



PROMESS



ELECTRIC PRESS  
WORK STATION  
PRODUCT LINE

# FULLY ELECTRIC WORK STATIONS

The Work Station is a stand-alone unit with a Promess precision servo driven ball screw press (EMAP) and motion controller. The system has the ability to press to a programmable position, to a programmable force, to a rate of change or any other process variable that can be measured with an external sensor.

Unlike traditional hydraulic press systems, the Promess Electric Press Work Station is completely electric. Because our products incorporate the latest servo technology, there are no hydraulic components to maintain (cylinder, pump, valves, or oil).

Included with the Work Station is the Promess application and programming software. The software allows for the quick and easy setup of programs through the Promess HMI. Software capabilities include the ability to graph and store force versus position signature curves. Additional sensors can be added to cover any additional application or test requirements. Sensors can include force, position (analog or linear encoder), flow and temperature.

## Work Station Includes:

- Promess Electro-Mechanical Assembly Press (EMAP)
- Promess motion controller
- Integrated force transducer
- Press stand with frame
- Light curtain
- Guarding

## Options:

- External position transducer
- Additional load cell ranges
- HMI with keyboard and mouse
- Safety door

## Features/Capabilities:

- Programmable stop points (positions)
- Programmable speed and acceleration
- Press to position
- Press to force
- Press to rate of change
- Data acquisition
- Push and pull capabilities

## Monitoring Capabilities:

- Force vs. position signature monitoring
- Data acquisition
- Display of force vs. position graphs, zooming and printing
- Gauging functions
- Adjustable process limits and tolerances



