

Innovative Technologies.



POWERBEND PRO
3 Axes (R Manual) CNC Press Brake

ERMAKSAN
SHEET METAL WORKING MACHINERY



80.000 sqm

Largest manufacturing facility
under one roof in Europe
in its sector



ERMAKSAN is well known for productive and result oriented research & development activities as well as affordable high-tech products in fabricating industry. With 47 years of manufacturing experience ERMAKSAN continuously invests on latest technology and its human resources.

ERMAKSAN manufactures 3000 machines annually with 700 qualified staff in a fully modernized 80.000 sqm factory equipped with state-of art machinery. ERMAKSAN exports 80% of its production through agents under the brand ERMAK from Canada to New Zealand, more than 70 countries in the world and provides full technical support since 1965.

By purchasing ERMAK machines, you will be investing on your future. With this decision we promise you to deliver the machine which will suit your needs and provide the best purchasing experience by means of price, delivery, quality, training and after-sales technical support.

ERMAKSAN
SHEET METAL WORKING MACHINERY

InnovativeTechnologies.



28.000

Machining capacity of 28.000 mm single part



3.000

3.000 machines manufactured annually

POWERBEND PRO

3 Axes (R Manual) CNC Press Brake

Power-Bend Series machines redesigned based on users preferences and it became unique machine with its electronic and mechanical features.

Power-Bend Pro Series is among the highest rated machines which will help you increase your productivity and keep cost at minimum level with its user friendly CNC controller and low cost hydraulic maintenance.

New Power-Bend Pro is exactly what you need for your production needs where complicated, sensitive, single or multiple bendings on high speed is needed.



CYBELEC DNC600S.

9,4" high resolution 2D graphical screen comes standard with Power-Bend Pro.

Stronger, faster and deeper bendings;

Power-Bend Pro Series press bends allows you to work on full capacity and eliminates lost time on production.

Sliding front support arms.

Scaled in metric, height adjustable front support arms.

Stronger, faster and deeper bendings



Rigit structure.

Dynamic and solid body machined with maximum sensitivity.

As fast as your will power

↓ High Free Falling Speed

→ High Bending Speed

↑ High Returning Speed

- High quality and repetitive bending is obtained by using synchronized cylinders and valves.
- Automatic axis referencing and calibrating at very first time when machine is turned on.
- All ERMAKSAN machines are designed by using SOLID WORKS 3D programming and made by enhanced ST44-1 quality steel with the latest technology.
- Rigid upper beam runs on 8-point bearings with bending precision of 0.01 mm.
- World wide recognized long lasting, stiffened, precise top and bottom tools.
- Silent high pressure pump.

Back gauge fingers.

Special design foldable back gauge fingers.

SICK M 2000 rear light guard.

CE standards safety protections help you work in safer conditions.

2 axis (X, R)
 4 axis (X, R, Z₁, Z₂)
 6 axis (X, R, Z₁, Z₂, X₁, X₂)
 Servo motorized back gauge. (option)

Multifunctional and sensitive back gauges help you bend complex parts with ease of mind, specially designed and produced by ERMAKSAN.

CNC and Servo motors run on rail and with 0.05 mm sensitive high precision ball screws which help you to be competitive.



Standard.

Back gauge system.

Power-Bend Pro offers you motorized X axis back gauge and manuel R axis as standard.



Option.

4 axis (X, R, Z₁, Z₂) servo motorized back gauge.
 Backgauge positioning with 0.05 mm accuracy.

ERMAK POWER-BEND PRO

Y1



Y2

Top clamping promecam.
Promecam type top clampings can easily be put on and off.

Fiessler Akas LCIM finger protection.

General features

- Chrome covered cylinders are machined with 0.001 mm precision and pistons are specially stiffened.
- Original clampings are user friendly and machined with high precision.
- Front support arms are slideable along machine length and easy to adjust.
- Compact and world wide recognized HOERBIGER hydraulics are produced according to CE standards.
- Two photocells on sides for rear guard.
- Fast tool tightening.
- Optic linear scales are sensitive up to 0.001 mm.
- Easy to use controller is freely movable along the machine and convenient for all.
- Synchronized working cylinders will give you the best bending result with its perfect repeatability ratio.
- 2 axis ultra strong back gauging system (X=800 and R), with 0.01 mm repeatability, moves along rails and ball screw, bending length controlled by CNC controller, foldable back gauge fingers for reverse bending applications.
- Multifunctional and high programable, 2D CYBELEC DNC 600 CNC controller.
- SIEMENS electrical system.
- Automatic axis referencing when machine is turned on.
- Side guards are standardized according to CE standards.



Hydrolic blocs



HEIDENHEIN and GIVI MISURE linear scales

Your solution for best bending results...

- Perfect configuration for sensitive bending and economic solution.
- Precise result for long and deep bending.
- Continuous sensitivity with crowning system.
- Long lasting rigid body is also suitable for heavy duty applications.
- Installation and training provided, easy maintenance.

