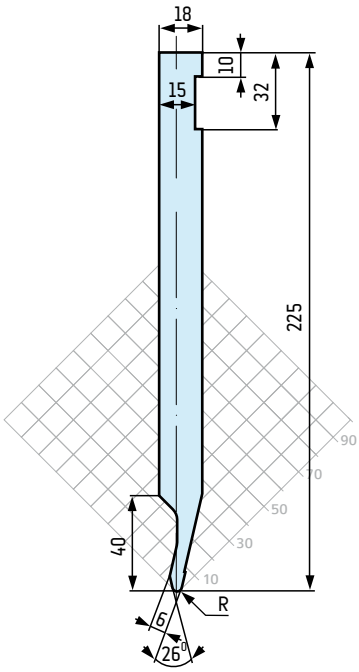


42CrMo4

S 2515 F 50 t/m

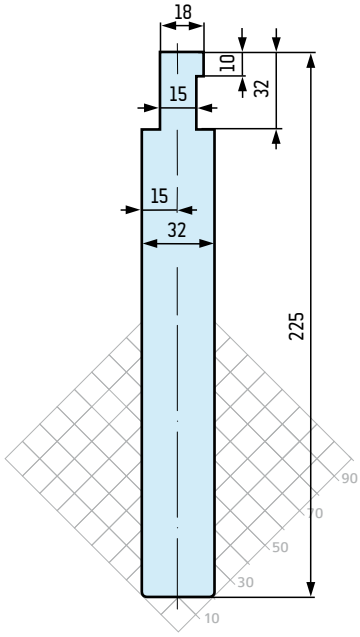
$\alpha = 26^0$

$R = 2\ mm$



42CrMo4

S 2515 H 150 t/m

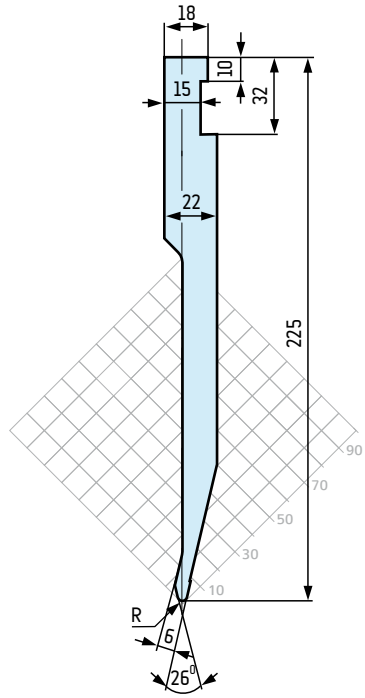


42CrMo4

S 2515 J 50 t/m

$\alpha = 26^0$

$R = 2$ mm

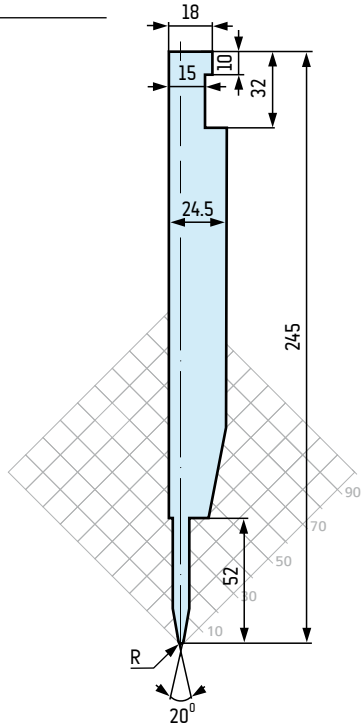


42CrMo4

S 2515 P 40 t/m

$\alpha = 20^0$

$R = 1$ mm

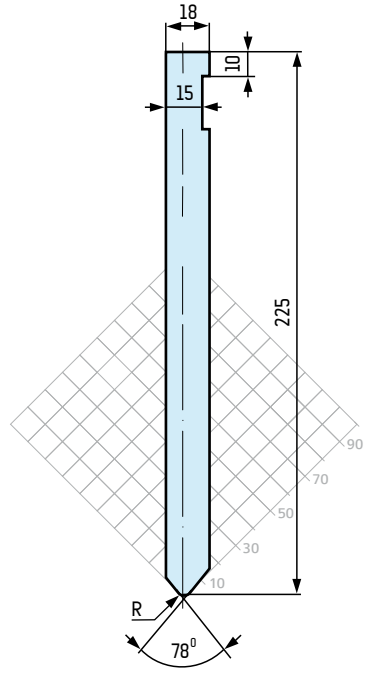


42CrMo4

S 2515 R 120 t/m

$\alpha = 78^0$

$R = 2$ mm

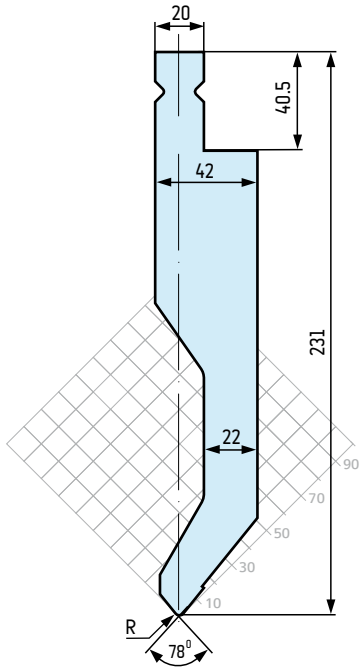


42CrMo4

S 2615 C 80 t/m

α = 78°

R = 2 mm

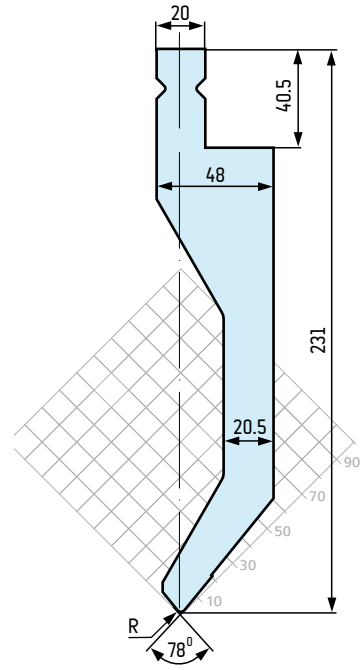


42CrMo4

S 2615 D 75 t/m

α = 78°

R = 2 mm

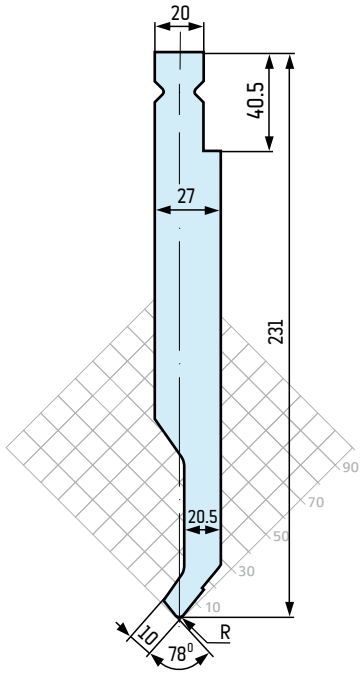


42CrMo4

S 2615 E 50 t/m

α = 78°

R = 2 mm

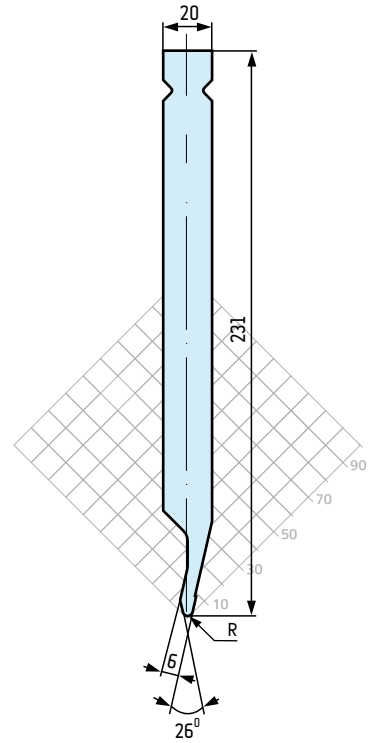


42CrMo4

S 2615 F 50 t/m

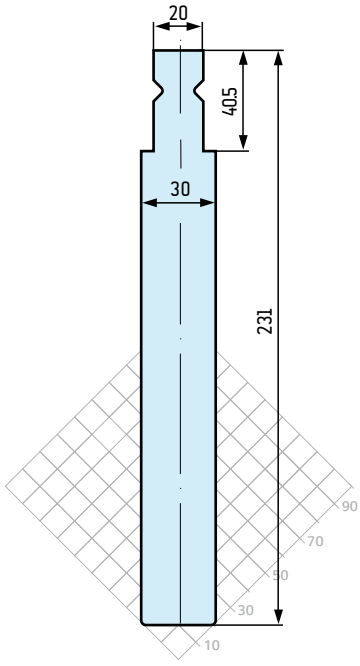
α = 26°

R = 2 mm



42CrMo4

S 2615 H 150 t/m

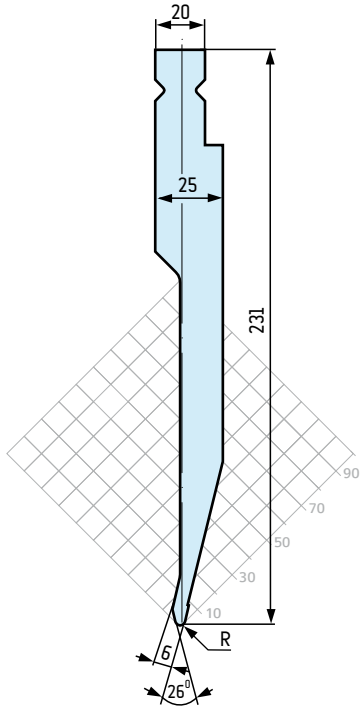


42CrMo4

S 2615 J 50 t/m

α = 26°

R = 2 mm

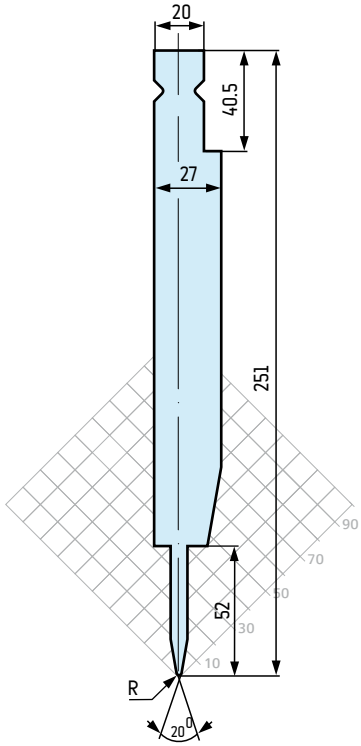


42CrMo4

S 2615 P 40 t/m

α = 20°

R = 1 mm

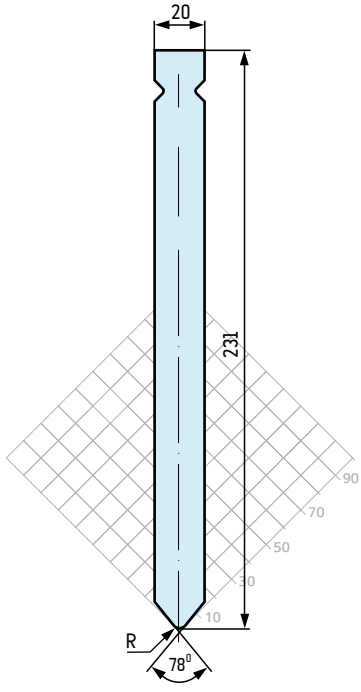


42CrMo4

S 2615 R 120 t/m

α = 78°

R = 3 mm



TYPE "L" DIES 90 MM | MATRYCE TYPU „L" 90 MM

24h 42CrMo4

M 5106 20 t/m

A = 6 mm, B = 16 mm, C = 32 mm

24h 42CrMo4

M 5108 20 t/m

A = 8 mm, B = 18 mm, C = 32 mm

24h 42CrMo4

M 5110 30 t/m

A = 10 mm, B = 25 mm, C = 32 mm

24h 42CrMo4

M 5112 35 t/m

A = 12 mm, B = 25 mm, C = 32 mm

24h 42CrMo4

M 5116 35 t/m

A = 16 mm, B = 32 mm, C = 32 mm

24h 42CrMo4

M 5120 35 t/m

A = 20 mm, B = 40 mm, C = 40 mm

24h 42CrMo4

M 5124 55 t/m

A = 24 mm, B = 45 mm, C = 45 mm

24h 42CrMo4

M 5130 60 t/m

A = 30 mm, B = 70 mm, C = 70 mm

24h 42CrMo4

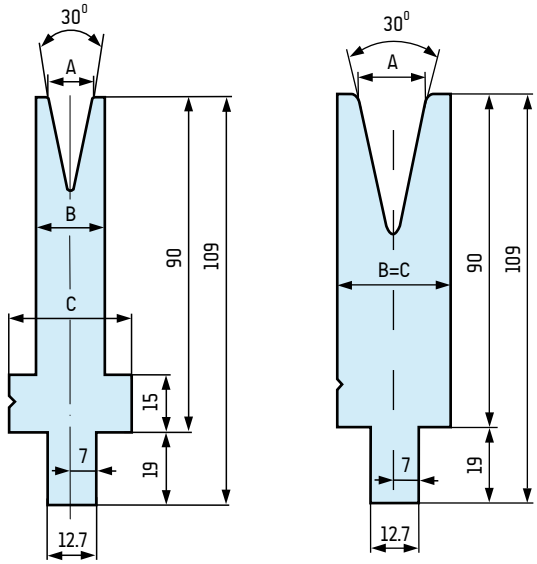
