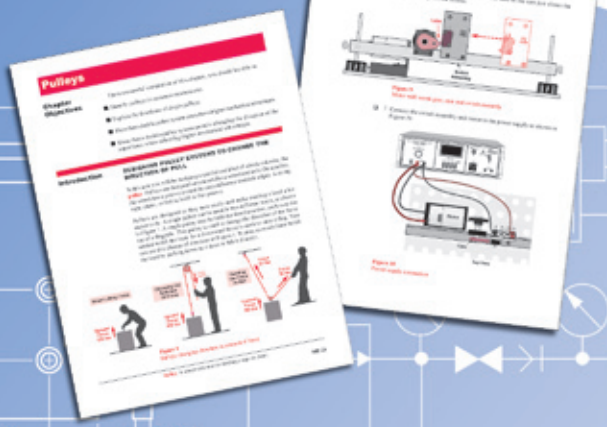
# Engineering Principles

## Mechanisms

Science
Technology
Engineering
Math

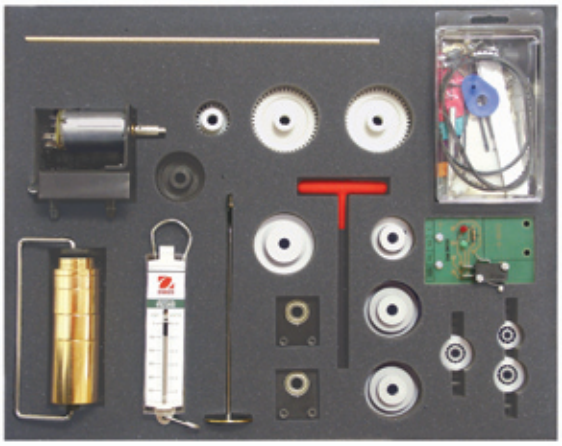


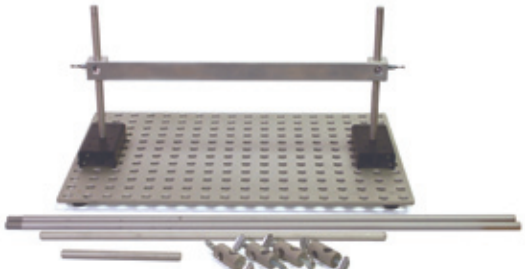




ENERGY CONCEPTS, INC.

# Mechanisms

The **ECI Model 275S Mechanisms Trainer** is a challenging program covering basic devices and simple machines. The students use the unique support stand system to construct a variety of simple and complex mechanical circuits and apply the physics concepts used in mechanical systems. The hands-on experiments and calculations help prepare students to succeed in higher levels of study in engineering.





Support Stand Set

## System Components

Single Pulley
Double Pulley
22T Spur Gear
45T Spur Gear (2)
24 Pitch Worm Wheel
T-Handle Wrench
Small Timing Pulley
Large Timing Pulley
Three-Step Pulley (2)
Motor, DC
CAM Switch Assembly
Spindle Mount Assembly (2)
Spring Scale
Weight Set
Weight Hanger
Ruler
Hardware Package

## Instrumentation

**Digital Tachometer**

**Digital Multimeter**

**High Current Power Supply**

The AC/DC power supply is fully protected and specifically designed to provide long life under classroom conditions. Built with rugged 20-gauge steel, it is made in the USA and backed by a 3-year warranty.

## The Laboratory Manual

The Lab manual is designed to help students develop a thorough understanding of the subject matter. It is clearly written and professionally illustrated. It is printed in two-colors and comes in a quality vinyl binder.

**Introduction**
Safety
System Familiarization

**Simple Machines**
Introduction
The Lever

**Pulleys**
The Single Pulley
The Double Pulley

**Gears**
Spur Gears
Increasing Speed with Spur Gears
Worm Gears

**Belts and Pulleys**
Introduction
Belt and Pulley Systems

**Cams**
Introduction
Cams

**Linkages**
Introduction
Linkages


## Instructor's Resource Guide

The Resource Guide includes sample data and answers to quiz questions, as well as a Student Journal CD. The journal provides a convenient way for students to enter and save their data and answers to experiment questions. The instructor can also have the students print paper copies to hand in for grading.



ENERGY CONCEPTS, INC.
1-800-621-1247
www.eci-info.com