

PRODUCT OVERVIEW

The company ATEC is a medium-size company **specializing in automation solutions** for different industries.

The know-how and innovation potential of ATEC has become known far beyond the borders of Germany. For example, ATEC products are exported to nearly all the big markets in the world (China, France, Poland, Czechoslovakia, etc.).

Some of our major customers are international market leaders **such as Rettig Heating Group B.V, Delta Radiatoren GmbH, Hoppe AG, Arbonia, Kermi GmbH, Schöck Bauteile GmbH....**

If you need some more information about reference customer please feel free to contact us.

At ATEC you can find qualified contacts for your innovative products and advanced process technologies, high system efficiency as well as through total solutions are required.

You can contact our experts to inform yourself without obligation of the available solution options and market-oriented plants and systems for the manufacture of your products.

We look forward to your enquiry!

Contact:

Mrs. Annette Rosewich
Tel.: +49 (781) 969768 – 0
Fax: +49 (781) 969768 – 25
Mail: info@atec-automation.com

ATEC – Reference machines



- ⇒ High powered medium frequency welding machine for radiator elements. 12 welding circuits simultaneously and individually adjustable – Height 400 - 3000
- ⇒ High powered medium frequency welding machine for radiator elements. 12 welding circuits simultaneously and individually adjustable – Height < 400
- ⇒ Spot welding machine for tube radiators
- ⇒ Short length spot welding machine – Height < 260mm
- ⇒ Special welding machine for towel radiators
- ⇒ Head-end half parts welding machine
- ⇒ Debarring machine for tube radiators
- ⇒ Internal grinding machine for tube radiators
- ⇒ Welding machine for tie bars. Welding of three bars (steel – stainless steel – steel) simultaneously
- ⇒ Automatic machining for welding electrode
- ⇒ Double element welding machine for radiators elements
- ⇒ Resistance welding machine for towel radiators
- ⇒ Complete production lines for towel radiators
- ⇒ CNC die cutting system for stainless steel, steel and aluminium tubes
- ⇒ 3 axis handling systems for stacking

We are specialized in:

Welding Application/Technology

- ⇒ Welding fixtures
- ⇒ Welding machines
- ⇒ Welding lines
- ⇒ Inspection equipment
- ⇒ Robot welding system
- ⇒ Manufacture of radiators



Forming Systems

- ⇒ Pipe end forming
- ⇒ Pipe end closure systems
- ⇒ Profiling systems
- ⇒ Punching machines

Automation Equipment

- ⇒ Handling equipment
- ⇒ Processing equipment
- ⇒ Assembly systems
- ⇒ Image processing

Excerpts of our customer reference list



We are also open if you have any questions about special production machines.

Production facilities for radiator manufacture

Tubular radiators

Towel radiators

Buried convectors



Worldwide, ATEC manufactures efficient and extremely economic complete solutions for the manufacture of

Tubular radiators – towel radiators – convectors

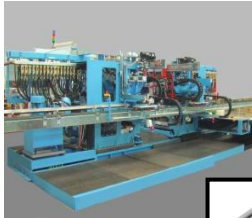


Renowned customers have been placing their trust in the extraordinary reliability and innovative process technologies provided by ATEC production facilities for many years.



Put your trust in a reliable partner with over 20 years of experience and outstanding know-how in the manufacture of radiator production facilities.

Excerpts from our production range.



High-performance welding units for radiator elements

Fully-automated universal welding unit for simultaneous welding of headpieces (left hand / right hand) to radiator element tubes.

Workpieces : 2-column - 6-column radiator elements

Welding process time : < 60 milliseconds

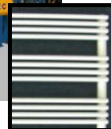
Welding seam length : approx. 950 mm



Universal grinding machine for radiator elements

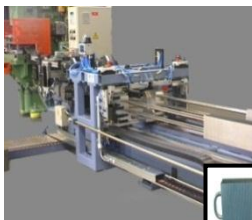
CNC-controlled weld seam - internal and external driving machine for radiator elements. Absolute highest quality grinding results due to electronically-regulated and individually adjustable grinding curve control system.