Your solution for perfect bendings;

You can bend longer and deeper parts at maximum repeatability with standard Power-Bend Pro machines.

Motorized crowning system.

Motorized crowning system helps bending your parts in same angle along every point of piece by sending signals to controller.



VERMAK **POWER-BEND PRO**

Foot pedal.

Double foot pedal helps you bend your parts automatically and easily.

Easily moveable controller unit.

Side guards.



Impressive bending solutions;

Equipment alternatives could be upgraded on Power-Bend Pro Series upon request. Thus, increased productivity achieved while bending.



Rigit structure.

Dynamic and solid body machined with maximum sensitivity.

AP3 / AP4 front sheet support arms.

CNC controlled support arms reduces your bending time significantly and is a great help for perfect bending.



User - friendly

 **CYBELEC**
DNC600S

Under your control

General features

Ease of use:

- High resolution 9,4" 2D graphic display.
- Easy set up and use that meets operator's needs.
- Rapid data input with the ergonomic keyboard with large keys.
- 2D graphic representation of the part.

User friendly:

- Programming all the parts in a single page.
- Easy installation and training.
- Contextual help and warning pop-ups.
- 99 repeatable bending.
- Library of 50 upper and lower tools.
- Accurate ram positioning by closed loop control of speed, pressure and parallelism.
- Back up facility of the programs, tool library and machine parameters with the standard Cybele backup software.
- Communication with the machine by full-blown graphical programming at the office environment with the standard PC 1200 2D software (offline software).

First part, good part:

- Easy adjustment with precision by simple access to the machine parameters.
- Consecutive program operating feature for high numbers of bend sequence.
- Inputting the angle and bend corrections directly on the controller.

Powerful:

- All basic functions.
- CE safety management.
- Easy communication.
- More than 20 language options.
- Robust and ergonomic design.

Standard Equipments

- Height adjustable and movable sliding front support arms.
- Top and bottom tools are surface hardened by special treatment.
- Promecan easy clamping system.
- CYEBEL DNC 600S controller with PC1200 2D software.
- CNC controlled strong X=800mm back gauge.
 - 410 mm throat depth.
 - 2 pieces back gauge fingers.
- Scales in metric and inches.
- Crownin system in bottom beam (3100/.../4100-260 and 3100/.../4100-320 manual crowning and above 3100-400 tn machines standard.
- Foot pedal is produced according to CE standarts and suitable for single and multiple bendings.
- 2 photocells are placed facing each other for rear and side guards.
- Covers for cylinders and top beam.
- Preadjusted electrical requirements based on customer's geographical area.
- Electrical panel and / or controller can be mounted on right side of machine upon customer request.
- Adjustable sliding front support arms.





Optional Equipments

- Special stroke and throat depth gives extra advantages for deep bendings.
- ER 70 controller (up to 5 axis).
- ER90 controller (3D touch screen).
- Special back gauge fingers can be added on optional backgauge stroke.
- Motorized crowning system.
- Hyrdolic oil heating and cooling.
- Custom made table width and bottom tool V openings.
- Optional top and bottom tools in different lenght.
- Specail tools for box and pole bendings.
- Laser front supoprt options.
 - WILA top clampings and bottom tool holders.
- Rol 1 and Rol 5 quick promecam release.
- Special parking units for front support arms.
- Tooling cabinet mounted to side of the machine to keep your tools clean and easily reachable.
- Automatic sliding system is lubricated automatically which is highly recommended for long lasting.
- U type special bottom tools for bending thich materials.
- Additonal fron support arms to prevent vaves on thin materials.
- Custom made machines upon customer special parameters.
- AP3 / AP4 front sheet support arms.
- Tool storing cabinet.

OPTIONAL CONTROLLER

ER70

General features

- High performance user friendly CNC controller is offered at affordable price.
- 2D graphical bending simulation.
- 2D graphical part drawing.
- 2D graphical manual crash control.
- Automatic bending calculations for inner and outer parameters.
- Automatic X and R axis calculating for bending steps and part dimensions.
- Bending skip or bending change.
- Automatic calculations of bent parts.
- Automatic positioning for Y₁ and Y₂ upon sample part degree.
- Automatic stroke or inside radius calculating.
- Screen dimensions: 10,4 TFT single colour.
- OS: WINDOWS.
- Memory: 64 MB.
- Memory for end users. Min 2 MB, approximately 1000 programs.
- Programming feature for up to 99 steps.
- Maximum 99 steps for single program.
- Y₁, Y₂, X, R, (Max 4 axis).
- Tooling and V DIE memory 30/60.
- USB back up available for lost info.
- Additional 2 USB ports for your keyboard or mouse.
- Ethernet sample piece transfer.
- Offline 2D part programming.



ER70.

Easy to use with 2D multifunctional controller.

Manuel crowning system.

By help of manuel crowning same angle along part lenght.



