transfluid[®] The solution for tubes.



The best result to ensure the success of your ideas.

Not only are our achievements shaping the market, they are also revolutionising metal forming. Always being better – thanks to the expertise of our staff. Always getting better – thanks to the ideas of our customers.

Your ideas are our challenge.





For the variety of your products.











Put your ideas into practice – with transfluid®.

Individual solutions for any challenge.

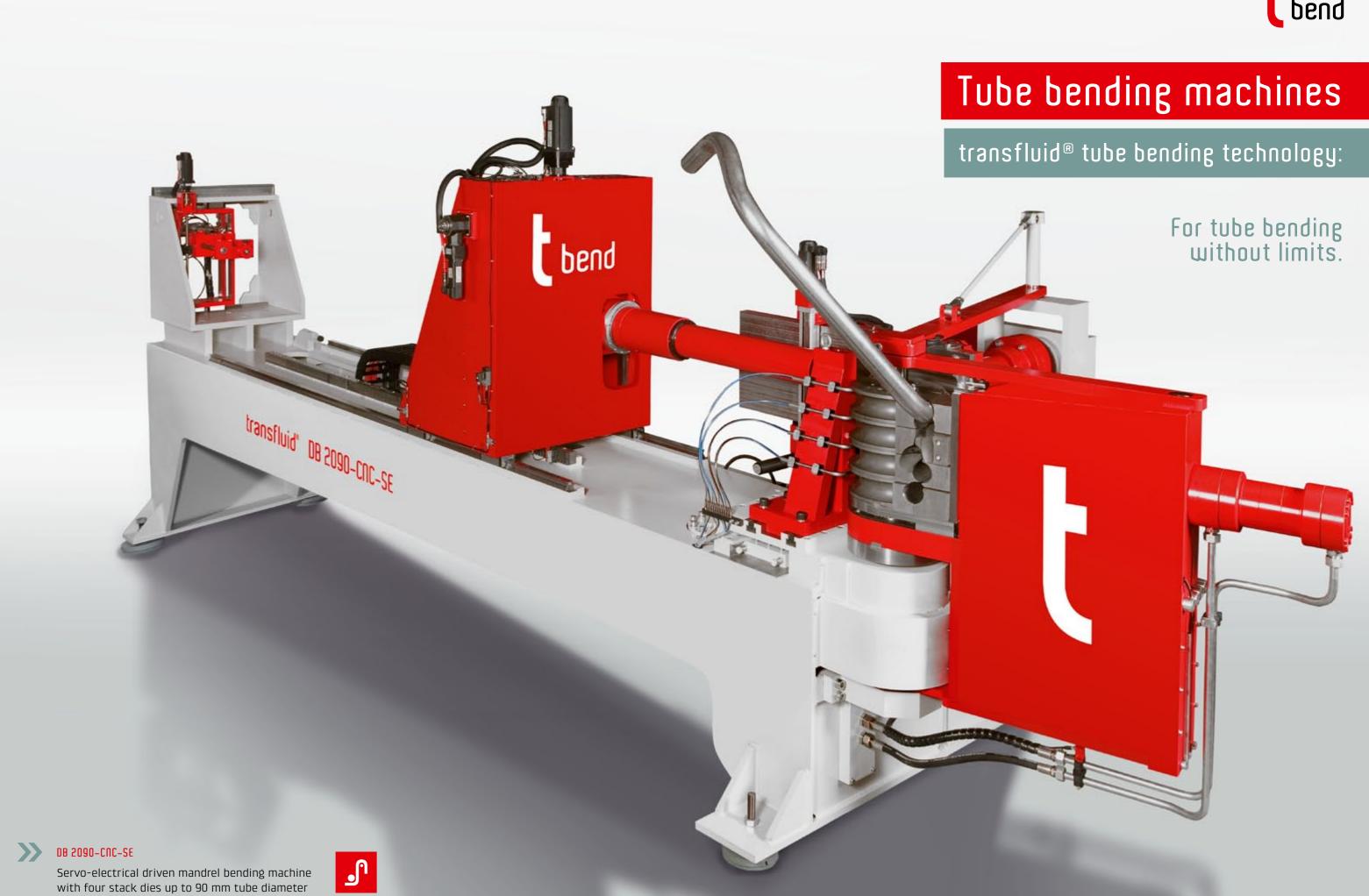














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			00110	0'''		

Uncompromising, versatile and simply good: Whether you need a pure bending machine or the MB 642 with optional functionality for pipefitting on side Internal or external deburring, assembly unit for all conventional connection systems (cutting rings, flaring connections, etc.), also circular metal saw.

Any integrated or add-on equipment is also available as stand-alone device.

transfluid® RE 642

bend

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Compact mandrel bending machines

DB 642K	6-42 mm Ø	
DB 2060K	20-60 mm Ø	
DB 2076K	20–76 mm Ø	
DB 20101K	20–101 mm Ø	

6-42 mm Ø

6-60 mm Ø

30-80 mm Ø

30–115 mm Ø

30-168 mm Ø

itted cutting ring and flaring connection system

₩ 642

Mobile bending machine with integrated tube deburring and cutting ring pre-assembly system

💙 DB 642 К

With integrated hydraulic saw, tube deburrer and cutting ring pre-assembly

MB 642

MB 2060

MB 3080

MB 30115

MB 30168

Compact, powerful, economical: Our fully hydraulic mandrel bending machine offers excellent bend quality and is very easy to operate. Optionally with hydraulic saw, deburrer and cutting ring pre-assembly.



Equipment options:

. 8886

- » Radii from 1.5 x to 2.5 x D
- $m \gg$ load lengths from 1 500 to 6 000 mm
- digital angle pre-selection of up t
 eight bending angles



Stationary mandrel bending machines

DB 630ST	6–30 mm Ø
DB 650ST	6-50 mm Ø
DB 2076ST	20–76 mm Ø
DB 2090ST	20-90 mm Ø

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- » Radii from 1.5 x to 2.5 x D
- » load lengths from 3.000 to 6.000 mm

Simple and powerful for impressive bending results: Our semi-automatic bending machines for small and

medium series production allow bending without limitations. With accessories to suit your requirements.

- » angle pre-selectable via touch panel
- » input data saving
- » off set bend device
- » digital displays







Fully automatic CNC controlled mandrel bending machine

Accurate, powerful and fast, with easy to operate and freely programmable CNC touch panel control. The compact, state of the art design of our transfluid® CNC bending machines offers you unlimited freedom of bending. Extremely short set up times offer maximum flexibility. Fully or partially electrically powered, these machines meet the most exacting demands.

Individual customisation creates optimal benefit for top results.

Equipment options:

» multiple bending levels » push bending » centerline booster » automatic loading, seam detectioning and positioning

4–15 mm Ø	partially / fully electrical
6–22 mm Ø	partially / fully electrical
6–30 mm Ø	partially / fully electrical
6-42 mm Ø	partially / fully electrical
20-60 mm Ø	partially / fully electrical
20-90 mm Ø	partially / fully electrical
	6-22 mm Ø 6-30 mm Ø 6-42 mm Ø 20-60 mm Ø





CNC mandrel bending machines for large tube diameters



Equipment options for all transfluid® CNC pipe bending machines

These machines are for large diameter tubes, providing impressive stability and power.

