

# IMPAX

## PROCESS MONITORING SYSTEMS

### IMPAX 2000



### PROCESS MONITORING SYSTEM FOR METAL FORMING MACHINES

Using a patented adaptive learning technique, this microcomputer-based unit learns each station's force profile as good parts are first formed, then monitors forming forces as the job continues to run. If the forming forces change, **IMPAX** stops the process immediately. Tolerances can be set to detect minor as well as major problems: smash ups, short feeds, faulty transfers, double feeds, and even some tool cracks, chips, and wear. Considerable savings can be realized from reductions in tool usage, machine downtime, and scrap production, as well as from improvements in operator efficiency and product quality. Because the Series 2000 counts every part and stops the machine at a preset total, overruns are virtually eliminated.

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### IMPAX 2000 PROCESS MONITORING TERMINAL

Suitable for all types of cold heading machines (single, double, and multiple blow), multi-die and extrusion presses with up to 8 stations, bolt makers, thread rollers, nail makers, stamping presses, and multi-slide machines.

#### MONITORING FUNCTIONS

**IMPAX** uses a patented monitoring technique. Up to four algorithms are applied to each signal that comes from a sensor. **IMPAX** stops the machine when it detects an error. In addition, there are three counters: a total counter, shift counter, and break counter. When the desired total is attained, the monitor stops the production and prevents overruns. Finally, the monitor continuously checks the RPM value of the machine. If there is too much variability, the process is stopped.

#### TECHNICAL FEATURES

The input signals are monitored for an integrated value (total work value) or for a peak input value (peak force). There is a programmable tolerance level for each input, lockable with a supervisor's key. Automatic compensation for startup input level, warm-up, and drift is included. The unit can be programmed to track a variety of different process inputs. The **IMPAX** time management module logs process errors as well as accumulated time in each mode of operation. The system can also be set up to monitor downtime events and automatically track up to 99 independent code entries. When **IMPAX** units are connected to a PC via **IMPAXNET**, the supervisor or manager can observe multiple machines from the PC and obtain full production reporting and analysis from the **IMPAX** units.

#### TECHNICAL DATA

Up to 8 sensor inputs, 2 timing inputs, 4 relay outputs, networking option, machine interface unit in separate enclosure, and CE rated.

#### Dimensions (without yoke):

Machine Control Box: 8"H x 6" w x 4"D  
Control Console: 11 3/4"H x 10 3/4" W x 9"D  
Cable Lengths: 10' or 20' between Control Box and Console  
Supply: 115/230V 50/60 Cycle

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