

# REAL TIME PRODUCTION MONITORING

Product Specification – Modul INCLUDIS.mdc

**INCLUDIS**<sup>®</sup>  
— mdc —

## Streamline your production process, cut operating costs and enhance productivity

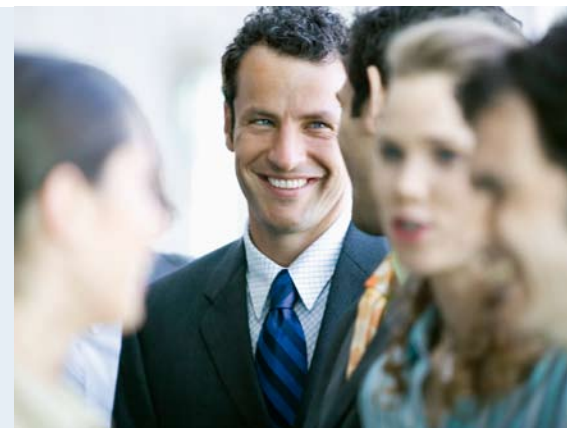
INCLUDIS.mdc integrates machines and equipment into your existing IT-system environment. The web based standard software solution connects the office with the shop floor. All relevant machine data are available in real time through web browsers in the intranet/internet. INCLUDIS.mdc collects and provides reports on condition, energy usage, amount of manufactured parts and/or scrap, runtime and process parameters. Depending on the type of machine, the integration occurs through

the existing interface and/or through Ethernet TCP/IP bus controller, to which one or more machines can be connected. The production data and reports are automatically calculated and are available via Intranet/Internet from any place at any time. With aid of integrated Email/SMS Messengers, you are immediately informed of any production deviations or downtimes and can automatically distribute current reports ad Excel tables to the responsible employees. Manual inputs in the

production are collected with mobile barcode scanners, pocket PC's or simple standard PC's. All hardware devices are wireless (WLAN) or connectable via standard network cables. Interfaces to all leading ERP-Systems are available. INCLUDIS.mdc is available as Inhouse (client hosted) or On Demand solution (web hosted).

## INCLUDIS Software is the perfect tool to

- view machines, labor, material and energy to identify losses
- track scrap, downtime and machine utilization for powerful shift reporting
- monitor machine performance and send Email/SMS alerts (24/7) in the case of deviations
- obtain reliable efficiency indicators (O.E.E.)



Handed over by

INCLUDIS GmbH  
Rosenstr. 18  
10178 Berlin

Tel. +49 (0) 30 200 89 69 - 0  
Fax +49 (0) 30 200 89 69 - 22

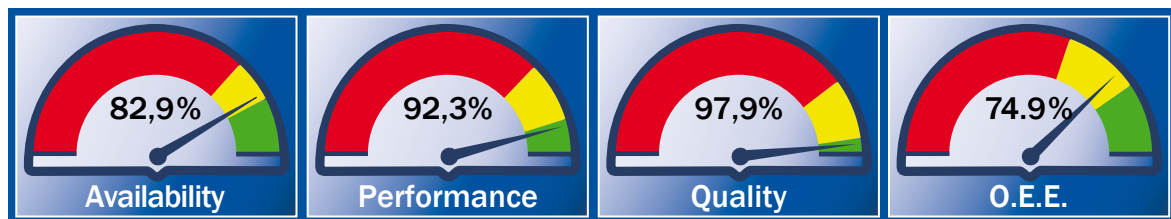
Internet [www.includis.com](http://www.includis.com)  
Email [mail@includis.com](mailto:mail@includis.com)

# REAL TIME PRODUCTION MONITORING

Product Specification – Modul INCLUDIS.mdc

**INCLUDIS®**  
— mdc —

## Gain visibility over your shop floor and make key decisions using real time data



INCLUDIS.mdc webbased dashboard provides you with reliable efficiency indicators (O.E.E.)

Machine Data MDC	System Requirements (IT)	Real Time Monitoring (online)
<p><b>Data Collection via</b></p> <ul style="list-style-type: none"><li>■ OPC client/server</li><li>■ Bus connector I/O device</li><li>■ PLC integration</li></ul> <p><b>Machine Data</b></p> <ul style="list-style-type: none"><li>■ Piece counter/cycle time</li><li>■ Good pieces and scrap</li><li>■ Run and downtime</li></ul> <p><b>Process Parameter</b></p> <ul style="list-style-type: none"><li>■ Speed</li><li>■ Energy usage</li><li>■ Temperature and pressure</li><li>■ Feed and speed (CNC)</li></ul>	<p><b>Inhouse (Client hosted)</b></p> <ul style="list-style-type: none"><li>■ Medium Server min. 4 GB RAM</li><li>■ BS MS WIN XP or MS 2003/2008 Server</li></ul> <p><b>On Demand (Web hosted)</b></p> <ul style="list-style-type: none"><li>■ Internet connection</li><li>■ Administration service provider</li></ul> <p><b>Intranet/Internet Data access</b></p> <ul style="list-style-type: none"><li>■ Standard browser</li><li>■ User-ID and password</li><li>■ Authorization user specific</li></ul> <p><b>Available Databases</b></p> <ul style="list-style-type: none"><li>■ ORACLE 10.2 SE 1</li><li>■ MS SQL server 2008</li></ul> <p><b>Data export</b></p> <ul style="list-style-type: none"><li>■ Export to Excel</li><li>■ Reports per email (pdf, xls)</li><li>■ SMS/email alerting</li></ul> <p><b>Setup</b></p> <ul style="list-style-type: none"><li>■ Plant calendar</li><li>■ Downtime and scrap codes</li><li>■ User specific dashboard</li></ul>	<ul style="list-style-type: none"><li>■ Shop floor overview</li><li>■ Dashboard</li><li>■ Runtime bar</li><li>■ Standard and current cycle time</li><li>■ Good pieces and scrap</li><li>■ Shift history and O.E.E.</li></ul> <p><b>Statistics and Charts (Shift, day, week, month)</b></p> <ul style="list-style-type: none"><li>■ Reliable efficiency indicators (O.E.E.)</li><li>■ Run and setup time</li><li>■ Down time and codes</li><li>■ Pareto-analysis</li><li>■ Availability and performance</li><li>■ Shift comparison</li></ul>
Shop Floor Data SFDC		INCLUDIS.mdc Software
<p><b>Input Devices</b></p> <ul style="list-style-type: none"><li>■ Standard-/industrial-PC</li><li>■ PDA/barcode scanner</li><li>■ Touchscreen operator panels</li><li>■ Push button panels</li></ul> <p><b>Data Inputs</b></p> <ul style="list-style-type: none"><li>■ Setup – start/end</li><li>■ #Job, #part and quantity</li><li>■ Job – start/interrupt/finish</li><li>■ Downtime code, scrap</li><li>■ #Labor and ID (option)</li></ul>		<p><b>Inhouse (Client hosted)</b></p> <ul style="list-style-type: none"><li>■ Licence per machine</li><li>■ Purchase and permanent usage</li><li>■ Maintenance, hotline excl.</li></ul> <p><b>On Demand (Web hosted)</b></p> <ul style="list-style-type: none"><li>■ User agreement</li><li>■ Monthly user fee</li><li>■ Maintenance, hotline, admin. incl.</li></ul>