Tubes made of all types of material, with thin or thick walls and with radii of 1.5 x pipe diameter or smaller may be accurately processed. This is made possible by sophisticated machine and control technology. Extremely short set-up times – less than 10 minutes – improve both flexibility and economy.

DB 40120-CNC	20–120 mm Ø	partially / fully electrical
DB 40139-CNC	40–140 mm Ø	partially electrical
DB 40168-CNC	40–168 mm Ø	partially electrical
DB 40220-CNC	40-220 mm Ø	partially electrical
DB 60275-CNC	60–275 mm Ø	partially electrical
DB 80330-CNC	80–325 mm Ø	partially electrical

Multi-level bendir

bend

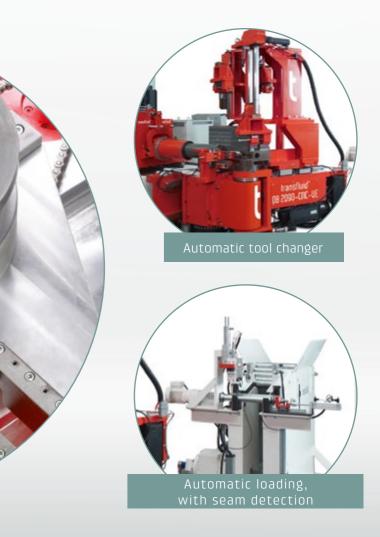
DB 40220-3A-CUC

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Mandrel bending machines for tubes up to 220 mm, both thin walled and for wall thicknesses up to 20 mm, with very simple tool changing system



A centreline booster ensures minimum wall thinning and short clamping lengths. Flange connections may be welded onto the pipe prior to bending. This translates to extreme efficiency improvements. Automatic retooling systems offer optimised and tailored bending processes.







Saw

Machine model	MB 642	MB 2060	MB 3080	MB 30115	MB 30168
Max. capacity steel tube St 37 (mm)	38 x 6 / 42 x 4	60,3 x 15	88,9 × 20	115 x 20	168 x 20
Max. capacity stainless steel tube St 52 (mm)	38 x 5 / 42 x 3	60,3 x 12,5	88,9 x 15	115 x 15	168 x 15
Max. radius (mm)	between 2xD and 3xD	between 2xD and 3,5xD	between 2xD and 3,5xD	between 2xD and 3,5xD	between 2xD and 4xD
Power (KW)	2	3	5	7	7,5
Weight (kg)	85	350	1000	2000	3500
L x W x H (mm)	850 x 500 x 1100	1000 × 1000 × 1200	1800 x 1350 x 1200	2000 × 2000 × 1100	3600 x 2250 x 1500
Bending direction	max. 150°	max. 150°	max. 150°	max. 150°	max. 150°
Bending drive	→ <u>-</u>	→ □.	⇒ ₽·	⇒ ₽·	→ □ ·
Available equipment options					
Tube deburrer	~	×	×	×	×
Cutting ring pre-assembly	~	×	×	×	×
37° flares	~	×	×	×	×

Assembly equipment

×

HA 642	RE 642	RE 2060
6-42	6-42	20-60
1/4-1 1/4"	1/4-1 1/4"	1/2"-2"
1,1	0,55	0,75
75	28	40
650 x 450 x 500	300 x 400 x 250	500 x 600 x 300
~	×	×
~	×	×
	6-42 1/4-1 1/4" 1,1 75 650 × 450 × 500	6-42 6-42 1/4-1 1/4" 1/4-1 1/4" 1,1 0,55 75 28 650 × 450 × 500 300 × 400 × 250 ✓ ×

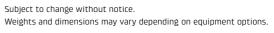
Machine model	DB 642 K	DB 2060 K	DB 2076 K	DB 20101 K
Max. capacity steel tube (mm)	42 x 5,0	60 × 6,0	76,1 × 3,0	101,6 x 3,5
Max. capacity stainless steel tube (mm)	42 × 3,0	60 x 4,0	76,1 × 2,0	101,6 x 2,0
Steel pipe	1 1/4" SCH 80	2" SCH 80	2 1/2" SCH 10	3 1/2" SCH 10
Square section (mm)	25 x 3,2	50 x 4,0	50 x 5,0	80 x 4,0
Rectangular (mm) – bending axis A	35 x 25 x 3,2	40 x 60 x 2,0	40 × 60 × 3,0	60 x 80 x 5,0
Rectangular (mm) – bending axis B	25 x 35 x 3,2	60 x 40 x 2,0	60 x 40 x 3,0	80 x 60 x 5,0
Max. radius (mm)	85	150	150	205
Section modulus (cm ³)	4,8	12,1	12,1	26,2
Usable length (mm)	3048	3048	3048	3048
Extension usable length (mm)	4572/6096	4572/6096	4572/6096	4572/6096
Bending speed (°/sec.)	13	10	10	10
Bending axis repeatibility (°)	+/-0,1	+/-0,1	+/-0,1	+/-0,1
Power (kW)	3	3	3	8
Weight (kg)	1000	1250	1250	3700
L x W x H (mm)	4380 × 900 × 1550	4450 x 900 x 1580	4450 x 900 x 1580	5000 x 1400 x 1500
Bending direction	Ğ	Č	Ğ	S
Bending drive	→ <u>-</u> .	→ •	→ .	->
Ancillary axes drive	→ 2011	→ 2010	-> 20	→ •••
Available equipment options				
Off-set bend device	~	~	~	~
Length stop	~	~	~	~
Digital display of the length and rotation	~	~	~	~
Usable length extension	~	~	~	~
Controlled mandrel with drawal	~	~	~	~
Mandrel lubrication	~	~	~	~
Following pressure die	×	×	~	~
Radius extension	×	×	×	×

Machine model	DB 642 K	DB 2060 K	DB 2076 K	DB 20101 K
Max. capacity steel tube (mm)	42 x 5,0	60 × 6,0	76,1 × 3,0	101,6 × 3,5
Max. capacity stainless steel tube (mm)	42 x 3,0	60 x 4,0	76,1 × 2,0	101,6 × 2,0
Steel pipe	1 1/4" SCH 80	2" SCH 80	2 1/2" SCH 10	3 1/2" SCH 10
Square section (mm)	25 x 3,2	50 x 4,0	50 x 5,0	80 × 4,0
Rectangular (mm) – bending axis A	35 x 25 x 3,2	40 × 60 × 2,0	40 x 60 x 3,0	60 x 80 x 5,0
Rectangular (mm) – bending axis B	25 x 35 x 3,2	60 × 40 × 2,0	60 × 40 × 3,0	80 x 60 x 5,0
Max. radius (mm)	85	150	150	205
Section modulus (cm ³)	4,8	12,1	12,1	26,2
Usable length (mm)	3048	3048	3048	3048
Extension usable length (mm)	4572/6096	4572/6096	4572/6096	4572/6096
Bending speed (°/sec.)	13	10	10	10
Bending axis repeatibility (°)	+/-0,1	+/-0,1	+/-0,1	+/-0,1
Power (kW)	3	3	3	8
Weight (kg)	1000	1250	1250	3700
L x W x H (mm)	4380 × 900 × 1550	4450 × 900 × 1580	4450 × 900 × 1580	5000 x 1400 x 1500
Bending direction	S	Q	Q	Ğ
Bending drive	→ .	→ .	→ .	→
Ancillary axes drive	→ 1	-> ->	→ •	→ •
Available equipment options				
Off-set bend device	~	~	~	~
Length stop	~	~	~	~
Digital display of the length and rotation	~	~	~	~
Usable length extension	~	~	~	~
Controlled mandrel with drawal	~	~	~	~
Mandrel lubrication	~	~	~	~
Following pressure die	×	×	~	~
Radius extension	×	×	×	×