M 5140 60 t/m

A = 40 mm, B = 75 mm, C = 75 mm

24h 42CrMo4

M 5150 80 t/m

A = 50 mm, B = 95 mm, C = 95 mm



42CrMo4

M 5206 40 t/m

A = 6 mm, B = 12 mm, C = 32 mm

42CrMo4

M 5208 40 t/m

A = 8 mm, B = 12 mm, C = 32 mm

42CrMo4

M 5210 50 t/m

A = 10 mm, B = 14 mm, C = 32 mm

42CrMo4

M 5212 60 t/m

A = 12 mm, B = 18 mm, C = 32 mm

42CrMo4

M 5216 80 t/m

A = 16 mm, B = 25 mm, C = 32 mm

42CrMo4

M 5220 100 t/m

A = 20 mm, B = 32 mm, C = 32 mm

42CrMo4

M 5224 100 t/m

A = 24 mm, B = 32 mm, C = 32 mm

42CrMo4

M 5230 110 t/m

A = 30 mm, B = 40 mm, C = 40 mm

42CrMo4

M 5240 130 t/m

A = 40 mm, B = 50 mm, C = 50 mm

42CrMo4

M 5250 150 t/m

A = 50 mm, B = 70 mm, C = 70 mm

42CrMo4

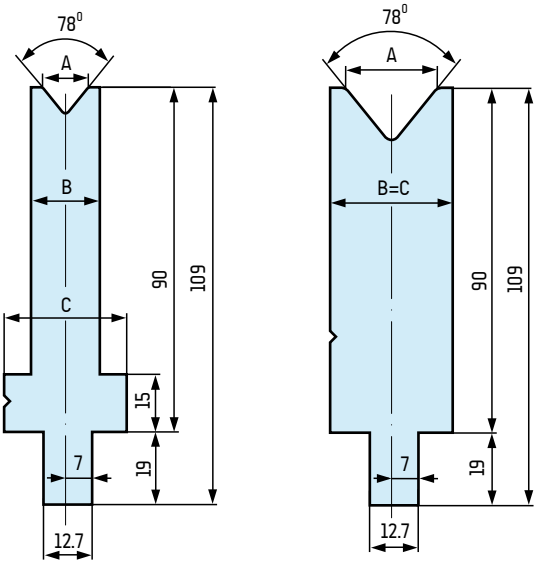
M 5260 150 t/m

A = 60 mm, B = 70 mm, C = 70 mm

42CrMo4

M 5280 150 t/m

A = 80 mm, B = 95 mm, C = 95 mm



TYPE "L" DIES 130 MM | MATRYCE TYPU „L" 130 MM

42CrMo4

M 5306 20 t/m

A = 6 mm, B = 16 mm, C = 32 mm

42CrMo4

M 5308 20 t/m

A = 8 mm, B = 18 mm, C = 32 mm

42CrMo4

M 5310 30 t/m

A = 10 mm, B = 25 mm, C = 32 mm

42CrMo4

M 5312 35 t/m

A = 12 mm, B = 25 mm, C = 32 mm

42CrMo4

M 5316 35 t/m

A = 16 mm, B = 32 mm, C = 32 mm

42CrMo4

M 5320 35 t/m

A = 20 mm, B = 40 mm, C = 40 mm

42CrMo4

M 5324 55 t/m

A = 24 mm, B = 45 mm, C = 45 mm

42CrMo4

M 5330 60 t/m

A = 30 mm, B = 70 mm, C = 70 mm

42CrMo4

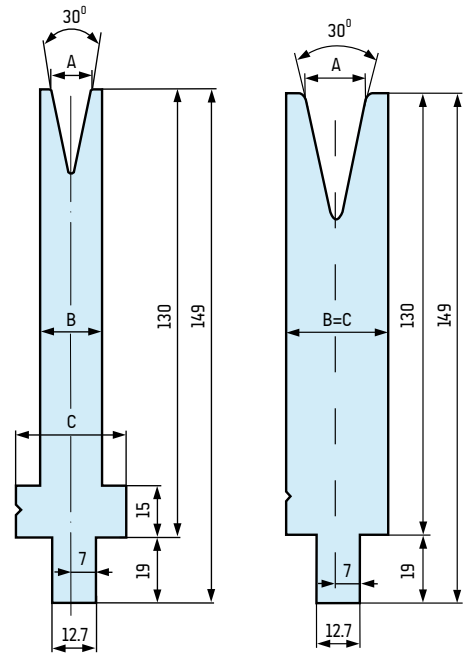
M 5340 60 t/m

A = 40 mm, B = 75 mm, C = 75 mm

42CrMo4

M 5350 70 t/m

A = 50 mm, B = 95 mm, C = 95 mm



42CrMo4

M 5406 40 t/m

A = 6 mm, B = 12 mm, C = 32 mm

42CrMo4

M 5408 40 t/m

A = 8 mm, B = 12 mm, C = 32 mm

42CrMo4

M 5410 50 t/m

A = 10 mm, B = 14 mm, C = 32 mm

42CrMo4

M 5412 60 t/m

