



Your local contact is:

John Owen

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It will be my pleasure to assist you in all your
tube manipulation processes



People who solve problems develop solutions and shape success

T BEND – MANDREL BENDING MACHINES

COMPACT AND VERY EFFICIENT.



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The compact mandrel bending machines can now be controlled easily with a touch panel. This opens up new possibilities, like displaying the comparison of target and actual values for all axes. Control of the length and the rotation means very little involvement for the operator during the manufacture of tubes. And users now have the option to load the bending data for individual products from a PC via a USB port.

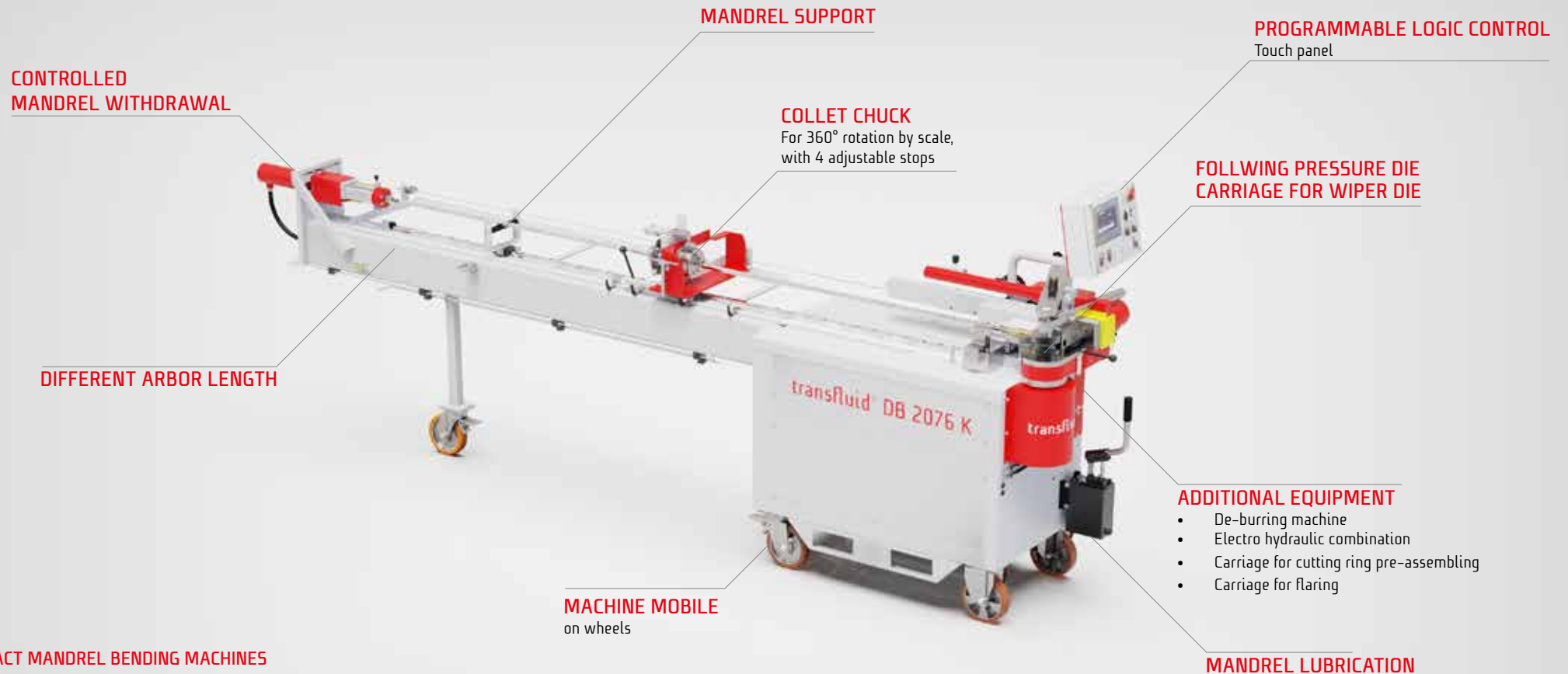
The machines are extremely robust and easy to operate. A selection of setups is available to process tubes of different lengths, with an operational length up to 20 ft.