Compact mandrel bending machines





Stationar	y mandrel
bending	machines

ending machines	

Machine model	DB 630 ST	DB 650 ST	DB 2076 ST	DB 2090 ST
Max. capacity steel tube (mm)	30 x 2,0	50 x 3,0	76,1 × 3,0	88,9 × 5,0
Max. capacity stainless steel tube (mm)	30 x 1,5	50 x 2,0	76,1 × 2,0	88,9 × 3,0
Steel pipe	3/4" SCH 10	1 1/2" SCH 10	2 1/2" SCH 10	2 1/2" SCH 40
Square section (mm)	20 x 2,5	35 x 2,5	60 x 2,5	75 x 3,0
Rectangular (mm) – bending axis A	25 x 30 x 2,5	25 x 40 x 2,0	60 x 40 x 3,5	75 x 50 x 4,0
Rectangular (mm) – bending axis B	30 x 25 x 2,5	40 x 25 x 2,0	40 x 60 x 3,5	50 x 75 x 4,0
Max. radius (mm)	75	125	190	225
Section modulus (cm ³)	1,2	5	12,1	26,2
Usable length (mm)	4572	4572	4572	4572
Extension usable length (mm)	6096	6096	6096	6096
Bending speed (°/sec.)	42	36	29	18
Bending axis repeatibility (°)	+/-0,1	+/-0,1	+/-0,1	+/-0,1
Power (kW)	4	9	11	19
Weight (kg)	2000	2300	3950	6000
L x W x H (mm)	6300 x 1400 x 1300	6300 x 1400 x 1350	7000 x 1700 x 1500	7300 x 2000 x 1500
Bending direction	ଓ ଓ	୦ ଓ	ଓ ଓ	୦ ଓ
Bending drive	→ .	→ <u>-</u>	—	—
Ancillary axes drive	÷.	-> 	÷.	
Available equipment options				

Available equipment options				
Off-set bend device	~	~	~	~
Length stop	~	~	~	~
Digital display of the length and rotation	~	~	~	~
Usable length extension	~	~	~	~
Controlled mandrel withdrawal	~	~	~	~
Mandrel lubrication	~	~	~	~
Following pressure die	~	~	~	~
Radius extension	~	~	~	~

Maschinen-Typ	DB 415-CNC	DB 415-CNC-VE	DB 415-CNC-R/L	DB 622-CNC	DB 622-CNC-VE	DB 622-CNC-R/L
Max. capacity steel tube (mm)	15 x 1,5	15 x 1,5	15 x 1,5	22 x 2,0	22 x 2,0	22 x 2,0
Max. capacity stainless steel tube (mm)	15 x 1,0	15 x 1,0	15 x 1,0	22 x 1,5	22 x 1,5	22 x 1,5
Steel pipe	1/4" SCH 10	1/4" SCH 10	1/4" SCH 10	1/2" SCH 10	1/2" SCH 10	1/2" SCH 10
Square section (mm)	10 x 1,5	10 x 1,5	10 x 1,5	16 x 1,5	16 x 1,5	16 x 1,5
Max. radius (mm)	40	40	40	55	55	55
Section modulus (cm ³)	0,2	0,2	0,2	0,5	0,5	0,5
Usable length (mm)	2000	2000	2000	2000	2000	2000
Extension usable length (mm)	3000	3000	3000	3048	3048	3048
Bending speed (°/sec.)	480	480	480	300	300	300
Speed of front feed (mm/sec.)	2000	2000	2000	1800	1800	1800
Speed of rotation (°/sec.)	650	650	650	600	600	600
Bending axis repeatibility (°)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Longitudinal repeatibility (mm)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Rotational repeatibility (°)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Power (kW)	6	6	6	13	13	13
Weight (kg)	1500	1500	1500	2100	2100	3000
L x W x H (mm)	3375 x 1200 x 1450	3375 x 1200 x 1450	3800×1400×2200	4200×1200×1500	4200×1200×1500	3900 × 1600 × 2200
Bending direction	0 0	ی ۲	ర+త	0 0	0 0	۲+3
Bending drive	4	4	4	4	4	4
Ancillary axes drive		4			4	⊡·
Available equipment options						
Radii changer/changing height (mm) 2-level/3-level	25/45	25/45	25/45	40/80	40/80	40/80
Automatic loading	~	~	~	~	~	~
Push bending device	×	×	×	×	×	×
Booster	×	×	×	×	×	×

Maschinen-Typ	DB 415-CNC	DB 415-CNC-VE	DB 415-CNC-R/L	DB 622-CNC	DB 622-CNC-VE	DB 622-CNC-R/L
Max. capacity steel tube (mm)	15 x 1,5	15 x 1,5	15 x 1,5	22 x 2,0	22 x 2,0	22 x 2,0
Max. capacity stainless steel tube (mm)	15 x 1,0	15 x 1,0	15 x 1,0	22 x 1,5	22 x 1,5	22 x 1,5
Steel pipe	1/4" SCH 10	1/4" SCH 10	1/4" SCH 10	1/2" SCH 10	1/2" SCH 10	1/2" SCH 10
Square section (mm)	10 × 1,5	10 × 1,5	10 × 1,5	16 x 1,5	16 x 1,5	16 x 1,5
Max. radius (mm)	40	40	40	55	55	55
Section modulus (cm³)	0,2	0,2	0,2	0,5	0,5	0,5
Usable length (mm)	2000	2000	2000	2000	2000	2000
Extension usable length (mm)	3000	3000	3000	3048	3048	3048
Bending speed (°/sec.)	480	480	480	300	300	300
Speed of front feed (mm/sec.)	2000	2000	2000	1800	1800	1800
Speed of rotation (°/sec.)	650	650	650	600	600	600
Bending axis repeatibility (°)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Longitudinal repeatibility (mm)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Rotational repeatibility (°)	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05	+/-0,05
Power (kW)	6	6	6	13	13	13
Weight (kg)	1500	1500	1500	2100	2100	3000
L x W x H (mm)	3375×1200×1450	3375 x 1200 x 1450	3800x 1400 x 2200	4200×1200×1500	4200×1200×1500	3900×1600×2200
Bending direction	0 0	0 0	د+ح	O O	0 0	۲+3
Bending drive	4	4	4	4	4	4
Ancillary axes drive	→ ⊡•••	4	⇒ ⊡••	⊡⊡•	4	→ ⊡•••
Available equipment options						
Radii changer/changing height (mm) 2-level/3-level	25745	25/45	25/45	40/80	40/80	40/80
Automatic loading	~	~	~	~	~	~
Push bending device	×	×	×	×	×	×
Booster	×	×	×	×	×	×

👌 🐧 Right or left

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💍 🕂 🕉 Right and left 💍 🐧 Right or left

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🖌 Electric Pneumatic

Subject to change without notice.

