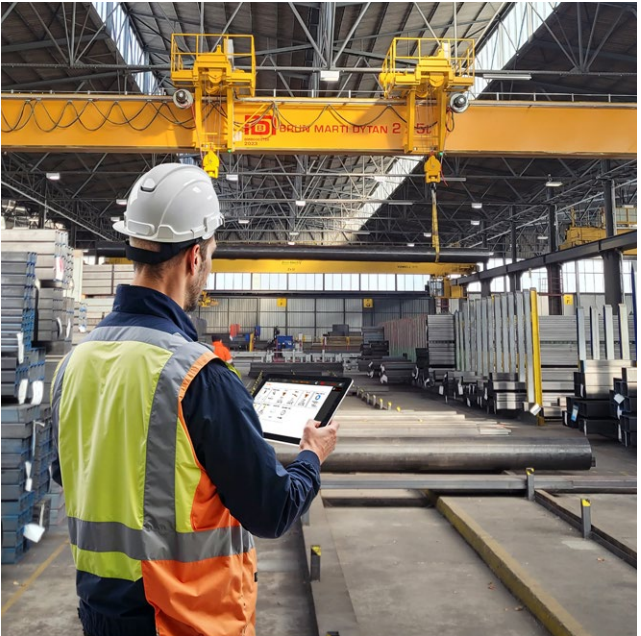




# SMART MAINTENANCE

**Maximising crane utilisation  
efficiency with smart  
technology**



# Smart Maintenance

## BASIC

---

**integrated as standard** in special crane systems with programmable logic controller (PLC)

- Crane dashboard with live data
- Gain insights into the effective utilisation of your cranes thanks to the logging of position speed, weight, alarms, operating hours and many more.
- Integrated remote access solution via mobile network or local internet connection
- State of the art cyber security and remote technology

With a high usability dashboard you can easily **analyse** and **interpret** your **data**. This visualisation supports the optimisation of your operating processes. Track your **power consumption**, monitor the **grid voltage** and optimise your **energy consumption** to **maximise efficiency**.

# ADVANCED

---

Smart Maintenance Basic  
with **Condition Monitoring extension**

- Visualisation of the crane positions
- Extension of sensors:  
Vibration of the trolleys, oil and machine temperatures
- Automatic alarm if limit values are exceeded
- Warning and fault messages by SMS and e-mail

Your crane system is equipped with hightech sensors to ensure **comprehensive monitoring**, including **temperature and vibration analysis**. All data is logged in real-time and visualised on your crane. Based on the recorded data, you can **minimise costly downtime**.


# PROFESSIONAL

---

Smart Maintenance Advanced  
with **Predictive Maintenance extension**

- Based on the recorded data the condition of the drive can be predicted.
- A possible wear on the crane rails or bearings can be detected from the vibrations.
- Visualisation of the live data in a cloud

Measured variables are calculated using **machine learning-trained algorithms** and compared with the actual values. This allows **abnormalities to be recognised at an early stage**, which can **prevent downtimes**.



# YOUR ADVANTAGES

- Increased system availability through early detection of failures
- Crane dashboard with statistical evaluation for comprehensive control and monitoring of your crane system
- Extensive traceability through data history
- Access security is up to date
- Data is stored locally on your crane system
- Remaining crane utilisation period visible (SWP = Safe Working Period)

## Hoist 1



Position  
**6,25m**

Speed  
**0.00 m/min**

Weight  
**1557.65 kg**

## Grid voltage

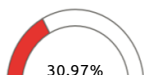


Phase 1: **402 V**

Phase 2: **400 V**

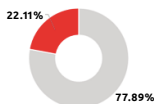
Phase 3: **398 V**

## Total weight



**3097,42 kg**

## Energy drives






**Energy consumption**  
1501,53 kWh

**Recuperated**  
426,33 kWh

# ABOUT US

Brun Marti Dytan AG (BMD) offers for your special and process crane system a smart maintenance system, which was designed as a separate layer to the actual crane control system.

Select one of the following expansion stages:

-  BMD Smart Maintenance **Basic**
-  BMD Smart Maintenance **Advanced**
-  BMD Smart Maintenance **Professional**

Get in touch with us and benefit from the latest technology!



**Brun Marti Dytan AG**  
Kantonsstrasse 2a  
6244 Nebikon

+41 41 209 61 11  
info@brunmartidytan.ch  
www.brunmartidytan.ch

