Coupling Mechanism

MAC

INTRODUCTION

The Oldham coupling is an example of an inversion of the double slider-crank chain.

This type of coupling is used to connect two parallel shafts which are not co-axial.

The flanged ends of the shafts have diametrical grooves and the intermediate disc has a tongue diametrically across each of its faces, both keys being at right angles. These tongues fit into the grooves in the shaft flanges and the intermediate disc then transmits rotation from the input to the output shaft with uniform angular velocity.

GENERAL DESCRIPTION

The Coupling Mechanism, "MAC", represents a simple Oldham type coupling. The lateral displacement of the input and output shafts may be varied and circular scales are fitted to the input and output flanges.

It consists of two outer discs made of aluminum and a central disc made of acetal. The central disc is located between both outer discs and it acts as the torque transmitting element. Torque transmission is accomplished by mating drive keys of the central disc, located on opposite sides and oriented 90° apart, with the slots of the outer discs.

Both outer discs are mounted in two graduated discs, where the angle of both outer discs can be measured.

SPECIFICATIONS

Bench-top unit with adjustable legs.

Anodized aluminum frame and panels made of painted steel.

The "MAC" unit mainly consists of:

Two outer discs made of aluminum.

Central disc made of acetal, located between both outer discs. It acts as the torque transmitting element. Torque transmission is accomplished by mating drive keys of the central disc, located on opposite sides and oriented 90° apart, with the slots of the outer discs.

Both outer discs are mounted in two rotary elements with a graduated disc to read the angle.

Manuals: This unit is supplied with the following manuals: Required services, Assembly and Installation, Starting-up, Safety, Maintenance & Practices Manuals.

MAC detail

EXERCISES AND PRACTICAL POSSIBILITIES

1.- Study of an Oldham mechanism

2.- Demonstration of the action of an Oldham coupling when the input and output shafts are laterally displaced.

3.- Demonstration of the angular velocity conservation in a misaligned transmission shaft.

DIMENSIONS AND WEIGHTS

MAC:

-Dimensions: 450 x 250 x 200 mm approx. (17.71 x 9.84 x 7.87 inches approx.)

-Weight: 2 Kg approx. (4.40 pounds approx.)

MAC/ICAI. Interactive Computer Aided Instruction Software System:

With no physical connection between unit and computer (PC), **this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF).** Both are interconnected so that the teacher knows at any moment what is the theoretical and practical knowledge of the students.
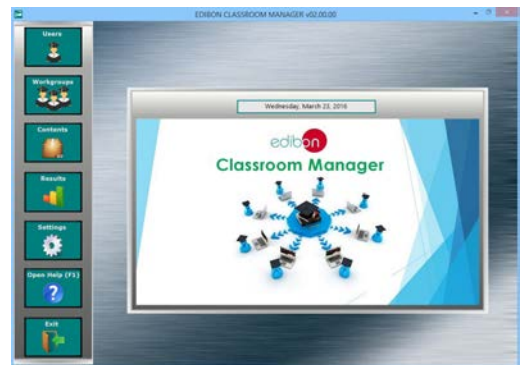
Instructor Software

- ECM-SOF. EDIBON Classroom Manager (Instructor Software).

ECM-SOF is the application that allows the Instructor to register students, manage and assign tasks for workgroups, create own content to carry out Practical Exercises, choose one of the evaluation methods to check the Student knowledge and monitor the progression related to the planned tasks for individual students, workgroups, units, etc... so the teacher can know in real time the level of understanding of any student in the classroom.

Innovative features:

• User Data Base Management.

• Administration and assignment of Workgroup, Task and Training sessions.

• Creation and Integration of Practical Exercises and Multimedia Resources.

• Custom Design of Evaluation Methods.

• Creation and assignment of Formulas & Equations.

• Equation System Solver Engine.

• Updatable Contents.

• Report generation, User Progression Monitoring and Statistics.