Fully automatic CNC controlled mandrel bending machine



Fully automatic CNC controlled mandrel bending machine

Machine model	DB 630-3A-CNC	DB 630-CNC	DB 630-CNC-VE	DB 630-CNC-R/L
Max. capacity steel tube (mm)	30 x 2,0	30 x 2,0	30 x 2,0	30 x 2,0
Max. capacity stainless steel tube (mm)	30 x 1,5	30 x 1,5	30 x 1,5	30 × 1,5
Steel pipe	3/4" SCH 40	3/4" SCH 40	3/4" SCH 40	3/4" SCH 40
Square section (mm)	20 x 2,5	20 x 2,5	20 x 2,5	20 x 2,5
Max. radius (mm)	85	85	85	85
Section modulus (cm³)	1,2	1,2	1,2	1,2
Usable length (mm)	3048	3048	3048	3048
Extension usable length (mm)	4572/6096	4572/6096	4572/6096	4572/6096
Bending speed (°/sec.)	65	275	275	275
Speed of front feed (mm/sec.)	400	1800	1800	1800
Speed of rotation (°/sec.)	90	550	550	550
Bending repeatibility (°)	+/-0,2	+/-0,05	+/-0,05	+/-0,05
Longitudinal repeatibility (mm)	+/-0,1	+/-0,05	+/-0,05	+/-0,05
Rotational repeatibility (°)	+/-0,1	+/-0,05	+/-0,05	+/-0,05
Power (kW)	10	22	22	22
Weight (kg)	2600	2600	2600	4500
L x W x H (mm)	4700 x 1400 x 1500	5000 x 1200 x 1450	5000 x 1200 x 1450	5200 x 1500 x 2200
Bending direction	ق ٢	٢ ٢	୦ ଓ	ర+త
Bending drive	→ D ·	4	+	+
Ancillary axes drive	→ .	→ ₽·	4	→ .
Available equipment options				
Radii changer/changing height (mm) 2-level/3-level	×	60/120	60/120	60/120
Automatic loading	×	~	~	~

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model	DB 642-3A-CNC	DB 642-CNC	DB 642-CNC-VE	DB 642-CNC-R/L
city steel tube (mm)	42 x 4,0	42 x 3,0	42 x 3,0	42 x 3,0
city stainless steel tube (mm)	42 x 3,0	42 x 1,5	42 x 1,5	42 × 1,5
	1 1/4" SCH 40	1 1/4" SCH 10	1 1/4" SCH 10	1 1/4" SCH 10
ction (mm)	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5
ıs (mm)	105	105	105	105
odulus (cm³)	4,25	3,4	3,4	3,4
igth (mm)	4572	4572	4572	4572
usable length (mm)	6096	6096	6096	6096
peed (°/sec.)	75	180	180	180
ront feed (mm/sec.)	400	1600	1600	1600
otation (°/sec.)	90	450	450	450
xis repeatibility (°)	+/-0,2	+/-0,05	+/-0,05	+/-0,05
al repeatibility (mm)	+/-0,3	+/-0,05	+/-0,05	+/-0,05
repeatibility (°)	+/-0,2	+/-0,05	+/-0,05	+/-0,05
Ŋ	14	30	30-35	30-35
3)	3700	3500	3500	4500
(mm)	6500 × 1400 × 1 500	6600 x 1200 x 1500	6600 x 1200 x 1500	7000 × 1600 × 2200
irection	<u>ق</u>	<u>ک</u> ق	୦ ଓ	۲+3
ive	-> 	→	4	→
xes drive	→ 2)•	→ •	4	→ <u></u> .
equipment options				
ger/changing height (mm) level	×	60/120	60/120	60/120
loading	×	~	~	~
ling device	×	~	~	~
	×	~	~	~

Machine model	DB 642-3A-CNC	DB 642-CNC	DB 642-CNC-VE	DB 642-CNC-R/L
Max. capacity steel tube (mm)	42 x 4,0	42 x 3,0	42 x 3,0	42 x 3,0
Max. capacity stainless steel tube (mm)	42 x 3,0	42 x 1,5	42 x 1,5	42 x 1,5
Steel pipe	1 1/4" SCH 40	1 1/4" SCH 10	1 1/4" SCH 10	1 1/4" SCH 10
Square section (mm)	25 x 2,5	25 x 2,5	25 x 2,5	25 x 2,5
Max. radius (mm)	105	105	105	105
Section modulus (cm³)	4,25	3,4	3,4	3,4
Usable length (mm)	4572	4572	4572	4572
Extension usable length (mm)	6096	6096	6096	6096
Bending speed (°/sec.)	75	180	180	180
Speed of front feed (mm/sec.)	400	1600	1600	1600
Speed of rotation (°/sec.)	90	450	450	450
Bending axis repeatibility (°)	+/-0,2	+/-0,05	+/-0,05	+/-0,05
Longitudinal repeatibility (mm)	+/-0,3	+/-0,05	+/-0,05	+/-0,05
Rotational repeatibility (°)	+/-0,2	+/-0,05	+/-0,05	+/-0,05
Power (kW)	14	30	30-35	30-35
Weight (kg)	3700	3500	3500	4500
L x W x H (mm)	6500 × 1400 × 1 500	6600 x 1200 x 1500	6600 × 1200 × 1500	7000 × 1600 × 2200
Bending direction	୦ ଓ	୦ ଓ	<u>ک</u> ق	د+ع
Bending drive	→ ■•	÷.	4	÷.
Ancillary axes drive	→ .	⇒ ₽	4	⇒ ₽
Available equipment options				
Radii changer/changing height (mm) 2-level/3-level	×	60/120	60/120	60/120
Automatic loading	×	~	~	~
Push bending device	×	~	~	~
Booster	×	~	~	~

Č + ♂ Right and left

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💍 💐 Right or left

Push bending device

Booster

Flectric Hydraulic

Subject to change without notice. Weights and dimensions may vary depending on equipment options.

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Č + 3 Right and left 💍 🐧 Right or left

Flectric Hydraulic

Subject to change without notice.

