

atrac®-Automation:

When it comes to best results in stretch-reducing.

The stretch-reducing mill plays a major role in determining the production costs and competitiveness of the tubes produced. The automation system ensures that the wall thickness is as uniform as possible over the length of the tubes and from tube to tube. End losses are minimized. The wall thickness is safely within the lower tolerance range. Input material is saved. The automation system pays for itself within a very short time. But to do so, it has to function reliably, atrac® does that.

Just switch it on - atrac® does the rest for you.

The atrac[®] Smart Control automatically and safely adjusts the setting of the various control functions to the current production conditions. The system learns quickly based on measurement data received, also detecting and correctly handling measurement errors and inaccuracies. Critical process situations, such as possible tube inadmissible breakage mechanical loads, are anticipated and avoided.

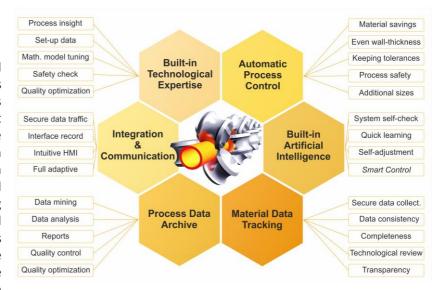


Fig.: Subsystems and main functions of atrac®

atrac® always and immediately delivers the data you need.

In production, the *atrac*® process model always and immediately supplies the correct setting data required for the stretch-reducing process on every request. The data delivery is 100% secure, so that there is no need for precalculation, storage and recall of data sets with all the associated problems. The atrac® process model is tuned in technological production planning and used for optimizations based on process data.

The most modern system - in continuous use for over 3 years.

The atrac® system is the front-runner in the development of SRM automation. From Smart Control to Smart Phone application, all technical possibilities are used for the goals of cost minimization and quality

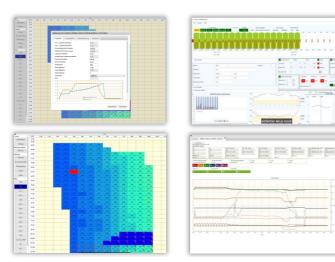


Fig.: Interface screens of atrac®

maximization in tube rolling. The reference system has been in continuous operation for more than 3 years to strengthen the competitiveness of a modern tube mill in Germany. Visits are possible.

Many pipe mills appreciate our reliable service.

Many other tube mills also with older automation systems appreciate our service, which is fast and competent, especially when other help did fail to arrive. We count 6 service references.