

# Manufacturing Intelligence

Born, Bred & Perfected on the shop-floor



Prestigious Awards



THE LARGEST MACHINE TOOL GROUP IN INDIA

[acemicromatic.net](http://acemicromatic.net)

## Real-time OEE & Production Analytics

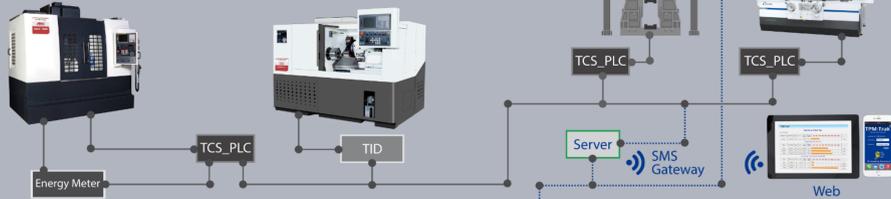
- **OEE:** Availability, Performance, Quality...
- **Counts:** Part Count, Cycle & Load-Unload times and Variations, Tool Life...
- **Machine stoppages:** Setup, break downs...
- **Dashboards & Reports:** For hourly, shift based, daily management, by machine, cell, part, operator...
- **MIS:** Comparison and Trends analytics
- **Financial:** True machine hour rate, costing...
- **Automated alerts:** Email, SMS, visual...
- **Can be deployed on:** CNC, PLC, Conventional machines; Turning, Milling, Die-casting, Presses...

**TCS\_PLC**

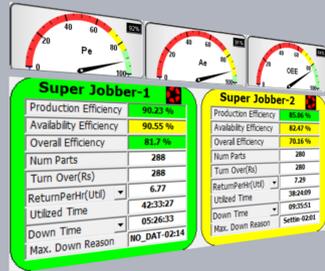
- Any M/c with 24 VDC Signals\*
- Interaction via HMI
- Workflows for Quality, Pokayoke
- Hard Interlock

**TID**

- For Controls with Macro B & RS232
- Interaction via CNC Console
- CNC Program Transfer
- Soft Interlock



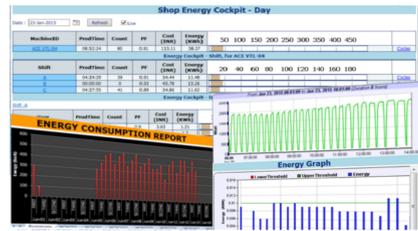
## Track & Trace



50+ Real time reports & Dashboards

## Process Energy Monitoring

- **Machine energy consumption:** By Hour, Shift, Day...
- **AC Energy Consumption:** Correlation to parts produced
- **Parameters:** KWH, Amp, PF...
- Power profile of each cycle
- Interlocks/Alerts based on energy consumption pattern



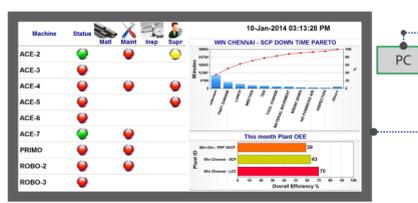
## Machine Diagnostics

- **Live Status:** Running Program Number, Feed, Axes positions
- Power ON Time, Operating Time, Cutting Time
- System Alarms
- **MTB Alarms:** Preventive, Predictive and Run based Operation history, and aggregates
- **Spindle and element characteristics:** Load, Speed, RPM, Temperature<sup>h</sup>



## Visual Factory & ANDON

- **Live Production Status of Line/Machine**
  - Part count, Downtime and efficiencies
  - Trend charts
  - Help request status
- **Visual alerts**
  - Enable quick, targeted responses to decrease losses
  - Enable decision makers with Right data at Right time
  - Enable operators with real time display of SOPs, Best practices, Safety measures...



