

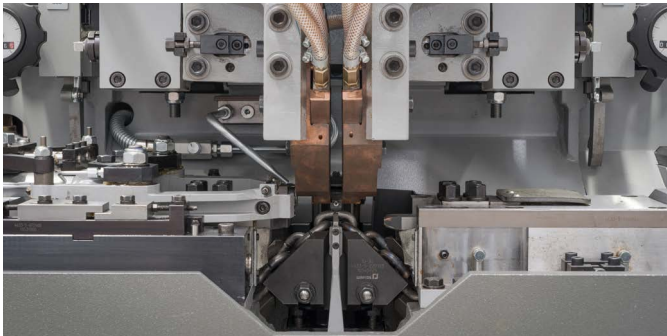
Chain Welding Machines for Resistance Butt Welding Round Steel Chains



Series
KEH x.2

Series KEH x.2

▼ Welding area



▼ Chain feed with chain feed monitoring and chain brake



▼ Chain transport



Our Accomplishments for your Benefit

- Robust machine design for the production of highstrength chains over a long period of time
- Reduction of set-up and tooling times due to parameter database

KEH 3.2, KEH 4.2, KEH 5.2, KEH 7.2

- Increase of tensile strengths by 20%, i.e. from 750 to 900 N/mm², and in case of small wire diameters to 1,000 N/mm², for processing modern stainless steels
- Servodrive of the control shaft with individually adjustable rpm numbers for welding, deburring, and transport

KEH 3.2, KEH 7.2:

- Output of machine increased by ca. 15 – 20% due to servodrive of the control shaft with individually adjustable rpm numbers for welding, deburring, and transport

KEH 7.2:

- Operating range increased to 18 mm wire thickness

Design Features

- Latest control technology due to servo technology for easy operation of the machine
- The following machine functions are driven separately by servomotors:
 - Control shaft
 - Upsetting
 - Chain transport
 - Up/down movement of the chain rotator gripper
- Designed for higher tensile strengths of modern chain materials
- Chain transport decoupled from control shaft, in-process adjustment of the transport stroke and the transport gripper position on the control panel, i.e. outside the hazard area
- Upsetting system decoupled from control shaft
- Freely programmable upsetting sequence, graphical programming on monitor, therefore no mechanical upsetting cam required anymore

▼ KEH 4.2



Quality, Reliability, and Efficiency – WAFIOS KEH x.2 Chain Welding Machines

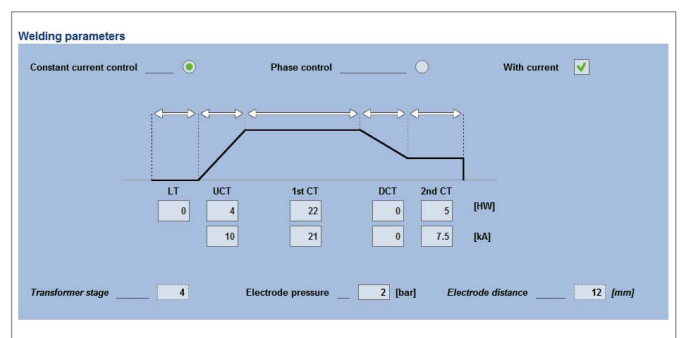
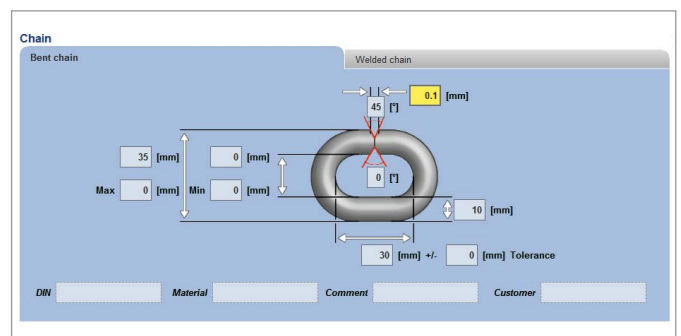
Application

Chain welding machines of the KEH x.2 series are used for resistance butt welding bent, round steel chains, with notches at the chain link ends. The welding mark on the chain link is completely deburred by the chain welding machine.



▲ Monitoring of the welding process

▼ Programming – Input of chain dimensions



▲ Programming – Input of welding parameters

Quality

Since 1893, 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.

▼ Kettenbiegemaschine KEB 7.2 und Kettenschweißmaschine KEH 7.2



Technical Data	KEH 3.2	KEH 4.2	KEH 5.2	KEH 7.2
Nominal wire Ø: <i>[mm]</i> Adm. tolerances in accordance with DIN EN 818-2 up to 800 N/mm ² up to 900 N/mm ² up to 1.000 N/mm ²	3.0 – 6.0 3.0 – 5.0	5.0 – 10.0 5.0 – 9.0	8.0 – 13.0 8.0 – 12.0	10.0 – 18.0 10.0 – 17.0 10.0 – 16.0
Welded chain link: <i>[mm]</i> Pitch / inside length of chain link Outer chain link width	8.9 – 42.0 (min. 2.7 × d) 10.8 – 25.2 (bent)	13.5 – 50.0 (min. 2.7 × d) 16.0 – 38.0	21.5 – 65.0 (min. 2.7 × d) 25.0 – 50.0	27.0 – 100.0 (min. 2.7 × d) 34.0 – 75.0
Output: <i>[links/min]</i> Stainless steel Chain steel	abt. 90 – 64	abt. 55 – 45 abt. 75 – 50	abt. 40 – 25 abt. 55 – 34	abt. 35 – 18 abt. 45 – 19
welding transformer: <i>[kVA]</i> Rated power 50% duty cycle	40	100	150	280
Compressed air consumption: <i>[NI/min]</i> (SI/Min. at 6 bar)	not yet defined	ca. 600	ca. 800	ca. 1,035
Cooling water consumption: <i>[l/min]</i> (SI/Min. at 3 barmin.)	not yet defined	35 – 40	35 – 40	35 – 40
Space required: <i>[mm]</i> (l × w × h)	not yet defined	abt. 4,660 × 2,580 × 3,100	abt. 4,080 × 3,160 × 2,750	ca. 5,080 × 3,450 × 2,910
Net weight: <i>[kg]</i> (machine with switch cabinet)	not yet defined	ca. 6,400	ca. 7,500	ca. 9,800



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 series
- Chain bending machine KBA 601
- Chain bending machine KBF 60
with induction heating (IEW 60) of chain link blanks
- Chain (resistance butt) welding machines, KEH x.2 series
- Chain (flash butt) welding machines,
KSH and KSF 60 series
- Chain calibrating machines, KPH series

WAFIOS AG

Silberburgstraße 5
72764 Reutlingen, Germany
Telefon +49 7121 146-0
Telefax +49 7121 146-250
sales@wafios.de
www.wafios.com

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