# Bending machines manufacturer!





www.strojegradnja-sas.si

## **About us**

Strojegradnja SAS - a qualitative and reliable manufacturer of hydraulic bending machines, following development trends and customers' needs.

We are a family run business, specialising in the development, production and selling of machines for bending, cutting and storing sheet metal. With our knowledge, experience and tradition we manufacture machines, which facilitate work and contribute to greater productivity in production plants. By fast dynamics of axis motion, graphic design and the possibility of remote controlling and programming, our newest products draw nearer to trends of Industry 4.0.

### 30 years of operation

During its 30 years of operation Strojegradnja SAS proved itself as one of the biggest European manufacturers of machines for bending sheet metal thinner than 2 mm. In 2018 we manufactured the 500th hydraulic machine at our plant and thus strengthened our position in the market and proved ourselves as a qualitative and reliable manufacturer of hydraulic bending machines.







## **BENDING MACHINES**

Hydraulic bending machines are the topmost machines for cutting and bending sheet metal. With their own technology they are designed for fast, precise and technically perfected production of your products. We offer three options of our basic series of machines: *Profi*, *Regular* and *Easy*.

### Profi

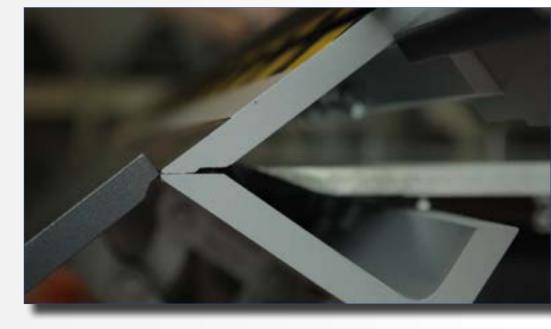
- intended for demanding users
- with automatic scissors and an operating depth of 1,150 mm
- option of CNC, Cs, Pf and E software

#### Normal

- with automatic scissors and operating depth of 1,150 mm
- option of Pf and E software

### Easy

- favourable variation of the bending machine
- option of automatic or manual roller shears,
- operating depth of 1,050 mm
- with software E



# HKS-CNC Profi



CNC Computer Profi console arms Roller sheras Backgauge system









A 17-inch industrial LCD touch-screen makes the programming even more manageable. New shapes of profiles can be programmed by simply entering dimensions and geometry. A profile library enables easy looking up of the saved profiles.

The Profi console arms are welded and they transfer movement from hydraulic cylinders to the upper clamp, which clamps the sheet metal in place during bending and cutting. Roller shears are driven with a hydraulic motor through a steel wire.

The system of sheet metal movement is electrically driven by front fingers and back support for sheet metal. The position of a backgauge system is measured by a measuring rod.

TECHNICAL DATA					
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.150 mm				
Sheet metal thickness	Al 1,5 mm, Steel (400 N/mm²) 1,25mm				
Weight	4.900 kg	4.400 kg	3.700 kg	3.100 kg	2.700 kg
Number of arms	8	7	6	5	4
Power	5,5 kW	4 kW	4kW	3 kW	2,2 kW
Power of electric motor	5,5 kW	4 kW	4 kW	3 kW	2,2kW

# HKS-Cs Profi

Hydraulic bending machines (HKS-Cs Profi) are equipped with automatic scissors, backgauge system and a touch-screen. Cs software enables simple manual operating and automatic bending with NC programming. The bending bar is reinforced so as to to achieve greaterprecision of the bending angle of sheet metal. The machines are driven by electric motors through a hydraulic pump, which enables better bending dynamics by means of frequency regulation.

Cs Computer Profi console arms Roller shears Backgauge system









A computer with a selection of automatic or manual mode, with very simple NC programming and a touch-screen. In the automatic programming mode, up to 200 different programmes can be saved, which can include up to 40 steps.

All the HKS-Cs Profi machines are equipped with Profi console arms. They are stronger, wider, and enable an operating depth of 1,150 mm. Roller shears are driven by a hydraulic motor through a steel wire.

The system of sheet metal movement is electrically driven by front fingers and back support for sheet metal. The position of a backgauge system is measured by a measuring rod.

