

Recording and control in tyre production

Tyre curing applications



Secure and reliable data recording in the harshest of environments

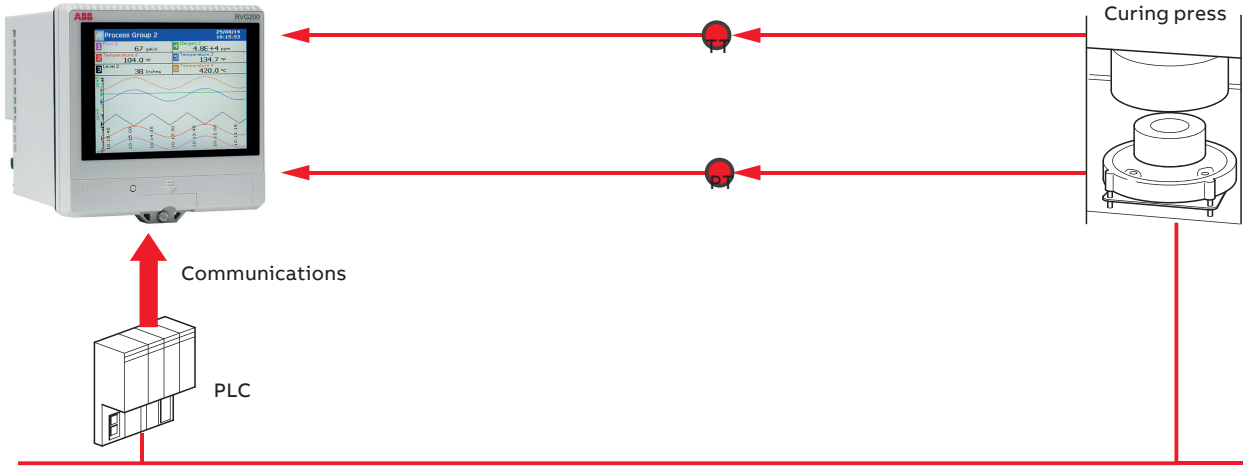
Measurement made easy

Introduction

Curing is the process of applying pressure to the green tire in a mould in order to give it its final shape, and applying heat energy to stimulate the chemical reaction between the rubber and other materials. Temperatures are in the area of 200 °C with pressures around 350 psi. This heat results in chemical and physical changes in the rubber compounds.

Tyres are cured for a certain duration of time depending on the type of tyres. Under-cured tyres will result in lack of adhesion of components and results in failed tyres. So, it is essential to keep track of the temperature and pressure applied during the curing process and alert the operator if there is a change in the applied temperature or pressure.

The process



Tyre curing process overview

What ABB products are suitable?

ScreenMaster RVG200

- A 24 input touch screen recorder featuring swipe gesture control provides fast and intuitive operation.
- Hosedown to IP66 and NEMA4X standards – well-protected against water, dust and steam around the tyre presses.
- Ethernet or RS485 comms enables easy integration in to a PLC and log the data present in the PLC.
- Email notification of alarms and status reports.
- Batch recording option enables simple recording and reviewing of batch processes.



ScreenMaster RVG200 paperless recorder

C1900 circular paper chart recorder

- 1 to 4 pen recording featuring universal inputs and selection of outputs
- User-selectable chart speeds and long-life pens combine to limit usage of consumables
- The tough, acid resistant case and secure cable-entry glands maintain the NEMA 4X rating for wall-mounted or pipe-mounted instruments
- RS485 Modbus serial communications
- Operational temperature range 0 to 55 °C (32 to 130°F)



C1900 circular paper chart recorder

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