



 **Bühler Insights**

Bühler Group, May 2021

Innovations for a better world.

 **BÜHLER**

23:35:60
Business Strategy
Insights

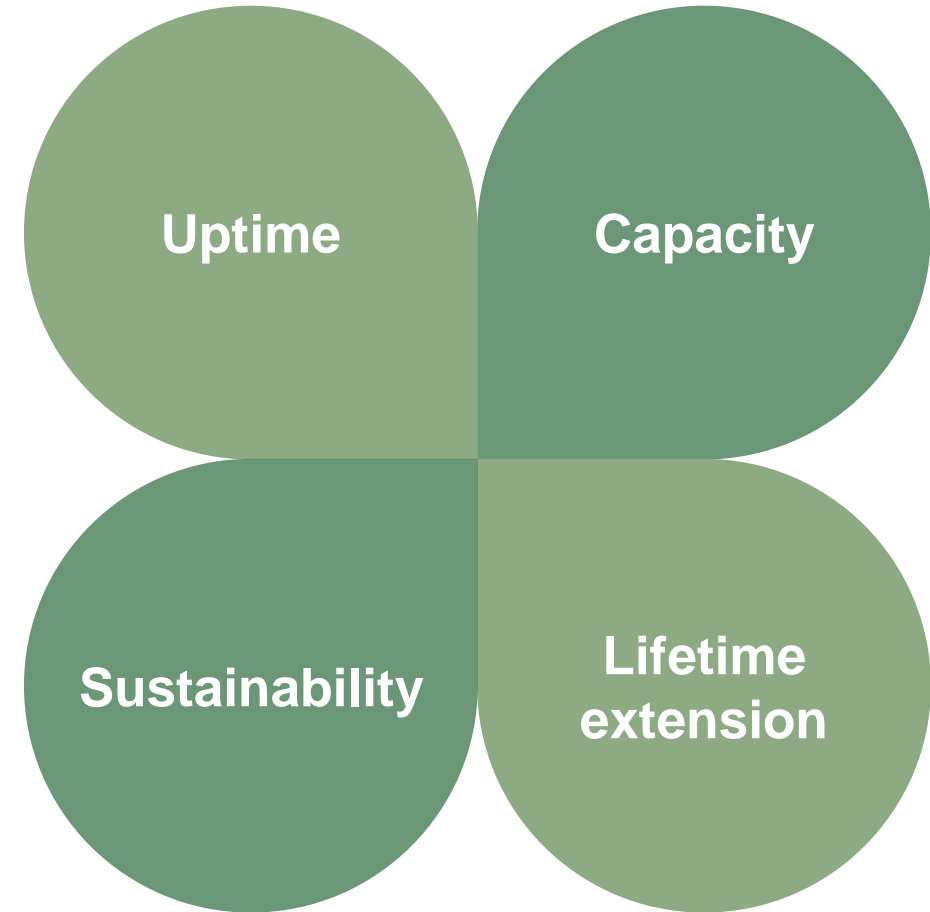
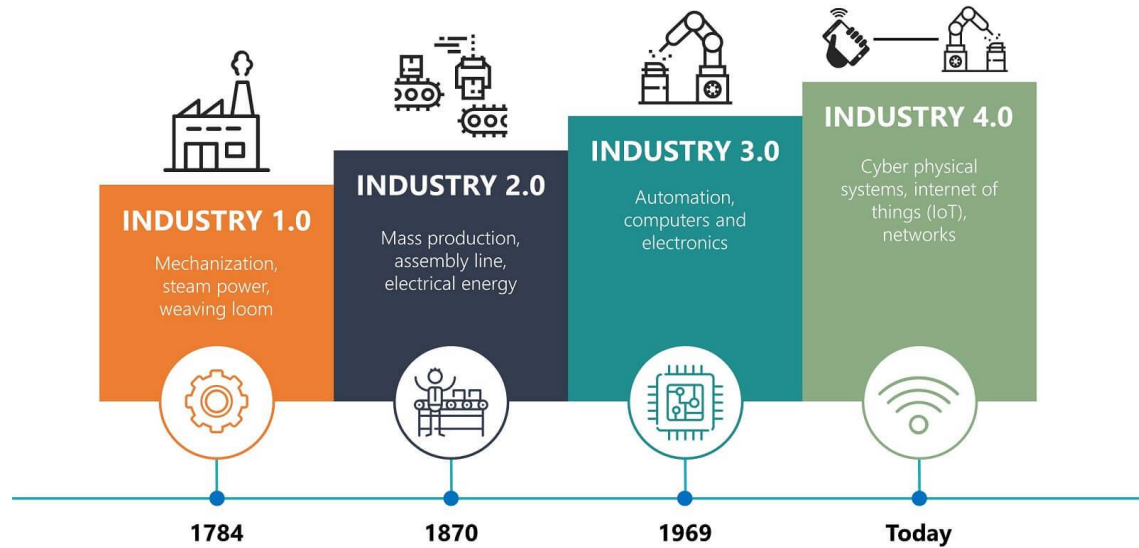
23:35:60

Topics

- 1 Digitalization & Bühler Insights
- 2 Bühler Insights – the details
- 3 Outlook
- 4 Highest cyber security standards
- 5 Technical details

Industry 4.0

The potential of digitalization



Source: <https://www.econserve.in/Industry4.0.html>

Bühler Insights

Bühler's central platform for connected products and services

Join our digital journey!

