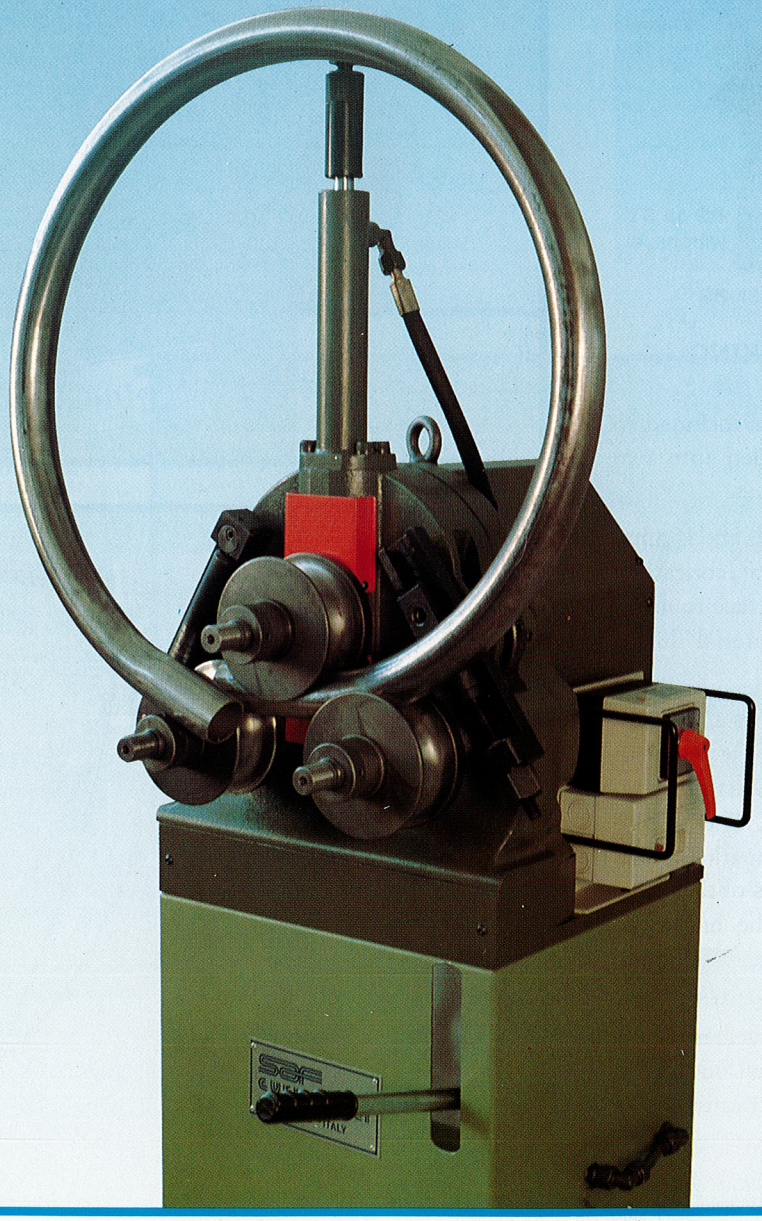
SEF curvatrici



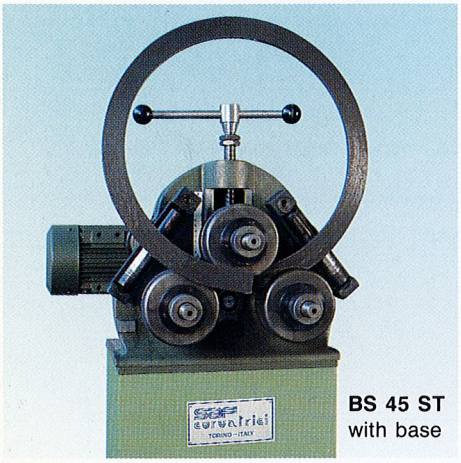
DS 45 HM
with base

BS and DS SERIE

GB
1997

THE CONCEPTION

The latest technology, applied to easy to work controls, is the main basis of the design of this series of machines.
SAF CURVATRICI has accepted the technological challenge by researching all the important aspects required by their users, then designing and manufacturing machines which distinguish themselves by their superior performance, durability and practicality.
We have produced a reliable, functional and easy to operate range of machines, suitable for use in a wide variety of manufacturing industries.
These machines can be used to bend virtually all kinds of materials thanks to their versatility and operating facilities.



