

## How Falkonry Helped Predict Failures & Avoid Downtime.

### Continuous steel caster fails

Continuous vertical casting process has a number of areas:

- Restarting casting
- Slab mold
- Cooling segment
- Straightener
- Slab cutter
- Oscillator



Unplanned downtime in casters and hot mills is one of their key problems



### Insufficient warning

One example is the pinch roller, a component of the continuous steel caster. The pinch rolls are in contact with the hot strip on either side and pull it down via motors turning them.

Pinch rolls wear due to heat and friction and have to be replaced every 3 months.

Unplanned downtime > Production loss

High repair costs > Higher expenses

On average, the cost of downtime is **\$12,000 per hour per line.** That is more than **\$1.7 million in lost production per year.**

Unplanned downtime of casters and hot mills alone can cause a **loss of more than 6 days** every year per steel production line

Using Falkonry Operational AI software, a steelmaker was able to analyze data from multiple sources to **identify patterns and provide alerts 7 days before a pinch roll fails.**

### How?

The company applied Falkonry's software to convert reactive/ preventive maintenance to predictive maintenance.

Using Falkonry, the customer was able to leverage their existing historical data, from multiple data sources, enabling engineers to quickly discover early warnings (Predictions) and get deeper insight (Explanation) on operational problems.