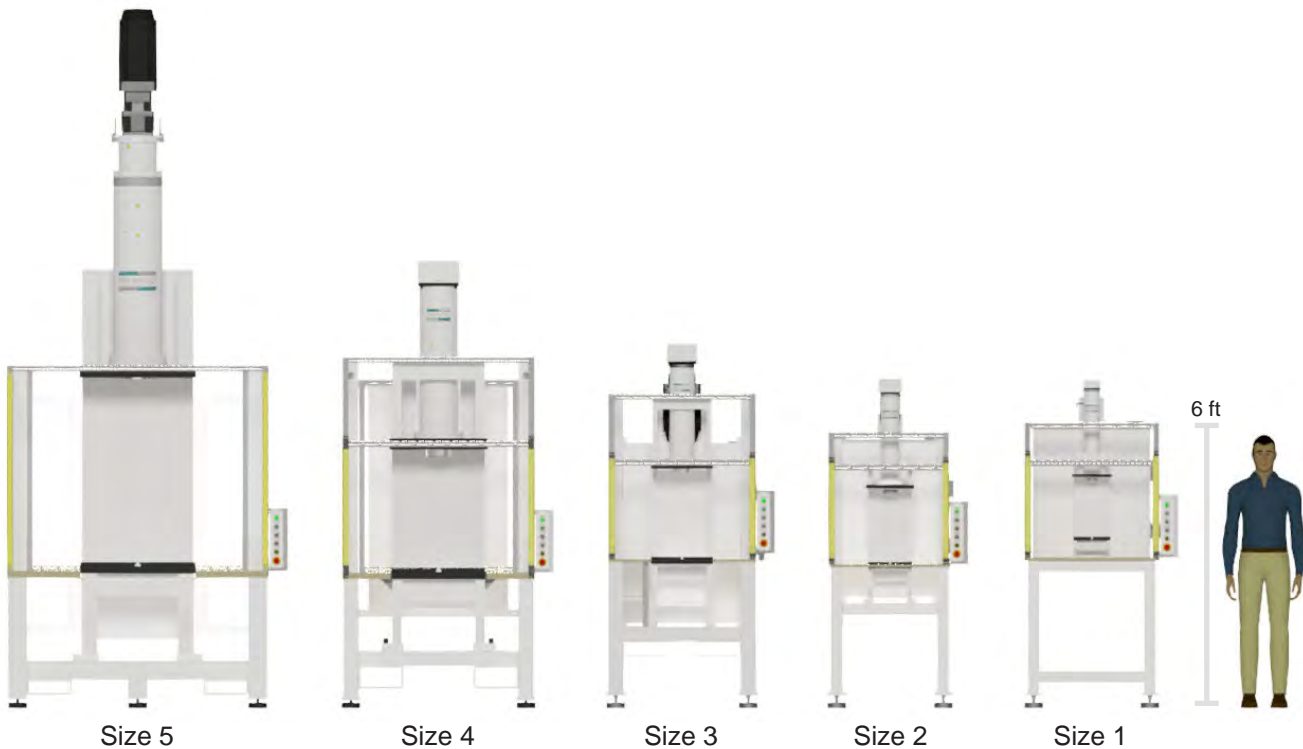
# WORK STATION CONFIGURATIONS

## What size press do you need?

- Force • Stroke • Speed

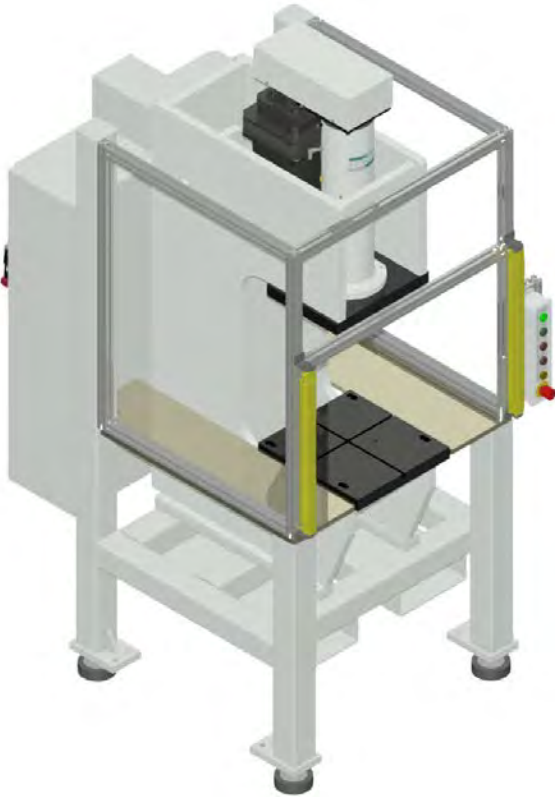
## Work Station Sizes

Size	Force		Stroke		Speed	Work Station Size
	kN	LBS	mm	inch	mm/sec	
EMAP-0.2kN	0.2	45	100	3.9/11.8	200	Size 1
EMAP-01kN	1	225	100/300	3.9/11.8	200/150	
EMAP-03kN	3	675	100/300	3.9/11.8	200	
EMAP-05kN	5	1,125	200/350	8/13.8	200	
EMAP-08kN	8	1,800	200/350/500	8/13.8/19	200	
EMAP-12kN	12	2,700	200/350/500	8/13.8/19	200	
EMAP-20kN	20	4,500	180/350/500	7/13.8/21.6	200	Size 2
EMAP-30kN	30	6,750	180/350/500	7/13.8/21.6	200	
EMAP-40kN	40	9,000	330/660	13/26	100	Size 3
EMAP-60kN	60	13,500	330/660	13/26	100	
EMAP-80kN	80	18,000	330/660	13/26	100	
EMAP-100kN	100	22,500	330/660	13/26	100	
EMAP-120kN	120	27,000	330/660	13/26	100	Size 4
EMAP-160kN	160	36,000	400	15.75	100	
EMAP-300kN	300	67,500	400	15.75	100	Size 5
EMAP-500kN	500	112,000	400	15.75	70	



# WORK STATION OPTIONS

## Frame Options



### Work Station with C- Frame

Promess C-Frames are designed to provide unobstructed access to the frame's work area. Every standard C-Frame comes with a Promess Press Mounting Plate and a T-Slotted Base Plate. All Promess standard C-Frames are designed to deflect no more than 500 microns at their maximum load capacity.

### Work Station with Four Post Frame

Promess 4-Post Frames are designed to experience only vertical deflection, while keeping all other deflection minimal. Every standard 4-Post Frame comes with a Promess Press Mounting Plate and a T-Slotted Base Plate. All Promess standard 4-Post Frames are designed to deflect no more than 500 microns at their maximum load capacity.