BS 45 ST
with base

TECHNICAL AND WORKING FEATURES

The SAF bending machines included in this brochure can be divided into two separate types: **BS** and **DS**.

BS series has two driving rolls and is suitable to bend profiles for general fabrication. The rolls have a knurled surface to maintain a constant feed of material during bending.

DS series has three driving rolls and, in addition to bending sections for general fabrications, is ideal for sections which require a good surface finish. The smooth surface of the rolls do not mark the material and a constant feed is obtained by the additional torque of the motorized upper roll.

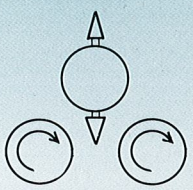
The lower rolls of both types of machine are fixed while the linear movement of the upper roll, which is mounted on a generous slide, sets the required radius.

The machine frame consists of a solid cast iron monobloc, with the ideal shape to counteract the stress which develop during bending.

The shafts are mounted on roller bearings.

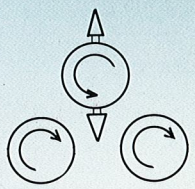
The shafts of the BS 40 are mounted on special heavy duty bushes.

BS SERIE

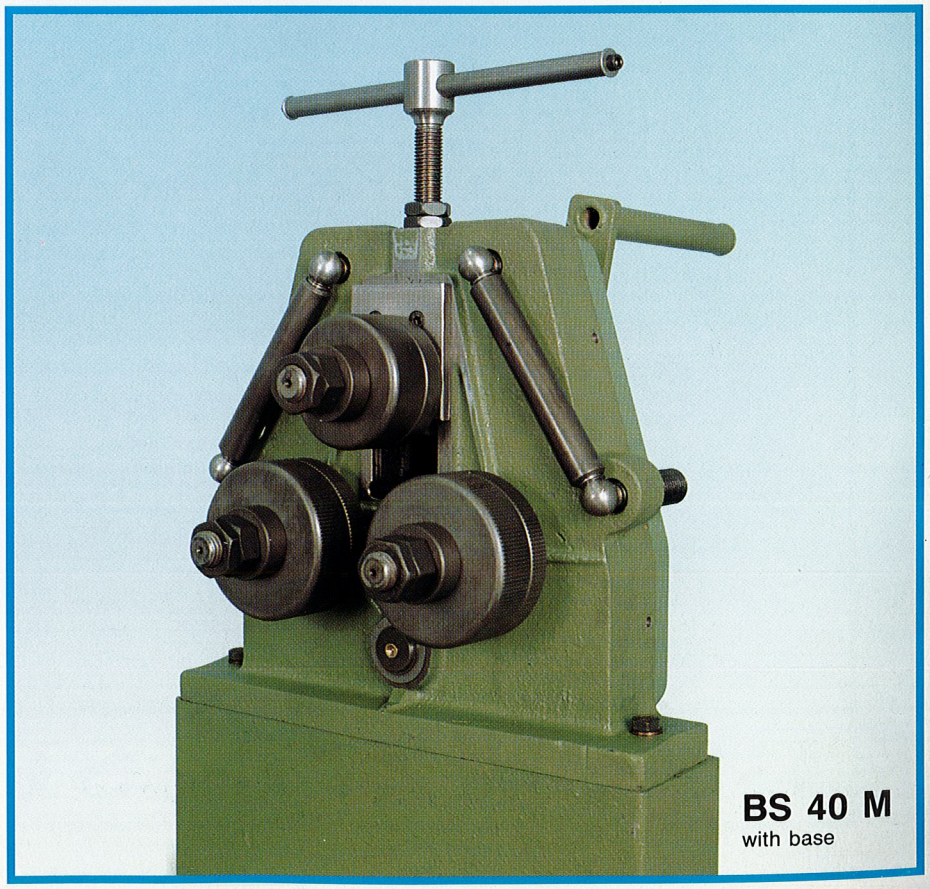


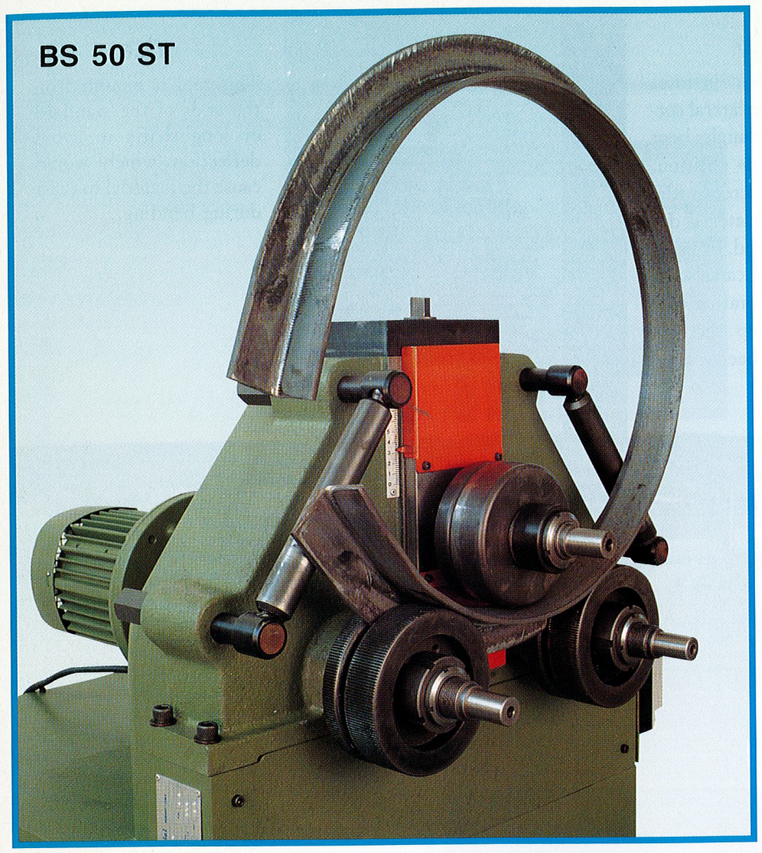
Reliability
Versatility
Power

DS SERIE



BS 45 ST
with base


BS 40 M
with base

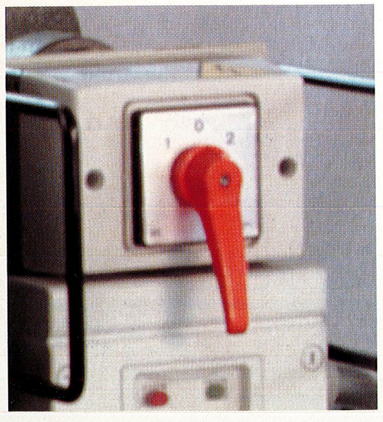


The rolls of the BS 40 are manually operated and the ratio of the operating handle to the rotation of the rolls has been carefully researched to achieve the best possible effort-performance ratio.

More information can be found in the technical table.

The right/left rotation controls are situaded on the machine in a position suitable to allow for efficient operation of the machine.

The machines are manufactured in accordance with all European legislation.

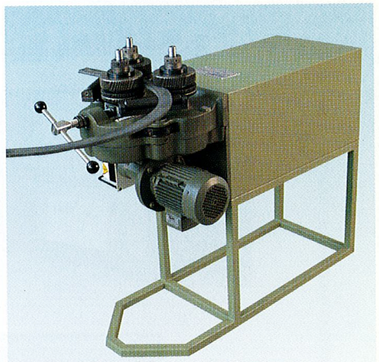


BENDING POSITION

The **SAF** machines of this series can be supplied with a standard or rotating fabricated base.

