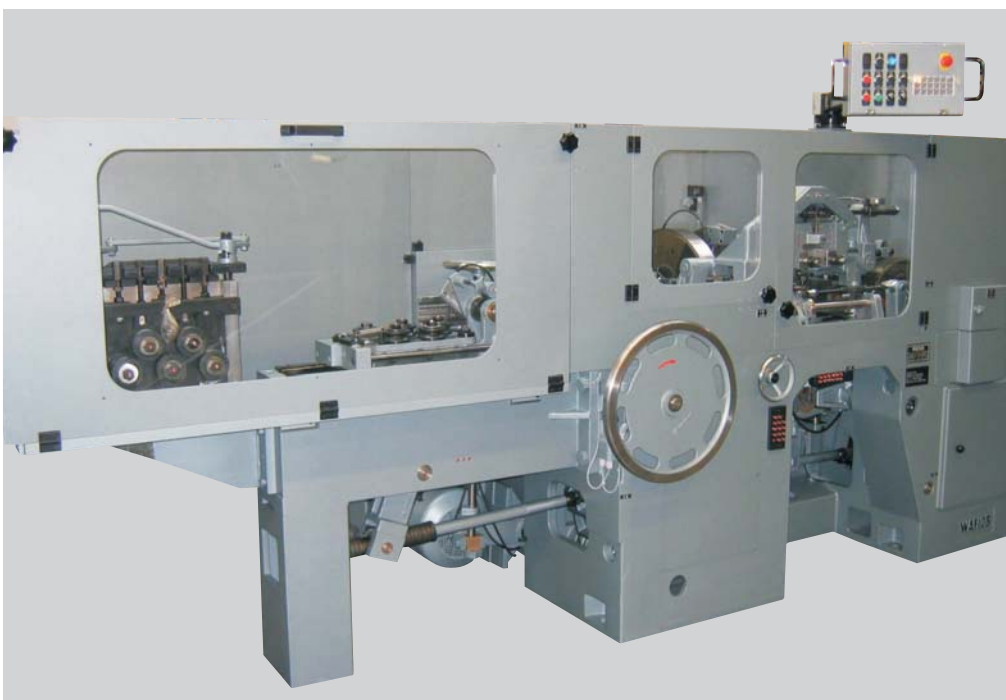


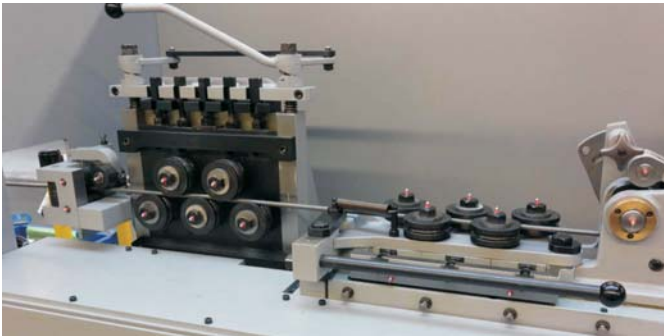
## Chain Bending Machines for Cold Bending of Round Steel Chains



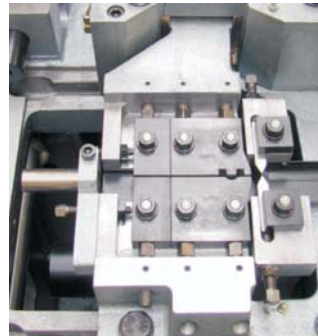
KER Series

# KER Series

▼ Roller straightening



▼ Pre-bending/notching station



▼ Bending tools



## Our Accomplishments for your Benefit

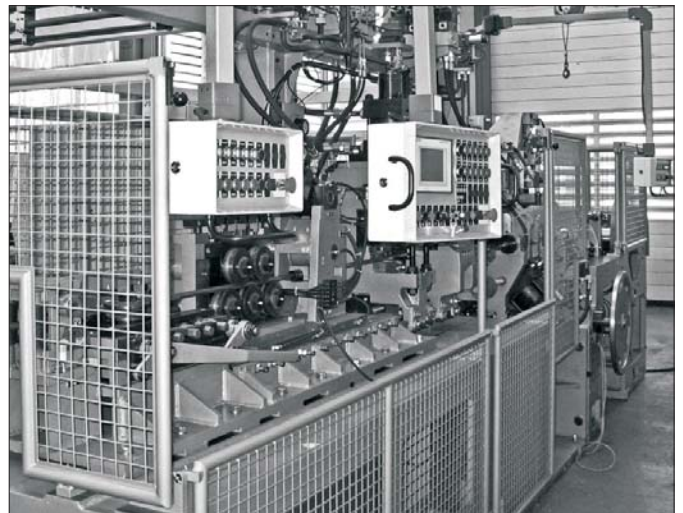
- Robust machine design for the production of high-strength chains over a long period of time
- Uniformly bent chain in continuous operation with the strictest bending tolerances
- No damage to the wire surface, i.e. high chain surface finish

There, the separated slug is inserted into a previously bent, vertically standing chain link that is held by turning tongs. In this bending station, the chain link is finish bent around a mandrel by two swivel-mounted bending levers whose rollers are positively guided in a cam plate that corresponds to the chain link shape. Wire surface damage is avoided with this bending method.

