

BRANKAMP

X5

PROCESS MONITORING

**POWERFUL PROCESS MONITORING
FOR SHEET METAL FORMING**



MARPOSS



www.marposs.com

For a full list of address locations, please consult the Marposs official website

ODN6B03EN01 - Edition 03/2023 - Specifications are subject to modifications.
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Marposs has an integrated system for Company quality, environmental and safety management, with ISO 9001, ISO 14001 and OHSAS 18001 certification. Marposs has further been qualified EAQF 94 and has obtained the Q1-Award.



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Your benefits

- ⊕ **Machine and tool protection**
- ⊕ **In-process quality control**
- ⊕ **Increased productivity due to extended run-time, reduced downtime and stroke optimization**
- ⊕ **Minimized tool and scrap costs**
- ⊕ **Process optimization for more stable processes**
- ⊕ **C-THRU 4.0 interface to connect the DC / MES / ERP systems**

Equipment

- Up to **24 monitoring channels** with automatic calculation of amplification and monitoring window
- Up to **16 digital inputs and cam outputs**
- **12" touch display** with fast image refresh and high resolution
- **High resolution signal acquisition** (24 Bit A/D conversion)
- Various, flexible **counter functions**: order, tool, dosage, maintenance, shift and stroke
- **Stop & Go diagram** shows the run-time behavior (up to 90 days) with spm graph
- **Device protocol records failure curves** incl. date, time and reason of process failure
- Extensive **tool and product storage**
- **Data collection terminal masks** prepared for C-THRU 4.0 and XBrowser

Monitoring

- **Multi-sensor evaluation** (force, UltraEmission, AcousticEmission, distance etc.)
- **Quattromatic**: Double, dynamic envelopes, inner envelope sorts, outer envelope stops
- **Systematic**: Precise monitoring of tool damage
- **Zoom**: Accurate monitoring of failure-critical signal sections
- **Short- and long-term trend**: Comprehensive monitoring of short- and long-term behavior
- **Tool protection** for feed and ejection monitoring
- **Super stop** to control hydraulic overload systems
- **Brake angle monitoring** visualizes stop problems of the machine
- **Sum and difference force** calculation and monitoring

Operation

- **Cockpit mask** shows all relevant information at-a-glance
- **Optimizer plus** calculates the optimum envelope curve for each channel
- **Adapt function** optimizes the envelope curves in the event of random process fluctuations
- **Monitoring assistant** for a flexible adaption of monitoring
- **Teach-In** for individual channels possible
- **Toolmatic** transmitting binary tool numbers of the plc to the unit
- **10 point calibration** for each channel
- **USB and network interface** for process documentaion



The cockpit mask provides all relevant information at-a-glance: counter readings, maximum forces, tool protection and envelope curves.



The device protocol records failure curves together with all process data.



The X5 shift counter records the number of pieces produced per shift, day and weeks. The machine performance can be compared over several weeks.



Binary input signals can be monitored with up to three windows to allow fast fault recognition.



This protocol stores the last 250 operator inputs with the date, time and the used tool number.

Technical Data

- Monitoring:** 1 - 8 (24) analog channels
4 - 16 digital in-/outputs
- Power:** 24 V / DC / 23 Watt
- Environment temp.:** +5 °C to +40 °C
- Interface:** 1 Ethernet / TCP/IP
2 USB
- Sampling:** Pseudo angle, option:
angle or stroke-dependent
- Dimensions:** 346 x 354 x 136 mm
(W x H x D)
- Weight:** 10.5 kg (incl. U-holder)