OPTIONAL CONTROLLER

ER90

General features

- Windows-style operating system.
- 2D and 3D programming.
- 3-D drawing feature.
- 2D DXF import feature.
- Automatic bending sequence search and collision control.
- 17" LCD touch-screen that facilitates sights of machine body, mould, back gauge, side protection guards, and components .
- Changeable color display unit (buttons, machine color, background color, color patterns, the background).
- Multi-functional alpha numeric keyboard.
- External attachment possibility of keyboard and mouse.
- Angle measurement and control through IMG 100 system.
- Enabling tandem type operational application.
- Dynamic crowning.
- Remote access.
- Application of digital protractor.
- Motorized front-support system.
- Configuration that can be made up to 16 axes.
- Error message display.
- Inch / mm, t / ustons unit alterations.

ERMAK CAD/CAM Bending Simulation Software:

- For ERMAKSAN press brakes CAD / CAM sheet metal bending simulation. ER90 PC (Windows98SE / ME / NT4 / 2000 / XP).
- Language options: Turkish, Czech, Dutch, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Finnish, Chinese.



ER90.
Professional solutions with 3D controllers.

Safety Systems



Fiessler Akas LCIIIM Protection System (O)



DSP Laser Protection System (O)



Laser Safe (O)

Laser safe that is produced specifically for press brakes that is the leader among safety systems. Laser safe keeps the operator's safety at the top level.



SICK Light Barrier (S)



SICK M 2000 Rear Light Guard (S)

CE standards safety protections help you work in safer conditions.



IMG 100 laser Safe and Angle Measurement System (O)

Laser Finger Protection helps you save time with easy installation.

- Laser Safe can be used with DNC 600S and ER-70.
- Angle Measurement can be used with ER-90.

Top Tool Clamping Systems



Promecam Top Tool Clamping System (S)
Top tool clamping system which provides quick tool change.



Pneumatic Tool Clamping System (O)
Pneumatic tool clamping systems press and center the tools automatically with the help of the pressurized air. These are perfect solutions to shorten the setup timing and for automated press brakes.



Hydraulic Tool Clamping System (O)
Hydraulic tool clamping systems clamp, correct and center the tools, with the help of the hydraulic automatically without need for air. These are perfect solutions to shorten the setup timing and for automated press brakes.



Wila Tool Clamping System (O)

Bottom Tool Clamping and Crowning Systems



Mutli-V Bottom Tool (O)
Multi V or U type adjustable tools.



Wila Bottom Tool Clamping System (O)



Hydraulic Bottom Tool Clamping System (O)



Wila Hydraulic Tool Clamping Systems (O)



CNC Motorised Crowning System (*)
CNC crowning system that communicates with the CNC controller, performs crowning automatically and enables the part to be at even bending angle at any given point.

* Up to 400 TN optional.
From 400 TN and above standard.



Manual Crowning System (*)
Manual crowning system that enables the part to be at even bending angle at any given point.

* Up to 260 TN optional.
From 260 TN and above standard.

Other Equipments



Throat (O)

Special throat depths are offered up to 1500 mm for large bendings.



Sliding Front Support Arms (S)



Backgauge Fingers (S)

Specifically designed folding backgauge fingers.



2 Axes (X,R)

4 Axes (X, R, Z₁, Z₂)

6 Axes (X, R, Z₁, Z₂, X₁, X₂) Rapid and Precise Back Support System with Servo Motor. (O)

They enable you to increase the production performance and quality.

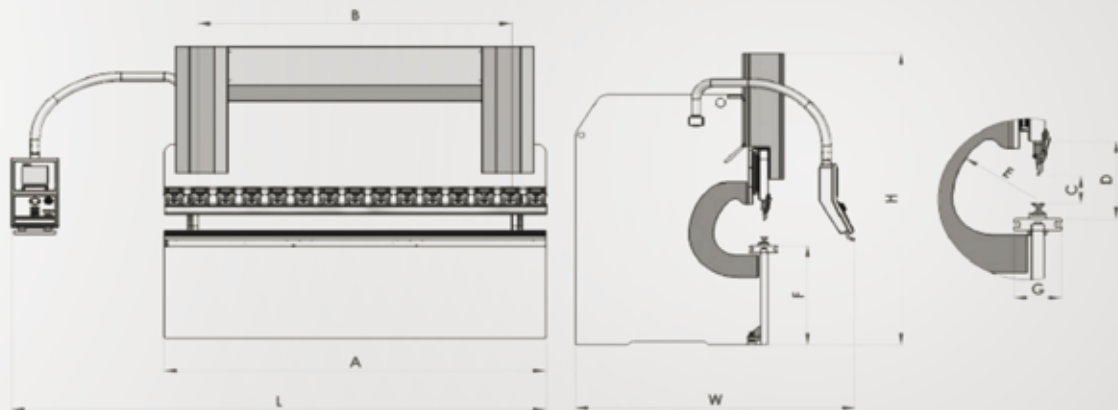


Tool Storing Cabinet (O)

