

## **Hot finish seamless**

### **Manufacturing process**

Tubular Products' seamless mechanical tubing is produced from solid round billets by rotary piercing and then is rolled in an Assel mill equipped with a no-end-loss unit that permits an extremely broad range of diameter/wall thickness ratios. Tubes are then processed through a multiple-pass sizing reducing mill and a rotary sizer.

Tube lengths from the hot mill are slowly air cooled or—moved directly to a unique isothermal annealing furnace to ensure a uniform microstructure hardness to promote excellent machinability. This process contrasts with conventional slow-cool furnaces, where tubes are cooled in bundles. That can result in variations in microstructure and hardness from tube to tube and even within a tube itself.

After cooling, tubes are pickled in an acid bath to remove mill scale and are inspected. Minor imperfections are removed by grinding prior any additional processing.