Fully automatic CNC controlled mandrel bending machine



Fully automatic CNC controlled mandrel bending machine

Machine model	DB 2060-3A-CNC	DB 2060-CNC	DB 2060-CNC-VE	DB 2060-CNC-R/L
Max. capacity steel tube (mm)	60,3 × 5,0	60,3 × 3,9	60,3 × 3,9	60,3 × 3,9
Max. capacity stainless steel tube (mm)	60,3 × 3,0	60,3 × 2,7	60,3 × 2,7	60,3 x 2,7
Steel pipe SCH 40	2" SCH 40	2" SCH 40	2" SCH 40	2" SCH 40
Square section (mm)	40 × 3,0	40 x 3,0	40 x 3,0	40 × 3,0
Max. radius (mm)	150	150	150	150
Section modulus (cm³)	11,3	9,3	9,3	9,3
Usable length (mm)	4572	4572	4572	4572
Extension usable length (mm)	6096	6096	6096	6096
Bending speed (°/sec.)	35	100	100	100
Speed of front feed (mm/sec.)	400	1400	1400	1400
Speed of rotation (°/sec.)	60	350	350	350
Bending axis repeatibility (°)	+/-0,2	+/-0,1	+/-0,1	+/-0,1
Longitudinal repeatibility (mm)	+/-0,3	+/-0,1	+/-0,1	+/-0,1
Rotational repeatibility (°)	+/-0,2	+/-0,1	+/-0,1	+/-0,1
Power (kW)	20	30-35	30-35	30-35
Weight (kg)	5300	6000	7600	9100
L x W x H (mm)	7000 × 1700 × 1500	7000 × 1800 × 1500	9700 × 1600 × 1800	9700 × 1600 ×1 800
Bending direction	ق ن	ত ত	ত ত	د+3
Bending drive	_> Σ••	→ ₽·	4	-> 2 · ·
Ancillary axes drive	→ 2)··	→ •••	4	→ ⊒··
Available equipment options				
Radii changer/changing height (mm)	×	90/150	90/150	80/150

Available equipment options				
Radii changer/changing height (mm) 2-level/3-level	×	80/160	80/160	80/160
Automatic loading	×	~	~	~
Push bending device	×	~	~	~
Booster	×	~	~	~

💍 🕂 🕉 Right and left

💍 🐧 Right or left



Č + 3 Right and left 💍 🐧 Right or left

Radii changer/changing height (mm)

2-level/3-level Automatic loading

Booster

Push bending device

🖌 Electric Hydraulic

Subject to change without notice.

×

×

×

Maschinen-Typ	DB 2090-3A-CNC
Max. capacity steel tube (mm)	88,9 × 5,0
Max. capacity stainless steel tube (mm)	88,9 × 2,0
Steel pipe	3" SCH 10
Square section (mm)	50 x 2,5
Max. radius (mm)	225
Section modulus (cm³)	26,7
Usable length (mm)	4572
Extension usable length (mm)	6096
Bending speed (°/sec.)	21
Speed of front feed (mm/sec.)	300
Speed of rotation (°/sec.)	45
Bending axis repeatibility (°)	+/-0,2
Longitudinal repeatibility (mm)	+/-0,3
Rotational repeatibility (°)	+/-0,2
Power (kW)	25
Weight (kg)	6200
L x W x H (mm)	7300 x 1700 x 1500
Bending direction	٢ ٢
Bending drive	 ₽·
Ancillary axes drive	→ •

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Fully automatic CNC controlled mandrel bending machine

DB 2090-CNC	DB 2090-CNC-VE
88,9 x 3,05	88,9 x 3,05
88,9 x 2,11	88,9 x 2,11
3" SCH 10	3" SCH 10
50 x 2,5	50 x 2,5
225	225
17,4	17,4
4572	4572
6096	6096
80	80
1000	1000
250	250
+/-0,1	+/-0,1
+/-0,1	+/-0,1
+/-0,1	+/-0,1
35	35
7400	8500
7000 x 1800 x 1500	9700 × 1700 × 1600
<u>ک</u> ق	<u>ی</u> ک
→ .	4
⇒. 	4
90/180	90/180
~	~
✓	✓
~	~



CNC mandrel bending machines for large tube diameters

Machine model	DB 40120-3A-CNC	DB 40120-CNC	DB 40120-CNC-VE	DB 40139-3A-CNC
Max. capacity steel tube (mm)	120 x 4,0	120 × 4,0	120 x 4,0	140 × 6,0
Max. capacity stainless steel tube (mm)	120 x 3,0	120 × 3,0	120 × 3,0	140 x 4,0
Steel pipe SCH 10	4" SCH 10	4" SCH 10	4" SCH 10	5" SCH 40
Square section (mm)	·			
Max. radius (mm)	300	300	300	350
Section modulus (cm³)	41,7	41,7	41,7	82,6
Usable length (mm)	6096	6096	6096	6096
Extension usable length (mm)	····			
Bending speed (°/sec.)	15	30	30	10°
Speed of front feed (mm/sec.)	300	800	800	300
Speed of rotation (°/sec.)	45	75	75	40
Bending axis repeatibility (°)	+/-0,2	+/-0,1	+/-0,1	+/-0,2
Longitudinal repeatibility (mm)	+/-0,5	+/-0,1	+/-0,1	+/-0,5
Rotational repeatibility (°)	+/-0,2	+/-0,1	+/-0,1	+/-0,2
Power (kW)	40	45	45	40
Weight (kg)	14200	14200	14200	17200
L x W x H (mm)	8900 × 2300 × 1800	9000 x 2200 x 1850	9000 x 2200 x 1850	8900 × 2600 × 1900
Bending direction	<u>ی</u> ک	୦ ଓ	ଓ ଓ	ত ত
Bending drive	-> 	→	4	→
Ancillary axes drive	→ <u>.</u> .	→ •••	4	→ <u>.</u>
Available equipment options Radii changer/changing height (mm)				
2-level/3-level		180/360	180/360	
Automatic loading	×	~	~	×
Push bending device	×	~	~	×

C	n	C	
L		L	Π

Machine model	DB 40168-3A-CNC	DB 40220-3A-CNC	DB 60273-3A-CNC	DB 80330-3A-CNC
Max. capacity steel tube (mm)	170 x 8,0	220 x 12,0	273 × 16,0	325 x 20,0
Max. capacity stainless steel tube (mm)	170 × 6,0	220 × 10,0	273 × 14,0	325 x 18,0
Steel pipe SCH 10	6" SCH 40	8" SCH 80	10" SCH 80	12" SCH 80
Square section (mm)	$\overline{}$			·
Max. radius (mm)	425	700	820	950
Section modulus (cm³)	160,4	394	799	1402,8
Usable length (mm)	6096	6096	6096	6096
Extension usable length (mm)				····
Bending speed (°/sec.)	7	5	3	2
Bending speed (°/sec.)	300	300	250	200
Speed of rotation (°/sec.)	40	20	20	15
Bending axis repeatibility (°)	+/-0,2	+/-0,3	+/-0,3	+/-0,3
Longitudinal repeatibility (mm)	+/-0,5	+/-0,5	+/-0,5	+/-0,5
Rotational repeatibility (°)	+/-0,2	+/-0,3	+/-0,3	+/-0,3
Power (kW)	60	85	90	90
Weight (kg)	23200	38700	55200	68000
L x W x H (mm)	9500 × 3000 × 2100	10500 x 4750 x 2400	11200 x 5400 x 2450	12300 x 6100 x 2450
Bending direction	୦ ଓ	୦ ଓ	<u>ک</u> ق	୦ ଓ
Bending drive	 ⊒··	→ .	→ .	→ •
Ancillary axes drive	→ 2.	→ 2010	→ 2011	→ □··
Available equipment options				
Radii changer/changing height (mm) 2-level/3-level				
Automatic loading	×	×	×	×
Push bending device	×	×	×	×
Booster				

💮 On request 💍 🐧 Right or left

Booster

Ĵ

Hydraulic

🖌 Electric



On request 💍 🐧 Right or left



Subject to change without notice.

mandrel bending machines for large tube diameters



We are partners.

