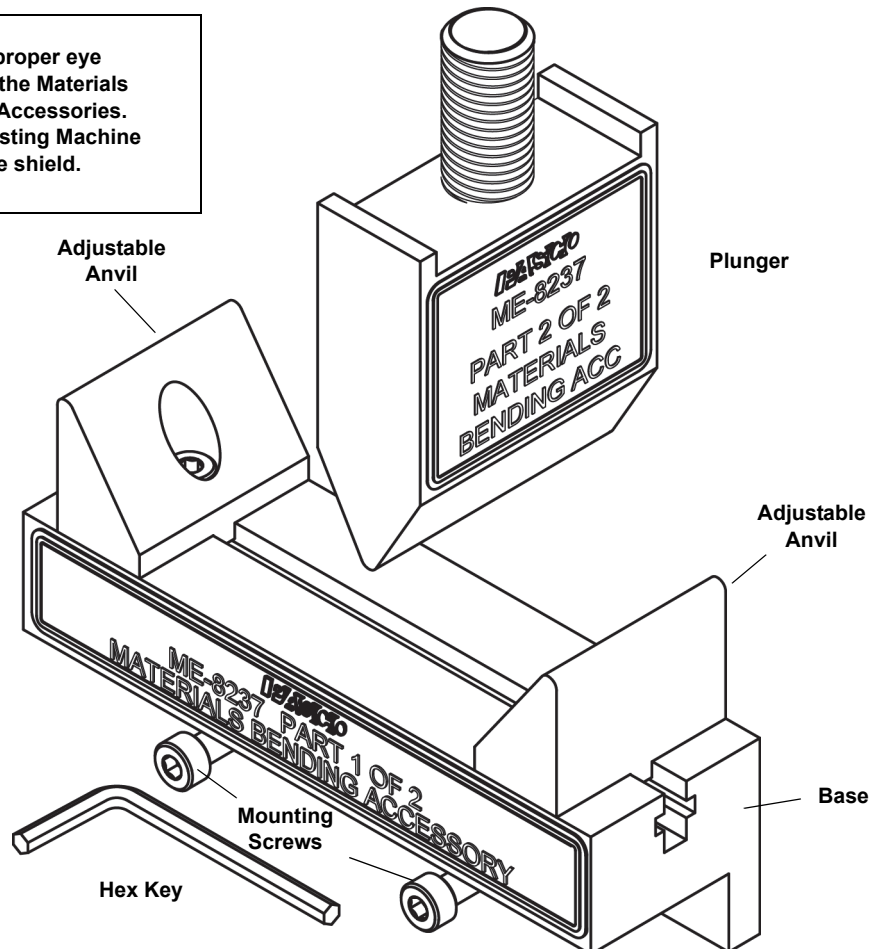


Materials Bending Accessory

ME-8237

For Use with the Materials Testing Machine (ME-8236)

WARNING: Provide proper eye protection when using the Materials Testing Machine or its Accessories. Operate the Materials Testing Machine behind a protective shield.



Included Items
Materials Bending Accessory
Hex Key

Recommended Items
Structures Cast Beam Set (ME-7009)
Truss Set Members (ME-6993)

Required Items*
Materials Testing Machine (ME-8236)
PASCO Interface (PASPORT compatible)
PASCO Data Collection Software

*See the PASCO catalog or web site at WWW.PASCO.COM

Introduction

The Materials Bending Accessory is designed to work with the PASCO Materials Testing Machine (ME-8236), which is part of the Materials Testing System (ME-8230). The machine is a device for measuring force and displacement for various materials as the materials are stretched, compressed, sheared, or bent. The Materials Testing Machine has a built-in load cell (strain gauge transducer) capable of mea-

suring up to 7100 newtons (N) of force (1600 pounds), and an optical encoder module that measures displacement of the load bar. Force data from the load cell and displacement data from the encoder module can be recorded, displayed, and analyzed by a PASCO Interface with PASCO Data Acquisition Software. The sensor cable from the Materials Testing Machine connects to a PASPORT input port.

Materials Bending Accessory (ME-8237)

The Materials Bending Accessory includes a plunger, a base with triangular anvil supports, and a hex key (allen wrench). The plunger is mounted on the bottom of the load bar using the load bar round nut (included with the Materials Testing Machine). Use the included hex key to mount the base on the top of the load cell with the included screws.

The spacing between the two triangular anvils on the top of the base can be adjusted. Use the hex key to loosen the screws holding the anvils and slide the anvils closer together or farther apart. Tighten the screws securely.

Operation

Caution: Be sure to wear adequate eye protection when using the Materials Testing Machine or its accessories. Operate the System behind a protective shield.

Basic operation involves mounting the item to be tested onto the Materials Testing Machine, connecting the Materials Testing Machine to an interface for data recording, and then turning the crank.

Place a sample for testing on the two Adjustable Anvil supports.

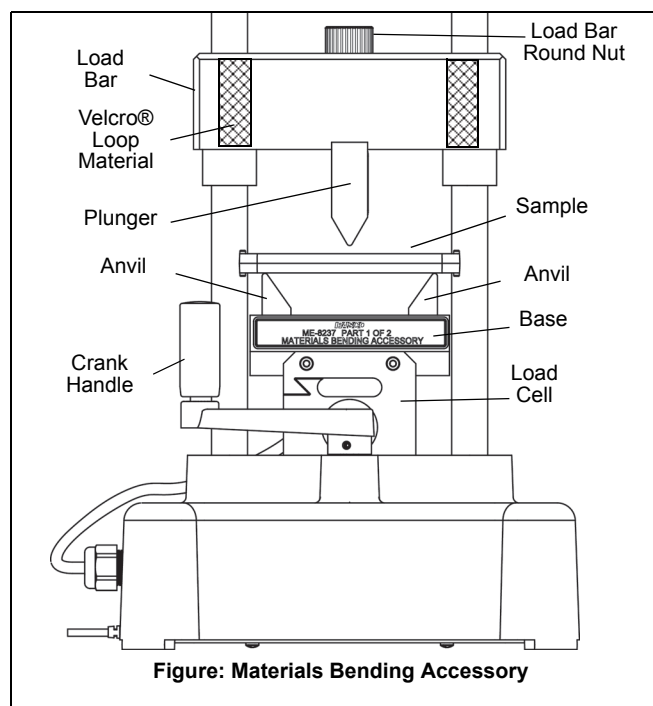


Figure: Materials Bending Accessory

Attach the Safety Shields

Attach the safety shields that come with the Material Testing Machine. Match the Velcro® hook material on the two safety shields to the Velcro® loop material on the front and back of the Load Bar. Adjust the position of the shields so that they will block any fragments that may come from the sample.

Record Data

Connect the plug on the sensor cable into a PASPORT input port on the PASCO interface. Start the PASCO software. Arrange a graph display of force versus position. Use the software to zero the two sensors of the Material Testing Machine. Start recording data. Turn the crank in a counter-clockwise direction to apply a force through the plunger on the sample. Observe the graph display of force and position.

Experiment Guide

NOTE: An Experiment Guide in electronic format for the Materials Testing System is available to download from www.pasco.com. Enter "Materials Testing System" in the Search window and look for the down-loadable file(s) under "User Resources".

Other Equipment

Other accessories are available separately for the Material Testing Machine. Please see the PASCO web site at www.pasco.com for more information.

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100

Phone: +1 916-462-8384 (worldwide)
800-373-0300 (U.S.)

E-mail: support@pasco.com

For information about the Materials Bending Accessory, go to the PASCO web site at www.pasco.com and enter the model number in the search window.

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