TECHNICAL DATA					
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.150 mm	1.150 mm	1.150 mm	1.150 mm	1.150 mm
Sheet metal thickness	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm
Weight	4.400 kg	3.800 kg	3.100 kg	2.500 kg	2.300 kg
Number of arms	7	6	5	4	4
Power	5,5 kW	4 kW	3 kW	2,2 kW	2,2 kW
Power of el. motor	5,5 kW	4 kW	3 kW	2,2 kW	2,2 kW

# **Additional equipment**

## For bendning thicker sheets

The machine is able to bend thicker sheets up to 1,5 mm or 2,00 mm steel, while increasing hydraulic power and construcation base on the hydraulic bending machines types HKS-CNC Profi, HKS-Cs Profi, HKS- Pf Profi and HKS - E Profi.



Automatic scissors positioned on the lower part of the hydraulic bendnig machine - with that we increase the bending space on the upper part of the bending machine!



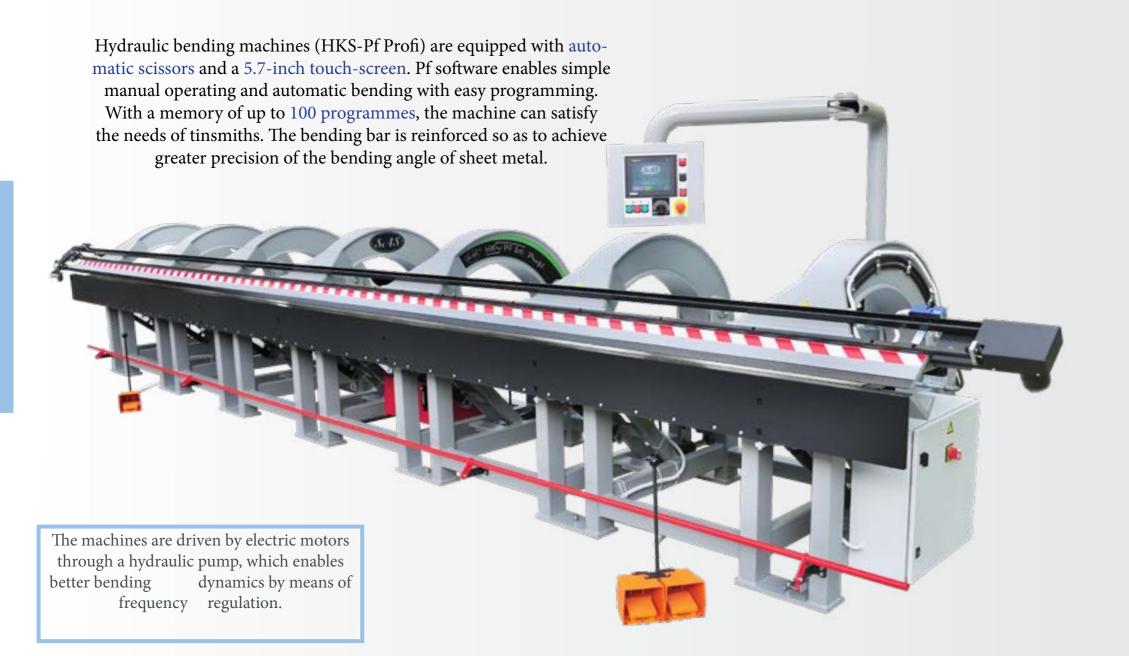
**Additional equipment** 

### TEHNICAL DATA

HKS-CNC Profi 2 mm					
Working length		8.200 mm	7.000 mm	6.100 mm	4.000 mm
Working width		1.150 mm	1.150 mm	1.150 mm	1.150 mm
metal thickness	Sheet	Al 3 mm, Steel (400 N/mm²) 2 mm			
Number of arms		13	11	9	6

HKS-CNC Profi 1,5mm					
Working length		8.200 mm	7.000 mm	6.100 mm	4.000 mm
Working width		1.150 mm	1.150 mm	1.150 mm	1.150 mm
metal thickness	Sheet	Al 2,5 mm, Steel (400 N/mm²) 1,5mm	Al 2,5 mm, Steel (400 N/mm²) 1,5mm	Al 2,5 mm, Steel (400 N/mm²) 1,5mm	Al 2,5 mm, Steel (400 N/mm²) 1,5 mm
Number of arms		11	9	8	5

# HKS-Pf Profi



Pf Computer Profi console arms Roller shears







A computer with a selection of manual or automatic operation mode, with very easy programming and a touch-screen. In the automatic mode, up to 100 different programmes can be saved.

