New projects

- Non-contact detection speed
- Diameter measurement system
- Vision system
- Control temperature of motor drives
- Model Master Reference Mill
The aim of this system is:
Contactless detection of material speed (maybe with laser devices).
The aim of this system is:
Provide a system for measuring the diameter of the tubes at the end of the finishing process. For the realization is expected the use of a measuring system with laser sensors, camera....
Vision system

The aim of this system is:
Provide a vision system that allows the detection of the weld bead (head-tail). The system involves the use of a smart-camera and corresponding image processing software (Machine Learning/Deep learning).
The aim of this system is:

- Identify any thermal problem due to faulty ventilation or air conditioning or overload. (Note: this isn’t an analysis with a thermal camera, but it is a data elaboration process, that are already available in our PC system control).

- We can monitoring different temperatures inside the cabinet, on the heatsink of the power converters, on the electronic boards.

- It’s possible to calculate the amount of energy flowing in the different circuits, with the comparison of these data is possible determine if there are any problems (i.e. a problem in a fan or in a air conditioner, or an overload in a motor due to a mechanical problem).

“Sensor-ization” for predictive maintenance

- Identify areas for sensors installation for helping maintenance managers to predict parts failure and avoid Mills downtime;
The aim of this system is:
Provide a model of the milling line in order to improve the speed control of the Mill and equilibrate the torque load in each stand on the whole Mill. This is today a big problem for operators that have to work “manually”.
(Machine Learning/ Deep learning).
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