# WORK STATION OPTIONS

## C-Frame Work Surface Options

Steel-Nickel Plated



Maple Wood

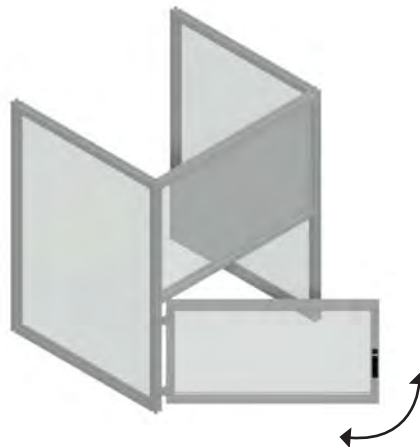


## Guarding Options

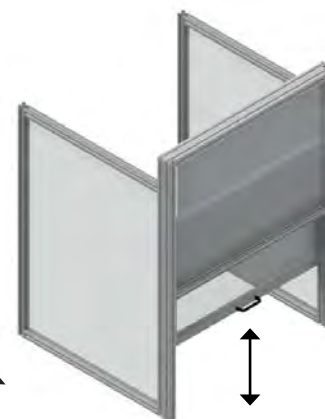
Light Curtain



Swing Door \*



Lift Door\*



\*Including redundant safety switches

## Operator Interface Options

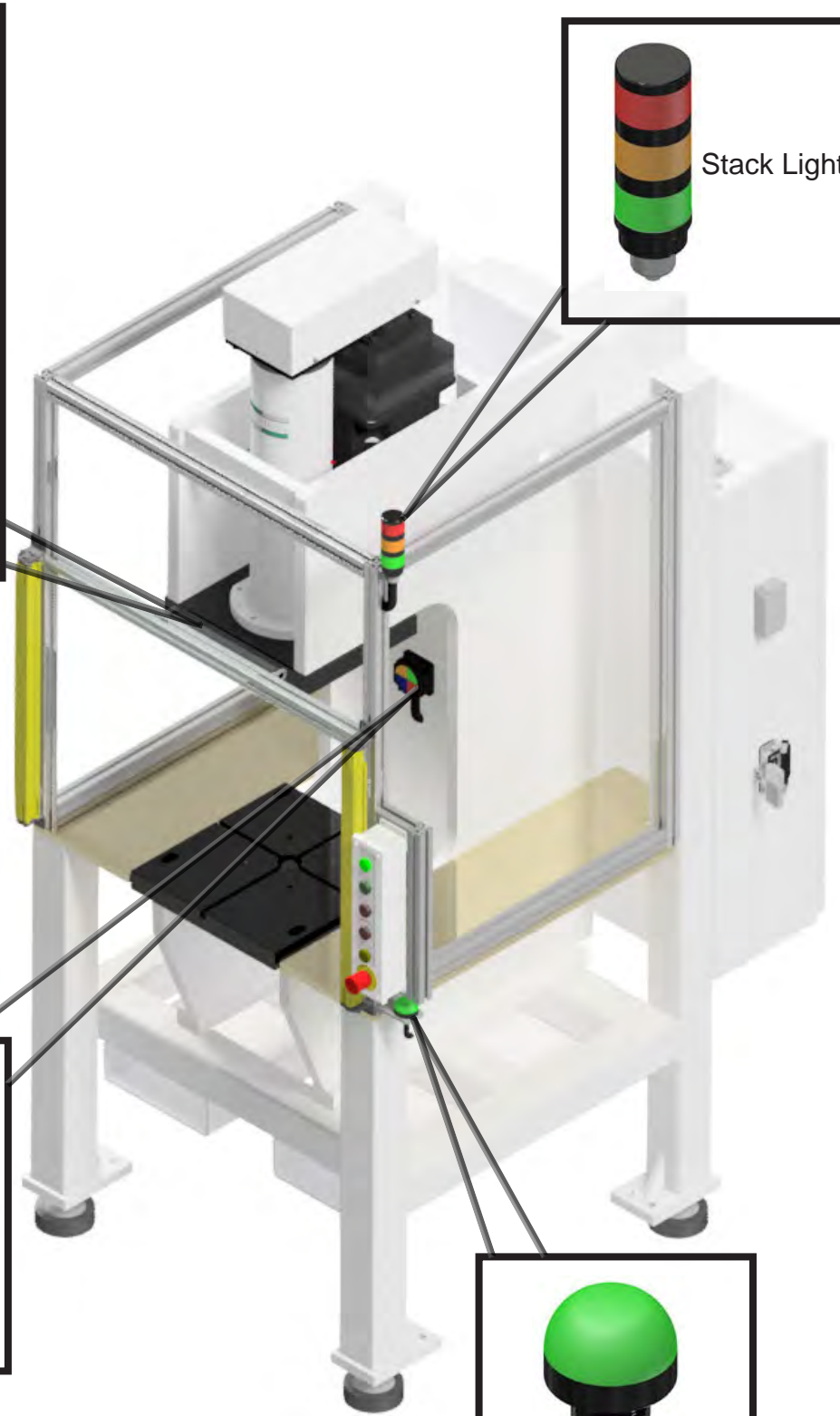
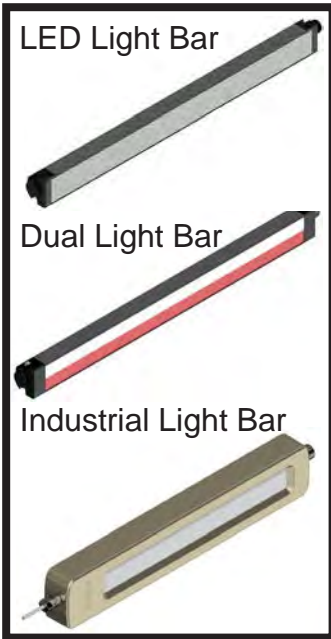
Push Button Box