A = 12 mm, B = 18 mm, C = 32 mm

42CrMo4

M 5416 80 t/m

A = 16 mm, B = 25 mm, C = 32 mm

42CrMo4

M 5420 100 t/m

A = 20 mm, B = 32 mm, C = 32 mm

42CrMo4

M 5424 100 t/m

A = 24 mm, B = 32 mm, C = 32 mm

42CrMo4

M 5430 110 t/m

A = 30 mm, B = 40 mm, C = 40 mm

42CrMo4

M 5440 130 t/m

A = 40 mm, B = 50 mm, C = 50 mm

42CrMo4

M 5450 150 t/m

A = 50 mm, B = 70 mm, C = 70 mm

42CrMo4

M 5480 150 t/m

A = 80 mm, B = 95 mm, C = 95 mm

42CrMo4

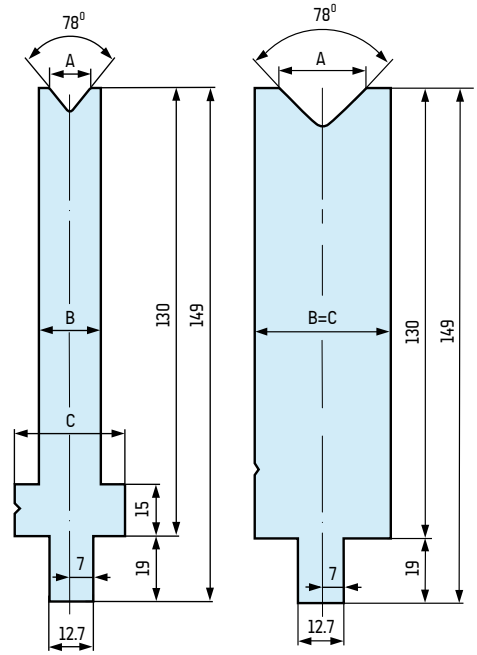
M 54100 150 t/m

A = 100 mm, B = 120 mm, C = 120 mm

42CrMo4

M 54120 150 t/m

A = 120 mm, B = 140 mm, C = 140 mm



TYPE "L" DIES | MATRYCE TYPU „L"

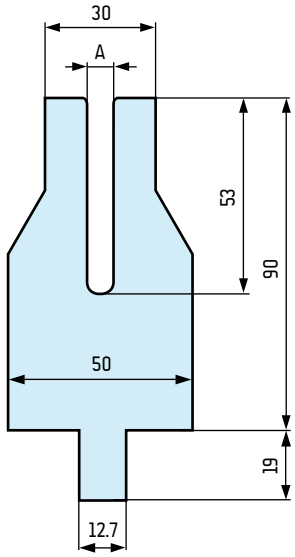
flattening dies | matryce do zagniatania

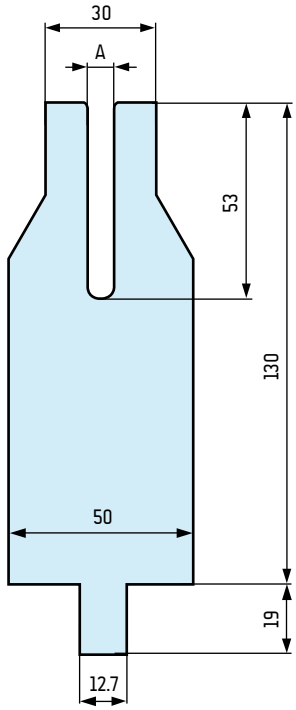
42CrMo4

M 5000

A = 8 mm, 10 mm, 12 mm

R = 1 mm

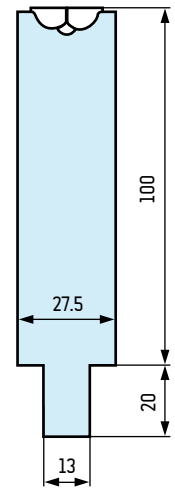


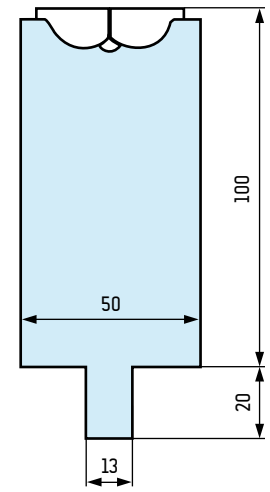


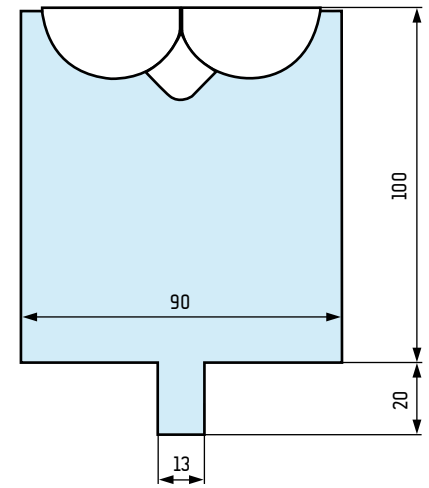
dies with movable inserts | matryce z ruchomymi wkładkami

Dies created for mark-free bending of stainless and coated steel. Thanks to continous suport they allow use on short bending arms, and next to holes.

Matryce przeznaczone do gięcia bezśladowego blachy nierdzewnej i powlekanej. Dzięki stałemu podparciu umożliwiają gięcie blach o krótkich ramionach, i w sąsiedztwie otworów.



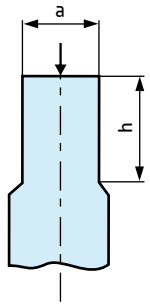




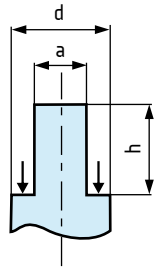
Different sizes of dies available. Dies can be offered with: 60 mm – type A, 13mm – type T and 12.7 mm – type L holding type. Length of a single section – 100 mm.

Możliwość wykonania różnej wielkości matryc. Dostępne uchwyty matryc: 60 mm – typ A, 13 mm – typ T oraz 12.7 mm – typ L. Długość pojedynczego segmentu do 100 mm.

