Process Monitoring System for Machine and Tool Protection, Quality Assurance and Increased Productivity

Multi-sensoric measuring system to monitor single/double blow and Progressive headers and thread rollers.

**Your benefits**

**Machine-/tool protection**
- Less tool costs
- Less consequential costs
- Less downtimes

**Quality**
- 100% In-Process-Control

**Process optimization**
- Less machine stops
- Stable processes

**Increased productivity**
- Higher utilization
- Higher quantities
- Longer tool life

**Ghost shift**
- Production during breaks
- Unmanned shifts
- Extra shifts

**Monitoring**
- An visualisation of two parallel sensor signals.

**Powerful programs**
- To monitor maximum force, envelope curves, trend etc. for all forming processes.

**Multi-channel**
- Displaying up to 8 channels making any process more transparent.

**Timing Window**
- Selectable timing window on each channel.

**Visual Aids**
- Visual error display and camera feature for screen shots.

**Numerous counters**
- Order counter
- Tool counter
- Sorting and dose function

**Process Quality**
- PQ factor - a reliable indicator for the quality of the entire process.

**Stop & Go Diagram**
- Records the running and downtimes over the last 7 days and creates the "fever chart" of the plant.

**Article Processor**
- Database for articles to be produced more than once.

**FactoryNet**
- The intelligent networking of the production. Production processes are transparent, faster and cheaper.
ECO 700

Monitoring functions

- Machine protection ✔
- Tool protection ✔
- Dynamic envelope curve monitoring ✔
- Cycle monitoring ✔
- Trend monitoring ✔
- Process quality ✔
- 8 monitoring channels ✔
- Multi-channel display ✔
- Spectral curve display ✔
- Feed monitoring ✔

Equipment

- Large 10.4" Touch Screen
- Screen Shot Kamera
- Tool and article database (optional)
- BDE terminal function (optional)
- FactoryNet (optional)
- fanless

Technical Data

- Monitoring: 8 measuring channels
- Power: 100-240 VAC, 50/60 Hz
- Power supply: 70 W
- Environment temp.: +5 °C to +40 °C
- Switching power: Umax: 48 VDC
  Imax: 100 mA
  Pmax: 5 W
- Inputs: 2 digital inputs for PNP initiators
- Connections: 8 interfaces for sensors
  2 interfaces for NC/Mi20
  8 amplifier plugs (optional)
  1 RS 232C interface
  1 USB
  1 Ethernet
- 2 cycle inputs
- 2 digital inputs
- Dimensions: 355 x 211 x 277 mm (W x H x D)
- Weight: 10 kg

Please note: The above functions are optional, even if not specifically stated. Technical details subject to changes without notice.

Monitoring

Specific monitoring methods do protect machine and tools and recognize even the smallest failures. Intelligent reactions contribute to the improvement of production and quality.

Autoprofiler

Calculates the optimal envelope curve for each point of the curve automatically. This eliminates complicated and time consuming segmental adjustments by the operator. The Autoprofiler works dynamically.

Result: Optimal fault detection without unnecessary machine shutdowns.

Article Processor

Universal database for all article related information. A helpful tool to record all process-related parameters (amplification, limits etc.) for articles to be produced more than once.

Production report

The Stop & Go diagram detects the running and downtime of the system automatically. As well it can be used as an input terminal for BDE data. All product-related monitoring data and device settings can be stored via network (FactoryNet).

Counter

Numerous counter functions for:
- Order quantity
- Tool life quantity
- Sort and dose functions
- Auto II operation

All counters show the actual, target, and the remaining amounts. Whether to stop the machine in case of counter reach can be set for each counter separately.