Push Button Box with HMI



# LIGHTING OPTIONS



# WORK STATION MODIFICATIONS

## Frame Options

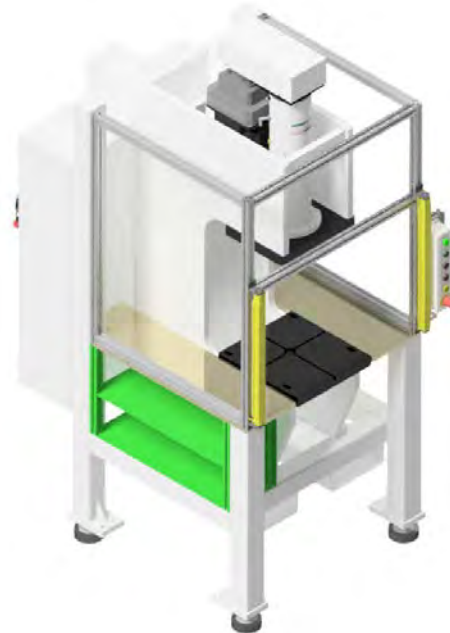
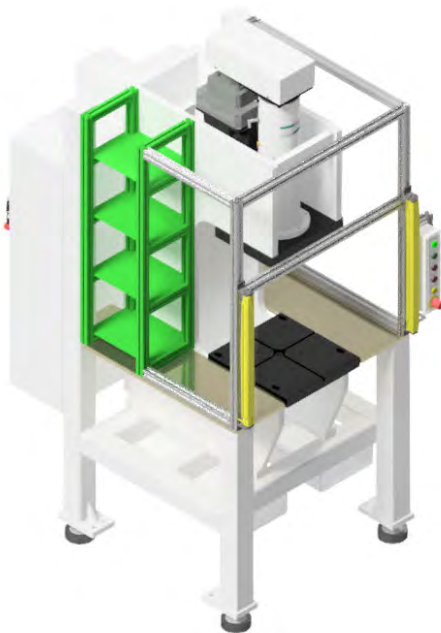
Extended C-Frame



