Measuring the spray amount in a Tempering system for bars and tubes

The application is a tempering system for bar and tubes for continuous heat treatment of pipes and steel bars. The diameter range of the bars and tubes is 15 - 50mm. Diameters up to 500mm for tubes and bar lengths of up to 7m are also possible.

The continuous process is an induction hardening quenching including a shower with comparatively high process speeds.

Surface hardening and tempering of ballscrews - in this plant two ACS flowmeter are installed.

Tempering system for bars and tubes for continuous heat treatment
Flow measurement in the induction system

The ACS flowmeters are used to measure the spray amount, which high accuracy and reliability, as this influences the product quality. The workpiece rotational speed and the feed rate also have a strong influence to the quality result and to the investment result resp. to the hardness result. The machines can reach a throughput of up to 13t/h with the appropriate power unit at an installation length of more than 70 meters.

By a certain residual scale fees and any additives in the quenching inductive meters are ideal because they are insensitive to dirt and wear.

Product info

Specials

Flowcont

- The Flowcont® FN offers a wide range of process connection, nominal diameters and high resistive coating up to 180°C
- The new measuring sensor has a short response time due to his high exciting frequency
- Due to modern filtering technologies the measuring and interfering signals can be separated exactly. This allows a highly precise measuring also at difficult conditions
- Selfcleaning electrodes with double sealing guarantees a high reliability of the flow meter
- Due to the grating strengthened coating in PFA the device is vacuum stable and can be used up to 180°C

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