





TFL tube finishing lines

a complete offer provided by **FIMI**.



To complete the electro-welded tube mills or also supplied individually as implementation of existing lines, FIMI provides machines for the finishing of steel tubes, with a range from 19 to 608 mm in diameter, for thicknesses from 0.5 to 20 mm and lengths from 3 to 15 m, both in-line and off-line, depending on the Customer's needs.

The management of the working phases is completely automated and can be easily integrated both to the tube lines and to the other components of the line.

The range of tube finishing machines supplied by FIMI is among the most complete:

- Hydraulic tube pressure test units up to 50 MPa (500 bar).
- Single or multi-headed tube end facing units.
- Tube threading units
- Non-destructive control systems.
- Packing systems.
- Tube handling units.

API & OCTG Ready.



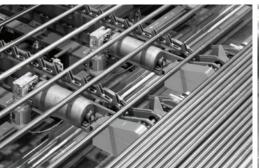
Nowadays, the importance of the tube finishing machines has increased in order to have a better quality and a more valuable production. FIMI has developed proper lines with the aim to satisfy these requests.

Finishing lines are indeed fundamental to obtain certified products such as API or OCTG production. All the necessary phases such as end finishing, hydrostatic testing and NDT controls can be managed by FIMI by supplying the correct machine for specific requests.

All these products can be fitted both online or offline depending from the production capacity, layout restrictions or customer desires. The main scopes are flexibility and quality as for the rest of FIMI machines.

The tools for the various diameters have been designed to guarantee rapid re-setting of the machine and to ensure high productivity levels for the line. The processing phases are completely automated and easily integrated with the pipe lines and the automatic packing lines produced by FIMI.







End Facing Units

The End Facing Unit is used to rework the ends of the tube to create a perfect finish, an internal or external bevel defined by specific product or in any case necessary for the subsequent hydraulic test so as not to damage the seals.

The cycle takes place by leveling the tube on one end, locking it with clamps and then activating the feed of the tool that performs the required machining.

The system is automatically set according to the diameter of the tube and the operations that have to be made

The movements are all extremely precise and comparable to those of a machine tool.











Hydrostatic Test Units

The Hydrostatic Test Unit makes it possible to verify the correct seal of the pressure inside the tube.

The test verifies that there are no holes on the weld, which is a prerogative of API products.

The test is performed by steps: the tube is first aligned and then washed internally with water to remove residues from previous processes.

The tube is transferred to the test heads that enter water and then raise the internal pressure up to the test pressure that is then maintained for the time defined by the API specification.

At the end of the test, the pipe is transferred to the drying station where it is inclined to allow water to flow-out.

The system then draws up a test report dividing the good tubes from the waste tubes.









The threading unit is used to rework the ends of the tube to create an internal or external thread defined by a specific product.

The cycle takes place by leveling the tube on one end, locking it with clamps and then activating the feed of the tool that performs the required production.

The system is automatically set according to the diameter of the tube and the operations that have to be made.

The movements are all extremely precise and comparable to those of a machine tool.





API products require pipe inspection using ultrasonic systems (UST) or Flux Leakage systems. These tests have to be performed carrying the tubes from a station to another and performing single inspections.

FIMI is able to offer turn-key tube handling systems and the integration of the commerce machines that perform non-destructive tests.





FIMI tube packers are completely smart systems which allow the preparation of square, rectangular and hexagonal bundles.

Thanks to an accurate construction, they are able to stack square, rectangular, beveled round and hydro-tested tubes directly in line with the Tube Mill, avoiding intermediate stoppages.

Automatic stackers, magnetic or traditional system, starting from 12,7 up to 323,0 mm length from 3 up to 13 m. Stackers automatically form, weight and drain the bundles of pipes ready to be packed using manual or automated strapping systems.

Handling systems for tubes designed to connect the various stations of the plant.











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