Turning equipment into connected devices

Process and single machine data from:

- Sensors
- Machines
- Control systems

Data storage and processing

- Secure data transfer
- Data storage and processing according to ISO 27001

Data usage, generating insights

- Customizable dashboards & KPIs
- Benchmarking & recommendations
- Artificial intelligence applications (*future*)
- Predictive analytics (*future*)



Data insights

Becoming solution partners

Use data for

Downtime analysis

Root cause analysis

Condition monitoring

Plant comparison

Inline quality monitoring

Remote Support

Display data as

Customizable dashboards

KPI overview

Leverage on data insights

Example: Remote troubleshooting

Bühler Insights Services help to monitor unplanned downtime and facilitate root cause analysis.

- Monitor the plant operations in real-time
- Get transparency over OEE and break it down to availability, reliability and efficiency
- Send alarm for deviations from pre-defined conditions
- Send the troubleshooting tickets through myBühler to get support from operations center specialists
- Look at historical data of key parameters
- Within the RemoteCare agreement, operations center specialists help to identify the root cause and fix the issues

Over 50
production
plants connected
today.



Topics

- 1 Digitalization & Bühler Insights
- 2 Bühler Insights – the details
- 3 Outlook
- 4 Highest cyber security standards
- 5 Technical details

Bühler Insights implementation

Step 1: Connectivity check

To make sure the integration of Bühler Insights works smoothly, our experts take a look at:

- Your automation system
- The IT / OT infrastructure
- The amount of space in your control cabinet
- The availability of devices and data points relevant for the required solution

Pre-requisites are:

- Bühler WinCos 2.2 or Mercury plant control
- Third-party control systems that support OPC UA or OPC DA
- A stable Internet connection

50+ people are working on the development, the operations and the support of Bühler Insights, to make sure you get what you need.



Bühler Insights implementation

Step 2: Gateway installation



Data collection from plant control systems, machines, devices and sensors



Local data buffering in case of temporary connectivity loss to Bühler Insights



Real-time data processing on the Bühler Insights Gateway



State-of-the-art security



Fast internet connection is a prerequisite. The use of an uninterruptable power supply (UPS) is recommended.



The **Bühler Insights Gateway** can be installed in a few minutes. It ensures the connection between your devices and our Bühler Insights Platform.

Bühler Insights implementation

Step 3: Creating your solution



We configure an individual dashboard for you – so you can have an eye on the most important information



Detect trends and patterns, by profiting from historical data



Set up benchmarking across multiple plants.



Bühler Insights implementation

Step 4: Consulting your data



Our experts support you remotely and keep an eye on your production



Our data science team can help to analyze the data and bring further data insights



Our experts can consult you to optimize your plant performance based on data insights



Things are changing in your plant? Bühler Insights can send you an alarm via email or text message on your mobile devices



Bühler Insights Pelleting Companion

Creating value for customers*

-50%...

reduction of machine alarms

from 50 to 25 per month and machine

+25'000 tons per year of throughput / **+250'000 US\$** per year of profit

40%...

faster machine start-up times

from 5 min to 3 min

+3'000 tons per year of throughput / **+30'000 US\$** per year of profit

*example from a Bühler customer; 7'200 alarms/a, 25% of alarms cause 15 min downtime each



Topics

- 1 Digitalization & Bühler Insights
- 2 Bühler Insights – the details
- 3 Outlook
- 4 Highest cyber security standards
- 5 Technical details

Bühler Insights

Our steps towards a full digital twin of your production facilities



New features
released continuously to profit
from safety and feature
updates



Benchmark
your plant performance
against industrial average



Machine learning
algorithms for predictive
applications and proactive
recommendations

Topics

- 1 Digitalization & Bühler Insights
- 2 Bühler Insights – the details
- 3 Outlook
- 4 Highest cyber security standards
- 5 Technical details

Information security ISO 27001 certification

Bühler's information security management system has been certified with the most respected **cyber security standard**: ISO 27001:2013.

ISO 27001 protects key areas such as

- internal business IT
- the automation solution Mercury MES
- the **Bühler Insights platform**, and
- the myBühler customer portal.