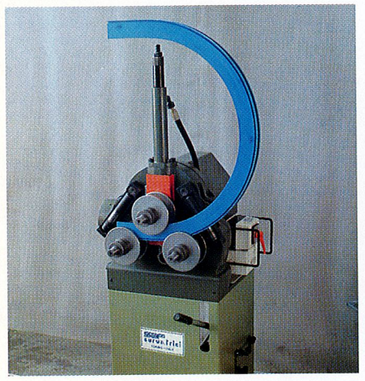
The standard base allows for work at an ideal height with the shafts in the horizontal position.

The rotating base allows for work to be done with shafts in either the horizontal or vertical position. The vertical position is especially useful when rolling very large radii.



BS 45 ST with rotating base

The rolls mounted on the driving shafts are very important for the quality of the bending. Together with the bending machine, **SAF** supplies one complete set of adjustable universal rolls, with which it is possible to bend the most part of steel profiles normally used in steel construction.
For special profiles, pipes and thin tubulars in steel, aluminium, copper, etc., special rolls are required.
Since many years now **SAF CURVATRICI** has been manufacturing and testing the rolls for client's profiles with scrupulous care and competence.
In very short time the rolls and the bent samples are delivered to the client.



A VERSION FOR EVERY NEED

The SAF machines in the BS series are available in three different sizes: 40, 45, 50 while the DS series is available only in 45.

The size of the machine can be chosen by checking the performance indicated on the relevant table.

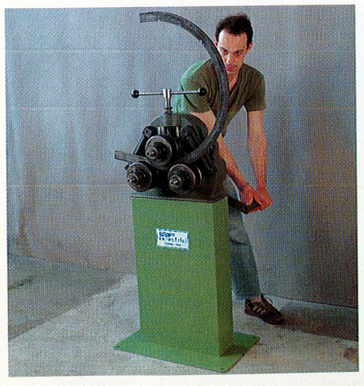
The version will be chosen according to the required shape and size of the component.

Versions available:

VERSION «M»

(BS 40 M)

Rolls are manually operated.
The top roll is manually adjusted by means of a handwheel.



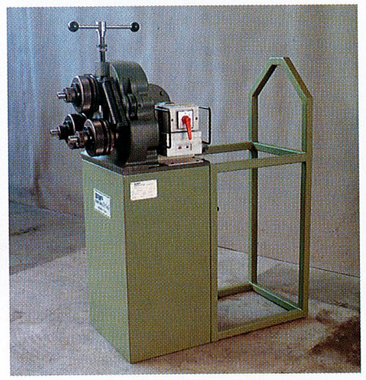
One version for every need

M ST HM H

VERSION «ST»

(BS 45 ST, BS 50 ST, DS 45 ST)

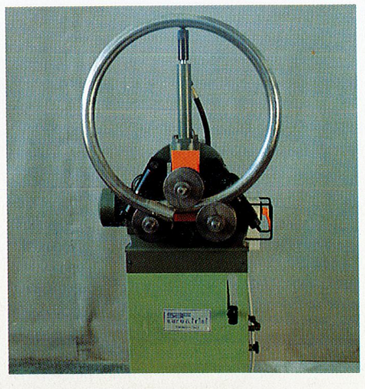
Rolls are motorised.
The top roll is manually adjusted by means of a handwheel.



VERSION «HM»

(BS 45 HM, DS 45 HM)

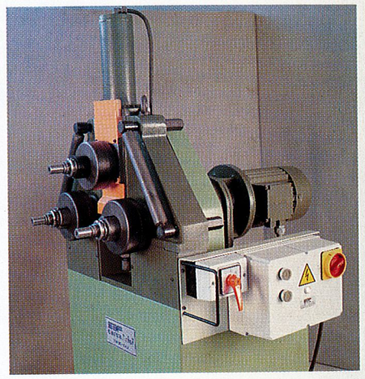
For this type of machine the top roll is adjusted hydraulically.
A hand pump placed on the front of the machine adjusts the top roll position and the material already placed between the bending rolls can be easily formed.
A mechanical dead-stop on the hydraulic cylinder controls the bending position.



VERSION «H»

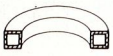
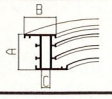
(BS 50 H)

The hydraulic adjustment of the top roll is achieved by means of an hydraulic unit operated by an electric motor.
Two buttons are used to move the top roll up and down.
Due to the force exerted by the hydraulically operated top roll the material already placed between the bending rolls can easily be formed.
A mechanical dead-stop is mounted under the bending roll.