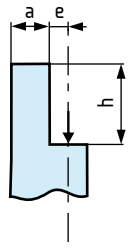
A



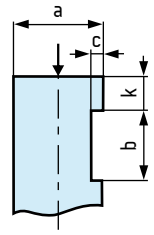
B



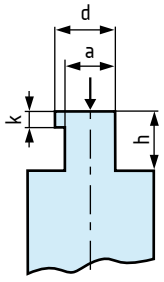
C



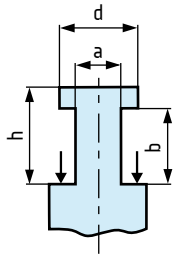
D



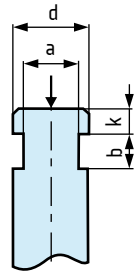
E



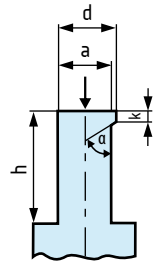
F



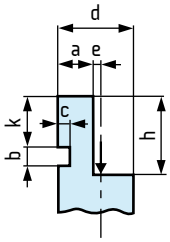
G



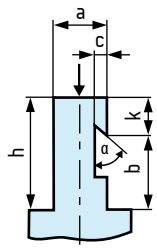
H



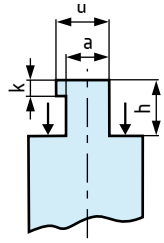
I



J



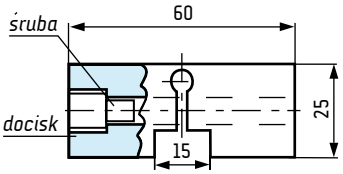
K



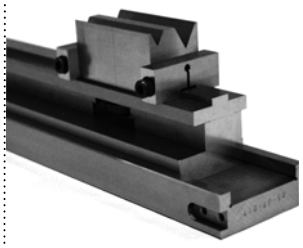
We offer punches with mounting edges as shown. The client can order a type from the drawing specifying his dimensions. The client may order a mounting edge to his own design.

W ofercie znajdują się stemple z uchwytem standardowym oraz z innymi typami uchwytów.
Klient ma możliwość zamówienia narzędzi z uchwytem z przedstawionego zestawu po określeniu symbolu literowego (np: „E") oraz zaznaczonych wymiarów. Można również zamówić narzędzie z uchwytem własnego projektu.

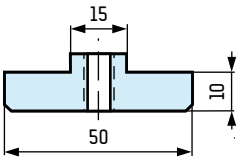
2 V



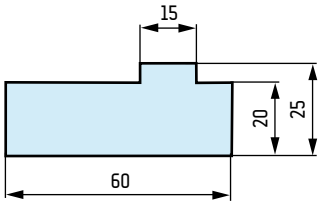
ASSEMBLY | **PRZYKŁAD MONTAŻU**



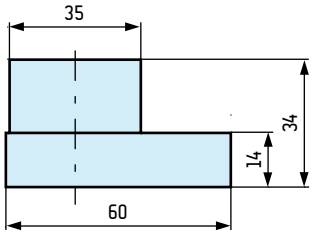
A



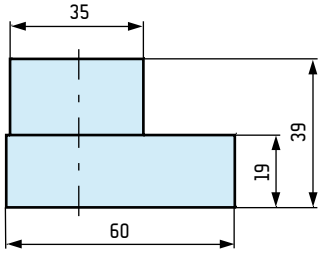
A 20



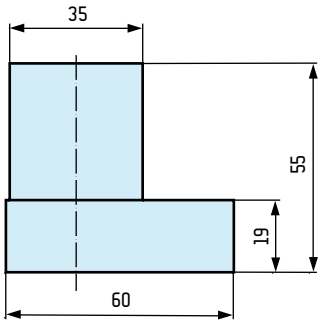
A 34



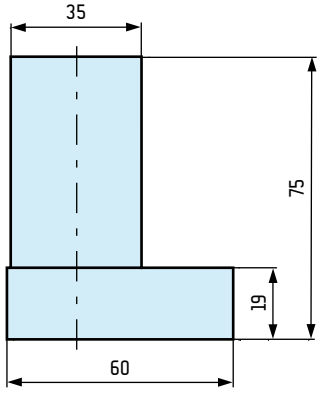
A 39



A 55

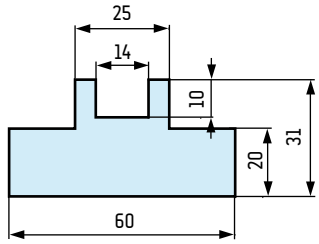


A 75



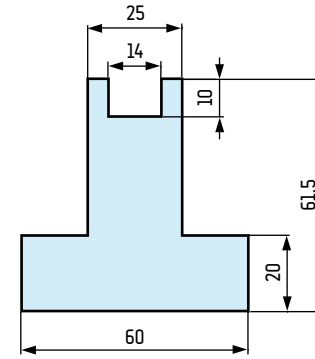
24h

A 31



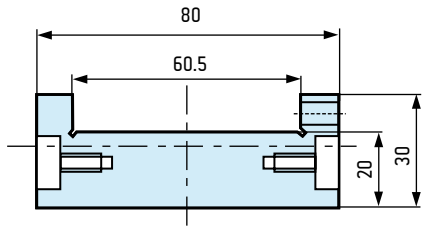
24h

A 61



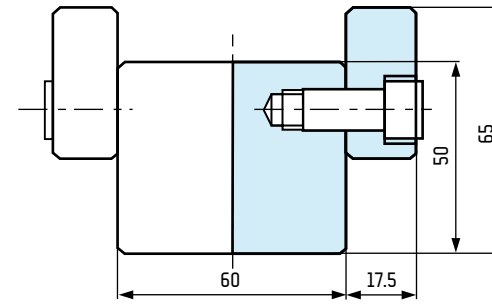
24h

B 60



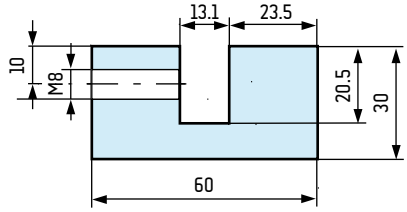
24h

C 60



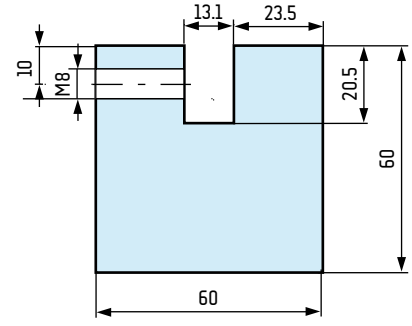
24h

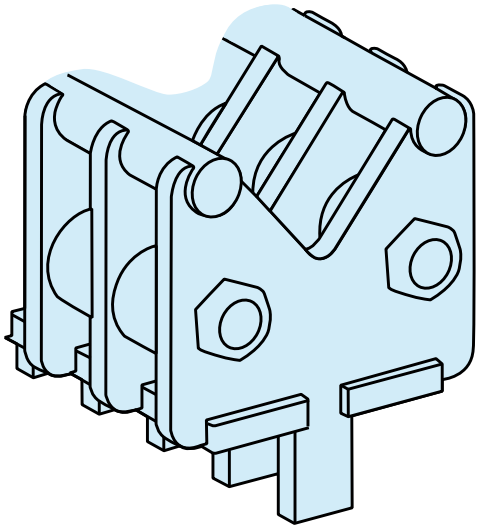
D 30



24h

D 60





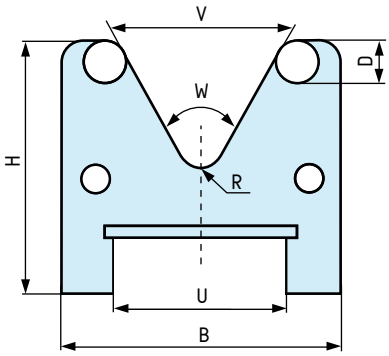
Matryce składane – o niskim tarciu. Wykonane ze stali stopowej, z wkładkami o twardości 60 HRC, stanowią tańszą alternatywę dla matryc pełnych. Dzięki wysokiej wytrzymałości mogą być używane do większości zastosowań przy blachach grubych i średniej grubości. Możliwa jest zmiana długości matryc, wymiana wkładek i wykonanie z każdym systemem mocowania.