All the HKS-Pf Profi machines are equipped with Profi console arms. They are stronger, wider, and enable an operating depth of 1,150 mm.

Roller shears driven by a hydraulic motor through a steel wire.

TECHNICAL DATA					
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.150 mm	1.150 mm	1.150 mm	1.150 mm	1.150 mm
Sheet metal thickness	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm
Weight	4.100 kg	3.400 kg	2.700 kg	2.300 kg	2.100 kg
Number of arms	7	6	5	4	4
Power of electric motor	5,5 kW	4 kW	3 kW	2,2 kW	2,2 kW

# HKS-E Profi

Hydraulic bending machines HKS-E Profi are equipped with automatic scissors and a 5-inch touch-screen. E software enables simple manual controlling and automatic bending with easy programming. With a memory of up to 90 programmes, the machine satisfies the needs of tinsmiths.



#### **E** Computer



matic operation mode, with very easy program-

ming and a touch-screen. In the automatic mode,

up to 90 different programmes can be saved.

#### **Profi console arms**



Roller shears driven by a hydraulic motor through a steel wire.

A computer with a selection of manual or auto-

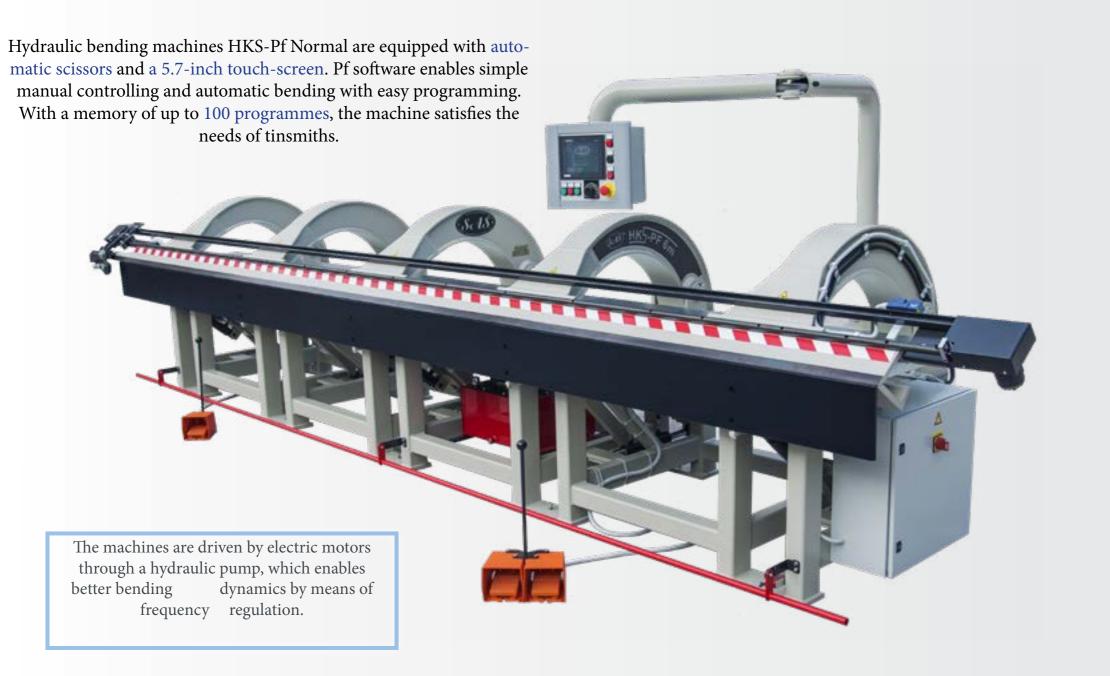
All the HKS-E Profi machines are equipped with Profi console arms. They are stronger, wider, and enable an operating depth of 1,150 mm.

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**Roller shears** 

	Technical data				
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.150 mm	1.150 mm	1.150 mm	1.150 mm	1.150 mm
Sheet metal thickness	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm	Al 1,5 mm, Steel (400 N/mm²) 1,00 mm
Weight	4.050 kg	3.350 kg	2.650kg	2.250 kg	2.050 kg
Number of arms	7	6	5	4	4
Power of electric motor	5,5 kW	4 kW	3 kW	2,2 kW	2,2 kW

## HKS-Pf Normal



Pf Computer Console arms Roller shears







A computer with a selection of manual or automatic operation mode, with very easy programming and a touch-screen. In the automatic mode, up to 100 different programmes can be saved.

