

# STRAIN GAIN®

MODEL HT400

## A Force-Sensor for Load Monitoring

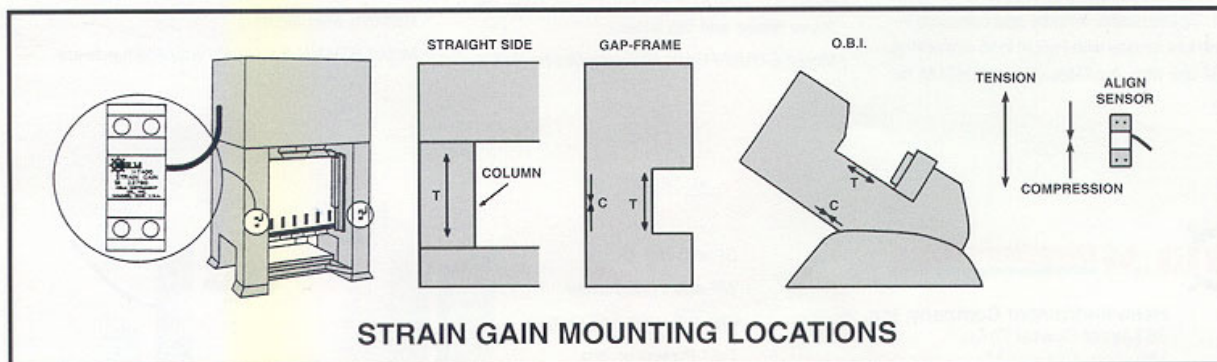


Helm HT400 Strain Gain - Industry standard since 1968

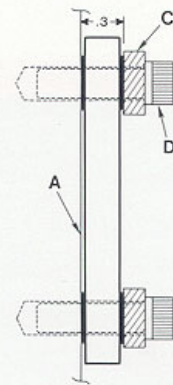
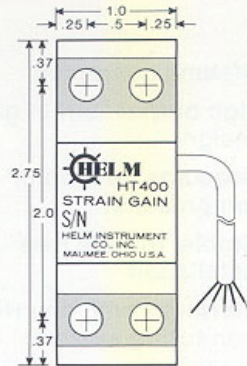
- Lifetime guarantee
- High output "strain gage" design
- Measures tension or compression
- Simple, trouble free installation
- Interfaces with any HELM monitoring system

The HELM HT-400 STRAIN GAIN® load sensing transducer accurately detects strain levels on all types of metal stamping presses. Using either drill/tap or weld/pad mounting method, the sensor is installed directly to upright columns of straight side presses or throat area of OBI an Gap Frame presses. When interfaced with HELM monitoring systems, linear output of strain levels at each sensing location displayed on digital meters.

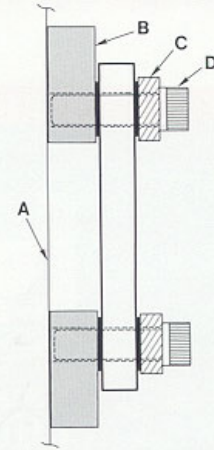
"Strain gages" in a 350 ohm full wheatstone bridge circuit are used as load sensing elements to assure long term stability and accuracy. Manufactured under laboratory conditions, all HT-400 sensors are matched within 1% and may be interchanged without recalibration of the press.



# STRAIN GAIN® Model HT400



DRILLED-HOLE MOUNTING



WELD-PAD MOUNTING

## SPECIFICATIONS

Capacity	400 Microstrain
Overload	600 Microstrain maximum
Recommended Excitation	8 volts AC or DC
Maximum Excitation	15 volts AC or DC
Output	1 mv/v @ 400 Microstrain
Cable	Shielded 4 conductor cable with oil resistant polyurethane jacket
Size	1" wide x 2 3/4" long x 5/16" thick

## ORDERING INFORMATION

Standard STRAIN GAIN sensor is supplied with 35 feet of cable (Model HT-400-35), four mounting screws, two anti-torque washers, and hex wrench. Special cable lengths and complete installation kits for use with HELM load monitoring systems are also available. Consult HELM for details.

A. Surface of machine structure.

B. WP-400 Weld Pad - Accessory.

C. Anti-Torque Washers - Supplied.

D. 1/4-28 Cap Screws - Supplied.

## INSTALLATION

For drilled-hole mounting, DF-400 drill fixture is required.

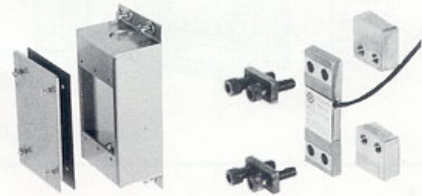
- With hand grinder, remove paint and grind to bare metal.
- Position fixture and drill center hole.
- Tap hole and bolt fixture to press in proper alignment.
- Drill remaining four holes 3/4 inch deep. Remove fixture and tap holes.
- Mount STRAIN-GAIN with supplied hardware.

For Weld-Pad mounting, WF-400 weld fixture and one set of WP-400 weld pads are required.

- Clean mounting surface to accept welding.
- Mount weld pads to weld fixture.
- With gloved hand hold welding fixture/weld pads to press.
- Weld three sides of each pad.
- Remove weld fixture.
- Mount STRAIN-GAIN with supplied hardware.

## ACCESSORIES

- DF-400 Drill Guide
- WF-400 Weld Fixture
- WP-400 Weld pad (set)
- T-21 Protection box
- WS Cover with gasket



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