We will help you bend your idea into its proper shape.

Our work is to give and take. Our partnership with our staff and suppliers is what drives us. And our customers. Your ideas are our challenges. We can offer in return: Our knowledge of technologies enabling solutions and a future.

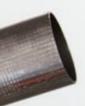
ransfluid

We are progress.

We think ahead. That is what drives our customers forward.

Innovation is our life, since progress is impossible without. As a technology leader, our passion and consummate objective is innovation.

To further your objectives.







Tube forming machines

transfluid[®] forming technology:

Where shape is a question of standards.

Axial forming machines

Accurate, fast and versatile: our type REB axial forming machines. They offer extreme forming, complex storage. Machine parameters and specific processing geometries and fast tool changing. A servo motor positions the tools in sequence horizontally or vertically. Almost all demands may be met with up to six forming stages and additionally clamping unit. Rotary forming stations may be integrated for specific forming tasks.

Operation is via a touch panel with integrated data sequences may be managed here. transfluid® can also optionally equip these machines with electrical or hydraulic NC drives. For extremely short cycling times, these forming processes may also be performed step by step in transfer systems.

REB 420	4–20 mm Ø	Forming power 64 kN
REB 632	6–32 mm Ø	Forming power 98 kN
REB 645	6-45 mm Ø	Forming power 147 kN
REB 660	6-60 mm Ø	Forming power 240 kN
Customised		Forming power up to 1.300 kN



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Our rolling technology offers you completely new CNC control if required. This allows forming indepenforming options. The method is particularly well dent of tooling. All the parameters and settings are suited for the creation of contours with sharp edges stored. This eliminates elaborate adjustments, saving for sealing elements and for perfect surfaces. All the you time. The machines are capable of forming outside drives in these machines are servo-electric and with to inside or vice versa, inside to outside.

SRM 622 4–22 mm Ø SRM 1550 15-50 mm Ø 40–115 mm Ø SRM 40115 SRM 50176 50-176 mm Ø

 \rightarrow

SRM 622

Bead rolling machine for tubes up to 22 mm

form



transfluid® REB 632

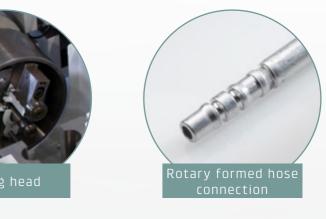
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REB 632-SRM

Detail view of an axial forming machine with four forming stages and additional clamping unit.

form

Rotary forming machines Type SRM







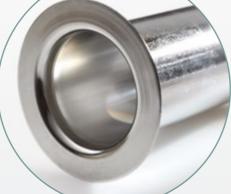
UMR 628	6 – 28 mm
UMR 642	6 – 42 mm
UMR 30115	30 – 115 mm
UMR 40220	40 – 220 mm
UMR 60325	60–325 mm

0

This machine will create a perfect sealing surface on flares between 20° and 90° and clamping lengths of approx. $1 \times D$. Flares up to 90° are produced in a single work step. Tool changing is extremely quick. Given the appropriate tools, the machine can also close pipe ends.

The forming machine for pipe diameters up to 325 mm can work almost independent of tooling, based on a free programmable controlled forming cone.

Perfect quality flange connections are simple to produce with these machines.





UMR 60325

Forming machine for the production of flares up to 90°

[form



REB 645-5 SRM 622

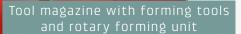
REB 645-5 SRM 622

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Combination machine with five axial forming stages and a rotary forming unit

Combination machines

To meet your individual requirements, we can combine different advantages of our processing methods, especially axial and rotary forming. We can offer both either in the same machine or as a transfer plant carrying out the processes in sequence.







Machine model	REB 420	REB 632	REB 645	REB 660
Max. capacity steel tube (mm)	20	32	45	60
Forming force (kN)	64	98	147	240
Forming length (mm)	60	80	90	180
Clamping force (kN)	64	98	147	240
Clamping force of additional clamping unit (kN)	39	64	98	147
Clamping length	80	150	180	200
Clamping	1	1	1	1
Cycle time of basic machine (sec.)	3	4	6	9
Cycle time for each additional stage (sec.)	2	3	4	5
Cycle time for additional clamping unit (sec.)	3	3	4	5
Power (kW)	5,5	7,5	10	15
Weight (kg)	1000	1500	2200	3200
L x W x H (mm)	2200 x 1410 x 1900	2300 × 2000 × 1900	2500 x 2200 x 2000	2500 × 3000 × 2000
Drive	_⇒ ₽	_> ₽	_> ₽	_⇒ Σ}•

Available equipment options				
Drive	4	4	4	×
Additional forming stages	~	~	~	~
Automatic starting function	~	~	~	~
Safety cover	~	~	~	~
Micro lubrication system	~	~	~	~

Machine model	SRM 622	SRM 1550	SRM 401115	SRM 50176
Max. capacity steel tube (mm)	4-22	15-50	40-115	50-176
Max. wall thickness (mm)	1	1,5	2	3
Steel pipe	3/16-1/2"	5/8-1 1/2"	1 3/4-4"	6"
RPM	300-1000	100-500	80-280	60-180
Cycle time adjustable (sec.)	4-10	8-14	15-50	15-60
Forming length (mm)	40	80	100	120
Clamping length	1,0 × D	1,0 × D	1,0 × D	1,0 × D
Clamping	\$	1	1	\$
Power (kW)	8	10	14	22
Weight (kg)	1100	2200	5500	8200
L x W x H (mm)	1700 × 900 × 1800	2300 x 1000 x 2000	2400 x 1200 x 1800	3150 × 1500 × 1800
Available equipment options				
CNC control	~	×	×	×
Automatic starting function	~	~	~	~
Safety cover	~	~	~	~
Circulating lubrication	~	~	~	~
Micro lubrication system	~	~	~	~

Machine model	SRM 622	SRM 1550	SRM 401115	SRM 50176
Max. capacity steel tube (mm)	4-22	15-50	40-115	50-176
Max. wall thickness (mm)	1	1,5	2	З
Steel pipe	3/16-1/2"	5/8-1 1/2"	1 3/4-4"	6"
RPM	300-1000	100-500	80-280	60-180
Cycle time adjustable (sec.)	4-10	8-14	15-50	15-60
Forming length (mm)	40	80	100	120
Clamping length	1,0 × D	1,0 × D	1,0 × D	1,0 × D
Clamping	\$	1	1	1
Power (kW)	8	10	14	22
Weight (kg)	1100	2200	5500	8200
L x W x H (mm)	1700 x 900 x 1800	2300 x 1000 x 2000	2400 x 1200 x 1800	3150 x 1500 x 1800
Available equipment options				
ENC control	~	×	×	×
Automatic starting function	~	~	~	~
Safety cover	~	~	~	~
Circulating lubrication	~	~	~	~
Micro lubrication system	~	~	~	~



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Rotary forming machines Type SRM