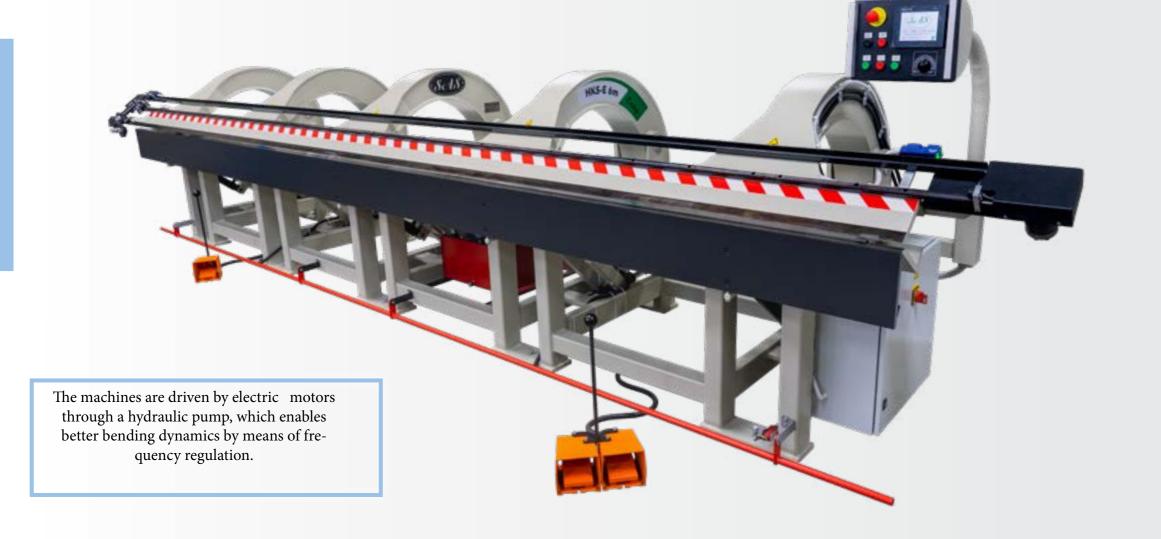
All the HKS-Pf machines are equipped with console arms, enabling an operating depth of 1,050 mm.

Roller shears driven by a hydraulic motor through a steel wire.

		TECHNICAL	DATA		
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.050 mm				
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Weight	3.800 kg	3.200 kg	2.400 kg	2.100 kg	2.000 kg
Sheet metal thickness	Al 1mm Steel 0,8 mm				
Number of arms	7	6	5	4	4
Power	4 kW	3 kW	3 kW	2,2 kW	2,2 kW
Power of electric motor	380 V				

# HKS- E Easy

Hydraulic bending machines HKS-E Easy are equipped with automatic scissors and a 5-inch touch-screen. E software enables simple manual controlling and automatic bending with easy programming. With a memory of up to 90 programmes, the machine satisfies the needs of tinsmiths.



#### **E Computer**



A computer with a selection of manual or automatic operation mode, with very easy programming and a touch-screen. In the automatic mode, up to 90 different programmes can be saved.

#### **Console arms**



All the HKS-E machines are equipped with console arms, enabling an operating depth of 1,050 mm.

#### **Roller shears**

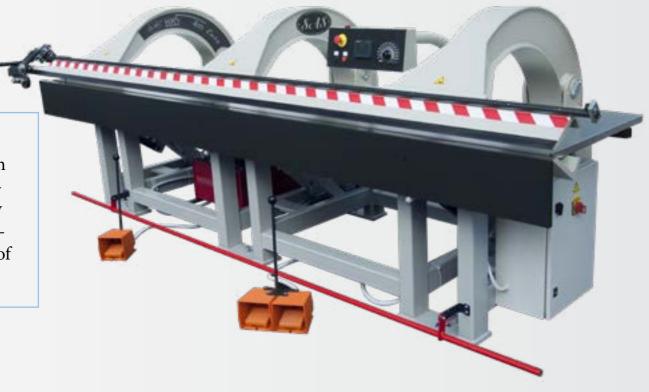


Roller shears driven by a hydraulic motor through a steel wire.

