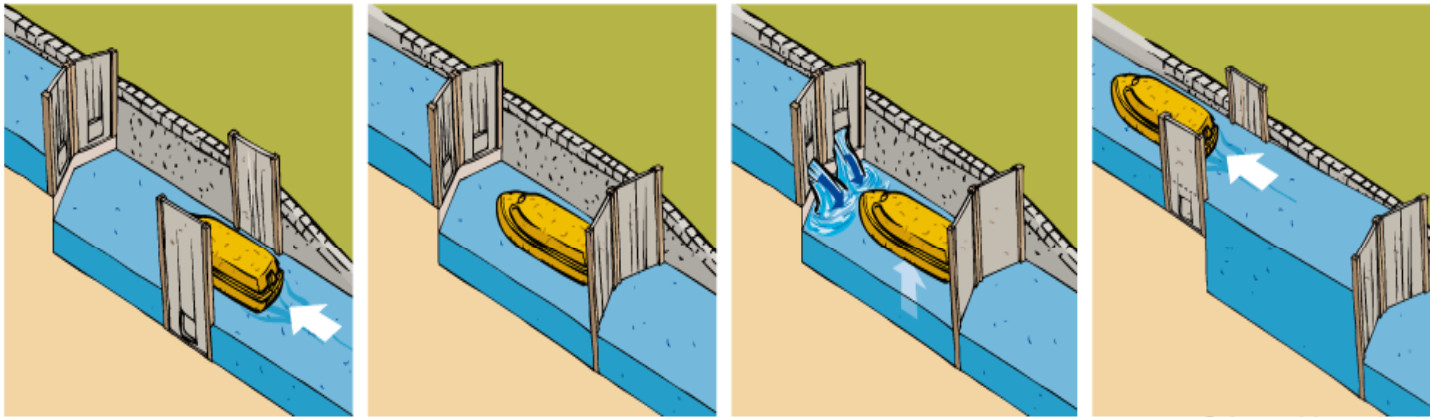


PX022 “WIRING AND PROGRAMMING AN AUTOMATED CONTROL OF A CANAL LOCK”

PRESENTATION OF THE PROJECTX-FINAL LEVEL 1.

The LOCK in the CANAL



© El Perro Pinto creación visual

FOR USE IN THIS CORE AREA: general and particular.

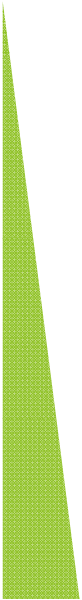
- ▶ GENERAL / KNOWLEDGE: Automation, electricity and pneumatic.
- ▶ PARTICULAR / ACTIVITIES: Assembly, PLC and Maintenance

LEARNING OUTCOMES. Common to be shared.

- ▶ 1. ATMPL04 - Write PLC program for sequential control systems
- ▶ 2. PNMAS01 - Perform installation, configuration and test of a pneumatic systems.
- ▶ 3. ELYAS01 - Installation and commissioning of electrical components
- ▶ 4. ATMPL02 - Develop connections between the PLC and units of automated control systems, robots or SCADA systems.

DURATION

- ▶ Theory: 20 hours
- ▶ Practice: 36 hours



THEORETICAL OBJECTIVES AND ACTIVITIES

OBJECTIVES

- ▶ 1. Pneumatic system
- ▶ 2. Basic Components Pneumatics
- ▶ 3. Elements Pneumatics and Electro-Pneumatic
- ▶ 4. Connection de Pneumatic and Electro-Pneumatic system
- ▶ 5. Electric Element in control system. Sensors and relays.
- ▶ 6. Design and connection electric components.
- ▶ 7. PLC, structure Hardware and software
- ▶ 8.- Software in different language (KOP-AWL-FUP-SCL)
- ▶ 9.- Building SCADA Systems.

ACTIVITIES

- ▶ 1. Assembly of Pneumatics systems and circuits
- ▶ 2. Assembly of a circuit in Electro-Pneumatic systems.
- ▶ 3. Programming PLC and SCADA systems
- ▶ 4. Assembly of wireless elements in project
- ▶ 5. Make software program and simulation.
- ▶ 6. Testing the PLC program
- ▶ 7. Testing the complete installation