As we share more and more data, it is also part of our mission to **protect the data** partners entrusted to us, and to keep those data as secure as possible.

Bühler's information security management system is certified according **ISO 27001:2013**

ISO/IEC 27001:2013
BUREAU VERITAS
Certification



BUREAU VERITAS
Certification



BUHLER
Bühler Group

Gupfenstrasse 5, 9240 Uzwil / Switzerland

This is a multi-site certificate, additional sites are listed on the next page

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 27001:2013

Scope of certification

Internal IT Services
Bühler Insights Platform
myBühler Portal
Mercury Automation Platform

Statement of Applicability, Rev 1.0, December 2019

Original cycle start date:	24-Jan-2020
Expiry date of previous cycle:	N/A
Certification Audit date:	19-Dec-2019
Certification cycle start date:	24-Jan-2020

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **23-Jan-2023**

Certificate No.: **IND.20.1811/IS/U** Version: **1** Revision date: **24-Jan-2020**

Pascal Singh

Certification body address: **5th Floor, 66 Prescot Street, London E1 8HG United Kingdom**
Local office: **Grossächerstrasse 25, 8104 Weiningen, Switzerland**

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.
To check this certificate validity please call: **+41 44 752 11 11**

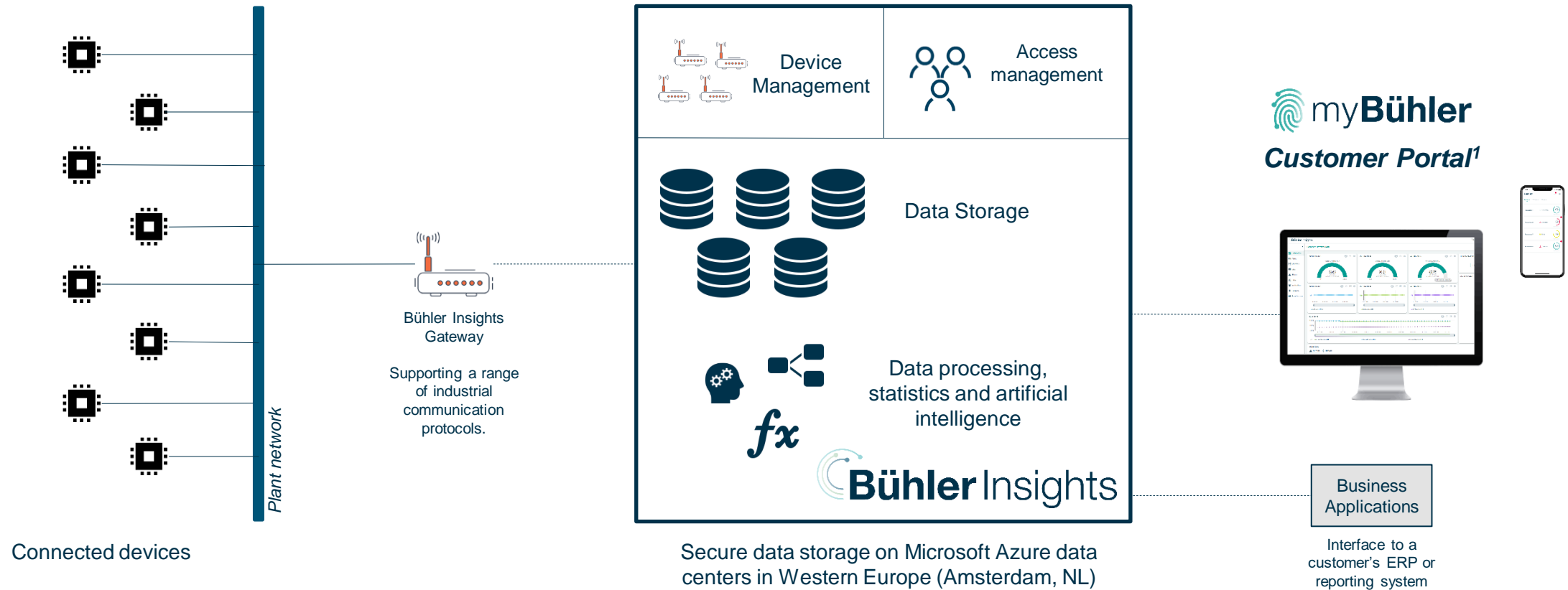


Topics

- 1 Digitalization & Bühler Insights
- 2 Bühler Insights – the details
- 3 Outlook
- 4 Highest cyber security standards
- 5 Technical details

Bühler Insights

High-level architecture



¹ Data from connected devices is currently being visualized in the Bühler Insights Portal. An integration into the myBühler customer Portal is planned in the future.

Thank you!

