



# In-Tool Force Monitoring Systems for Stamping Applications

## FEATURES:

**Mandonic** automatic enveloping system

Cockpit Dashboard with multifunction displays

Mandon Technology-Suggests operational improvements to the operator

RFID User Access (SK 800)

10.4"/15" Color Touch Screen

Up to 16 force input channels

BDE Outputs including cycle and good part pulses

Multiple Counters

Press Frame Monitoring

Digital In/Out Logic

Production Monitoring Option

PC Based Systems

Optional features for specific user needs

Simple to Operate

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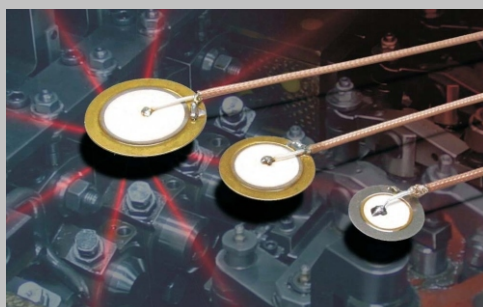
Web: [impaxptg.com](http://impaxptg.com)



## SK 500/800

## IN-TOOL FORCE MONITORING DETECTS:

- Rising/Pulled Slugs
- Worn Tooling
- Punch Breakage
- Small Chips
- Cracked Dies
- Broken Stripper Plates
- Scrap Build-up
- Loose Tooling
- Forming Defects
- Transfer Issues



Discflex Piezo In-Tool Sensors



X-Flex Frame Strain Sensor

# SK 500/800

## Monitoring Functions

- **Mandonic** auto enveloping system
- **SKPuzzlemaster** monitoring programs for specific error detection
- New intelligent auto start feature after machine stop
- Analyzes process stability and monitoring quality
- Absolute force measurement
- Trending stop/go chart
- Tool protection
- Part data memory (Set-up recall)
- Press set-up assistance
- **Mandon®** reporting system

## Technical Features

- 10.4"/15" TFT high resolution color touch screen
- EMR-proof, ergonomically designed flat enclosure,
- Numerous mounting options (yoke, swivel, floor pedestal, panel mount)
- Part counters for job size, tool life, unattended production runs with Eco-Stop and SPC intervals
- Sorting and batching logic
- **SKTelemaster** for remote service
- Machine data collection

## Technical Data

- Powerful digital signal analysis processor
- Up to 16 analog inputs
- 5 digital outputs (incl. 4 relays)
- 5 digital inputs
- Crank angle decoder option
- Data ports: serial RS-232, Ethernet, USB, Teleservice
- RFID controlled user access (SK 800 only)
- Data back-up (network or USB)
- High output digital signal amps

## Dimensions (without yoke):

290 W x 240 H x 115 D (mm)  
SK 500 & 600

398 W x 331 H x 135 D (mm)  
SK 800

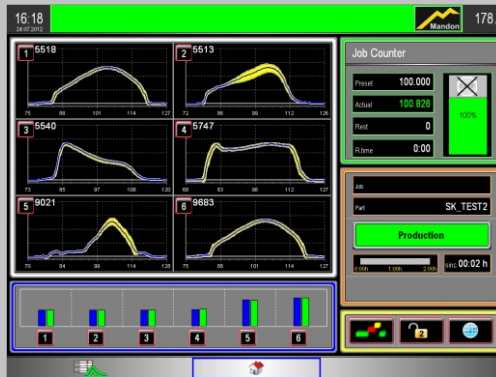
Supply: 24 VDC, 60W

Weight: 7 kg/12 kg



Please note that some features are optional features even if not specifically mentioned. Modifications are possible without prior notice.

## Highlights



The **Mandonic** auto enveloping system adjusts the envelope limits according to the current variation of the process.

The result: reliable detection of process errors with virtually no unnecessary machine stops.

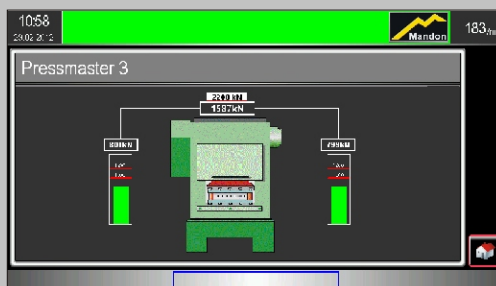
**SKPuzzlemaster** is provided for quick activation of expert monitoring routines.



Our unique **Mandon®**-system "talks" to the machine operator.

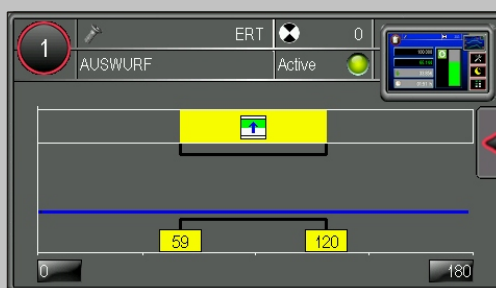
**Mandon®** is constantly thinking along with the process, gives timely warnings, provides intelligent remedies, and gives precise recommendations on how to improve productivity and quality.

**Mandon®** is your productivity insurance!



The current press loads and the respective overload limits are visualized on with a graphical machine symbol.

The graph shows actual press load (taken from 2 or 4 sensors), the total load and the respective overload limits in form of bar graphs and numerical values.



Tool Protection is provided by the additional monitoring of digital sensors to measure e. g.

- strip feed
- part ejection
- transfer fingers
- etc.

A range of monitoring functions is available to accommodate many different types of sensors and signal queries.