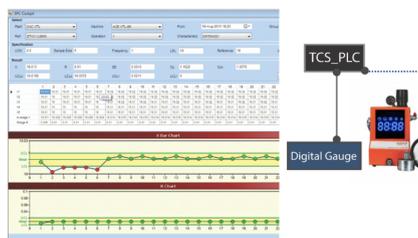
## e-SHOPx & Work Flow Apps

- Enables workflow between the operator at the machine/ Assembly station and Central Production System
- Operator can access day schedule, drawings, process sheets, CNC program...
- Operator can raise Help Requests, update production status and rejection information...
- Can be implemented on PCs, Thin Clients or Tablets



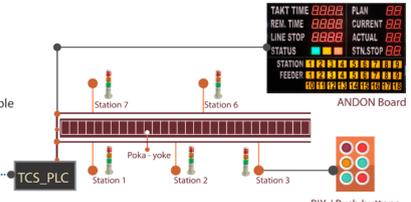
## Online Inspection & Poka Yoke

- Visual indicators of X-Bar, R Charts and Cp, Cpk values
- Excel Reports for Analysis and printing
- Process instability detection and interlock#
- **Interfacing with External Digital Gauge**
  - RS-232 Data can be interfaced with TCS\_PLC
- **Probe Interfacing**
  - Data collection from Gauges interfaced with CNCs, via Macro locations and RS-232



## Assembly & Conveyor Monitoring

- Automatically captures workflow, stoppages, and interactions between stations
- Provides visual indications of Help requests and Stoppages via 3-Tier Lamps, LED Boards...
- Provides instant communication to the right people with escalation workflow by way of SMS/email



# TPM-Trak<sup>®</sup>

Optimize your factory. Increase your profits!



### 1 INCREASE EFFICIENCY AND UTILIZATION

Increase efficiency of man, machine and process – using accurate, real-time OEE, machine utilization, stoppages data and analytics.

### 2 REDUCE COST PER COMPONENT

Reduce cost of machining, and consumables – by using accurate data and correlations between part production, machine hour rate, and usage of energy, tool consumption etc.

### 6 MIS AND AUDIT

Drive your hourly, daily, weekly reviews, and TS16949/ISO processes using 1-touch TPM-Trak dashboards and reports.

### 3 EMPOWER YOUR PEOPLE

Empower your decision makers with factual data, at the right time – so that root causes can be found faster, better, cheaper. By process.

### 5 MAKE MORE MONEY

Increase your competitiveness and revenues. Your ROI within weeks!

### 4 IMPROVE MAINTENANCE

Improve time-to-respond and time-to-rectify with real-time alerts and escalation processes.

Manufactured by :



**AceMicromatic Manufacturing Intelligence Technologies Pvt. Ltd.**  
No.706, 7th Floor, Brigade Rubix, 20, HMT Watch Factory Road, Peenya 1st Stage, Bangalore - 560022  
T: +91(80) 2972 3400/01/02, E: pctsales@acemicromatic.com [www.amitpl.com](http://www.amitpl.com)

Marketed and Serviced by :

**Micromatic Machine Tools Pvt. Ltd.**  
INDIA

Ahmedabad +91 9924289892; Aurangabad +91 240 2552309; Bangalore +91 80 40200555; Bangalore - Bommasandra  
Belgaum +91 99900 02597; Chennai - Ambattur +91 44 40440700; Chennai - Sriperumbudur +91 044 22265531; Chennai - Tambaram +91 44 22265531;  
Coimbatore +91 422 4506183; Delhi +91 11 22414232; Faridabad +91 129 4087000; Gurgaon +91 124 4745500; Hyderabad +91 40 27750496;  
Indore +91 73899 39100; Jamshepur +91 657 6539931; Kolhapur +91 230 2460444, 2460123; Kolkata +91 33 23648781; Ludhiana +91 97791 28296;  
Mumbai +91 22 26861009; Mumbai - Thane +91 22 25889006; Nasik +91 253 6610254; Pune - Chakan +91 21 35322002; Pune - Chinchwad +91 20 40712111;  
Pune - Shirur +91 98906 23217; Rajkot +91 281 6548369; Ranipet +91 4172 272732; Rohtak +91 99966 91055; Rudrapur +91 95570 30224; Trichy +91 431 2443066;

INTERNATIONAL  
Germany +49 1722316688; Shanghai +86 21 586 650 31; Switzerland +41 32 652 58 41

E-mail : [salesmt@acemicromatic.com](mailto:salesmt@acemicromatic.com)