

170 SERIES

www.decade.co.uk

DECADE

With its host of unique and innovative features, the Decade 170 Series is the clear choice to ensure you get the **utmost performance** from your power presses. With clear, simple to use touch screens the unit is very intuitive to use.

Load Monitor

170 Series
www.decade.co.uk

The 170 Series Load Monitor feature allows a **more accurate method of monitoring press and tool load**. Trip levels are set automatically and adjust for gradual changes in running load, this process *eliminates nuisance stopping* and allows *finer control* over the press and tool conditions.

- **'Trend' based limit checking tolerates changing load values but maintains sensitivity**
- **Integrates with tool setup library (1000+) to save target load values and limits values**
- **Fault history file saves load faults with time/date stamp**
- **"Setter Mode" disables load checking for N strokes during tool/die setup**
- **Available in 1,2 and 4 load channel versions**
- **Monitor measures load through complete press stroke**
- **Uses DECADE piezo transducers or load cells**
- **Power cure monitor**



Tool Protection

170 Series
www.decade.co.uk

Press tooling represents a significant investment in both **monetary and quality terms**, manufacturing high quality components demands high quality tooling. In order to protect these investments and ensure that no accidental or avoidable damage could render the tooling out of production there are a number of methods available to perform these tasks.

The 170 Series offers an **In-Tool Protection feature** where up to 24 *digital sensors* can be monitored for correct operation and in the event of a fault stop the press before irreparable damage is done.

- **Mechanical feeder or material in correct position**
- **Buckle detection for long feeds of thin material**
- **Successful scrap or component ejection out of the tool area**
- **Correct positioning of material in transfer system**
- **Presence of pilot holes in material strip / push back pilot**
- **Detection of scrap carried along material strip**



Cams

170 Series
www.decade.co.uk

Power presses use rotary CAM signals to control equipment like feeders, scrap cutters, part ejection and strip lubrication. Conventional cam-boxes use mechanical switches operated by cam lobes which means if you need to adjust the on/off angles you have to physically move the cam lobes.

- **Provides 24 fully independent CAM channels for controlling ancillary equipment**
- **Angles are entered in at the 160 Series screen so no more fiddling with mechanical switches**
- **As well as normal ON/OFF Angle CAMs, On/Time Duration CAMs are ideal for Air Blow-offs or Strip Lubrication**
- **All CAM angles are saved in the Tool Library for recalling the next time the tool is used**
- **Each CAM channel can be given a name for easy identification of what it is controlling**
- **Single, double, triple and interval mode option for each CAM. Cyclic CAM option, will operate CAMs every X strokes**



Production Recording

Counters

170 Series
www.decade.co.uk

The Production Recording module of the 170 system provides a means to measure your **productive and non-productive times** over shift or job runs.

The 170 will record time and part counts while the press is in production, when the press stops the operator is prompted for a “downtime” reason which is then used to log the stop time against. Over a shift or job run a pattern of run/stop times is built up which is displayed on the 170 screen.

This data can be **exported to a PC** for later analysis.



Batch

Job

Coil

Day

Tool

Slide Control

170 Series
www.decade.co.uk

Adjusting the press slide is a task that is constantly required when setting up a tool or die set in the press, whether this process is motorized or done manually, the need for an accurate reference point is of obvious benefit. Being able to move the slide to a known reference point for a tool or die set can drastically reduce setup times and give setters valuable information.

- **Displays the slide position in mm (shut height) to an available 0.01mm resolution**
- **Has three target positions for tool removal, tool Clamp/Unclamp and tool run**
- **Stores all the target positions in the tool library for future setups and reference**
- **Can connect to press to automatically adjust the slide to target positions**



Pressure Control

170 Series
www.decade.co.uk

Ensuring the correct counterbalance and cushion pressures are set is vital for correct press and die operation. The 170 Series Pressure Control features allows the air pressures held in the Bed Cushions or Counterbalance Cylinders to be monitored via pressure transducers, a graphical screen then displays these pressure values visibly as 'tanks' and in calibrated pressure units.

Pressure Target Values can be set for cushion and counterbalance which then visibly indicates to the operator if the pressure is above or below the correct value for the Die. The 'tank' turns **RED** when the pressure is not correct and it turns **GREEN** when set correctly.

