

SOLAR TUBES

TUBE CORRUGATION LINE TS-W

For the Manufacture of Flexible Metal Tubes & Hoses

EXCELLENT PRODUCT QUALITY



Supporting a **wide product range** thanks to a modular line configuration.

High performance longitudinal tube forming, welding & tube corrugation technology allows **high production speeds**.

Adequate non wearing hybrid tube forming tools in combination with quick product dimension change mechanism ensures **reduced set-up time**.

Optimized seam welding technology plus the accordant down stream equipment result in **long lasting product run length**.

Our **inline quality control** measures the achieved unique product quality.

APPLICATIONS

Tube Corrugation Line TS-W used in the fields of:

- Solar Tubes
- Heat Exchangers
- Heating Networks
- Petrol & Gas Transportation
- Automotive
- Process Industry



TAPE FORMING TECHNOLOGY

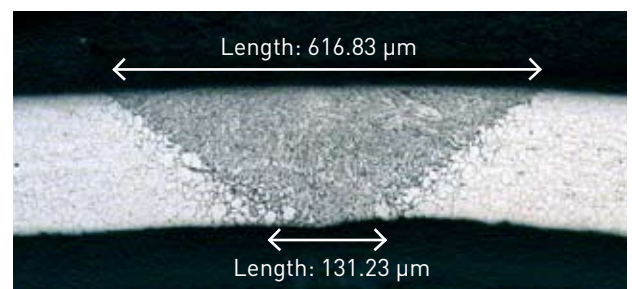
The edge trimming process is optimised in order to guarantee the best repeatable product quality and easy operation.

The design principle of the tape forming unit supports long lasting run length at high production speeds.

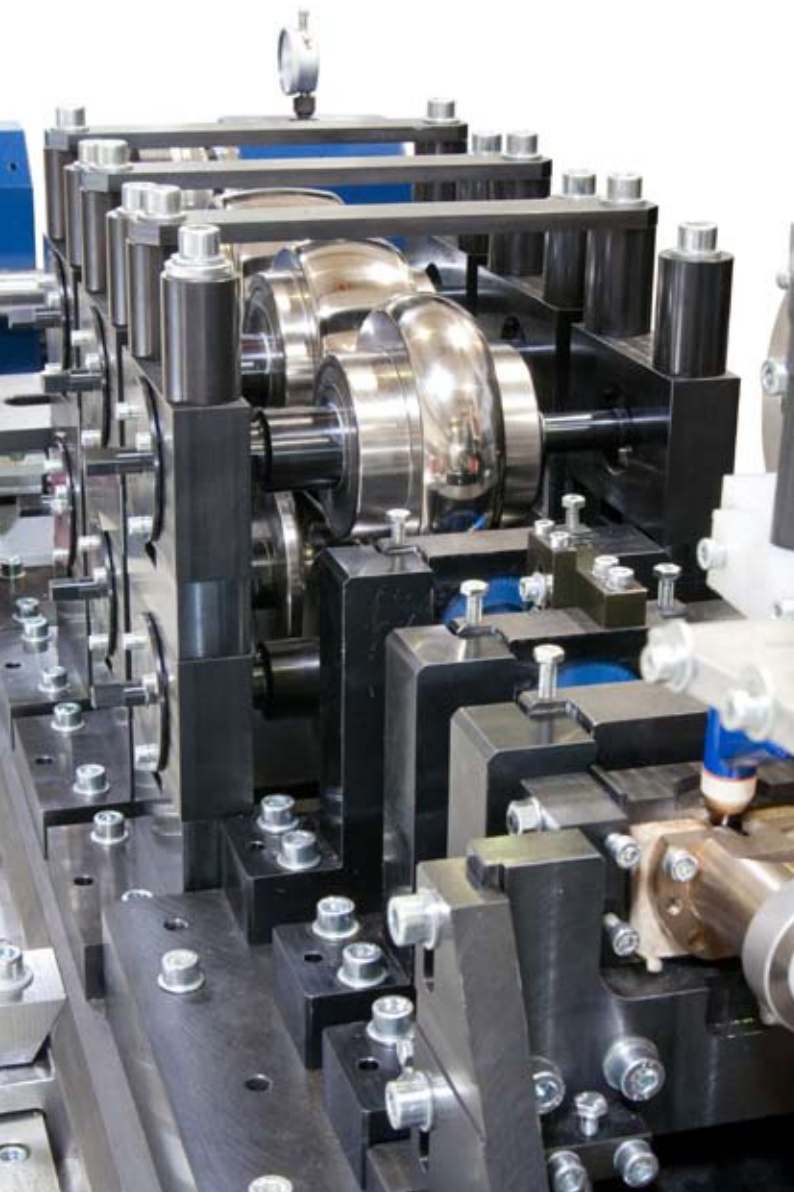
For the production of longitudinally welded tubes, an exact preparation and guiding of the tape edges is required. The preceding edge trimming process is optimized in order to guarantee best repeatable product quality.

TUBE WELDING TECHNOLOGY

Longitudinal seam welding is carried out by means of a plasma welding and is monitored by an arc video system. Optimized tube forming & welding technology results into a weld seam, offering adequate product properties.



DN16 - Welding Root, at 10 m/min



TUBE CORRUGATION TECHNOLOGY

The corrugators are optimized for high speed corrugation of highest quality metal hoses.



The special robust corrugation head design is characterised by long tool and bearing lifetime, easy handling and a large range of possible corrugation geometries with tightest production tolerances.



PROCESSING DATA*	TS-W01	TS-W02
Structural Speed	20 / 50 m/min	20 m/min
Run Length	1000 m	1000 m
Diameter Range	DN06 - DN32 (1/4" - 1 1/4")	DN16 - DN65 (5/8" - 2 1/2 ")
Wall Thickness Range	0.10 - 0.35 mm	0.15 - 0.60 mm
Tube Materials	Stainless Steel, (Alu, Cu)	Stainless Steel, (Alu, Cu)
Welding Method	TIG, Plasma, (Laser)	TIG, Plasma, (Laser)
Tube Corrugation	Smooth, Annular, Helical	Smooth, Annular, Helical
Corrugation Shape	Normal, Narrow, Wide	Normal, Narrow, Wide

* All data subject to alterations serving progress.
Other product dimensions are available on request.

TUBE CATERPILLAR

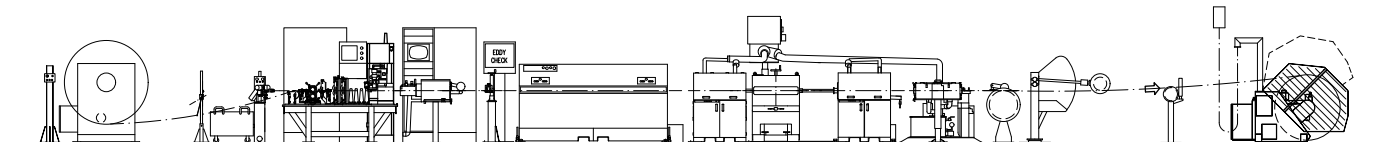
The line is equipped with a tube caterpillar which is especially designed for welding applications. Any kind of speed variations are avoided by digitally synchronizing the two belts. The tube pulling force is applied by means of profile belts adapted to the requested product range.



Caterpillar BA 1250-RF

INLINE QUALITY CONTROL

An eddy-current is induced into the welded seam and is evaluated.



Tape Forming • Welding • Calibration • Corrugation

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