Grinding process time : < 0.7 seconds



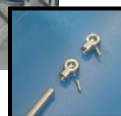
Towel radiator production facilities

Complete unit for towel radiator manufacturer. Fabrication of collection tubing and horizontal tubes with automatic merging and welding to towel radiator. Various tube end sealing technologies and geometries possible.



Aluminium convector production facility

Complete unit for the manufacturer of heater convectors with reflectors in aluminium. Manufacture of aluminium fins with subsequent automatic stacking of fins and pressing into heater elements



Installation unit for brake pipes

Fully automated assembly of various parts into brake pipes in stainless steel. All joint parameters (force / route) are continuously monitored and checked for safety reasons. Fitted parts are soldered pressure-sealed after the joining process.

Products from ATEC – production lines



door sign steel reinforcement with a steady bush (Steel-Steel ● Stainless steel-Stainless steel)

the problem: securing high-tensile welded joint
the solution: annular projection welding with welding process regulation and monitoring



door handles with cover (St-St / VA-VA)

the problem: sealing pipe ends without a gap
the solution: annular projection welding



steel furniture pie-to-pipe welded joints

the problem: firmly joining pipes with a minimum of welding seam preparation
the solution: 90° welding with network frequency equipment



steel sheeting design

the problem: firmly joining steel sheeting design
the solution: multispot welding with welding parameter regulation



grating

the problem: making U profiles on forming machine and welding with transverse rods
the solution: joining the grating with resistance welding



collector) pipes with inside threads

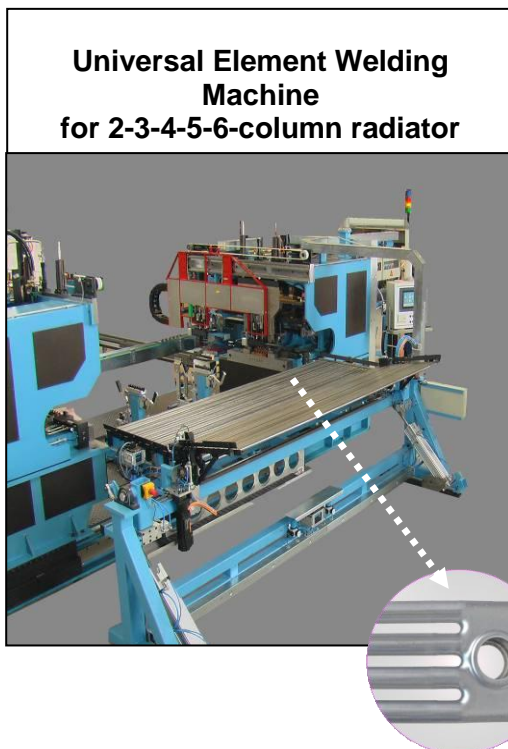
the problem: placing inside threads in thin-walled pipes without welding in added screw sockets
the solution: moulding drumming and threads (non-cutting (!) manufacturing process with high-tensile threads)

Tube Radiator production – Universal element welding machine

... we help you reducing the production costs!

The medium-frequency welding system specifically developed for the tube radiator production will make it possible to manufacture **head-end-tube connections** in **top quality** and, at the same time, with an **extremely high productivity**.