With the **SAF** bending machines the customer has a reliable product which allows him to bend with precision in only 1 step.
Please contact us for any information you may need. Our technicians will submit you the best solution for your bending problems.

MIN AND MAX PERFORMANCE TABLE

PROFILE		BS 40 M			BS 45 ST BS 45 HM				DS 45 ST DS 45 HM				BS 50 ST BS 50 H			
		ROLLS	SIZE	R MIN	TOOL.	ROLLS	SIZE	R MIN	TOOL.	ROLLS	SIZE	R MIN	TOOL.	ROLLS	SIZE	R MIN
1B		TRS TRS TRS	35x8 30x8 20x5	400 150 80		TRS TRS TRS	50x10 40x 8 20x 5	500 150 100		TRS TRS TRS	50x10 40x 8 20x 5	500 150 100		TRS TRS TRS	60x12 50x10 20x 5	400 250 100
1A		TRS TRS TRS	50x12 50x 8 20x 3	300 120 80	TIR	TRS TRS TRS	60x20 50x10 20x 3	400 120 100	TIR	TRS TRS TRS	60x20 50x10 20x 3	400 120 100		TRS TRS TRS	60x25 50x10 20x 3	400 120 100
2A		TRS TRS TRS	20x20 20x20 10x10	250 150 80	TIR	TRS TRS TRS	25x25 20x20 10x10	200 150 100	TIR	TRS TRS TRS	25x25 20x20 10x10	200 150 100		TRS TRS TRS	30x30 25x25 10x10	300 150 100
3A		TRS TRS TRS	35x35x4 30x30x4 20x20x3	500 200 100		TRS TRS TRS	45x45x5 40x40x5 20x20x3	500 200 80		TRS TRS TRS	45x45x5 40x40x5 20x20x3	500 200 80		TRS TRS TRS	50x50x6 45x45x5 20x20x3	300 200 100
3B					RCD RCD RCD	TRS TRS TRS	40x40x5 35x35x5 20x20x3	500 200 150	RCD RCD RCD	TRS TRS TRS	40x40x5 35x35x5 20x20x3	500 200 150	RCD RCD RCD	TRS TRS TRS	45x45x5 40x40x5 20x20x3	400 250 150
5A		TRS TRS TRS	35x35x5 30x30x4 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	45x45x6 40x40x5 20x20x3	250 150 100
5B		TRS TRS TRS	35x35x5 30x30x4 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	45x45x6 35x35x6 20x20x3	250 150 100
5C		TRS TRS TRS	35x35x5 30x30x4 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	40x40x6 35x35x6 20x20x3	250 150 80	TIR	TRS TRS TRS	45x45x6 35x35x6 20x20x3	250 150 100
6A		RSP RSP RSP	50x25x5 40x20x5 30x15x4,5	300 200 100	TIR	TRS TRS TRS	60x30x6 50x25x6 30x15x4,5	300 200 100	TIR	TRS TRS TRS	60x30x6 50x25x6 30x15x4,5	300 200 100	TIR	RSP RSP RSP	80x45x8 60x30x6 30x15x4,5	350 200 100
6B		RSP RSP RSP	50x25x5 40x20x5 30x15x4,5	300 200 100	TIR	TRS TRS TRS	60x30x6 50x25x6 30x15x4,5	300 200 100	TIR	TRS TRS TRS	60x30x6 50x25x6 30x15x4,5	300 200 100	TIR	RSP RSP RSP	80x45x8 60x30x6 30x15x4,5	350 200 100
6C		TRS	30x15x4,5 — —	450 — —	TIR	TRS TRS	40x20x5,5 30x15x4,5 —	450 200 —	TIR	TRS TRS —	40x20x5,5 30x15x4,5 —	450 200 —	TIR	TRS TRS —	50x25x6 30x15x4,5 —	500 200 —
9C		RSP RSP RSP	22 18 10	300 150 100		TRS-RSP TRS-RSP TRS-RSP	30 25 10	500 200 100		TRS-RSP TRS-RSP TRS-RSP	30 25 10	500 200 100		RSP RSP RSP	35 30 10	400 200 100
10A		RSP RSP RSP	40x20x2,5 30x15x2 20x10x1	750 500 100	TIR	TRS-RSP TRS-RSP TRS-RSP	50x30x3 50x20x2 20x10x1	750 500 100	TIR	TRS-RSP TRS-RSP TRS-RSP	50x30x3 50x20x2 20x10x1	750 500 100	TIR	RSP RSP RSP	60x30x4 50x30x3 20x10x1	500 500 100
10B		RSP RSP RSP	35x20x2,5 30x15x2 20x10x1	600 400 100	TIR	TRS-RSP TRS-RSP TRS-RSP	50x30x3 40x20x2 20x10x1,5	750 500 100	TIR	TRS-RSP TRS-RSP TRS-RSP	50x30x3 40x20x2 20x10x1,5	750 500 100	TIR	RSP RSP RSP	60x30x4 50x30x3 20x10x1,5	750 500 100
11A		RSP RSP RSP	30x30x2 25x25x2 20x20x1,5	500 250 100		TRS-RSP TRS-RSP TRS-RSP	40x40x3 30x30x2 20x20x1,5	500 250 100		TRS-RSP TRS-RSP TRS-RSP	40x40x3 30x30x2 20x20x1,5	500 250 100		RSP RSP RSP	50x50x3 40x40x3 20x20x1,5	750 400 100
9A		RSP RSP RSP	30x2 25x1,5 10x1,5	400 300 100	TIR	RSP RSP RSP	60x2 50x2 10x1,5	600 300 100	TIR	RSP RSP RSP	60x2 50x2 10x1,5	500 180 100		RSP RSP RSP	60x2 50x2 10x1,5	500 300 100
9B		RSP RSP RSP	33,7x2,3 (1") 26,9x2,3 (3/4") 17,2x2 (3/8")	500 300 100	TIR	RSP RSP RSP	48,3x2,9 (1"1/2) 42,4x2,9 (1"1/4) 17,2x2 (3/8")	500 400 100	TIR	RSP RSP RSP	48,3x2,9 (1"1/2) 42,4x2,9 (1"1/4) 17,2x2 (3/8")	400 300 100	TIR	RSP RSP RSP	60,3x3,2 (2") 48,3x2,9 (1"1/2) 17,2x2 (3/8")	400 300 100
13A										RSP	A x B x C 45x65x15	400		RSP	A x B x C 50x75x25	500