Technical Features

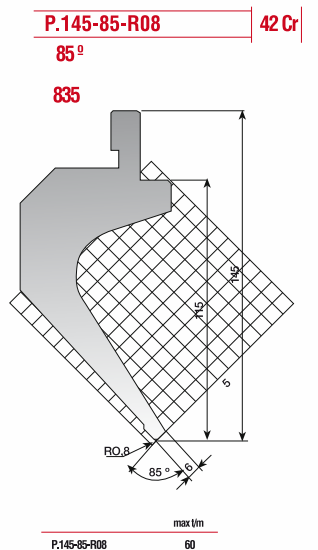
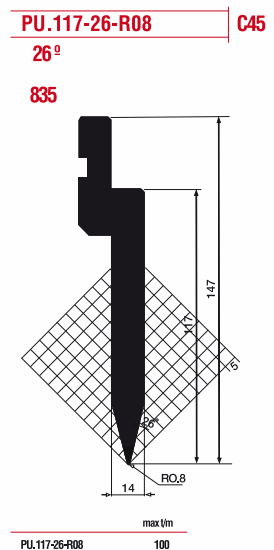
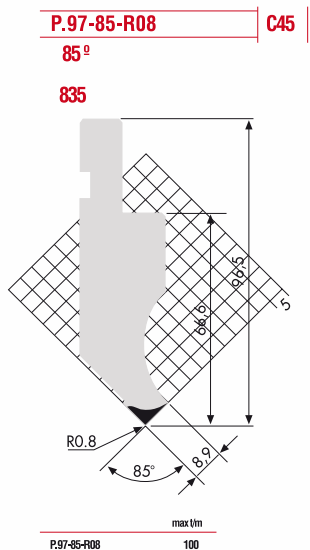
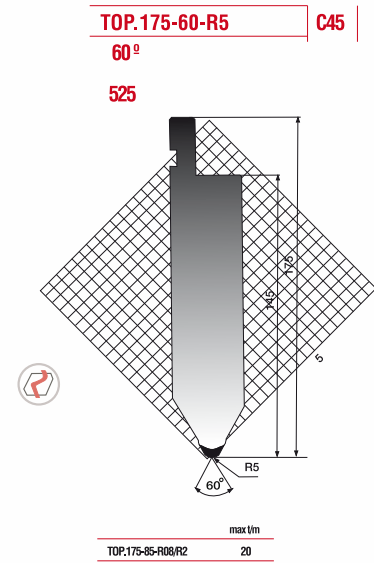
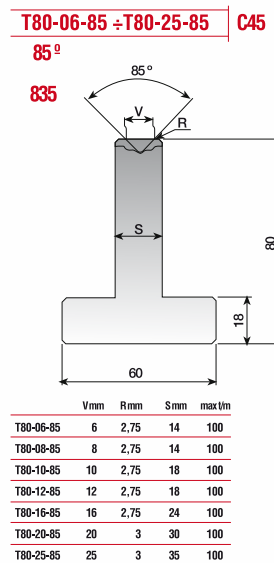
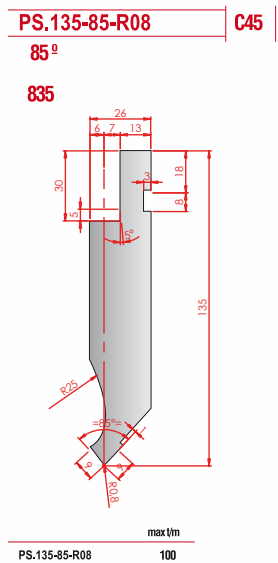
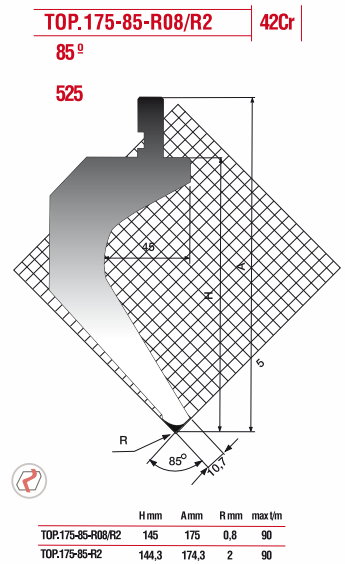
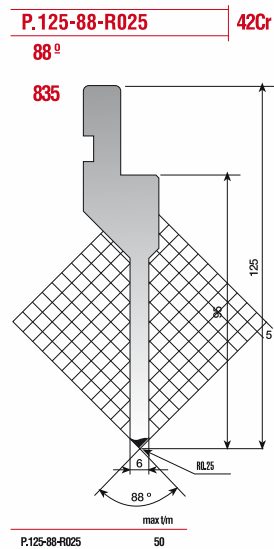
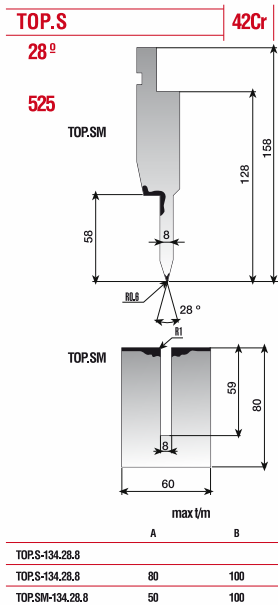
TYPE	BENDING LENGTH	BENDING POWER	DISTANCE BETWEEN COLUMNS	Y RAPID SPEED	Y WORKING SPEED *	Y RETURN SPEED	CROWNING	TRAVEL IN X AXIS	SPEED OF X AXIS	BACKGAUGE FINGER BLOCKS
	A		B							
	mm	Ton	mm	mm/s	mm/s	mm/s		mm	mm/s	Amount
PB-PRO 1270 - 40	1270	40	1050	140	17	170	-	800	230	2
PB-PRO 1270 - 60	1270	60	1000	200	14	165	-	800	230	2
PB-PRO 2100 - 40	2100	40	1700	140	17	170	-	800	230	2
PB-PRO 2100 - 60	2100	60	1700	200	14	165	-	800	230	2
PB-PRO 2600 - 60	2600	60	2200	200	14	165	-	800	230	2
PB-PRO 2600 - 100	2600	100	2200	200	9.5	155	-	800	230	2
PB-PRO 2600 - 135	2600	135	2200	160	10	120	-	800	230	2
PB-PRO 3100 - 100	3100	100	2600	200	9.5	155	-	800	230	2
PB-PRO 3100 - 135	3100	135	2600	200	10	120	-	800	230	2
PB-PRO 3100 - 175	3100	175	2600	180	10	135	-	800	230	2
