

MASTER Series

Modular bending machines



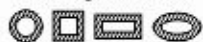
CE-51

Modular bending machine. Possible to complete with different automation level



Oriented

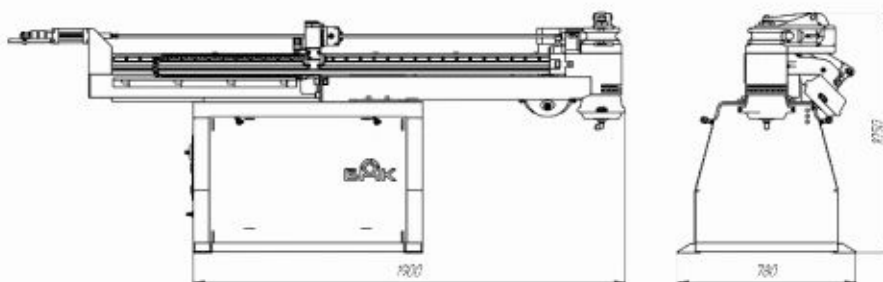
Mandrel and without mandrel bending of tubes



and profiles



High quality bends in 3 axes by coiling method



Abilities

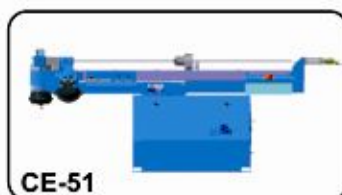
3 axes control (A;L;R)
Tube profile changing control in bending place

Design

- Bending machines Master was developed on replaceable modules base, which allows to complete machines under customers application with different characteristics and automation levels
- Machines design allows to change or add modules. Machine can change characteristics and raise automation level

Modification

- Drive



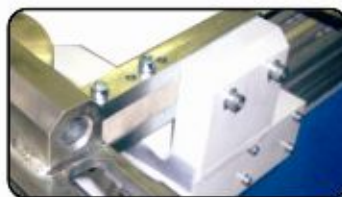
Electrical: 380V, 1,5 kWt

- Tube clamp



Automatic

- Counterbending die



Fixed



Automatic



Baltic Machine-building Company

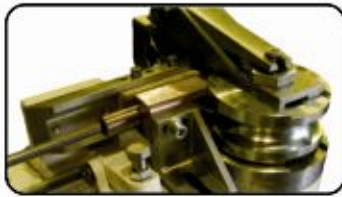
Tel./fax: +7 812 3310840, +7 812 3313970, tel.: +7 812 7167377; e-mail: bmc@trubogib.spb.ru; web-site: <http://www.tubend.ru>

MASTER Series

Modular bending machines



Tooling



Consists of 5 elements:

- Former
- Clamp
- Pressure die
- Flexible mandrel
- Wiper die

Innovations

- For machines assembling we use component, produce by leading European and Japanese companies
- Remote bending module exclude collisions between bent parts and machine frame and allows to make complex parts in 3-axes
- High-tech components (flexible mandrel and wiper die) ensure best quality bends of light-wall tubing on $R=1,5D$
- Tooling replaceable for all bending machines, produce by BMC
- Easy-used PLC menu



• Mandrel moving system



Fixed

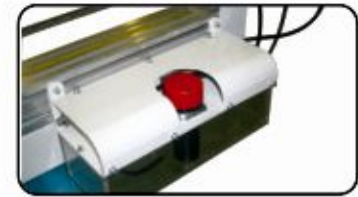


Automatic

• Mandrel lubrication system



Manual



Automatic

• Positioning Device



Manual



Semiautomatic

Technical data

Maximum tube diameter, (with yield strength 250 MPa), mm	51x2
CLR, mm	From 27 up to 170 (up to 750 under request)
CLR, min	1,5D
Bending angel, degrees	0-180
Accuracy	
Bending angel (A), degrees	0,1
Tube advance (L), mm	0,5
Tube space rotation angle (R), degrees	1
Time of one bend, sec.	10
Power supply	
Power/voltage	1,5 kWt, 380 B
Compressed air, kg/ sm ²	0,1 m /min, 6 atm.
LxHxB, mm	1900x780x1050
Weight, kg	600



Baltic Machine-building Company

Tel./fax: +7 812 3310840, +7 812 3313970, tel.: +7 812 7167377; e-mail: bmc@trubogib.spb.ru; web-site: <http://www.tubend.ru>