► Major advantages and features at a glance:

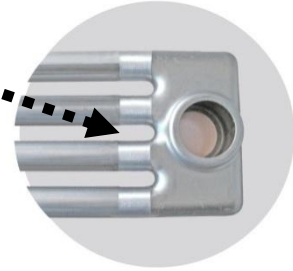


- up to **2.700 radiator elements per hour** cleanly welded
- **hardly visible weld seams in excellent weld seam quality**
- hardly any, **partly no finishing work** whatever as compared with conventional techniques
- **no weld splashes** on the weld seam, especially not in the **arched area of the head-end**
- high process safety ensured for the **seal welds of all tube-tube connections** by the singular (!) welding current control with up to **12 weld seam connections being monitored and controlled** at the same time

- **high production flexibility** thru partly fully automatic retooling processes for the welding of different radiators element types (**2-3-4-5-6 column elements**)
- energy-efficient technology with a **permanently low energy consumption**
READY for Future



internally ground



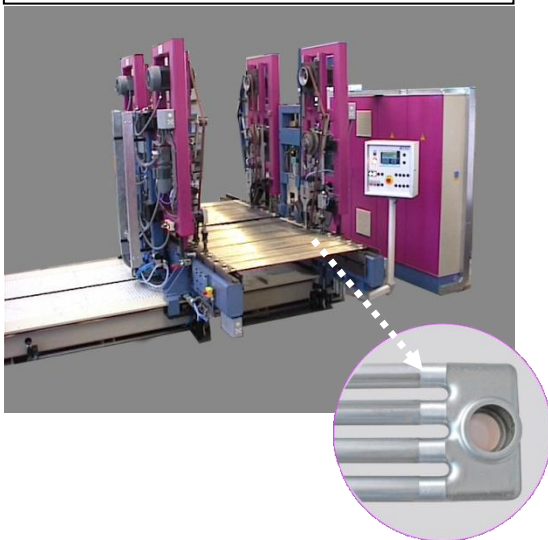
Radiator production – internal grinding machine ... we help you reducing the production costs!

The internal grinding machine, specifically developed for the tube radiator production, will now make it possible to grind welded radiator elements at their **head-end tube weld seams** efficiently and in **top quality**, i.e. in the internal area that is particularly difficult to access.

► Major advantages and features at a glance:

I.

internal grinding machine for 2-3-4-5-6-column radiator elements with CNC-controlled grinding



- excellent grinding results with **CNC-optimized** and **CNC-controlled grinding units**, with the **grinding profile** being **adaptable** in the most **optimal** way to the changing grinding conditions at any time
- **high production capacity of up to 2500 radiator elements per hour**
- **high production flexibility** achieved by the **rapid-change retooling system** that can be used for any radiator element type [2-3-4-5-6-column elements for heights between 200 mm and 3 000 mm]

- to be **operated in a stand-alone configuration or in production lines**, into which the machine can be integrated subsequently without any problems
- long service life of the abrasive belts without belt breakage by applying CNC-controlled grinding profiles
- operating the machine is made easy and can be learned intuitively thru the intelligent, highly sensitive industrial touch screen

PS: By the way... you can order from ATEC on request complete production lines with production units that are optimally geared to each other and have a demand-oriented degree of automation.

Welding machine for fixing cover lids on door handles

... we help you reducing the production costs!

The **medium-frequency welding machine with its servo-controlled feed mechanism**, specifically developed for the production of **door handles**, will now make it possible to cover and close the tube ends of **steel or stainless steel** door handles in top quality, **without leaving gaps and in an economical process**. This applies particularly to **small lot sizes and production orders with a wide variety of parts**.

► Major advantages and features at a glance:

Welding machine for fixing cover lids on the tube ends of door handles



- cover lids welded into the tube ends of door handles **without leaving a gap**, thus **avoiding crevice corrosion** under the relevant ambient conditions
 - **high production flexibility** ensured by the **ATEC rapid-change retooling system** for different part sizes
 - **extremely short retooling times** without additional tools
 - **operating the machine is made easy and can be learned intuitively** thru the **intelligent, highly sensitive industrial touch screen**
-
- **fast welding speed and high process safety** by the highly dynamic **servo-controlled feed mechanism** that will ensure good impact resilience
 - **energy-efficient welding technology** with a permanently low power consumption – **ready for the future**