TECHNICAL DATA					
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.050 mm	1.050 mm	1.050 mm	1.050 mm	1.050 mm
Sheet metal thickness	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm
Weight	3.750 kg	3.150 kg	2.350kg	2.050 kg	1.950 kg
Number of arms	7	6	5	4	4
Power	3 kW	2,2 kW	2,2 kW	2,2 kW	2,2 kW
Voltage	380 V	380 V	380 V	380 V	380 V

# HKS Easy

Hydraulic bending machines (HKS Easy) are equipped with automatic scissors and a 3.5-inch touch-screen. E software enables simple manual controlling and automatic bending with easy programming. With a memory of up to 20 programmes, the machine satisfies the basic needs of tinsmiths.



	TECHNICAL DATA				
Working length	8.200 mm	7.000 mm	6.100 mm	5.000 mm	4.000 mm
Length of machine	9.100 mm	7.900 mm	7.000 mm	5.900 mm	4.900 mm
Bending angle	145°	145°	145°	145°	145°
Working width	1.050 mm	1.050 mm	1.050 mm	1.050 mm	1.050 mm
Sheet metal thickness	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0 mm, Steel (400 N/mm²) 0,8 mm	Al 1,0mm, Steel (400 N/mm²) 0,8 mm
Weight	3.500 kg	2.900 kg	2.100kg	1.800 kg	1.600 kg
Number of arms	7	6	5	4	3
Power	3 kW	2,2 kW	2,2 kW	2,2 kW	2,2 kW

### Manual bending machines RKS 1350 and RKS 2030 with manual scissors and bending angle measurement.



# **Manual bending machines**

### **RKS 1350**

TECHNICAL DATA - RKS 1350				
Working length	1.350 mm			
Bending angle	150°			
Sheet metal thickness	Al 1,0 mm Steel 0,8 mm			
Length of machine	1.920 mm			
Weight	100 kg			

### **RKS 2030**

TECHNICAL DATA - RKS 2030				
Vorking length	2.030 mm			
ending angle	150°			
heet metal thickness	Al 0,8 mm Steel 0,7mm			
ength of machine	2.590 mm			
Veight	180 kg			

Our offer of warehousing consists of single, double band and console decoilers and rollers for sheet metal. All the decoilers are equipped with an adjustable disc break and a handle for spinning the mandrel. The handle is meant for easy fastening and unfastening of the mandrel.



### **RAZ-END 1250/4**



RAZ-END 1250/4		
Weight	160 kg	
Working width	1.250 mm	
Inner Φ	480 - 530 mm	
Load capacity	4.000 kg	

### **RAZ-END 1250/3**



AZ-END 1250/2	
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RAZ-END 1250/3	
Weight	150 kg
Working width	1.250 mm
Inner Φ	480 - 530 mm
Load capacity	3.000 kg

RAZ-END 1250/2		
Weight	130 kg	
Working width	1.250 mm	
Inner Φ	480 - 530 mm	
Load capacity	2.000 kg	

## **RAZ-ENO 1250**



RAZ-ENO 1250			
Weight	170 kg	160 kg	140 kg
Working width	1.250 mm	1.250 mm	1.250 mm
Inner Φ	480 - 530 mm	480 - 530 mm	480 - 530 mm
Load capacity	4.000 kg	3.000 kg	2.000 kg

**RAZ - R 1250** 



**RAZ - ENK R 1000** 



RAZ - R 1250		ı
Veight	160 kg	ŀ
Working width	1.250 mm	-
nner Φ	480-530 mm	
Load capacity	2.000 kg	

	RAZ-ENK R 1000	
]	Weight	130 kg
	Working width	1.000 mm
1	Inner Φ	480 - 530 mm
	Load capacity	1.000 kg

**RAZ-EN 500** 



RAZ-EN 500	RAZ-EN 800
100 kg	120 kg
500 mm	800 mm
480 - 530 mm	480 - 530 mm
2.000 kg	2.000 kg
	100 kg 500 mm 480 - 530 mm

**RAZ- ENK 1000** 



RAZ-ENK 500



RAZ-ENK 1000	
Weight	130 kg
Working width	1.000 mm
Inner Φ	480 - 530 mm
Load capacity	1.000 kg

RAZ-ENK 500		
Weight	115 kg	
Working width	500 mm	
Inner Φ	480 - 530 mm	
Load capacity	1.500 kg	

#### **RAZ-DV 1250**







ROL - Cart for transportation of roofing



ROL	
Weight	40 kg
Working width	1.250 mm
Loading capacity	2.000 kg

**RUN - Transporting cart with** a roller



RUN		
Weight	15 kg	
Working width	1.250 mm	
Loading capacity	100 kg	

## **DECOILERS**

Machines for sheet metal winding from bigger to smaller coils of inner diameter of 300 mm and biggest mass of 300 kg. The winder has an integrated manual counter, shears for transversal cutting and a probe for removing the winded sheet metal.