Extended Throat C-Frame



## Storage Options



# WORK STATION ACCESSORIES

Ram Extensions



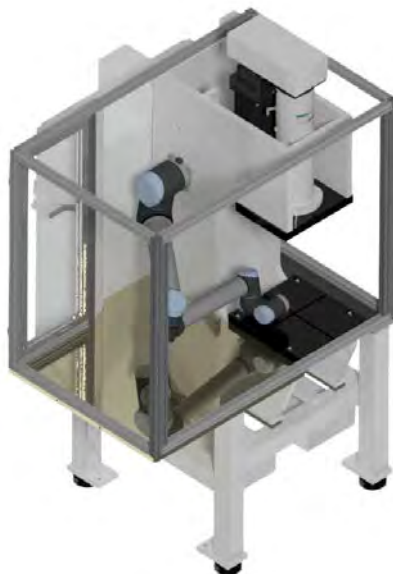
AC Unit\*



\*For use when environmental temps reach 41°C/105°F or higher

# CUSTOM WORK STATION EXAMPLES

Robot Work Station



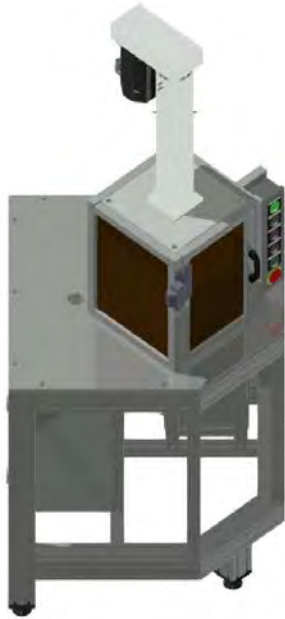
H-Frame Work Station



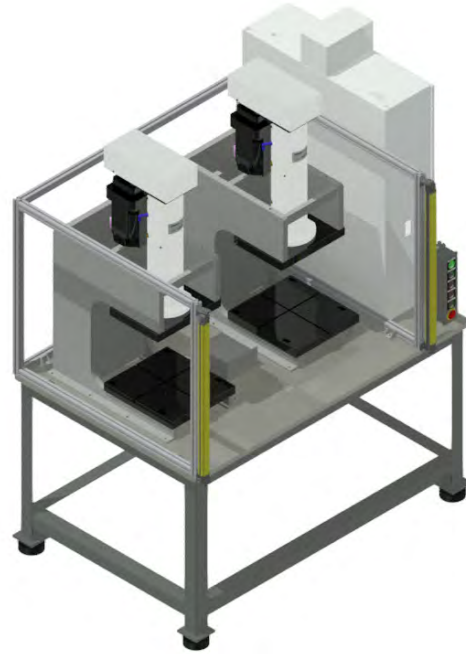


# CUSTOM WORK STATION EXAMPLES

Compact Work Station



Dual C-Frame Work Station



Horizontal Work Station



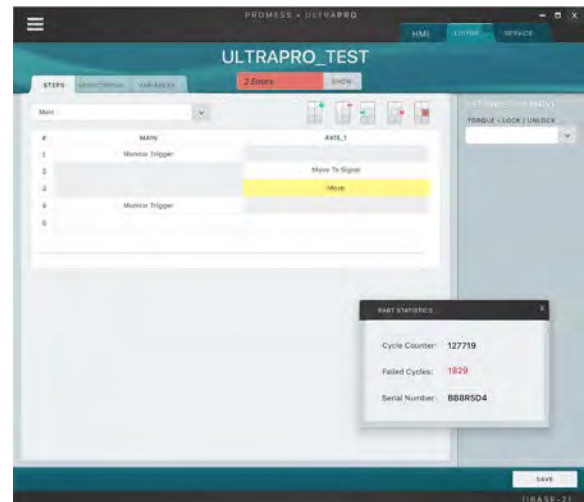
Inverted Work Station



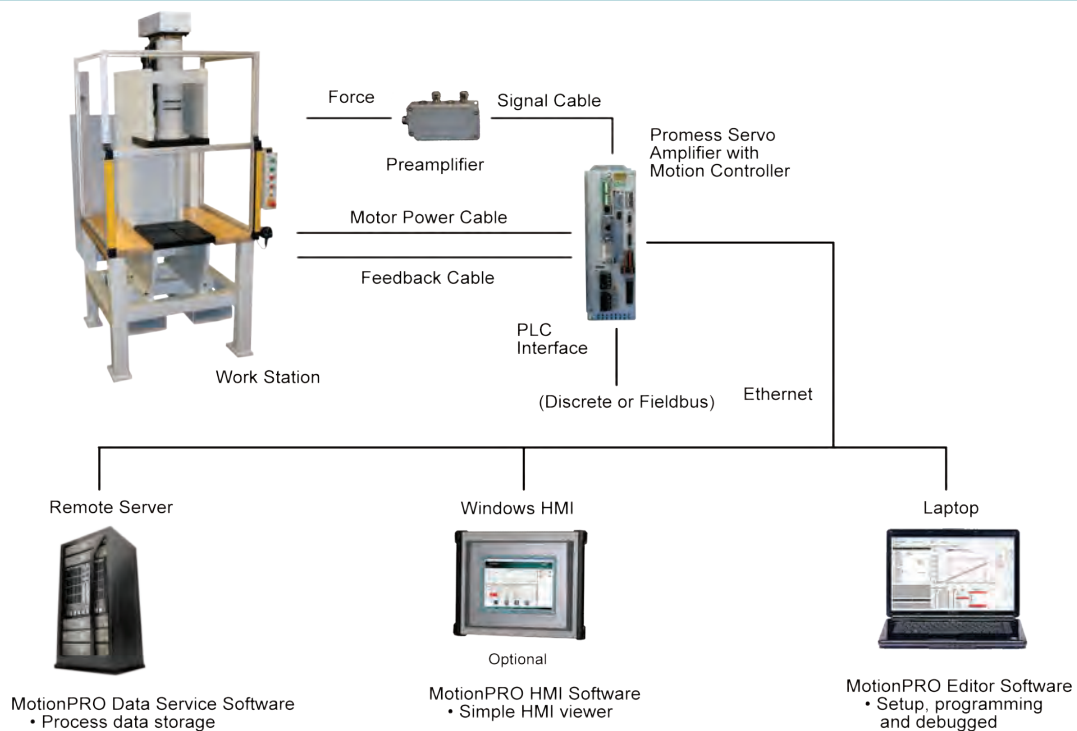
# SOFTWARE

Promess software solutions offer a very high level of flexibility allowing you to configure the system solution to best fit your process requirements.

There are three basic components that make up the Promess Software Package. The Editor which is used to create the setup and programs, the HMI components for local viewing and the Data Service for collecting and viewing data. These software components can be used individually (remotely or locally) or in conjunction with each other.

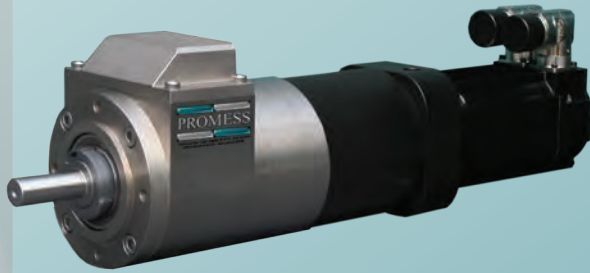


# SYSTEM LAYOUT



# OTHER PRODUCTS

11

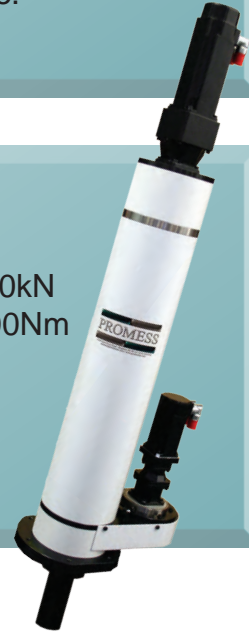


Torque Measuring Capabilities range from 0.010Nm to 2500Nm.

The Promess TorquePRO system combines a servo motor and torque transducer into a single plug and play package. These systems have the ability to control and monitor rotational torque and angle.

The Promess Rotational Electro-Mechanical Assembly Press (REMAP) offers linear motion as well as rotational. Both axes are controlled independently and are completely programmable.

Forces up to 30kN  
Torque up to 200Nm



