



ErmaFlex #10s

Multitec Vertical Axis Module

1st functional subassembly of the Multitec system

Multitec Vertical Axis Module at a glance

Highlights & Key Activities

Assembly and disassembly of the 3 animation kits (electric, pneumatic and hydraulic)
 Fault diagnosis and repair
 Wiring and connection of actuators and sensors
 Mechanical adjustments of the 3 technologies

Specific components

Elevation system identical to Multitec
 Power box
 Pneumatic box (optional)

Features

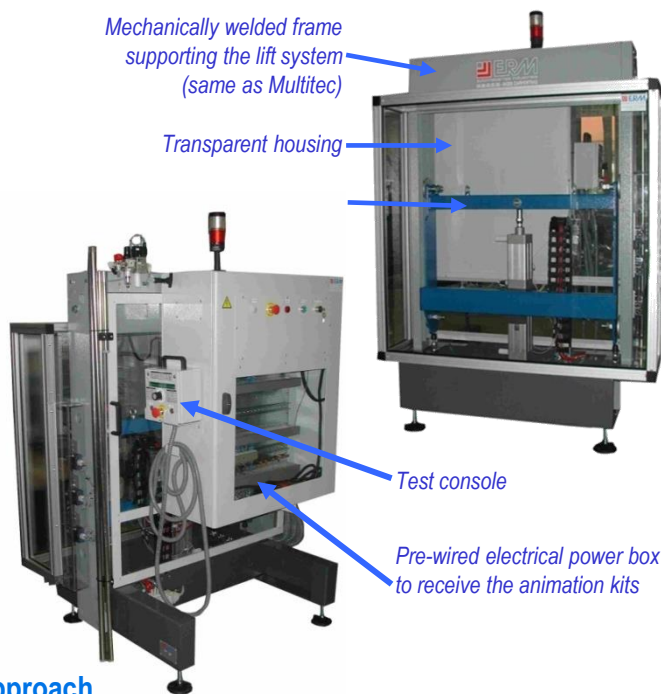
L/ W/ H: 1500 x 1000 x 1900 mm
 Electrical energy: 400V three-phase + neutral
 Pneumatic energy: 6 bar
 Weight: 120 kg

This system is accompanied by a technical and educational file

References

- ✓ **OS50:** Multitec Vertical Axis Module
- ✓ **AC51:** Test Stand for Multitec Vertical Axis Module
- ✓ **KE50:** Electric Animation Kit
- ✓ **KH50:** Hydraulic animation kit
- ✓ **KP50:** Pneumatic Animation Kit
- ✓ **OS51:** Pneumatic valve for KP50

Bac Pro MSPC
 BTS MS - IUT



Pedagogical approach

Educational activities

- ✓ Assembly/Disassembly
- ✓ Wiring and connection
- ✓ Re-conditioning of the lifting functional chain (electric, pneumatic or hydraulic motorisation)
- ✓ Actuator and sensor integration
- ✓ Connection of pre-actuators or actuators
- ✓ Stroke adjustment
- ✓ Setting the sensors
- ✓ Performing static development or integration tests
- ✓ Performing dynamic tests
- ✓ Study of constructive solutions
- ✓ Trouble shooting

Practical work proposed by ERM Automatismes

- TP 1: Fault diagnosis and repair (corrective maintenance activity)
- ✓ Trouble shooting
 - ✓ Drafting of a breakdown report
 - ✓ Fault diagnosis
 - ✓ Identification of the defective component
 - ✓ Reading nomenclatures and searching for references
 - ✓ Search for the component in a manufacturer's catalogue
 - ✓ Dismantling and replacing the defective component
 - ✓ Connection
 - ✓ Settings (position and stroke)
 - ✓ Functional check
 - ✓ Drafting of an intervention report
- TP 2: System re-conditioning (preventive maintenance activity improving)
- ✓ Hydraulic to electrical reconditioning
 - ✓ Electrical to pneumatic re-conditioning
 - ✓ Pneumatic to hydraulic re-conditioning
- TP 3: Mechanical intervention of controls and adjustments (activity of preventive maintenance)
- ✓ Prepare the intervention area,
 - ✓ Search for information in technical files,
 - ✓ Carry out adjustments (mechanical, sensors, etc.),
 - ✓ To appropriate the various commissioning and adjustment procedures,
 - ✓ Participate in the implementation and bring the system into its initial position,
 - ✓ Start the system,
 - ✓ Check that the system is working properly.

ELECTRIC MOTORIZATION



Hollow shaft geared motor (KE50)

PNEUMATIC DRIVE



2 Double acting cylinders (used as singles) mounted in tandem (KP50)

HYDRAULIC DRIVE

Single acting cylinder + hydraulic power pack (KH50)