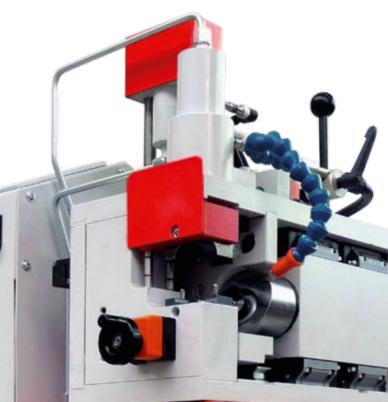


Rotary forming machines Type UMR

Machine model	UMR 628	UMR 642	UMR 30115	UMR 40220	UMR 60325
Max. capacity steel tube (mm)	6-28	6-42	30-115	40-220	60-325
Wall thickness (mm)	2,5	4	4	6	8
Steel pipe	1/4-3/4"	1/4-1 1/4"	1 1/4-4"	2-8"	2 1/2-12"
RPM	603	200	170	140	70
Cycle time adjustable (sec.)	4-10	4-15	10-45	15-60	20-90
Forming length (mm)	15	25	50	70	80
Clamping length	1,0 × D	1,0 × D	1,0 × D	1,0 × D	1,0 × D
Clamping	\$	\leftrightarrow	\leftrightarrow	\leftrightarrow	\$
Power (kW)	1,3	4,5	8,5	14	20
Weight (kg)	750	1000	1500	1750	8000
L x W x H (mm)	1000 × 700 × 1600	1100 × 900 × 1700	1400 × 1100 × 1900	2500 x 1300 x 1900	3200 × 1600 × 2500
Available equipment options					
Automatic release	~	~	×	×	×
Safety cover	~	~	~	~	~
Circulating lubrication	×	×	×	×	×
Micro lubrication system	~	~	~	~	~







transfluid®











Chipless orbital cutting equipment

Knife shearing method

curate cutting results - allowing you to directly con- tensioned with a size-dependent force during cutting, tinue processing your tubes. The clean produced cuts they will not deform around the cut. allow you to continue any forming directly on the cut

Cut

Our chipless orbital cutting machines offer you ac- face – without further processing. Since the tubes are

transfluid" RTO 628

>>RTO 628

Orbital cutting unit for tubes up to 28 mm with tube loading magazine and ejection unit for five different pipe lengths

Equipment options:

- » Cutting rate up to 1 600 pieces/hour
- » Cut length optimisation to minimize scrap
- » from the coil, with straightening unit or with tube loading magazine
- » controlled multiple ejection of cut lengths

6–28 mm orbital cutting method

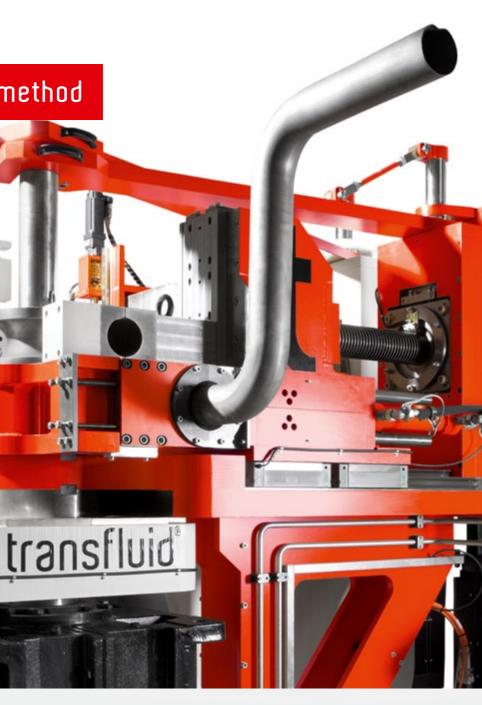


Cut

>>Knife shearing units in a variety of processes

RT 622 RT 1040

6–22 mm Knife shearing 10–40 mm Knife shearing



Our cutting method is ideal for secondary trimming, allowing precise shearing of the tubes. This creates right angled sharp edged cuts even on extreme pipe geometries. The two chips may be reliably detected in this process. This cutting process may also be used for cutting bent geometries on our bending machines.

Up to three blades may be used if the demands are extreme. The process may furthermore also be optimised with an internal mandrel and modified to enable cutting the tube at an angle.





Tube cutting machine

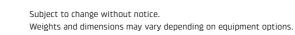
Machine model	RT 622	RT 1040	RTO 628	RTO 2076
Cutting process	Ŏ-	Ŏ-	¥ +:+	4:>
Cap. Ø (mm)	6-22	10-40	6-28	20-76
Max. wall thickness (mm) – material-dependent	1,5	1,5	2	3
Shortest cutting length (mm) – pull apart	×	×	55	150
Shortest cutting length (mm) – through cut	7	7	25	70
Max. cutting length (mm)	00	00	00	00
Min. straight length after bend (mm)	10	10-20	×	×
Length tolerances (mm)	± 0,1	± 0,1	± 0,1	± 0,2
Cycle time (sec.) – depends on material and wall thickness	6	6	2,2-8	6-10
Power (kW)	3	4,5	7,5	15
Weight (kg)	400	550	1700	2500
L x W x H (mm)	1000 x 650 x 1700	1500 x 850 x 1800	2800 × 1030 × 1600	3000 × 1500 × 2000
Drive	■•	₽	4	4
Area of application				
Straight pipes	~	~	~	~
Bent pipes	~	~	×	×
Available equipment options				
Automated loading from coil or from a straight stock magazine	×	×	~	~
Straightening section	×	×	~	~
Micro lubrication	~	~	~	~
Automatic unloading	×	×	~	~

Chipless circular blade

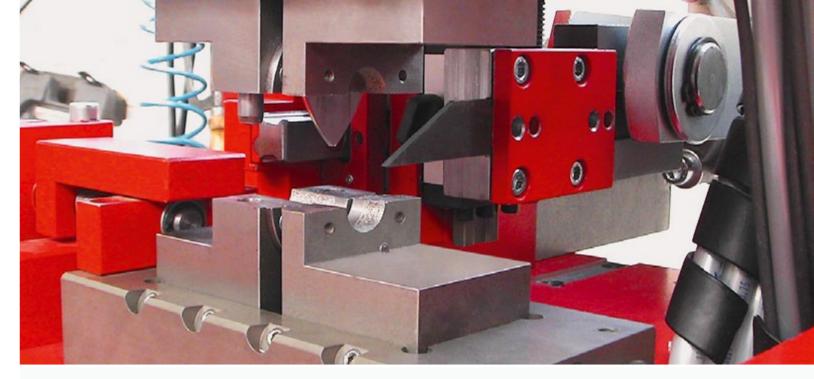
With scarfing knife
 / 2 cuchillas metalicas /
 infinity

🗲 Electric

Hydraulic









Why you may rely on us?

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Realising your ideas is what we do best.

We manufacture machines. This is what we are competent at. Yet we offer our customers more: With our know-how, we support them to achieve optimal results.