## PROCESS DEVELOPMENT CENTER



Promess would like to invite you to our Process Development Center. The PDC is available to help you develop your processes and confirm the Promess technology that is best suited for your application. Call today to set up a visit.

### The Process Development Center gives you access to:

- Electric Press Work Stations with capabilities ranging from 0.2kN-300kN
- Torque stations ranging from 5Nm-600Nm
- REMAP (Rotational Electro-Mechanical Assembly Presses) which combine rotational and linear motion in one machine

# WHAT MAKES US DIFFERENT

## Philosophy

- Under sell - Over support

## Experience

- Successfully engineered technology-based solutions that have:
  - Controlled and/or monitored billions of cycles
  - Assembled and/or tested millions of components and assemblies for thousands of customers

## Presence

- North American based manufacturing company
- Offices all over the world to help you get the support you need sooner
- Design, develop, manufacture, and support all products, software and applications from our campus in Brighton, MI
  - Complete control over every aspect of our products
  - Eliminates the delay, difficulty, inconvenience and cost of dealing with a foreign manufacturer

## Technical resources

- Employ more technical support than all of our competition combined
- Seniority of technical resources range from 7 to 40 years

## Support

- World Wide 24/7/365
- Available to both the OEM and End User

# THE COMPANY



Promess Incorporated, is recognized as a leading U.S. manufacturer of highly adaptive monitoring and motion control systems used by companies around the world to assemble and test their products.



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"Cloning the perfect part"