PB-PRO 3100 - 220	3100	220	2600	180	11	160	-	800	230	2
PB-PRO 3100 - 260	3100	260	2600	140	11	135	Manual	800	230	2
PB-PRO 3100 - 320	3100	320	2600	140	10.5	150	Manual	800	230	2
PB-PRO 3100 - 400	3100	400	2550	110	8.4	130	Motorized	1000	230	2
PB-PRO 3760 - 175	3760	175	3250	180	10	135	-	800	230	2
PB-PRO 3760 - 220	3760	220	3250	180	11	160	-	800	230	2
PB-PRO 3760 - 320	3760	320	3250	140	10.5	150	Manual	800	230	2
PB-PRO 4100 - 135	4100	135	3600	200	10	120	-	800	230	2
PB-PRO 4100 - 175	4100	175	3600	180	10	135	-	800	230	2
PB-PRO 4100 - 220	4100	220	3600	180	11	160	-	800	230	2
PB-PRO 4100 - 260	4100	260	3600	140	11	135	Manual	800	230	2
PB-PRO 4100 - 320	4100	320	3600	140	10.5	150	Manual	800	230	2
PB-PRO 4100 - 400	4100	400	3550	110	8.4	130	Motorized	1000	230	2
PB-PRO 4270 - 135	4270	135	3780	200	10	120	-	800	230	2
PB-PRO 4270 - 220	4270	220	3780	180	11	160	-	800	230	2
PB-PRO 4270 - 400	4270	400	3780	110	8.4	130	Motorized	1000	230	2
PB-PRO 6100 - 220	6100	220	5100	130	11	125	-	800	230	4
PB-PRO 6100 - 320	6100	320	5100	80	10.5	75	Motorized	800	230	4
PB-PRO 6100 - 400	6100	400	5100	80	8.4	65	Motorized	1000	230	4

