# M PRESS FORCE MONITORING SYSTEMS



### PRESS FORCE TRACKING

Form Atılım Makine is implementing real time press force measurement and monitoring systems. All presses are manufactured with certain tonnage ratings depending on the model and design. It is of critical importance both for the part quality and press lifetime to measure force and tonnage values during the forming operation.

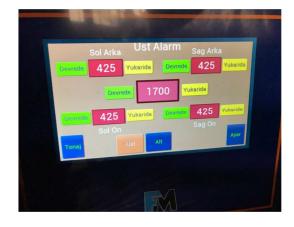
Monitoring the force curve continuously allows the use of high tonnage alarm value to prevent the press from overload. In this way, the press is stopped automatically when the high limit is exceeded or audio and visitual warnings are signalled to the operator. Similarly, low force value limit detects the missing part or insufficient forming force situations.

Die life is also extended by measuring and controlling the press forming force. It is also useful in making die design changes for proper forming of parts.



## PRESS FORMING FORCE

- Real Time Total Press Force
- Tonnage Value at Each Column
- High Tonnage Alarm
- Low Alarm Limit
- Force Curve Signature
   Provide
- Longer Die Life
- Better and Efficient Die Design
- Protection from Press Overloads
- Less Maintenanace Downtime
- Realtime Quality Control
- Immediate Warning and Alarm



It is possible to work longer periods without urgent maintenance by avoiding press overload damages. Keeping the press forces within recommended limits prevents emergency stops and improves the die life.

The real time force measurement system tracks the forming force much faster than milliseconds and displays the force curve for each pressing operation on the operator panel. The force curve signature for each part can be tracked in a "quality" window. This allows one to detect any abnormal condition and separate faulty parts.

The press forces of each stroke are logged both as peak values and in real time graph format. Each press stroke forming force curve is stored as data recorded with specific product name, date, exact time. All alarms can be checked from past records.

### **CALIBRATION**

Press calibration is needed following the system installation. Form Atılım Makine is helping in press calibration via special loadcells. The necessary apparatus for placing the loadcells are planned and practiced together with the plant maintenance team.

The press force measurement system is checked against the calibration tonnage values and adjusted to display the realtime values.







Form Atılım Makine can inform in more detail following an on-site inspection of your press or similar part forming applications.



# FORM ATILIM MAKINE LTD.