"Low Friction" dies meet the high demands of customers who need continual product improvement. By using new production techniques a new tooling product has been developed offering great value for money. It can be used for almost any application and will be a major advantage for use in the midrange and heavy sheet metal industry.

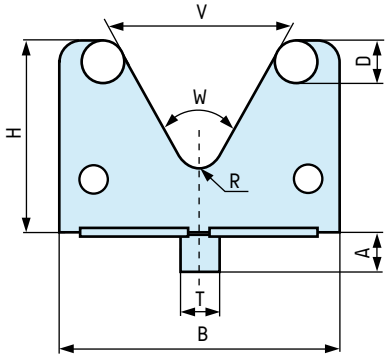
V	D	**W°**	B	**H**	R	**t/m**
24	6	**80**	44	**55**	2	**50**
24	6	**30**	44	**55**	2	**30**
32	6	**80**	52	**55**	3	**50**
32	6	**30**	52	**55**	5	**30**
40	6	**80**	60	**55**	5	**60**
48	6	**80**	68	**55**	5	**70**
mm	mm	**°**	mm	**mm**	mm	

V	D	**W°**	B	**H**	R	**t/m**
40	15	**30**	78	**80**	5	**100**
50	15	**35**	88	**90**	7	**100**
60	15	**40**	98	**110**	10	**120**
80	20	**45**	130	**130**	10	**160**
100	20	**55**	150	**140**	18	**200**
120	25	**60**	180	**160**	18	**250**
150	25	**70**	212	**180**	25	**300**
200	30	**80**	270	**220**	30	**350**
250	30	**80**	325	**300**	40	**400**
300	40	**80**	400	**360**	40	**450**
400	50	**80**	524	**400**	50	**550**
mm	mm	**°**	mm	**mm**	mm	

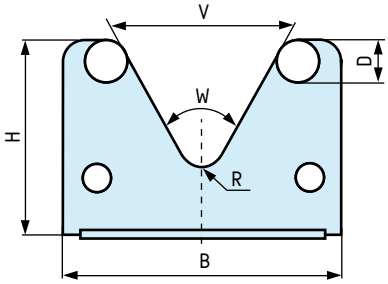
S



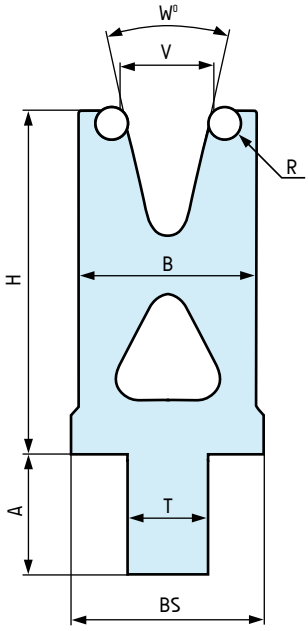
T



U



COMPOUND DIES | MATRYCE SKŁADANE

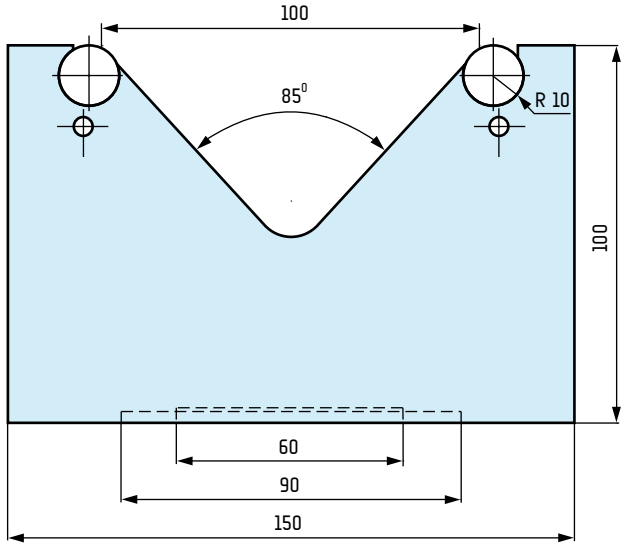


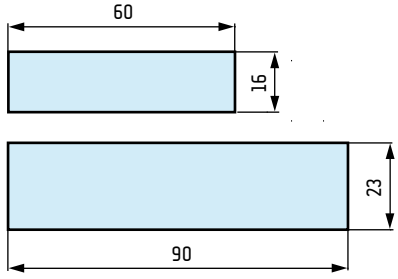
Compound dies are press brake dies for "airbending" only. The high precision, high quality, hardened and anodised, aluminium die body, contains the two hardened and ground die bars. The die bars are interchangeble in case of wear. The bars can be TiN coated for longer life, and less friction. Bronze or non metalic bars can be supplied for special applications.

Matryce kompozytowe, wykonane z wytrzymałych stopów utwardzonego aluminium. Matryce posiadają wysokiej jakości wymienne wkładki stalowe, hartowane i szlifowane. Możliwe jest zastosowanie wkładek pokrytych powłoką TIN dla zmniejszenia tarcia lub użycie wkładek plastikowych. Do specjanych zastosowań możemy dostarczyć wkładki z brązu lub innych materiałów

V	R	**W**	B	**BS**	H	**T/m**	T	**A**
8	1.5	**30**	20	**30**	55	**20**	13	**20**
12	2	**30**	24	**30**	55	**30**	13	**20**
16	2.5	**30**	28	**28**	55	**40**	13	**20**
20	2.5	**30**	32	**32**	55	**45**	13	**20**
24	3	**30**	40	**40**	55	**50**	13	**20**
32	4	**60**	52	**52**	55	**60**	13	**20**

ROLL DIES | MATRYCE ROLKOWE





Round inserts hardened up to 60 HRC allow for bending steel up to 14 mm thick.

Matryce z rolkami o twardości do 60 HRC pozwalaja na gięcie twardych blach o grubości do 14 mm.

Rectandular inserts 60 mm or 90 mm wide allow the die to be fixed on smaller machine beams.

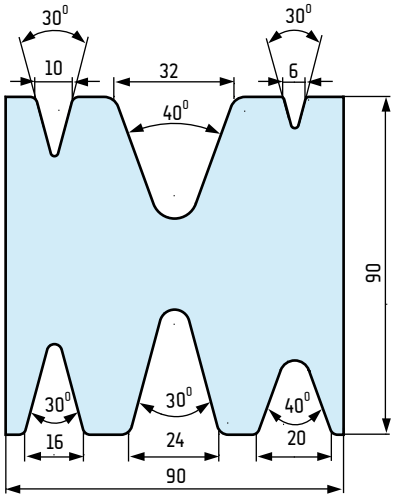
Wkładki o szerokości 60 mm lub 90 mm mogą służyć do zamocowaniana na węższym stole.

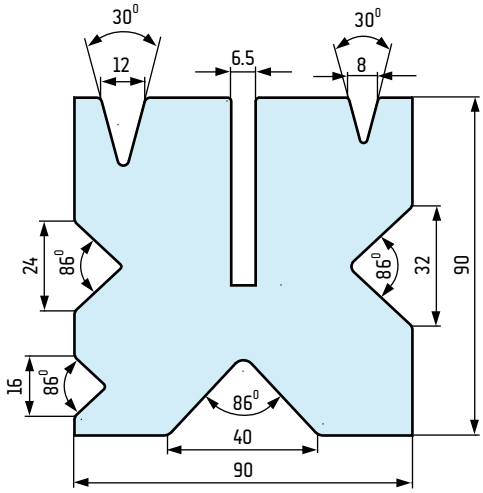
SPECIAL DIES | MATRYCE SPECJALNE

multiple vee dies | matryce wielorowkowe 42CrMo4

We can offer different sizes to the customers specification, length up to 4100 mm.