* Working speed should be max. 10 mm / sec. at CE certified machines according to the EN12622 norm.



NUMBER OF SHEET SUPPORT (Sliding front arms)	OIL CAPACITY	MOTOR POWER	STROKE	DAYLIGHT	THROAT DEPTH	TABLE HEIGHT	TABLE WIDTH	LENGTH	HEIGHT	WIDTH	WEIGHT
Amount	lit.	kW	C mm	D mm	E mm	F mm	G mm	L mm	H mm	W mm	kg.
2	80	5.5	170	387	350	850	90	2150	2300	1650	3050
2	150	7.5	275	530	410	900	90	2250	2750	1960	4150
2	80	5.5	170	387	350	850	90	2900	2300	1650	3950
2	150	7.5	275	530	410	900	90	3250	2750	1960	5650
2	150	7.5	275	530	410	900	90	3750	2750	1960	6050
2	150	7.5	275	530	410	900	90	3750	2800	1950	6850
2	200	11	275	550	410	900	90	3750	2800	2050	8250
2	150	7.5	275	530	410	900	90	4250	2800	1950	7450
2	200	11	275	550	410	900	90	4250	2800	2050	8650
2	200	15	275	550	410	900	90	4250	2800	2150	9450
2	300	18.5	275	550	410	900	200	4550	2850	2250	11500
2	300	22	275	550	410	900	220	4550	2900	2350	15000
2	400	30	375	650	410	900	240	4550	3200	2450	16800
2	400	30	375	650	510	1000	240	4550	3470	2650	20840
2	200	15	275	550	410	900	90	4900	2800	2150	10950
2	300	18.5	275	550	410	900	160	5100	2900	2250	12600
2	400	30	375	650	410	900	220	5100	3150	2450	20000
2	200	11	275	550	410	900	90	5100	2800	2100	10650
2	200	15	275	550	410	900	90	5100	2850	2150	11950
2	300	18.5	275	550	410	900	160	5150	3000	2250	13800
2	300	22	275	550	410	900	200	5150	3000	2350	16700
2	400	30	375	650	410	900	220	5350	3150	2450	21750
2	400	30	375	650	510	1000	240	5450	3470	2650	26330
2	200	11	275	550	410	900	90	5280	2800	2150	10950
2	300	18.5	275	550	410	900	160	5320	3000	2250	14600
2	400	30	375	650	510	1000	240	5600	3470	2650	26550
4	300	18.5	275	550	410	1100	180	7500	3200	2350	25800
4	400	30	375	650	410	1100	180	7500	3350	2450	30900
4	400	30	375	650	510	1100	200	7650	3750	2650	39700

