

# Tube Welding Machines RHF 400/600



## Highest quality at maximum flexibility.

**Well equipped to meet the new demands of the market**

For over 90 years Schöler has made its name worldwide in the development and manufacture of state-of-the-art machines and plants for the heat exchanger industry.

The idea for the RHF seam welded tube machines has been developed by our engineers on the basis of these many decades of experience. It is a concept which unites maximum productivity with utmost flexibility. Thus trouble-free production speeds of up to 200 m/min of finished product or 900 tubes per minute are just as feasible as tube dimensions of up to 105 mm in height and 12 mm in width.

If you to be equipped for the latest demands of the market and for new product ideas? With RHF seam welded tube machines, made by Schöler, you definitely will be. Our machines can be upgraded or retrofit at a moment's notice by means of our specially developed add-on applications. Should you ever have an exceptional problem, our team is at hand with advice and assistance and will devise the ideal solution for all electrical, mechanical and service matters - to meet your own specific requirements.

## Technical Data

Field of application / Product Types

Production of longitudinal-welded tubes by high-frequency welding process  
Radiator, CAC, oil cooler and collector tube applications  
flat-oval, hourglass, rectangular or round tube profiles

## Productivity

up to 200 m/min finished product  
up to 900 tubes/min

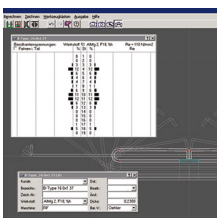
## Materials

Aluminum - 0,2 - 0,5 mm for radiators, CAC and oil coolers  
Aluminum - up to 2,8 mm for round tubes  
Copper, brass, CuproBraze - 0,115 - 0,2 mm for radiator and CAC tubes

## Options

Automatic strip splicing unit  
Strip accumulator  
Zone dimple unit  
Flux or braze paste application  
Camera inspection  
Tube stacker  
Packing and bundling systems

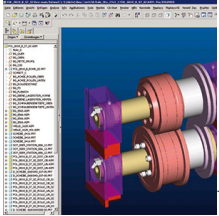
## Tube forming pattern design



A rapid and accurate assessment of the tube forming pattern carried out at the start of the roller set construction will ensure that the best possible distribution of stress is achieved. Pre-simulation and consideration of the material behaviour enables our engineers to effectively split up the requisite shaping steps.

Time-consuming laborious tasks are eliminated by finding solutions through utilization of modern software thus enabling our design engineers to concentrate entirely on designing the shaping concept.

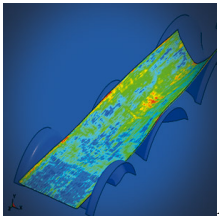
## 3D - Profile roller modeling



Using 3D CAD software from Pro-ENGINEER, the modelling profile data for each station can be imported and verified.

All roller profiles will then be generated automatically on the basis of a parametric reference system. Potential collision ranges will have already been detected and eliminated during the construction phase. The drawings and parts lists will also be generated automatically, saving time and labour.

## Finite-Elemente-Simulation



After design and construction of the profile rollers is complete the results can be fully verified and checked with the help of finite-element-simulation.

Having already received very detailed information about the stress ratios in the profile and the critical shaping steps during construction via the FEM simulating software, the developer can take corrective action if necessary. Extended shaping steps can also be simulated without any problem, like dimpling or cutting the tube into lengths for example.

## Insights

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