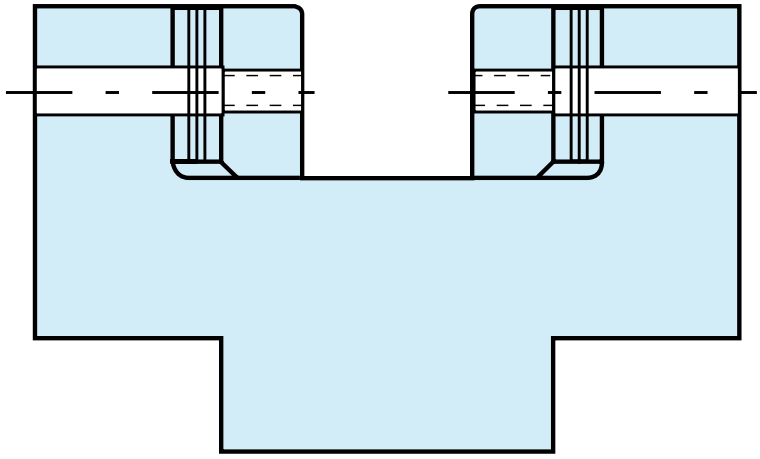
Oferujemy matryce z wieloma rowkami, według specyfikacji klienta o długości do 4100 mm.

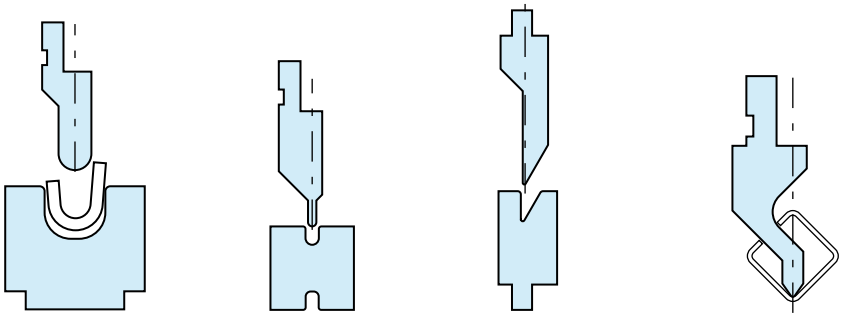


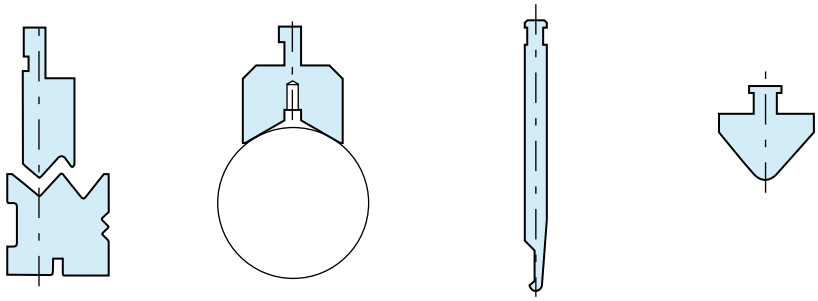


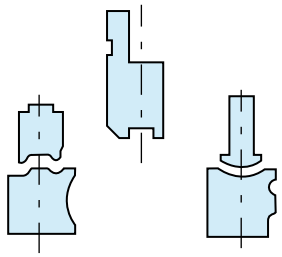
variable vee die | matryca z regulowaną szerokością wyjęcia

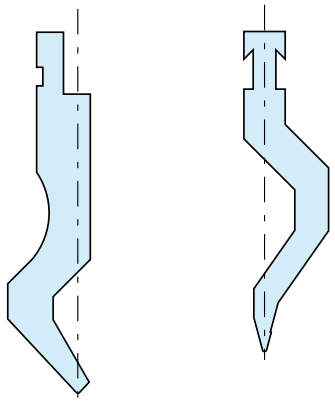
Adjusted with inserts for different vee size.
Wkładki pozwalają zmieniać szerokość roboczą matrycy.

