



PNEUMATIC HANDLING LINE

OPERATING CYCLE

The parts placed on the conveyor belt are held by the vacuum suction grip of a first pneumatic jack, then placed on the horizontal jack, grasped by the electromagnet jack undergoing a complete handling cycle before being returned to the belt.

PNEUMATIC COMPONENTS

- 3 double effect pneumatic jacks Ø32mm. Travel 250mm, each equipped with:
 - flow reducers allowing fine adjustment of their movement
 - magnetic position detectors (2 or 3 per actuator) with LED
 - quick-fit joints for Ø4mm tubes
 - 2 5/2 electropneumatic distributors
 - 1 5/3 electropneumatic distributor
- All distributors are fitted with
- 24V DC coils
 - LED visual display of the state of the coils
 - quick-fit joints for Ø4mm tubes
 - fitted on mountings with silencers
- Vacuum generator
- One of the actuators is fitted with a suction grip with its vacuum system. An adjustable threshold vacuostat delivers an electrical presence or absence of vacuum signal. A vacuumeter allows visual checking on the vacuum.
- Jacks protection
- To avoid any risk of destroying a pneumatic jack, an entirely pneumatic logic system (without student access) prevents the simultaneous movement of the horizontal jack with a vertical jack.

ELECTRIC BOX

- Contains a regulated 24V DC 2A source to feed the PLC if necessary if it does not have an internal supply. The necessary supplies to the model.
- A Start cycle button, a Stop cycle button,
- a reset button.
- a general emergency button stopping the electric and pneumatic supplies.
- The connector which the user connects to the PLC or to the manual control box.

USER'S PROTECTION

- A transparent color door is a barrier between the pneumatic jacks and the user's hand. The opening turns off the air pressure

PLC (only for PNEU99 version)

- 14 inputs / 10 outputs (RELAYS)
- 2 languages : Grafset instructions, contact language.
- Programming : from a PC using a software (included).
- Delivered with a complete and functional program.



OTHER CHARACTERISTICS

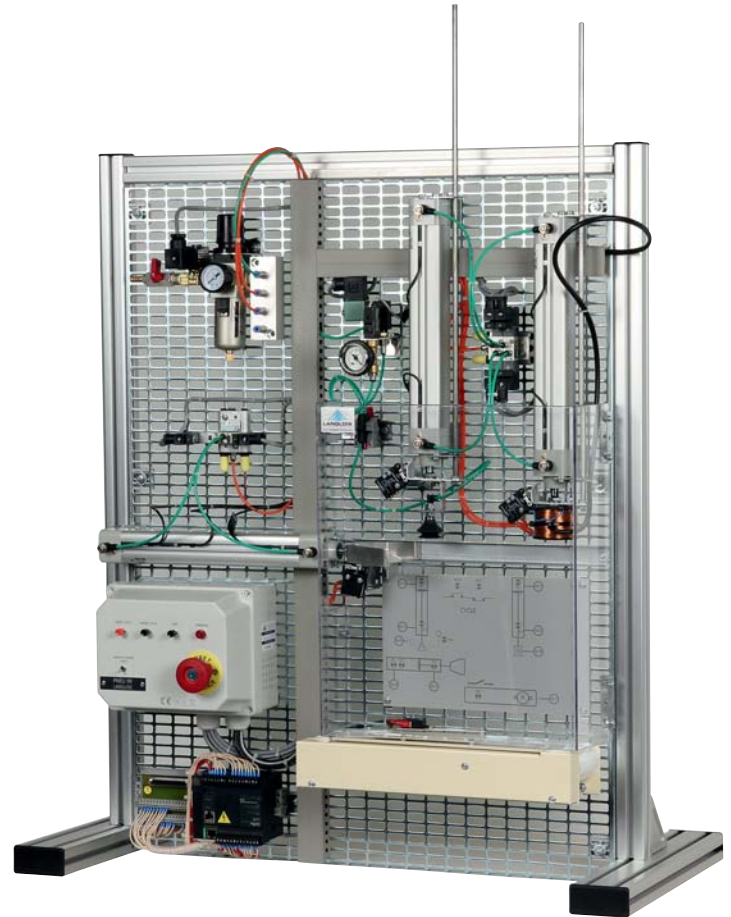
The conveyor belt is either controlled by the automatic system and the end of belt detection switch or by being forced into operation. An electromagnet illustrates picking up by a magnetic field. PNEU** is connected to the air network by splined terminal placed on the valve block of stop + regulator + filter + distribution output by quick coupling.

Dimensions: 820 x 1000 x 460mm.



COMPRESSOR
SEE WEB SITE

ref. PRESS-35



ref. PNEU99 with PLC and software

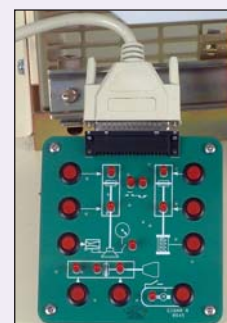
ref. PNEU98 without PLC

EDUCATIONAL OBJECTIVES

- Introduction to pneumatic components
- Programming approach by PLC
- Monitoring of the system in manual or automatic mode

USER'S MANUAL & THEORETICAL COURSES

The model is delivered ready for use (the electric part is completely wired and all the pneumatic connections made). The quick-fit joints allow dismantling/reassembly of pneumatic interconnections with Ø4mm tubes of various colors. A manual gives details of the operation of all the electro-pneumatic components used and their adjustment. Several cycles are described, including one complete with its grafset.



MANUAL CONTROL BOX SUPPLIED

This box contains

- 9 push buttons corresponding to each actuator
- 11 indicator lights which give information about the state of the sensors

It allows very slow observation of pneumatic phenomena and learning about the basic regulation of flow control, actuator speed, and detector positions.