

## Product Code: EKE EUM.SVR

Electromechanical system with servo motors, servo drive and electronic control unit, based on high precision and high efficiency. It does not require hydraulic oil. Maintenance costs are low and environmentalism that stands out with the system.

Tensile, compression, flexure and cyclic tests are performed with a single system by changing only the test fixtures. Load capacity 50kg, 100kg, 500kg, 10kN, 50kN, 100kN, 200kN, 300kN, 500kN and 1000kN are available as standard products in our range, higher capacities are manufactured on special order.

Load and strain controlled tests can be performed with very sensitive elongation. The test requirements as requested position controlled speed (0.0005 mm/min.) are provided with high precision. Also according to the test requirements, total capacity of the machine under load controlled rate from 0.5% to 100% with maximum error class  $\pm 0.5\%$ .

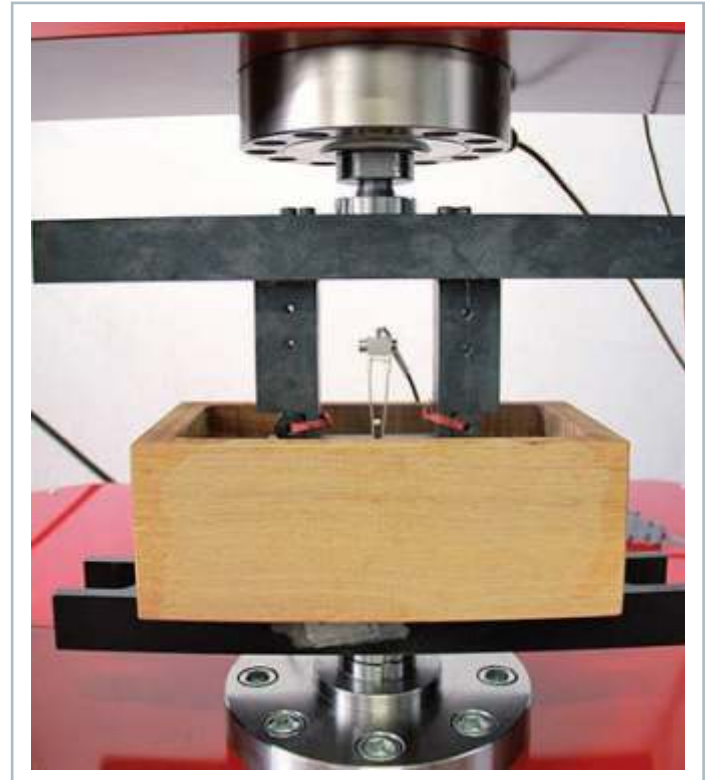
Strain controlled tests could be done with non-contact video extensometer with  $1\mu\text{m}$  resolution. Video extensometer measuring system works in synchronized mod with the system's own software.

A control unit which is the heart of the system could transfer data 1kHz - 5kHz and 10 kHz in one second. A remote control device which when attached with control system can perform operations such as, sample insertion, jaws control; positioning and also can perform the complete test directly without using software.

ENKAY electro-mechanical testing machines are preferably used in food, composite material, elastic, plastic, rubber materials, metals, biomedical, and textile sectors.

### Technical Specifications:

- ✓ Load capacity 50kg, 100kg, 500kg, 10kN, 25kN, 50kN, 100kN, 200kN, 300kN, 500kN and 1000kN are available as standard products in our range, higher capacities are manufactured on special order.
- ✓ Comes with standard jaws and grips, extras are optional.
- ✓ Machine has 2-columned frame and pneumatic "V-type" jaw system for flat and cylinder specimens.
- ✓ Load measurement and control is processed with loadcell and has class 0.5 sensitivity between 1-100% of capacity, according to ISO 7500-1 standard.
- ✓ Loading rate is adjustable between 0.01kN/sec and 15kN/sec.
- ✓ Position measurement and control can be done with 0.0001 mm sensitivity, by position sensor which is integrated inside the device.
- ✓ Machine's electronic control unit (EDC Unit) is from Germany.
- ✓ EDC unit has 4 channel, and each channel has 1000 data per second data control and process rate separately.

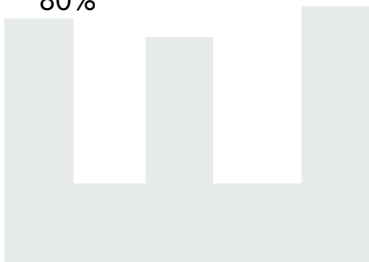


# SERVO ELECTROMECHANICAL UNIVERSAL MACHINE



**ENKAY**  
ENTERPRISES  
KRINERU VENTURES

- ✓ With machine, test software will be given.
- ✓ With software, user can make different test procedures like Tensile Force, Tensile Strength, Rupture Force and Total Elongation Automatically.
- ✓ Also, user can define 32 different parameters depending upon load and position-control.
- ✓ Remote control unit RMC will be given with EDC unit.
- ✓ With remote control, user can follow parameters such as real time stress, displacement and strain on internal screen.
- ✓ Piston movement control, hydraulic jaw's on/off control and system's general functions are also controlled with this remote control without any PC.
- ✓ Electronic unit: controller, from Germany.
- ✓ Control: 1-German Controller and 2-Computer software "Test & Motion" (with Load and Displacement control)
- ✓ Sensitivity: 0.01mm/min. or 0.01kN/sec.
- ✓ Resolution: 18 bit - 22 bit
- ✓ Load control rate: 0.01kN/sec
- ✓ Control speed sensitivity =< 1% of set value.
- ✓ Displacement measurement sensitivity:  $\pm 0.5\%$
- ✓ Displacement measurement stability: 0.01 $\mu$ m.
- ✓ Displacement control rate: 0.01-500mm/min.
- ✓ Deformation measurement sensitivity: 0.01 mm/min.
- ✓ Deformation control speed: 0.01 mm/min.
- ✓ Upper test distance: 1195mm
- ✓ Lower test distance: 1100mm
- ✓ Horizontal test width: 500mm
- ✓ Dimensions: (W X L X H) (in mm): 995 x 1050 x 2300
- ✓ Weight: 1000 kg
- ✓ PC software comes as a standard (Test & Motion)
- ✓ Operating temperature: 10 - 30°C, Humidity < 80%



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