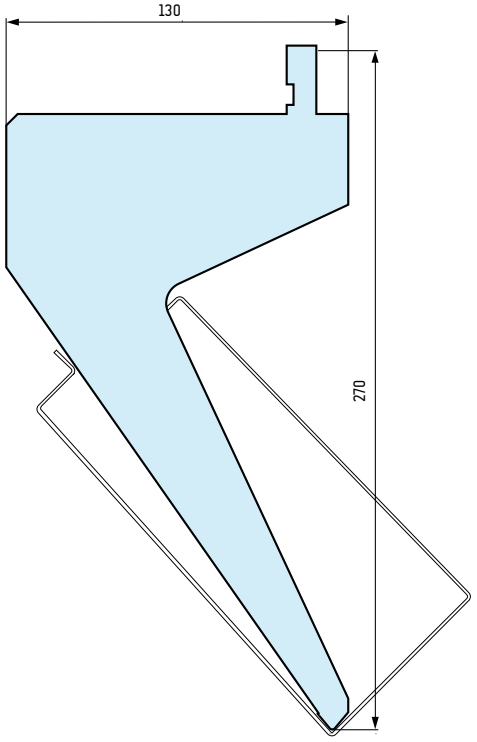


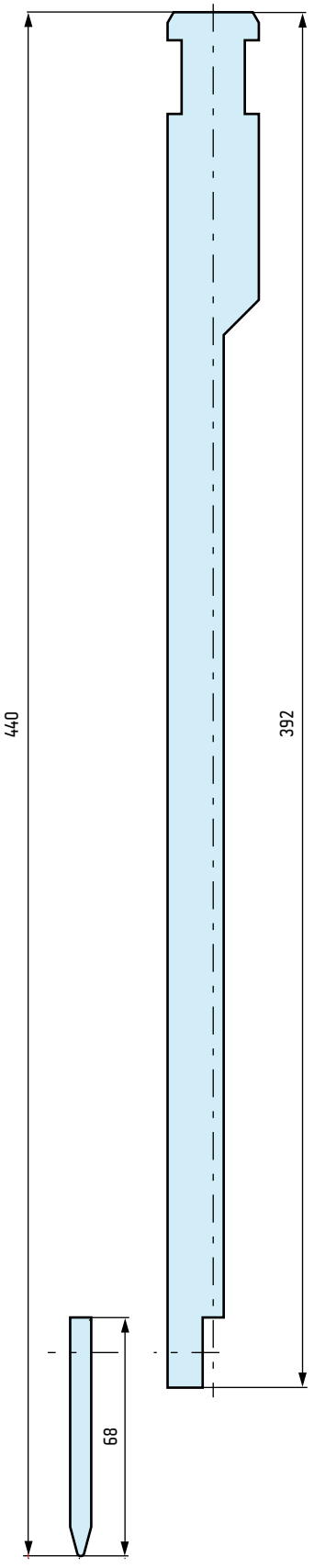








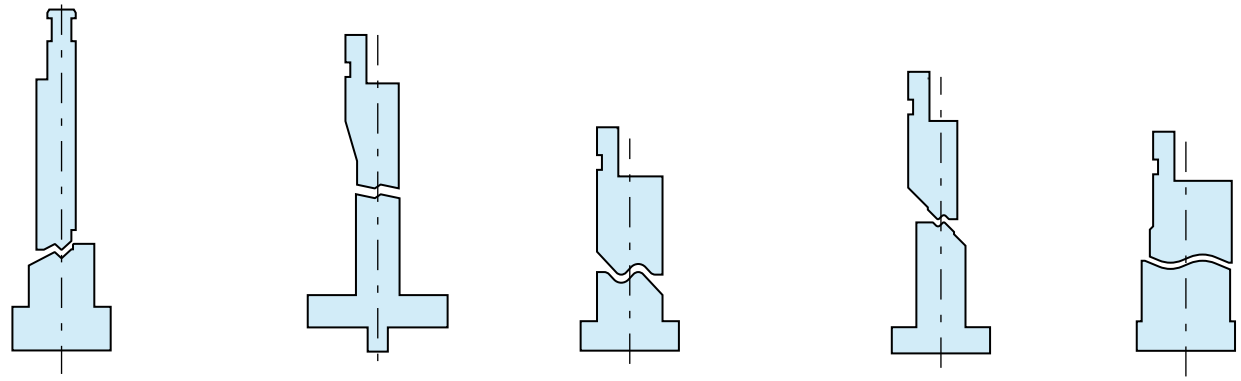

130
270

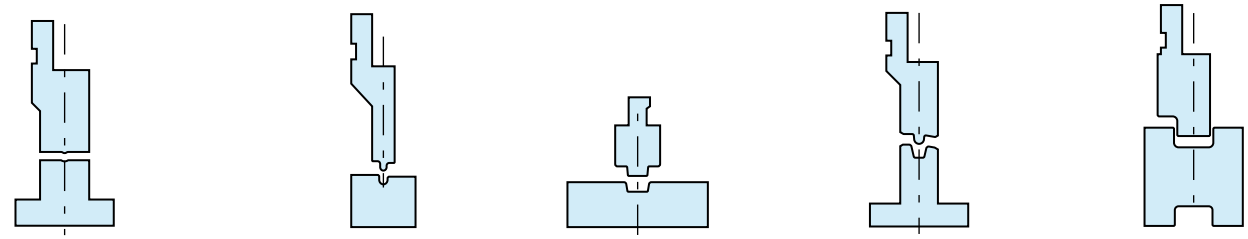

440
392
68

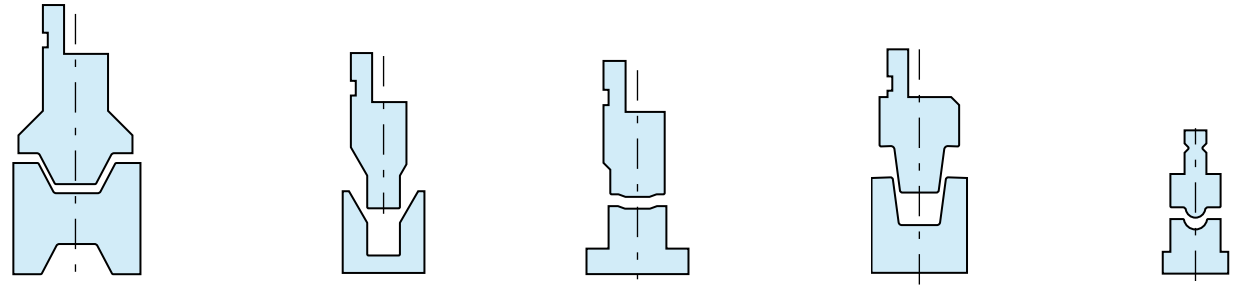
SPECIAL TOOLING | NARZĘDZIA SPECJALNE

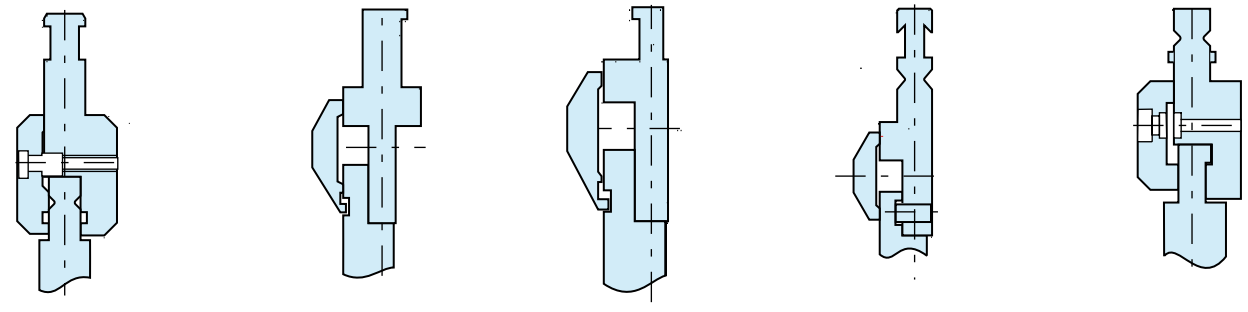
Example of specialized tooling. We can offer many types of punches and dies for special applications, as well as non standard holders.

Przykłady narzędzi do zastosowań specjalnych.
Możemy zaoferować wiele typów narzędzi do gięcia specjalistycznych profili, oraz niestandardowych mocowań narzędzi.



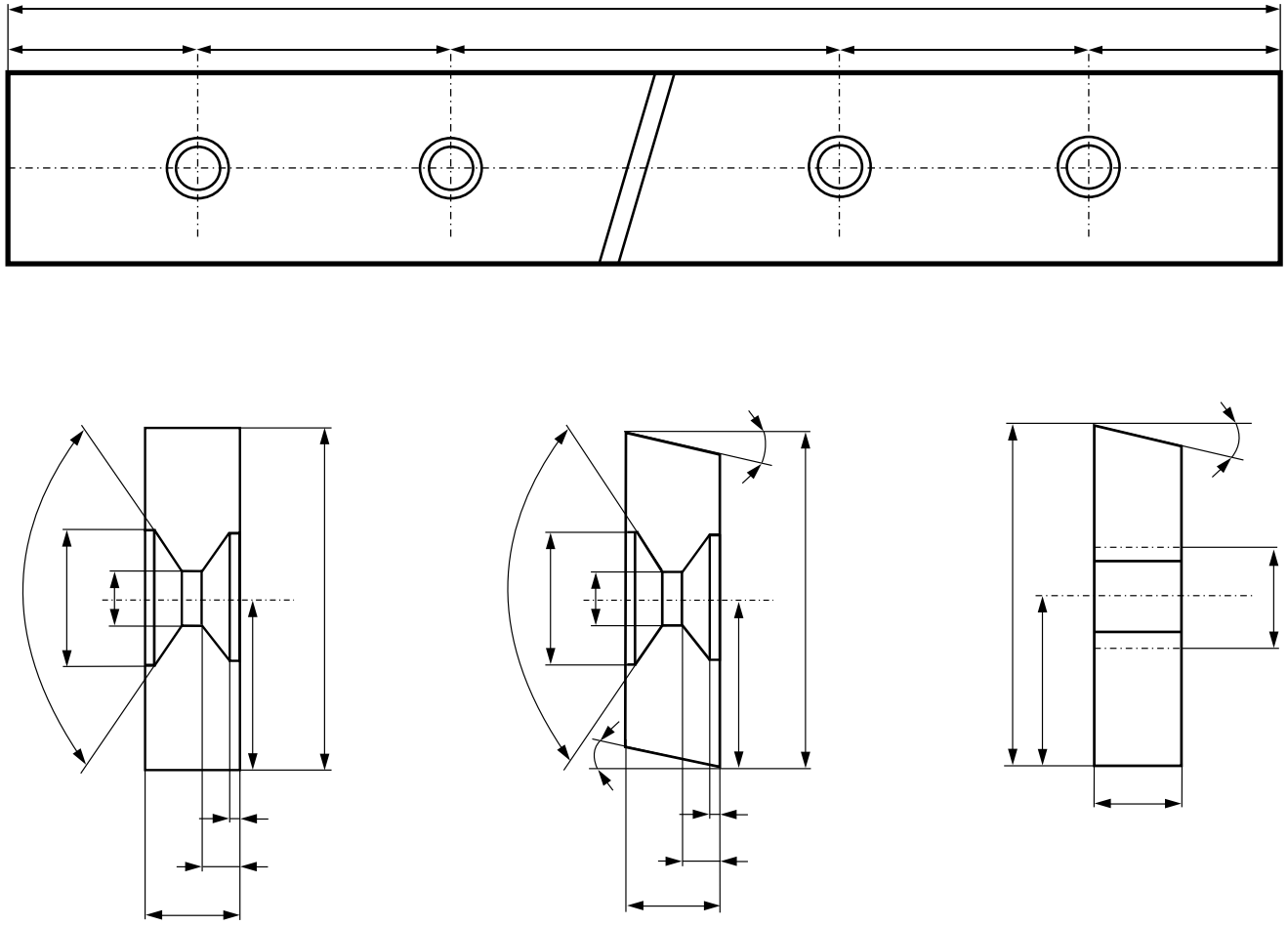






shear blades | noże do gilotyn

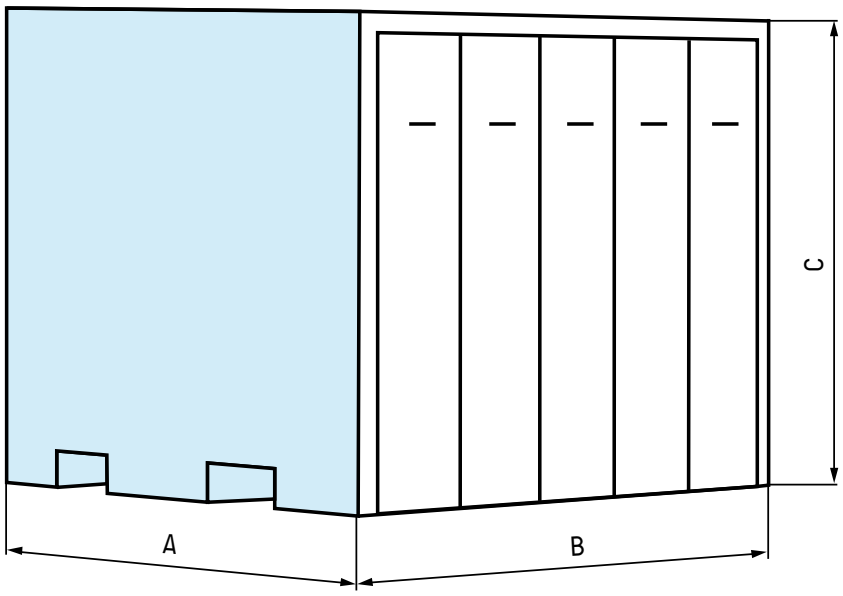
Insert dimensions
Przy zamówieniu uzupełnić wymiary



