• **Context:**

Hager owns several production sites in France (cf. [https://www.hagergroup.com/fr/entreprise/sites/1024-683.htm](https://www.hagergroup.com/fr/entreprise/sites/1024-683.htm)). Electrical parts (circuit breaker components...) are manufactured at the Obernai site, on high-end production lines.

• **Issue:**

To carry out component assembly operations, ensuring stability of the finished products (assembly of springs, small metal components...).

• **Objectives:**

Adjust machine positioning, improve machine tuning, stabilise motion, avoid assembly defects, tune machines on the assembly lines.

• **Keywords:**

Dysfunctions, electrical components, circuit breakers, high speed, high-speed video, high-speed camera

In order to achieve high-quality production, the technicians must ensure that the line is not disrupted by sudden movements. These movements do occur however, and in a random manner. In addition, there are many different product references, each requiring specific machine settings, and fine-tuning between cycles.

Trouble Pad enables these movements to be seen, even though they are invisible to the naked eye. The maintenance technicians have access to slow-motion images of the mechanical parts as they move. They can thereby identify the defect precisely, and intervene on the appropriate area of the machinery.

Identifying the origin of the disruption means quality can be improved.

• **Conclusion:**

Thanks to Trouble Pad, motion detection enables the technicians to correct defects rapidly, thereby minimising stoppage time. HAGER has been using several Trouble Pads at this production site since 2016.