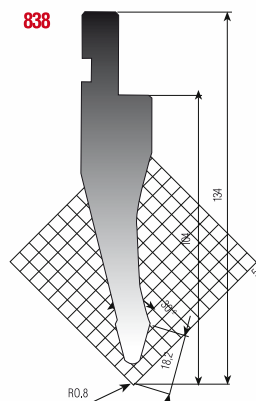
Special Top and Bottom Tools



P.134-30-R08 | **C45**

30°

838

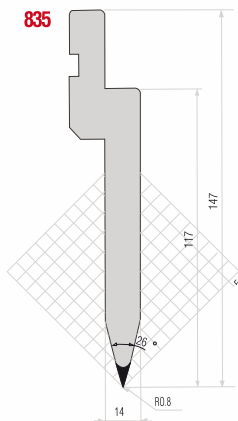


max t/m
P.134-30-R08 70

PU.117-26-R08 | **C45**

26°

835

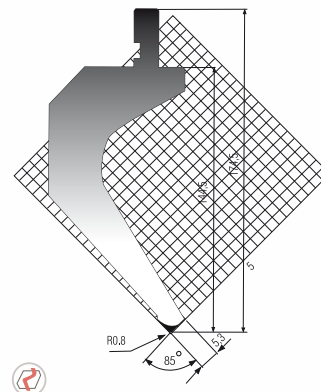


max t/m
PU.117-26-R08 100

TOP.175-85-R08/S | **42Cr**

85°

525

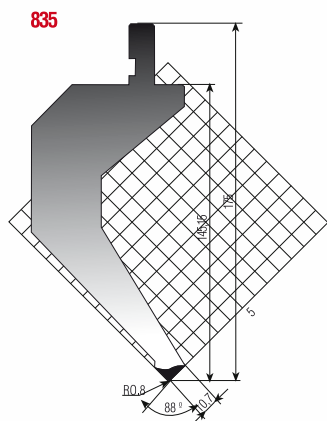


max t/m
TOP.175-85-R08/R2 20

P.175-88-R05 | **42Cr**

85°

835

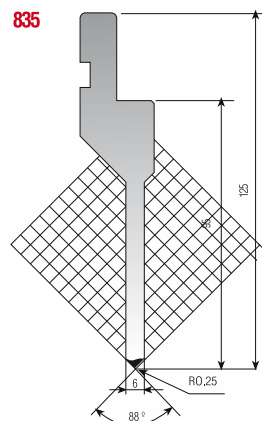


max t/m
P.175-88-R05 50

P.125-88-R025 | **42Cr**

85°

835

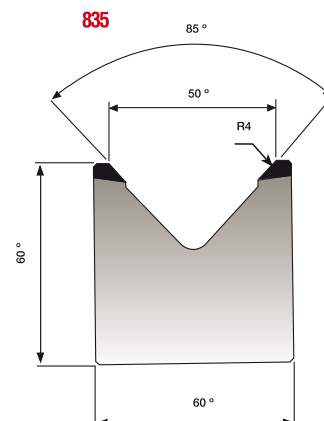


max t/m
P.125-88-R025 100

M.60-85-50 | **C45**

85°

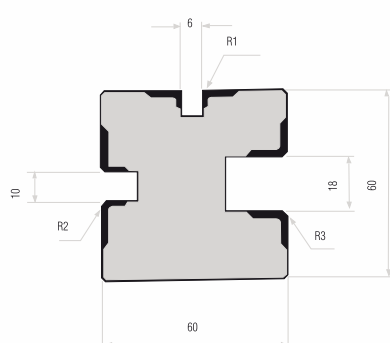
835



max t/m
M.60-85-50 100

M460 | **C45**

835

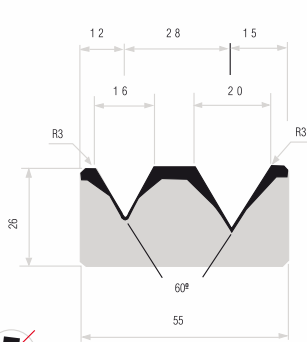


max t/m
M460 80

P.125-88-R025 | **C45**

60°

835

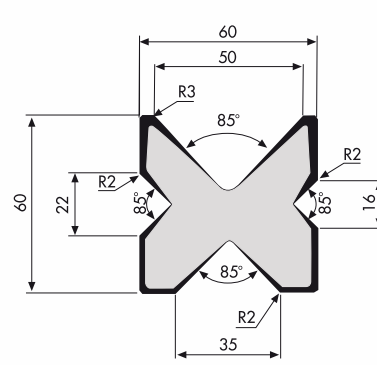


max t/m
M26-60-05 80

M460-R | **C45**

85°

835



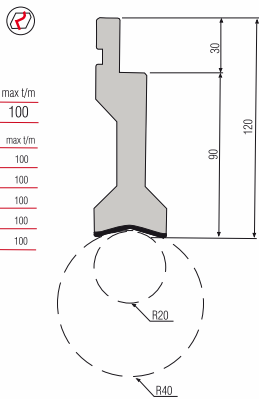
max t/m
M460-R 80

Special Top and Bottom Tools

42C

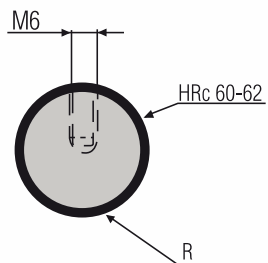
522

		max t/m
TOP.CC.120-20		100
	R mm	max t/m
TOP.CC20	20	100
TOP.CC25	25	100
TOP.CC30	30	100
TOP.CC35	35	100
TOP.CC40	40	100



C45

525

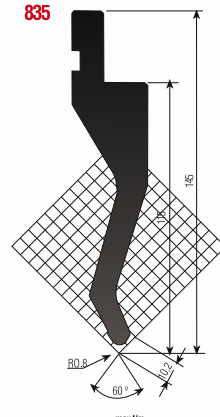


	R mm	max t/m
TOPC08	8	100
TOPC10	10	100
TOPC12,5	12,5	100
TOPC15	15	100
TOPC17,5	17,5	100