Accessories are available, like an integrated saw, a de-burring device, a flaring tool, and a compression-fitting swaging tool. These accessories are available with all standard diameters or hydraulic tubing (1/4" to 1 5/8"). All compact mandrel bending machines can bend up to 180°. Radii of 1.5 or 2 times the diameter of the tube are common in this application and easy to achieve with these machines.



T BEND – MANDREL BENDING MACHINES

FULL ELECTRIC WITH CNC-CONTROL



COMPACT MANDREL BENDING MACHINES

Compact and very efficient. Our fully hydraulic mandrel bending machine delivers outstanding bend quality and very simple handling, with PLC control for preselection and storage of bending angles via a touch panel.

With the appropriate tool, it is possible to bend rectangular or square tubes. The machine is equipped with a following pressure die and an internal tool locking system. Tight radii from 1.5xD with perfect bend quality can be achieved.

OUR PORTFOLIO OF MACHINES



Type	DB 642-K	DB 2076-K	DB 20101-K
Range	1/4" - 1 5/8"	1/4" - 3"	1/4" - 4"
Max. capacity	1 5/8" x .191" (mild steel) 1 5/8" x .120" (stainless steel) 1" x .125" (Square section)	3" x .120" (mild steel) 3" x .072" (stainless steel) 2" x .191" (Square section)	4" x .134" (mild steel) 4" x .072" (stainless steel) 3 1/8" x .15" (Square section)
Max. Radii	4.1"	5.9"	9.8"
Usable length	5 ft 10 ft (standard) 15 ft 20 ft	5 ft 10 ft (standard) 15 ft 20 ft	10 ft (standard) 15 ft 20 ft
Speed of bending axis	13 °/sec.	10 °/sec.	11,5 °/sec.
Power bending axis	electro-hydraulic	electro-hydraulic	electro-hydraulic
Operating voltage	480 V - 60 Hz - 3 Ph. - 4 KW	480 V - 60 Hz - 3 Ph. - 4 KW	480 V - 60 Hz - 3 Ph. - 12 KW
Nominal pressure	250 bar, Operating pressure 200 bar	250 bar, Operating pressure 200 bar	250 bar, Operating pressure 200 bar
Length	172"	175"	197"
Width	35"	35"	55"
Height	61"	62"	59"
Weight approx.	1980 lb	2750 lb	8180 lb

BASIC EQUIPMENT:



BENDING TOOLS

Bending tools for tubes with already formed tube ends



HOLLOW SHAFT

Allows small-bend-radius tools.



FOLLOWING PRESSURE DIE

Following pressure die for bends up to 180° (for radii up to max. 2xD, for larger bending radii the pressure die can be repositioned to ensure a constant contact up to 180° bending angle).



EQUIPMENT:



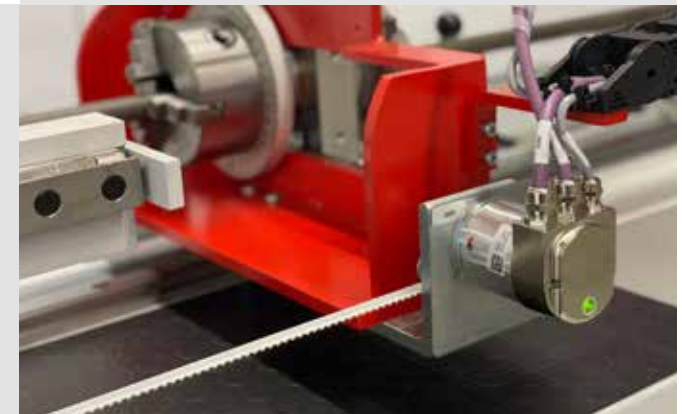
PROGRAMMABLE LOGIC CONTROL

- for compact mandrel bending machines
- With Programmable Logic Control (PLC)
- Possibility to store up to 20 bend angles to be called up individually or in sequence via Touch Panel
- Angle selection 0,1°
- Permanent showing of theoretical and actual bend angles
- Display of spring back
- Display of bending sequence
- Changeable spring back factor, to switch on/off
- With memory capacity of 500 tubes with 20 different positions
- Incl. USB Interface to import and export data