ECM-SOF. EDIBON Classroom Manager (Instructor Software)
Application Main Screen
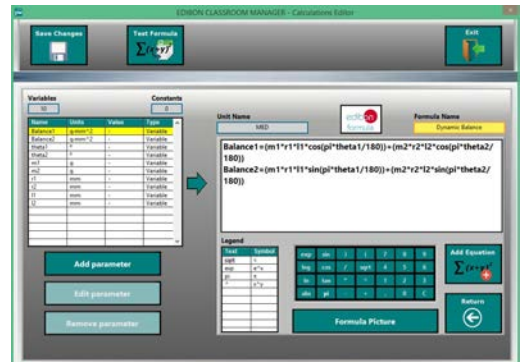
ECAL. EDIBON Calculations Program Package - Formula Editor
Screen
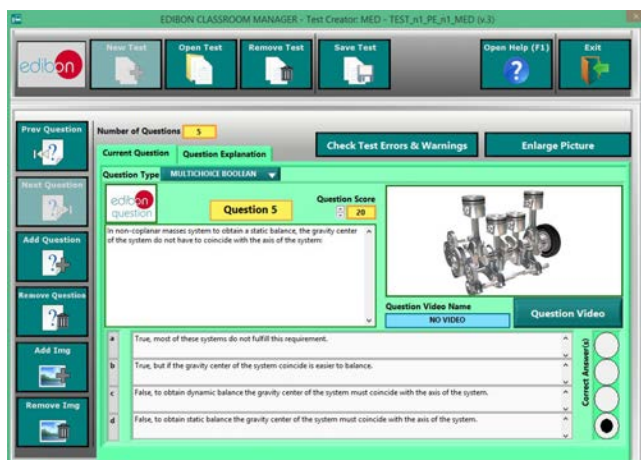
ETTE. EDIBON Training Test & Exam Program Package - Main Screen with
Numeric Result Question

ERS. EDIBON Results & Statistics Program Package - Student
Scores Histogram

- ESL-SOF. EDIBON Student Labsoft (Student Software).

ESL-SOF is the application addressed to the Students that helps them to understand theoretical concepts by means of practical exercises and to prove their knowledge and progression by performing tests and calculations in addition to Multimedia Resources. Default planned tasks and an Open workgroup are provided by EDIBON to allow the students start working from the first session. Reports and statistics are available to know their progression at any time, as well as explanations for every exercise to reinforce the theoretically acquired technical knowledge.

Innovative features:

• Student Log-In & Self-Registration.

• Existing Tasks checking & Monitoring.

• Default contents & scheduled tasks available to be used from the first session.

• Practical Exercises accomplishment by following the Manual provided by EDIBON.

• Evaluation Methods to prove your knowledge and progression.

• Test self-correction.

• Calculations computing and plotting.

• Equation System Solver Engine.

• User Monitoring Learning & Printable Reports.

• Multimedia-Supported auxiliary resources.

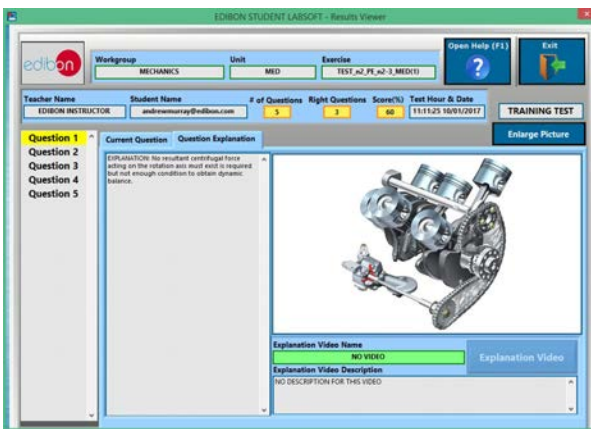For more information see ICAI catalogue. Click on the following link:

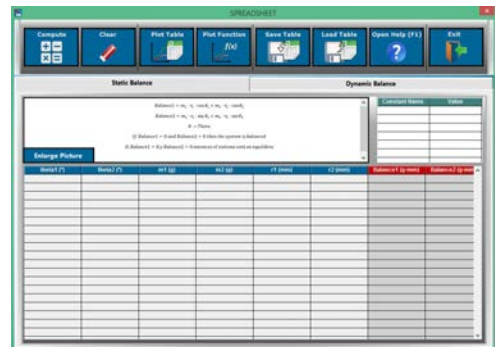www.edibon.com/en/files/expansion/ICAI/catalog

ESL-SOF. EDIBON Student LabSoft (Student Software)
Application Main Screen

EPE. EDIBON Practical Exercise Program Package Main Screen

ERS. EDIBON Results & Statistics Program Package - Question Explanation

ECAL. EDIBON Calculations Program Package Main Screen

✱ Specifications subject to change without previous notice, due to the convenience of improvement of the product.

INTERNATIONAL

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REPRESENTATIVE: