Tube sheet
treatment solutions
Expanding, trimming & welding
Automated Tube-end Trimming

The objective of the trimming tool is to provide the required distance between the tube-end and the reference surface (tube sheet).

In order to streamline the process, an automatic tube-end trimming process has been introduced, which is performed as follows:

- Locating tubes
- Designating the local base area
- Measuring tube stick-out outside the reference plane
- Centering the tool against the axis of the machined tube
- Tube-end trimming to a defined height
- Verification of the trimming process

Automated Expanding Tool

The objective of the robot-mounted expanding head is to obtain the smallest possible gap between the tube and tube sheet.

The process is repeated tube by tube through following steps:

- Local control of tool distance from the reference surface
- Inserting the expander inside the tube
- Tube forming
- Tool withdrawal

Fully automated tube sheet treatment solutions:

Automation in heat exchanger production is one of the key sectors developed by RMA Sp. z o.o. Over the past few years, we have designed & developed many new technologies that have contributed to increased efficiency as well as the quality of manufactured products.

The most important processes in Tube Sheet treatment, such as automatic line changeover, vision systems application, tubes trimming and expanding, and also tubes to tube sheets welding - can be easily automated.

Find out more at www.myrma.eu/ATTS
Tubes to Tube sheet Automatic Welding

Welding of the tube to tube sheet is the last stage of manufacturing perfect quality tube bundle. The whole process is controlled by very accurate path finding system which controls and monitors welding parameters. Thanks to that we have improved quality and ensured high productivity which is the biggest advantage of this technology.

The process is repeated tube by tube through following steps:

- Finding position of the tube
- Measuring local surface of the tube sheet
- TIG or Laser Welding

All operations are performed on one platform powered by 6-Axis industrial robot equipped with automatic tool exchange system!
Tube sheet treatment solutions at a glance

Automatic expanding (AES-40)

Automatic trimming (ATS-40)

Automatic electrode change (AEC)

AEC, ATS-40 - patent pending!

Watch the above technologies in action >>

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