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Descaling Pressure Gauge

The application

The impact created by the water jet on the rolled product surface is the predominant criteria when it comes to hydro-mechanical descaling of steel in hot rolling. The water pressure is one of the main parameters for the impact.

This is true for the design of new descaling systems but also for the revamp of existing installations.

A study of an existing descaling installation is a structured approach to analyze all vital data so that potentials for optimizations focusing on reduction of energy consumption and product quality can be identified.

The problem

In existing descaling installations it is not uncommon that the pump pressure is known whilst precise information about the water pressure in the descaling spray header is not available. There can be a significant difference between the two because of the pressure losses in the pipe work. However, this information is vital for the

benchmarking of the existing situation and for the simulation the impact of an improved nozzle arrangement.

The solution

With the new Lechler DESCALING PRESSU-RE GAUGE the water pressure can be measured directly at the spray header in front of a descaling nozzle by simply taking one nozzle out and putting the pressure sensor in instead.

The benefits
With the exact value of
the water pressure available at the nozzle a much
more accurate simulation
of the existing situation
and the proposed modification can be made with
the Lechler DESCALE
software.

The true representation of all important values will provide a much better basis for decision making regarding the potentials for energy reductions and product quality improvements which can be expected from an optimization of the nozzle arrangement.

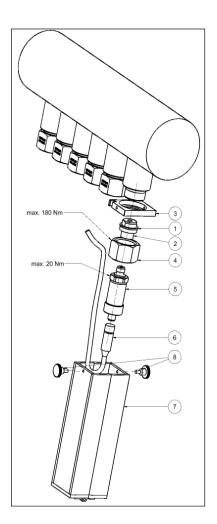
Furthermore it is possible to detect potential pressure losses in the pipe work by using the Lechler DESCALING PRESSURE GAUGE.

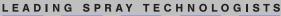
The Product

The system comes in a unique case which contains all components such as one sensor which fits into all Scalemaster and MiniScalemaster versions, a sensor protector, a 5 m (16.4') cable and a hand held pressure reading.

The sensor is easy to install, no special tools are required. A measurement can be taken during a maintenance shut down when no rolling takes place.

Only one measurement at one nozzle position of a header can be done at one time.







NOZZLES











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Descaling Pressure Gauge

Complete DESCALING PRESSURE GAUGE 06P.M00.00.00.00.0





Sensor details

- Measuring range: 0...600 bar
- Burst pressure: 2000 bar
- Accuracy of sensor: ± 0.25% of Full Scale (± 1.5 bar)
- Protection class: IP67

Hand held pressure reading

- · Simple and user-friendly key operation
- 2 sensor inputs, automatic sensor recognition
- Measuring range and unit of measurement of the sensors connected to it are recognised automatically (units: bar, psi, MPa)
- Zeroing (taring) of the individual measurement channels
- Display of the actual measured values
- Display of the differential (channel A minus channel B)
- · Minimum or maximum value indication, with reset function
- · Operating Manual: German / English / French



LEADING SPRAY TECHNOLOGISTS











Preassure Gauge Leaflat_rev.02 mod. BM_20.06.2011

NOZZLES

HEADERS

CONTROLS

SYSTEMS