42C

60⁹

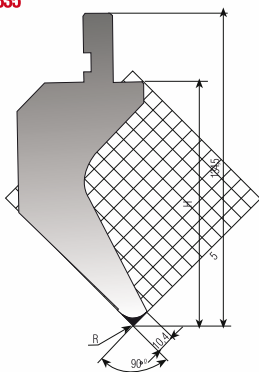
835



C45

90°

835

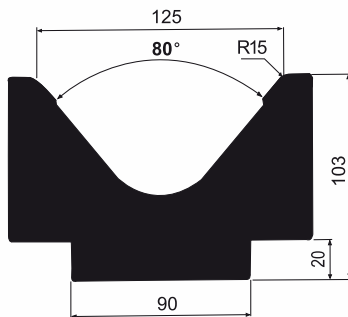


	H mm	R mm	max t/m
PK.135-90-R08	104,35	0,8	50
PK.135-90-R025	104,6	0,25	50

C45

80⁹

835

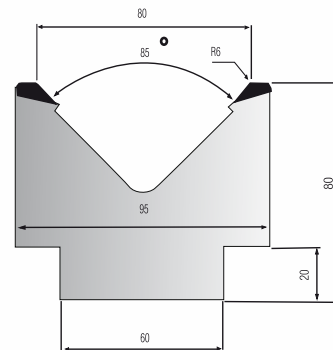


	max t/m
M103-80-125	100

C45

85⁹

835

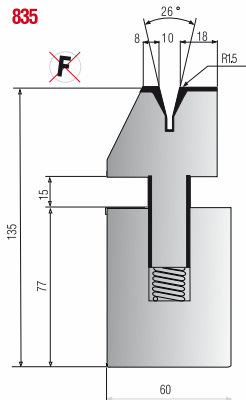


	max t/m
M80-85-80	100

C45

26⁹

835



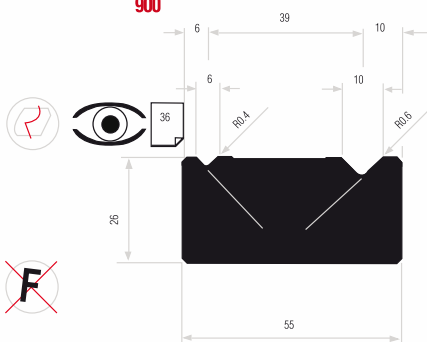
	max t/m
S135-26-10	26

C45

90^o

835

900

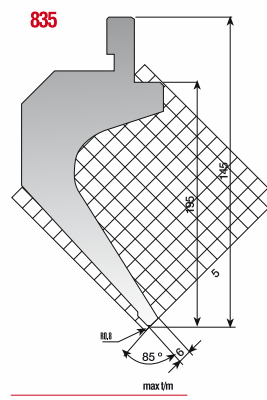


	max t/m
M26-90-01	100

420

85 0

835

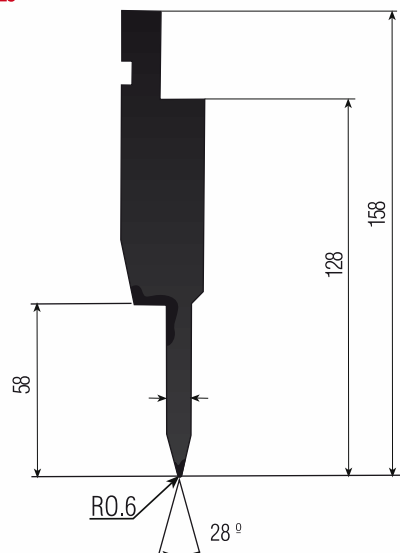


P.145-85-R08
60

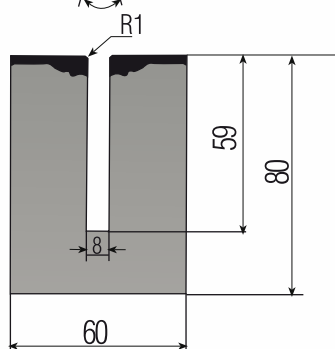
TOP.S (TOP.SP+TOP.SM) 42Cr

28°

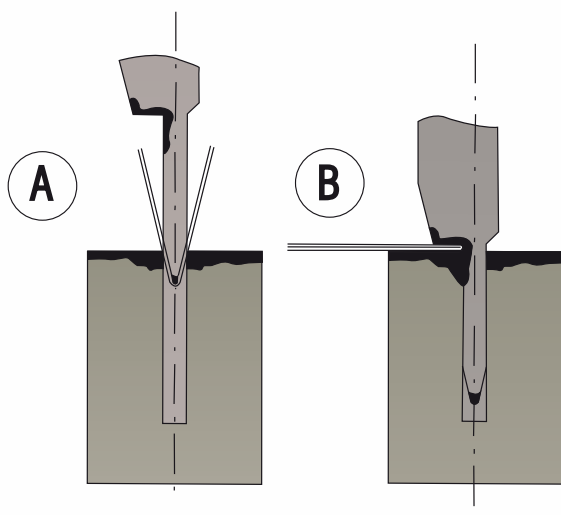
525



TOP.SM



	max t/m	
	A	B
TOP.S-134.28.8		
TOP.SP-134.28.8	80	100
TOP.SM-134.28.8	50	100



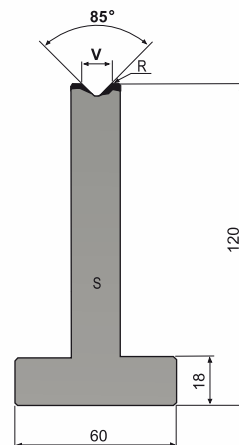
T120-06-85 ÷ T120-25-85

C45

85°

835

	V mm	R mm	S mm	max t/m
T120-06-85	6	2,75	14	100
T120-08-85	8	2,75	14	100
T120-10-85	10	2,75	18	100
T120-12-85	12	2,75	18	100
T120-16-85	16	2,75	24	100
T120-20-85	20	3	30	100
T120-25-85	25	3	35	100



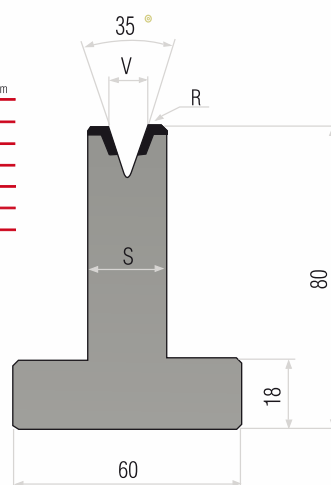
T80-06-35 ÷ T80-25-35

C45

35°

835

	V mm	R mm	S mm	max t/m
T80-06-35	6	0,8	14	35
T80-08-35	8	1	16	35
T80-10-35	10	1,2	20	40
T80-12-35	12	1,6	22	40
T80-16-35	16	3	30	45
T80-20-35	20	3	35	50
T80-25-35	25	3	40	50



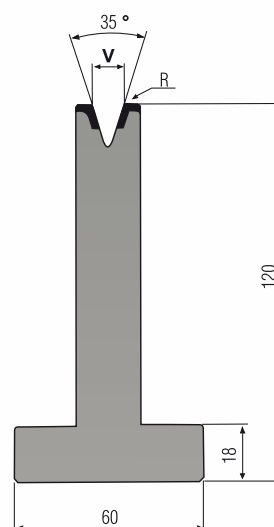
T120-06-35 ÷ T120-25-35

C45

85°

835

	V mm	R mm	S mm	max t/m
T120-06-35	6	0,8	14	35
T120-08-35	8	1	16	35
T120-10-35	10	1,2	20	40
T120-12-35	12	1,6	22	40
T120-16-35	16	3	30	45
T120-20-35	20	3	35	50
T120-25-35	25	3	40	50



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