

**Press Fit
Crimping
Staking
Riveting
Testing**

**100% In-Process
Inspection of
Assembled
Parts**

Assembly Monitoring Systems



The Problem



Tight Fit



Loose Fit



No Part Present



Part Misaligned

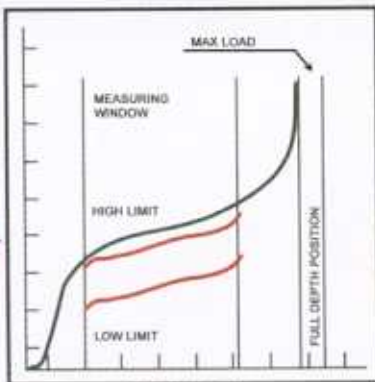


Full Depth Exceeded

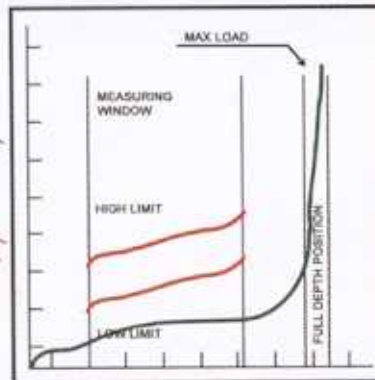


Wrong Part

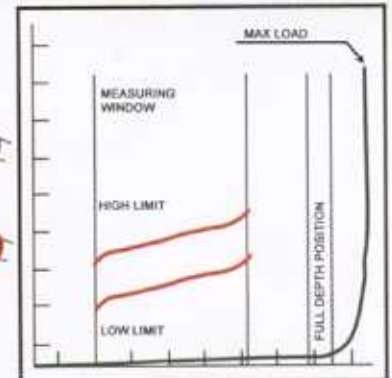
The Solution



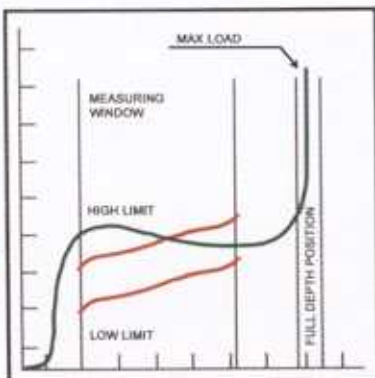
Tight Fit



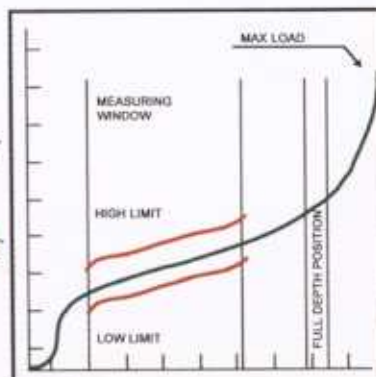
Loose Fit



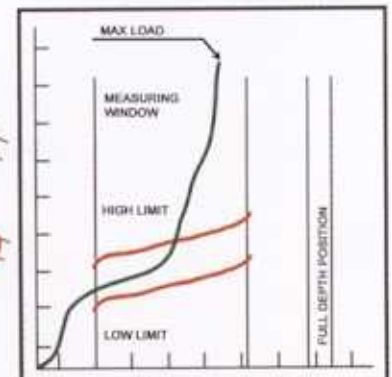
No Part Present



Part Misaligned



Full Depth Exceeded



Wrong Part

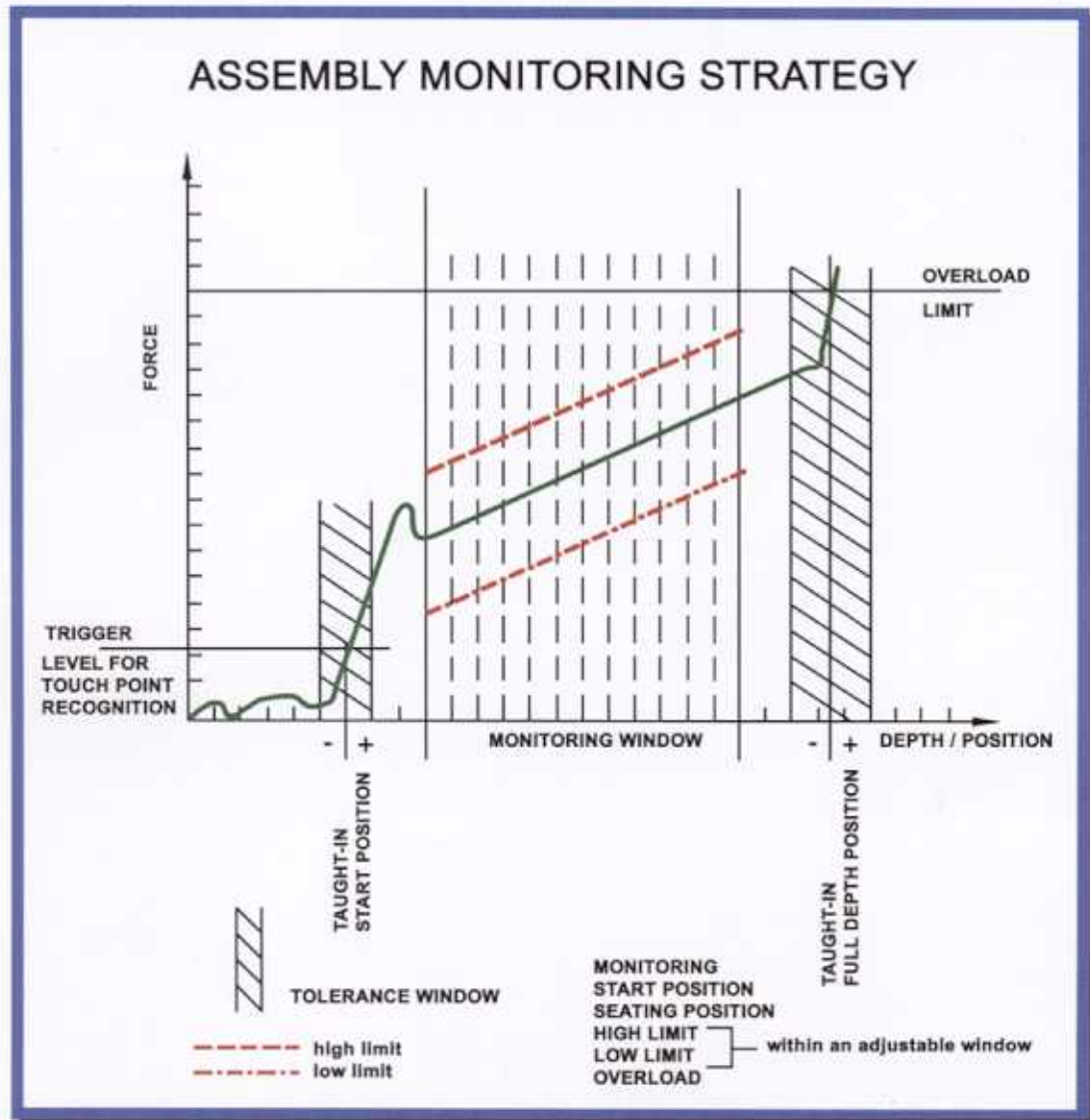
The Method

What makes PROMESS different?

Typical press monitoring systems measure maximum load only or a single force value during the assembly cycle. This is a reason why the systems provide so little information.

PROMESS monitors the entire press window for precise in-process quality information.

An example is shown below.



The **PROMESS** ASSEMBLY MONITORING SYSTEM consists of a microprocessor based electronic unit which monitors the signals from force and position sensors mounted on the machine.

Analysis is performed by comparing the force profile of the assembly with a taught profile. This technique involves measuring the assembly force in a position dependant manner.

The assembly profile is monitored within an adjustable window, which allows the user to define the critical part of the assembly cycle. During this critical portion of the assembly operation, the force level is closely monitored.

The touchpoint and full depth positions are also to be within an adjustable tolerance. The full depth position can be monitored based on an absolute position or relative to the touchpoint.

The Product

FEATURES & BENEFITS

- High & low force limits
- Monitoring of full depth of press in reference to touchpoint
- High sampling rate allows monitoring of very fast cycle time
- Retrofittable to existing machines
- In-process, on-line, quality verification
- User friendly / menu driven software
- System electronics adaptable to non-Promess sensors
- Upgradable



PROMESS PROVIDES WITH EVERY SYSTEM

- Monitoring electronics
- Force transducer
- Position transducer
- Installation assistance
- Training
- Data acquisition (optional)

OR...

If you have a competitive system that does not work, we will integrate our technology with your existing components to make it work.

The Company



The Promess Headquarters has been located in Brighton, Michigan since 1984 and continues to provide in-process sensing systems for manufacturing.



Look at our other Assembly Monitoring and Control Products

PROMESS

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