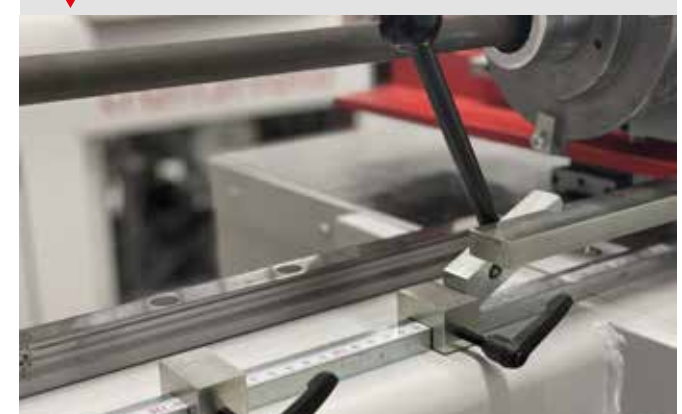
STANDARD COLLET CHUCK

- For 360° rotation by scale, with 4 adjustable stops
- With chuck clamp for all sizes up to 3"
- Inclusive length stop device with scale and 4 adjustable stops
- Usable length 20 ft



QUICK-ACTION CHUCK

For holding individual collets (optional)



EQUIPMENT:

BENDING MANDRELS

Bending mandrels in different contours or materials.



WIPER DIE

Prevents the formation of wrinkles on the inside of the bend.



CONTROLLED MANDREL WITHDRAWAL

- Improves the visual quality of bend
- Variable adjustment from 0-20°
- Automatic return



ADVANTAGES AT A GLANCE:

- The solution for optimal sheet quality at an attractive price
- Mobile, movable machine suitable for maintenance and site piping
- Simple, intuitive control, touch screen incl. USB interface for data import/export
- Perfect sheet qualities with tight bending radii from 1.5xD
- 10° & 37° flaring function for systems available on the market, standard tools available on the market can be used
- Easy transport by rollers, crane eyes and forklift shoes
- Worldwide availability of standard electrical & hydraulic components



OPTIONAL EQUIPMENT:

METAL-CUTTING SAW

- For tubes from 1/4" - 1 5/8"
- For integration in transfluid bending machine DB 642 K

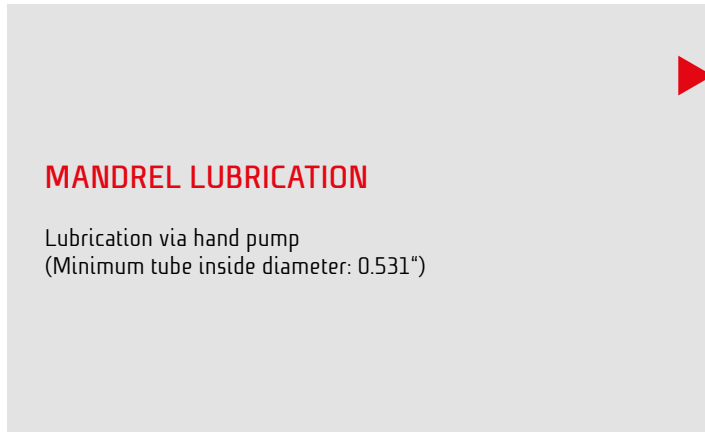
CARRIAGE FOR CUTTING RING PRE-ASSEMBLING & FLARING

- For tubes from 1/4" - 1 5/8"
- For pre-assembling single and multi bite rings according to DIN 2353



MANDREL LUBRICATION

Lubrication via hand pump
(Minimum tube inside diameter: 0.531")



DE-BURRING MACHINE

Capacity:

- For tubes from 1/4" - 1 5/8"

Machine equipment-/basic accessories:

- de-burring tools
- De-burring heads easily sharpened and adjusted
- Internal de-burring tool with 3 HSS edges
- External de-burring tool with 1 HSS edge







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