## Design Features

- Smooth machine running
- Safety devices to protect tools and machine parts
- All main movements are carried out by the positive mechanical control of double-acting curves
- KER 8: Auxiliary feeder and slug machine are hydraulically driven

▼ KER 8



## Mode of Operation

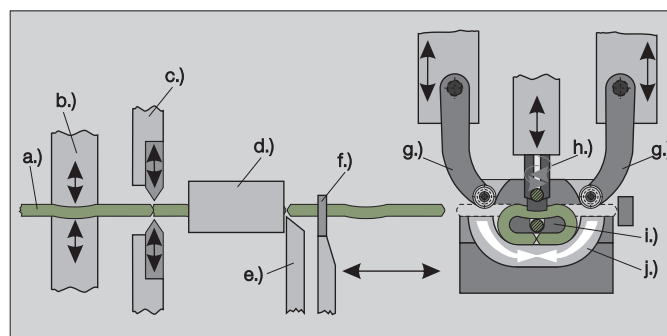
The chain wire drawn off the pay-off unit is straightened on two levels and passed to a pre-bending/notching station that can be displaced in the wire direction. There, the wire receives a waved bend which later becomes the back curvature of the bent chain link. Moreover, the wire is notched from both sides at intervals of one slug length. In a second station which is offset by several pitches, one each slug length is fixed by a gripper, cut-off and transported to the bending station.

# Quality, Reliability, and Cost-Efficiency

## WAFIOS KER – Chain Bending Machines

### Machine application

KER series chain bending machines are used for the cold bending of round steel chains. Wire material discharge from the wire coil. The bent chain can subsequently be immediately electrically welded on a separate machine.



▲ Tool design of the KER roller bending procedure

- |                       |                               |                     |
|-----------------------|-------------------------------|---------------------|
| a.) Chain material    | d.) Cutting bush              | h.) Turning tongs   |
| b.) Pre-bending steel | e.) Cutting tool              | i.) Bending mandrel |
| c.) Notching tool     | f.) Transport gripper         | j.) Cam plate       |
|                       | g.) Bending lever with roller |                     |

### Quality

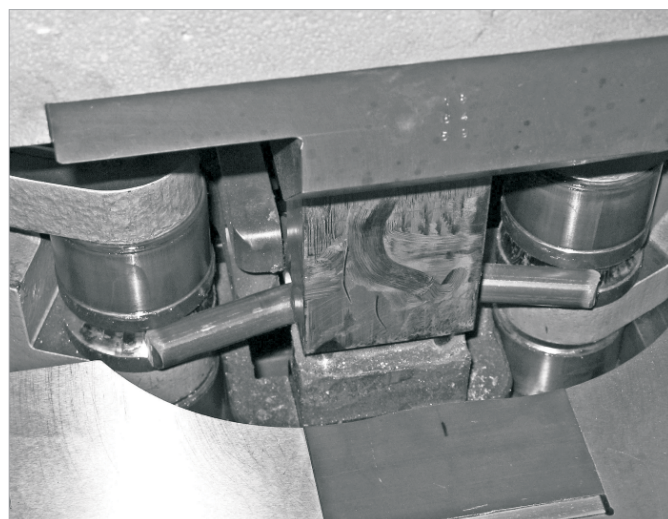
For over 100 years, the name WAFIOS has been synonymous with highest quality, safety standards, and technical innovations in the German machine manufacturing industry.

### Reliability

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

### Cost-efficiency

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



▲ KER-bending lever with rollers

Technical Data	KER 4	KER 5	KER 7	KER 8
Wire dia., mm, up to 750 N/mm <sup>2</sup>	5.0 - 10.0	8.0 - 13.0	10.0 - 16.0	13.0 - 20.0
Wire feed length, mm	50 - 160	80 - 200	100 - 250	135 - 360
Pitch / Inside link length, mm of bent link	min.: 3 x d / 15 max.: 5 x d / 53	min.: 3 x d / 24 max.: 5 x d / 69	min.: 3 x d / 30 max.: 5 x d / 85	min.: 3 x d / 40 max.: 5 x d / 126
Output (links/min) up to 750 N/mm <sup>2</sup> up to 500 N/mm <sup>2</sup>	75 - 60 80 - 65	65 - 45 70 - 50	55 - 30 60 - 35	26 - 15 26 - 15
Power installed (KW)	5.5	7.5	11.0	22.0 + 37.0
Compressed air requirement (6 bar)	---	---	---	10 l/link
Cooling water consumption at 15°C (at 3 bar)	---	---	---	20 l/min
Hydraulic system tank contents l	---	---	---	1,000
Space required L x W (mm)	abt. 6,000 x 2,500	abt. 6,500 x 3,000	abt. 7,000 x 3,000	abt. 11,000 x 5,000
Net weight in kg:	abt. 4,500	abt. 6,300	abt. 10,000	abt. 27,000



Our product range includes a wide variety of high-quality chain machines, such as:

- Chain bending machines, KEB .1 series
- KBA 601 chain bending machine with WED 601 conductive blank heating or with IEW 601 inductive blank heating
- Chain welding machines, KEH series
- Chain welding machines, KSH series
- Chain calibrating machines, KPH series
- KBS 4.1 combined chain bending and chain welding machine

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Precision Machinery for Wire and Tube