NAV- RO 1250

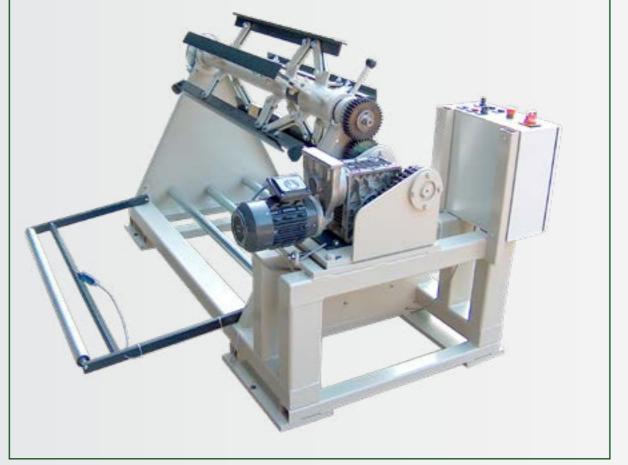






NAV-RO 1250		
Weight	300 kg	
Working width	1.250 mm	
Loading capacity 300 kg		
Counter for length measurement		

## **DECOILERS**

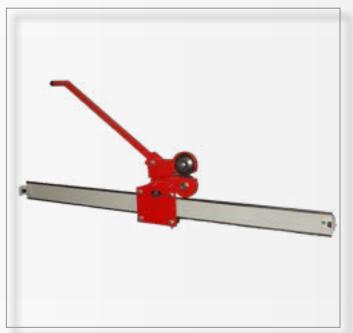


	RAZ-MV 500	RAZ-MV 1250
Weight	650 kg	750 kg
Working width	500 mm	1250 mm
Load capacity	4.000 kg	4.000 kg



Devices and machines for sheet metal cutting are intended for sheet metal cutting in transversal and longitudinal directions.

**SKA-PR**Shears for transversal cutting of sheet metal for the table, width 1.250 mm



SKA-PR		
Weight	30 kg	
Working width	1.250 mm	

**SKA- DR**Shears for transversal cutting of sheet metal with holder, width 1.250 mm



SKA-DR		
Weight	70 kg	
Working width	1250 mm	
Sheet metal thick-	0,8 mm	
ness		

Cutting tables are equipped with manual shears, sheet metal holder and sheet length measurement.



MIZA				
Working length	8.000 mm	7.000 mm	6.000 mm	5.000 mm
Working width	1.250 mm	1.250 mm	1.250 mm	1.250 mm
Sheet metal thick-	0,8 mm	0,8 mm	0,8 mm	0,8 mm
ness				
Cutting table on wheels, with shears for sheet metal cutting in transversal direction.				

## **TOOLS**

## Ferro-Rez

Slitting machine Ferro-Rez cuts maximum 1.250 mm width sheet metal. Machines are made for faster and easier sheet metal cutting in longitudinal and transversal direction, suitable for roofing companies.

Ferro-Rez				
Weight	1.000 kg			
Working width	1.250 mm			
Sheet metal thic	ck- 1,0mm			
ness				
Number of blades	3 kom			
Voltage	380 V			
Power	2,6 kW			
Fuses	16 A			





Slitting machine is equipped with measuring system and Touch-screen panel. This enables easy automatic and manual work. In automatic mode several sheet metal length and number of pieces can be adjusted. With help of frequency regulator sheet metal speed is adjustable.

SIR- tube expanders are intended for expanding tubes (of diameters 60, 80, 100 and 120 mm), are at an affordable price and also very useful.







SIR 60, 80, 100, 120		
Tube diameter	Ø 60 mm	
	Ø 80 mm	
	Ø 100 mm	
	Ø 120 mm	

**OUR PRODUCTS AROUND THE GLOBE** 

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