We offer shear blades for most types of shears, typical or according to the clients own drawings .We grind the blades and harden them to 55 ±2 HRC. We have in stock all types of Polish and Czech shear knives types NG 3-13, NTE, CNTA 6.3-25. We can also offer many other types of blades according to the client drawings and specification, of length up to 4100 mm. We can regrind and repair used blades of up to 4100 mm in length.

Produkujemy noże do nożyc gilotynowych, szlifowane i hartowane na wskroś do 55 ±2 HRC. W stałej sprzedaży posiadamy noże do nożyc NG 3-13, NTE, CNTA 6.3-25. Możemy wykonać wiele innych typów noży według rysunków i specyfikacji klienta o długości noża do 4100 mm. Oferujemy również ostrzenie noży gilotynowych o długości do 4100 mm.

tooling cabinets | szafy na narzędzia



Safe and functional tooling cabinets allow fast and easy access to tools, while protecting them from mechanical damage. Available with 3, 4 or 5 sections, each capable of storing up to 10 m of tooling. Solid upper and lower shelves allow storing of sectionalized tooling. As standard made for type A tools, punches with 13 mm holding and dies with 60 mm holding, 835 mm in length, also possible to make shelves for tools of types T and L, with length of tool 1100 mm. Cabinets are powder coated and easy to transport. They were designed and manufactured to last a long time.

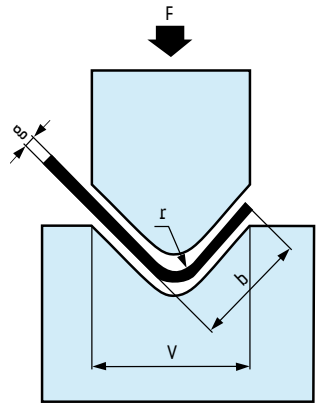
Bezpieczne i funkcjonalne szafy narzędziowe – szybki i łatwy dostęp do narzędzi, zabezpieczają przed uszkodzeniami mechanicznymi. Dostępne w wersji 3, 4 i 5 komorowej, jedna komora pozwala na przechowanie do 10 mb narzędzi. Stała górna i dolna półka pozwala na przechowywanie narzędzi segmentowych. Standardowe wykonanie dla narzędzi typu A – mocowanie stempli 13 mm i matryc 60 mm, długość narzędzi 835 mm, możliwe również wykonanie półek dla narzędzi typu T i L o długości 1100 mm. Lakierowane proszkowo, przystosowane do transportu wózkiem paletowym i widłowym. Solidne wykonanie zapewnia długi czas użytkowania.

PRESSURE TABLE | TABELA DOBORU SIŁ

The table shows bending pressure for sheets with air bending
Parametry gięcia swobodnego blach przy gięciu w powietrzu

F [t] – pressure on 1 m
r – inner radius on steel
b – minimum lenght of bending arm
V – vee size

F [t] – siła na 1 m
r – promień wewnętrzny giętej blachy
b – minimalna długość zaginanego ramienia
V – szerokość wyjęcia

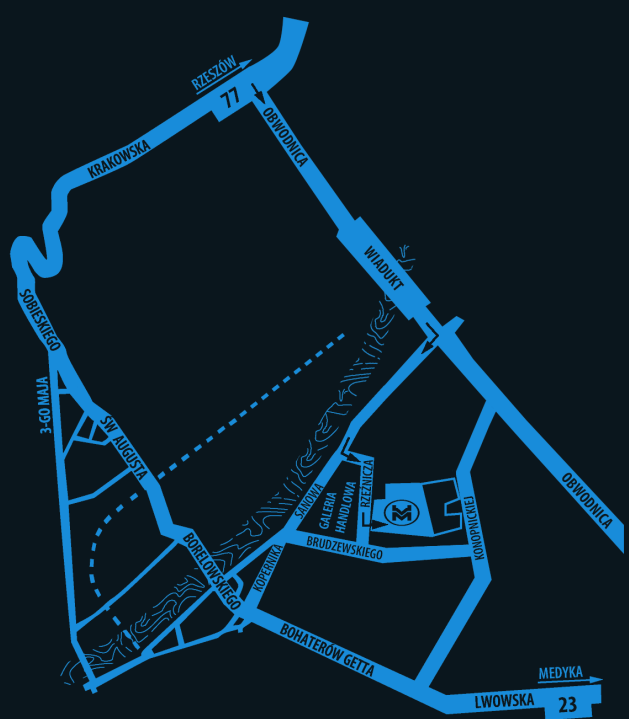


RM = 45 kg/mm²

g	V	4	**6**	7	**8**	10	**12**	14	**16**	18	**20**	25	**32**	40	**50**	63	**80**	100	**125**	140	**160**	200	**250**
	b	2.8	**4**	5	**5.5**	7	**8.5**	10	**11**	13.5	**14**	17.5	**22**	28	**35**	45	**55**	71	**89**	100	**113**	140	**180**
	r	0.7	**1**	1.1	**1.3**	1.6	**2**	2.3	**2.6**	3	**3.3**	4	**5**	6.5	**8**	10	**13**	16	**20**	23	**26**	33	**40**
0.5		4	**3**																				
0.6		6	**4**	3	**3**																		
0.8			**7**	6	**5**	4																	
1.0			**13**	10	**8**	6	**5**																
1.2					**13**	10	**8**	6	**5**														
1.5							**13**	10	**9**	8	**7**												
2.0							**25**	20	**17**	14	**13**	10											
2.5									**29**	24	**21**	16	**12**										
3.0										38	**32**	24	**17**	13									
4.0												47	**34**	25	**19**	14							
5.0													**57**	42	**32**	24	**18**						
6.0														65	**48**	36	**26**	20					
8.0															**94**	69	**50**	38	**29**	25			
10.0																	**84**	63	**48**	41	**35**		
12.0																	**130**	96	**72**	62	**53**	40	**31**
16.0																			**139**	120	**101**	76	**58**
20.0																						126	**95**

RM = 70 kg/mm²

g	V	4	**6**	7	**8**	10	**12**	14	**16**	18	**20**	25	**32**	40	**50**	63	**80**	100	**125**	140	**160**	200	**250**
	b	2.8	**4**	5	**5.5**	7	**8.5**	10	**11**	13.5	**14**	17.5	**22**	28	**35**	45	**55**	71	**89**	**100**	113	**140**	**180**
	r	0.7	**1**	1.1	**1.3**	1.6	**2**	2.3	**2.6**	3	**3.3**	4	**5**	6.5	**8**	10	**13**	16	**20**	**23**	26	**33**	**40**
0.5		7	**4**																				
0.6		10	**6**	5	**4**																		
0.8			**11**	9	**8**	6																	
1.0			**19**	16	**13**	10	**8**																
1.2					**20**	15	**12**	10	**8**														
1.5							**20**	16	**14**	12	**10**												
2.0							**39**	31	**26**	22	**20**	15											
2.5									**44**	38	**33**	25	**18**										
3.0										58	**50**	37	**27**	20									
4.0												73	**53**	39	**30**	22							
5.0													**89**	66	**49**	37	**27**						
6.0														101	**75**	55	**41**	31					
8.0															**147**	107	**78**	59	**45**	39			
10.0																	**131**	98	**74**	64	**55**		
12.0																	**202**	149	**112**	97	**82**	62	**48**
16.0																			**217**	187	**157**	118	**90**
20.0																						196	**148**

PLASMET®

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