$\mathbf{>}$

with ultrasonic pre-cleaning, flushing section and a drying zone





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Tube cleaning systems

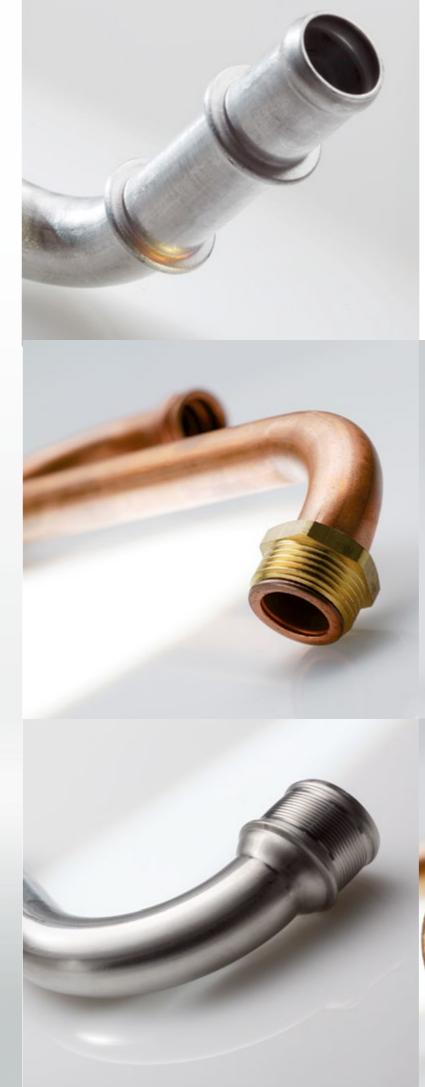
As clean as it gets: Our tube cleaning systems will clean your tubes to perfection.

The simplest and quickest method of cleaning bent tubes is pellet cleaning. The process is very effective for single pieces and small series production.

Various solutions are available for series operation, depending on requirements. Pass-through for straight tubes or in baskets for already bent parts. Pallet transport may also be useful here. Prior ultrasonic cleaning is also possible, depending on the degree of cleanliness required.

Liquid operated cleaning systems may of course also be filled up automatically or they may have a particulate detector. Such systems are designed to suit individual requirements.

DLW	Continuous cleaning system
RR	Basket cleaning system
RL	Single tube cleaning system (liquid)
RR 42	Single tube cleaning (pellets)







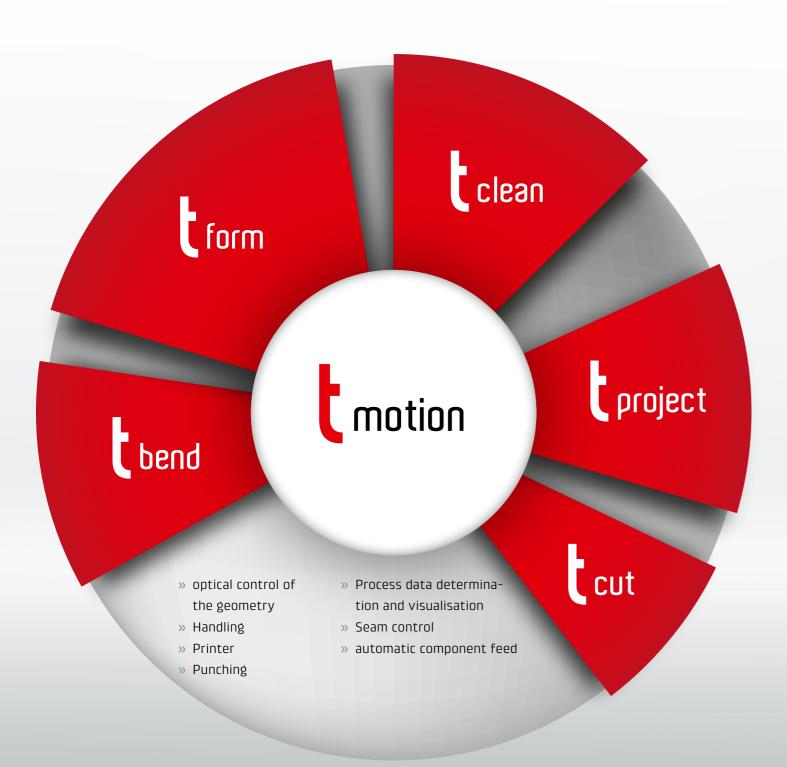




Flexibly matching your requirements.

t motion

Not only does automation increase capacity, but it also creates process reliability, ensuring that the quality of the manufactured components is always top notch. Assemble your own production island here: always extremely powerful and accurate.



















motion

On request including:

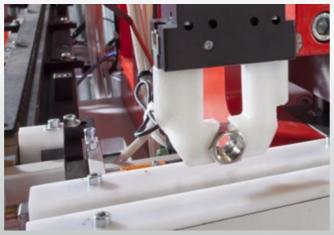
Product marking, seam detection or optical, non-con- Complete production cells designed to match your tact camera control systems for 100% control of ge- requirements, including the layout designed to optiometries or surfaces. Brazing and welding units may mise the flow of materials. be integrated here as well as autofrettage.

We will plan for you:











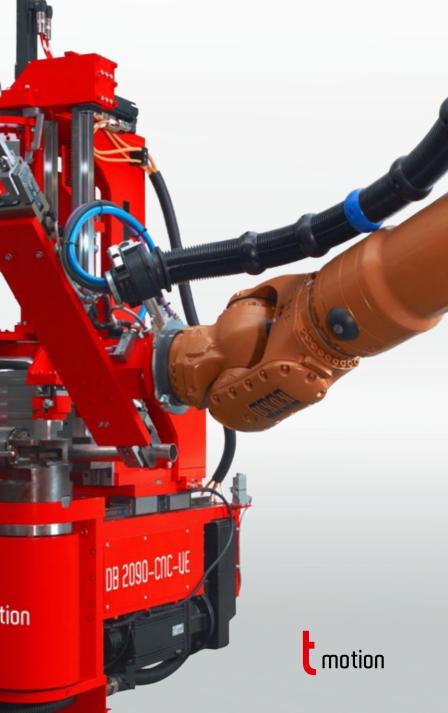
DB 5080-CUC

- Fully electric with CNC bending machines.
- Automatic 8-station tool changer
- Loading magazine
- Seam control
- Handling by robots

Automatic in-process tool change

Plug and Produce! Our automated production cells are ready for immediate large scale series production.

The production cells comprise tried and trusted machines in our range, with storage and loading systems, parts feeders or complete handling systems to complement your processes. Linear or via robots – the choice is yours.





We offer powerful software as an effective on-line solution to reducing the number of steps towards a finished component – to use with the bending machine and most CAD systems.



Reliable planning:

Apart from the accurate calculation of cut lengths and the documentation of tube data, our t project software offers especially intuitive reliability of production. This is because the tube geometries may be checked for feasibility already before bending – to avoid collisions in the machine, with tools or other elements.



Powerful software

Your cleuer transfluid[®] solution.

Reliable planning for perfect results

The clever solution:

For left / right bending machines, the software automatically determines which bend to assign to which head. Length increases due to forming processes are automatically included.

The software also calculates the positioning in case of flanges which have been welded to the pipe on both sides before bending. It stands to reason that the software can also handle free forming processes and multi-level machines.



This is what we stand for.

Gerd Nöker

Ludger Bludau

transfil

Stefanie Flaeper

Burkhard Tigges



. Benedikt Hümmler









Machines in the market

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