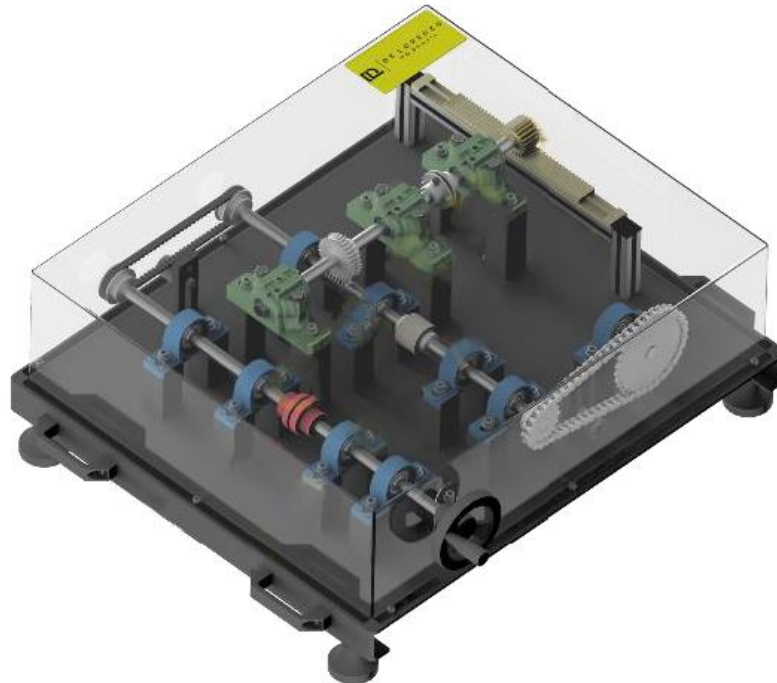




DIDACTIC SYSTEM FOR STUDY AND TRAINING IN TRANSMISSION ELEMENTS AND MECHANICAL COUPLING



DL 13005- 01

Didactic kit aimed at the study, demonstration and operation of machine elements typically used in mechanics.

The Kit is divided into parts, which are interconnected, to produce the movements of separate shafts, in order to demonstrate the operation of the transmission elements and couplings, including rack and pinion. Manual steering wheel operation.

TEACHING ACTIVITIES

1. Study and analysis of the operation of mechanical transmissions.
2. Analysis of the use of pulleys.
3. Analysis of the use of a timing belt (toothed belt).
4. Adjust current and voltage on timing pulley with idler adjustment.
5. Current and voltage adjustment in the current transmission system, with turnbuckle adjustment.
6. Analysis of the use of gears.
7. Analysis in the choice of clockwise/counter-clockwise movement.
8. Analysis of the use of different types of mechanical couplings.
9. Analysis of the use of different types of mechanical bearings.
10. Assembly and disassembly of pulleys, belts, chains, gears and bearings.
11. Linear rotational motion transformation study.



SYSTEM FEATURES

- a) 01 Metal base in sheet No. 3, anti-corrosion treatment and dimensions (400x875x700) for use on a suitable bench/table (not supplied).
- b) 04 Rubber feet (Vibra-Stop), with 70 mm diameter and height adjustment.
- c) 04 x 133 mm Total Compression Nylon Handles.
- d) 01 3 mm thick polycarbonate shield, with 8 fixing points on metal base.
- e) 01 Nylon handwheel style handle with 160 mm diameter.
- f) 07 linear shafts in 1045 stainless steel, ground and with the necessary keyways.
- g) 20 monobloc bearing holders, with holes and threads for fixing, dimensions (40x40x74mm).
- h) 06 Split bearing holders, with holes and threads for fixing, dimensions (40x40x107.5mm).
- i) 10 Bearings per bearing, pedestal type monobloc model P 204.
- j) 10 Sealed spherical bearings, with extended inner ring model UC 204.
- k) 01 Elastic grip coupling, with symmetrical buckets and synthetic rubber between them.
- l) 01 Gear coupling, with two symmetrical steel hubs and self-lubricating polyamide coupling sleeve.
- m) 01 Blade coupling, with two symmetrical hubs made of carbon steel, with a connecting blade attached by screws and nuts.
- n) 02 Aluminum toothed timing pulleys, with 32 teeth for 9 mm belt and 55 mm flange diameter.
- o) 01 Neoprene rubber distribution strap, 635 mm long, with 127 teeth, with glass fiber laces.
- p) 02 Belt/chain tensioners consisting of a tensioning roller moved by an adjustable handle.
- q) 01 Gear and worm gear set with transmission ratio 5:1, with 40 mm between centers.
- r) 01 Sprocket for single chain, with 30 teeth and $\frac{1}{2}$ " pitch.
- s) 01 Sprocket for single chain, with 15 teeth and $\frac{1}{2}$ " pitch.
- t) 01 Splice chain, $\frac{1}{2}$ " pitch.
- u) 01 Rack and pinion assembly, clockwise and counter-clockwise, on an extruded profile sliding base.

