

### Chain Bending Machines for Cold Bending Round Steel Link Chains







## KEB x.2 Series

▼ Infeed and straightening



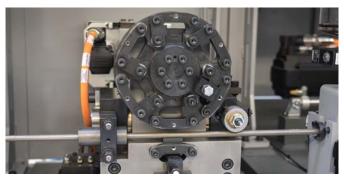
### Our Expertise for your Benefit

- Machine efficiency increased by ca. 10% (KEB 7.2)
- Robust machine design for the production of highstrength chains over a long period of time
- Wire can be inserted into the machine by means of the first pair of feed rollers
- Repeatable machine settings by saving set-up parameters, thus shorter set-up and tooling times

### **Design Features**

- Servotechnology
- Machine is controlled by servomotors and pneumatic cylinders
- Machine has been reinforced for processing higher tensile strengths
- Roller feed with 2 or 3 pairs of rollers, each pair of rollers is servomotor-driven
- Revised and servomotor-driven notching device
- Each one of the three control shafts of the bending slides (right, left, rear) are individually driven by servomotors
- The device for transporting the chain link from the first to the second bending station is driven by two servomotors
- Tilting tongs for turning around the bent chain link is driven by two servomotors. Tongs are opened and closed pneumatically.

### ▼ Wire embossing device



### **Options**

- Wire embossing device
- Wetting device
- Hydraulic, quick-release mechanism for straightening devices of the KEB 7.2

### ▼ Bending slide





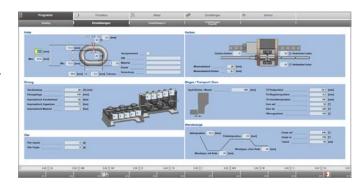
# Quality, Reliability, and Efficiency WAFIOS Chain Bending Machines – KEB x.2 Series

### Application

Chain bending machines from the KEB x.2 series are used for cold bending round steel link chains. Wire material is fed in from the wire coil. The bent chain can then immediately be electrically welded on a separate machine.

### Mode of Operation

The wire is drawn off the wire coil. It is then straightened in two planes. Then it is notched and cut at intervals according to the chain link blank length. In the first bending station, the chain link blank is pre-bent around the two-part bending mandrel. The pre-bent chain link is transported to the second bending station where it is finish-bent into the chain strand. In a third station, the chain link is calibrated to the correct width.



▲ Input screen KEB 7.2

### Quality

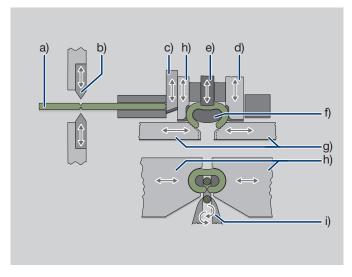
For more than 125 years, the name of WAFIOS has been synonymous with highest quality, safety standards, and technical innovations in the German machine manufacturing industry.

### Reliability

Strict quality controls, state-of-the-art production systems, and many years of experience guarantee that your investment is safe in our hands. Our global service network ensures high availability of WAFIOS machinery.

### Cost efficiency

High production output and a long service life will save money and shorten the amortization time of your investment.



- ▲ Tool structure of the KEB x.2 double bending procedure
- a) Chain material
- d) Bending tools
- g) Pre-bending tools

- b) Notching tools
- e) Holding tool
- h) Finish-bending tools

- c) Cutting tool
- f) Bending mandrel
- i) Tilting tongs



Technical Data	KEB 4.2	KEB 7.2
Nominal wire Ø: Adm. tolerances in accordance with DIN EN 818-2 Stainless steel, up to 800 N/mm² Chain steel, up to 800 N/mm² Chain steel, up to 900 N/mm² Chain steel, up to 1,000 N/mm²	- - 5.0–10.0 mm 5.0–9.0 mm	10.0–16.0 mm 10.0–18.0 mm – 10.0–16.0 mm
Wire infeed length:	155 mm max.	280 mm max.
Bent chain link:  Pitch / inside length of chain link  Outer chain link width	14.5 – 52 mm min. 2.9 × wire diameter 16–38 mm	29 – 95 mm min. 2.9 × wire diameter 34–70 mm
Output:  Chain steel, up to 800 N/mm² Chain steel, up to 900 N/mm²	ca. 75-60 links/min	ca. 45-35 links/min
Compressed air consumption: (SI/min at 6 bar)  Machine Embossing device	135 SI/min 	ca. 200 SI/min ca. 300 SI/min
Coolant water:	for air conditioner on sitch cabinet	for air conditioner on sitch cabinet
Dimensions: (l×w×h)	ca. 5,000 × 2,800 × 2,300	ca. 6,600 × 3,400 × 2,300
Net weight: (with switch cabinet)	ca. 6,800 kg	ca. 12,000 kg





Our product range includes a wide variety of high-quality chain machines.

- Chain bending machines, KEB x.1 and KEB x.2 series
- Chain bending machines, KER x.2 and KER 8 series
- KBA 601 chain bending machine with conduction (WED 601) heating or with induction (IEW 601) heating of chain link blanks
- Chain bending machine KBF 60 with induction heating (IEW 60) of chain link blanks
- Chain (resistance butt) welding machines,
- KEH x.2 and KEH 8 series

  Chain (flash butt) welding machines,
- KSH and KSF 60 series
- Chain calibrating machines, KPH series

### **WAFIOS AG**

Silberburgstraße 5 72764 Reutlingen, Germany Phone +497121 146-0 Fax +497121 491-250 sales@wafios.de www.wafios.com

Precision Machinery for Wire and Tube