- **Monitor Counterbalance and 1-2 bed Cushion Pressures. Integrates with Tool Setup Library to save target pressure values for each Die set**
- **Shows pressure values in 'real time'**
- **Can automate pressure regulation when fitted with a fill/dump valve-block assembly or proportional valve**
- **Can stop the press if any of the pressures are not set correctly**
- **Manual & automatic pressure regulation modes. Shows pressure in PSI, Bar etc...**

Temperature & Servo Roll Feed

170 Series
www.decade.co.uk

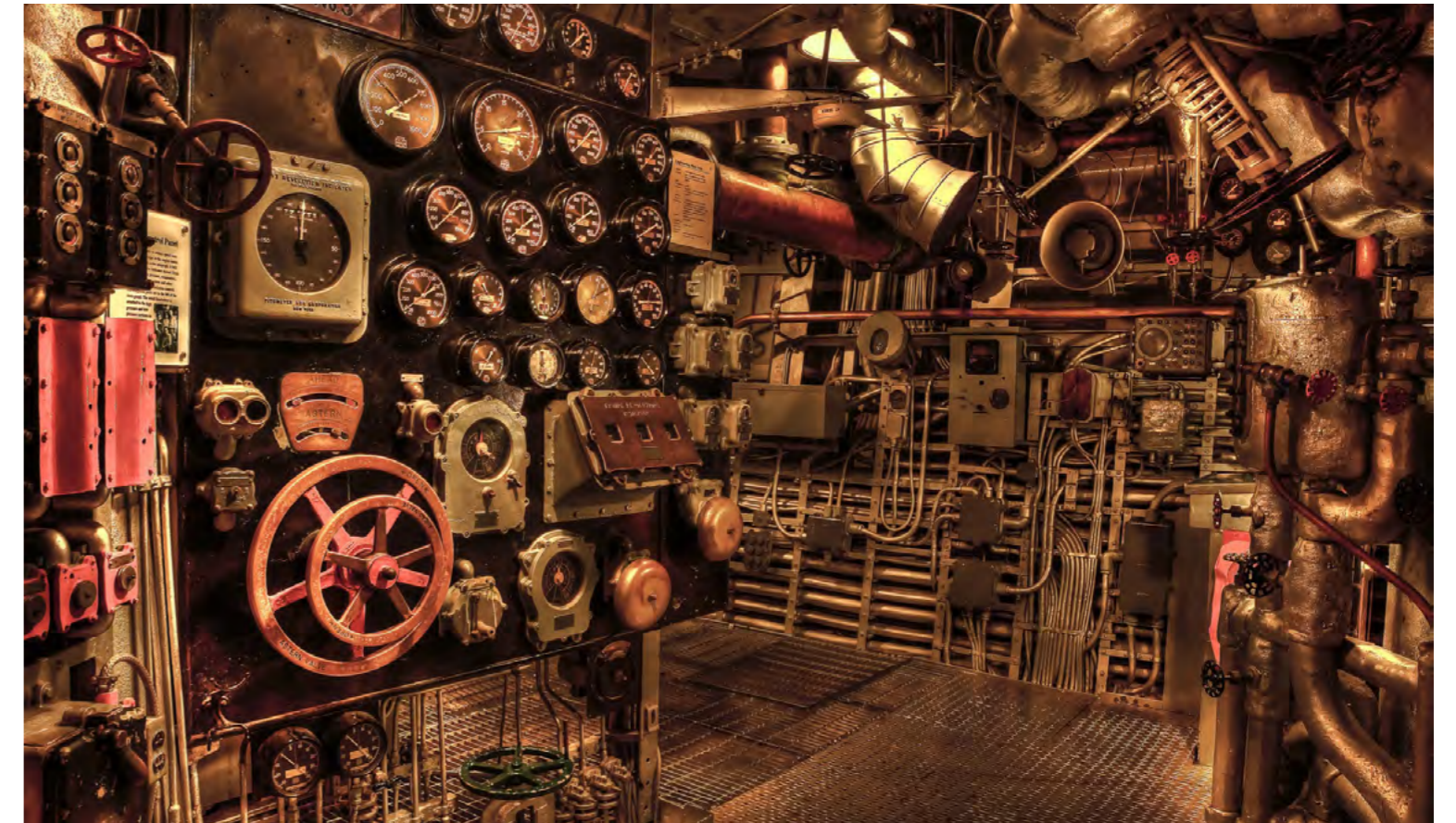
Temperature Monitoring

4 channels of temperature:

- **The DECADE 160 can monitor up to 4 channels of temperature on a metal stamping press**
- **User defined upper and lower set point limits**
- **Integrates with tool setup library to save target temperature values and limits values**
- **Show temperature output/readings in Celsius and histograms**

Servo Roll Feed Interface

Serve Roll Feed Interface for roll feed with a communications port can be set with Pitch, Rate and Acceleration/Deceleration information when a new tool is loaded from the tool database.



**SOLVING TOMORROW'S
PROBLEMS TODAY TO
ENGINEER A BETTER FUTURE**

Thank You

For any enquiries please call us on **+44 (0)121 359 3978** or
email us at **info@decade.co.uk**