	BS 40 M	BS 45 ST	BS 45 HM	DS 45 ST	DS 45 HM	BS 50 ST	BS 50 H
SHAFTS DIAM. mm	35 upper 30 lower	35	35	35	35	40	40
UNIVERSAL STANDARD ROLL DIAM. mm	88 upper 108 lower	137	137	137	137	137 upper 147 lower	137 upper 147 lower
SHAFT R.P.M.	ratio roll rot./op. handle 1/9	8	8	8	8	13	13
ELECTRIC MOTOR POWER Kw	—	0,75	0,75	0,75	0,75	2,2	2,2 + 0,75
MACHINE WEIGHT Kg	55	127	137	135	145	220	285
MACHINE SIZE mm	B400 L300 H500	B580 L530 H530	B580 L530 H1670	B650 L600 H530	B650 L600 H1670	B780 L1180 H435	B780 L1180 H1260
MACHINE BASE WEIGHT Kg	21	19	—	20	—	28	—
MACHINE BASE SIZE mm	B600 L300 H720	B420 L340 H730.	—	B420 L410 H730	—	B620 L480 H720	—

REMARK: Max. dimensions and min. radii are referred to steel R = 45 Kg/mm²
The radii for min. sizes can be reduced by using special rolls and straighteners

ON DEMANDE: **TRS** Standard rolls
RSP Special rolls
TIR Shaft tensioning rods
RCD Right lateral correcting tool for angles bent in 3B position
RCS Left lateral correcting tool for angles bent in 3B position

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