

## 5 Metrics that Increase Plant Availability

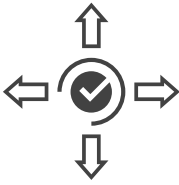


Value from a plant

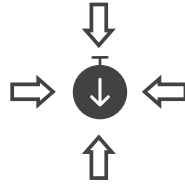


Plant availability

$$(\text{available\_hours}) \times (\text{max\_units/hour}) \times (\$/\text{unit}) = \text{maximum\_value}$$



Maximizing availability

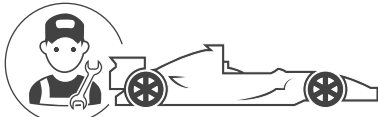


Minimizing downtime



Right time your maintenance schedule;  
lower unscheduled maintenance

In a race, if the car is not on track, it's losing the race



Record pit stop = 0.66 seconds  
Distance lost in pit stop = 12 car lengths

Burst tire  $\Rightarrow$  Race lost  $\Leftarrow$  Too many pit stops

If the mill is not casting steel, it's losing money



1 day's lost of production = millions of dollars in lost revenue

### How to recover lost production

Operational AI



Predictive maintenance

Predict failures before they occur

Reduce unscheduled downtime



Maximize production