



Predictive Analytics.

Combining data science and engineering know-how to help you increase OEE of your Carat.

Optimization to reduce downtime.

The IoT solution Predictive Analytics optimizes production planning and operational costs with prognostic data that enables well-planned production and maintenance cycles. It can help you improve your OEE, quality consistency, machinery traceability, and streamline logistics.

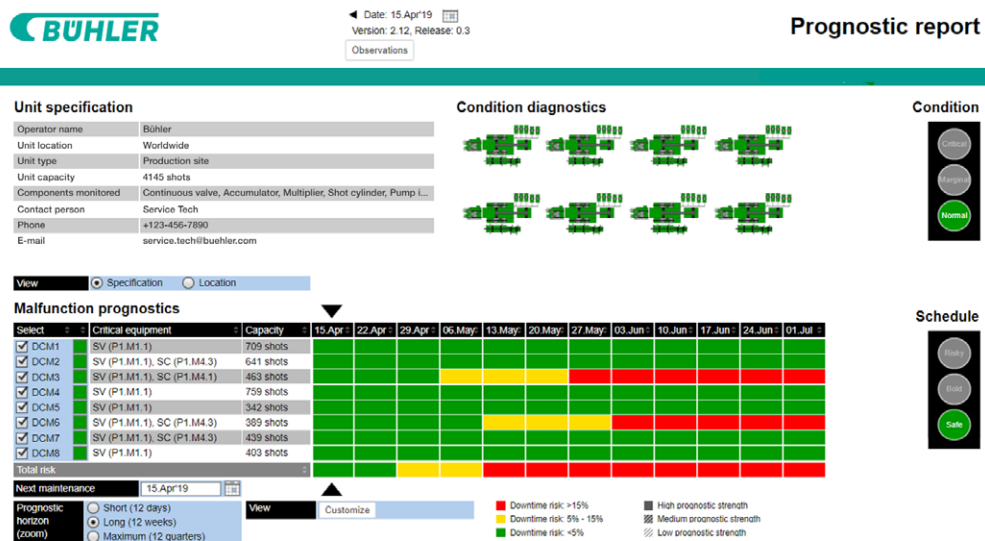
Data from critical processes – including steady valves, injection cylinder, accumulator, and pressure multiplier – is collected via sensors, the control unit, and the cell management system of your machine.

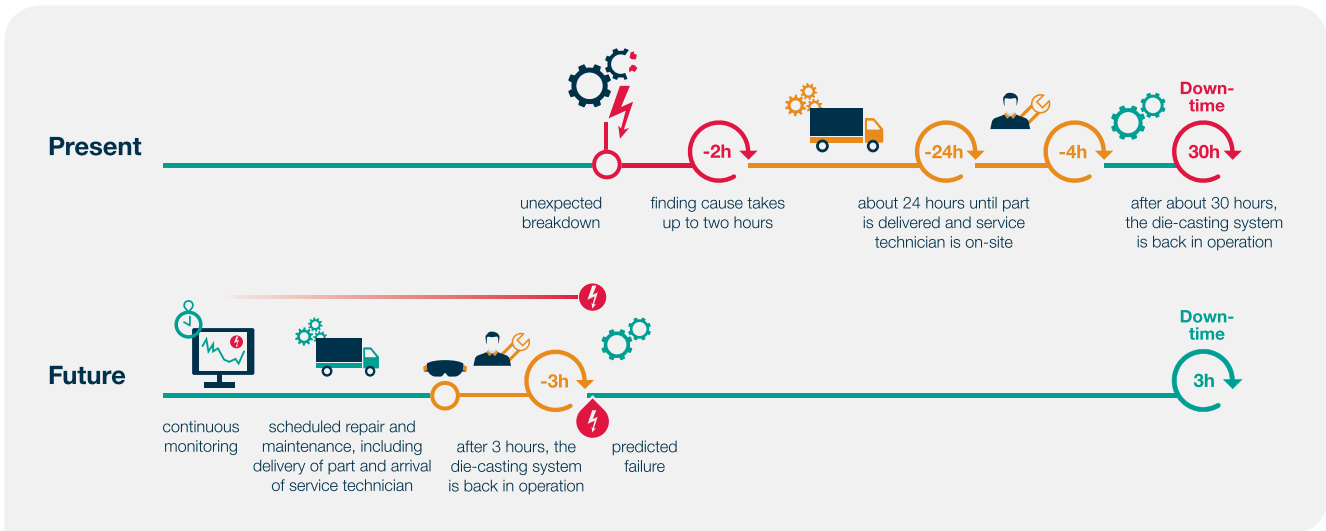
Predictive Analytics identifies patterns in the data, detects anomalies and provides calculated predictions for future issues. Using our deep process know-how, your machine

data is also compared with a cloud-based databank to detect deviations in working conditions and to identify potential problems before they become costly interruptions or failures.

Benefits for your foundry

- **Increased OEE** with predictive maintenance
- **Efficiency** – predict potential problems and optimize production and maintenance plans
- Ensure **consistent performance** of your production
- **Quality** – avoid recalls and reduce scrap





Minimized unscheduled downtime.

Based on our unique algorithms for Bühler die casting machines, Predictive Analytics generates prognostic foresights more than just insights, giving you an edge in both technical and commercial decisions.

The automated, industry-based learning process enhances the prognostic strength and horizon of availability forecasts. Forecasts therefore improve with increased time of connectivity, constantly improving quality and efficiency.

Technical know-how and data science, combined.

With both best-practice engineering knowledge and mathematical techniques, this solution presents concise and decision-oriented reports. Based on the Remaining Useful Life (RUL) of the machine, actionable suggestions will also be provided, making production planning more efficient.

Secure data handling.

All of your data is encrypted before being transferred and stored securely in our Microsoft Azure® cloud environment. This not only helps data protection, but also gives a reliable, scalable, and standardized process the world-over.

80%

Critical parts in injection and closing units covered – which account for up to 80% downtime in die-casting machines.

95%

95% accuracy of prediction. Validated.



Cutting-edge engineering intelligence with an algorithm that adapts through self-learning.



Data encryption and secure cloud infrastructure that keeps your data safe.

Prerequisite: Your machine should have Bühler IoT gateway, access to the internet, and DataView / DataNet.

Lead time: If you have a Bühler IoT connected foundry, Predictive Analytics can be connected within one day. For a foundry that is not connected to Bühler IoT, delivery time upon request.

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