

## مق 599- مشروع دبلوم تطبيقات التحكم الأوتوماتيكي لعام 2015/2014 تحت إشراف أ.م/ محسن سليمان- منسق الدبلوم ومدير معمل التحكم ACC

إسم المشروع المقترح: تنفيذ جهاز/وحدة متكاملة للتعليم والتدريب على برمجة وتشغيل أجهزة PLC (الحاكم المنطقي المبرمج)

### Integrated Educational Training Kit for Operation & Programming of Industrial Process Control & PLC Systems

مقدمة عامة- التجارب والمتطلبات الفنية التي يجب توافرها في الجهاز:

#### Overview:

- ✓ Educational Kit should allow for reliable training on engineering processes and PLC systems as close as possible to those in industrial and actual production.
- ✓ The Kit should allow for right “artificial” training processes that are economic, flexible and practical.
- ✓ In addition to Kit-hardware, required training system must include computer-aided Software, Virtual-Labs, and practical exercise methods that ensure very good expertise in automation and PLC technologies.

#### Technical Specifications and Requirements:

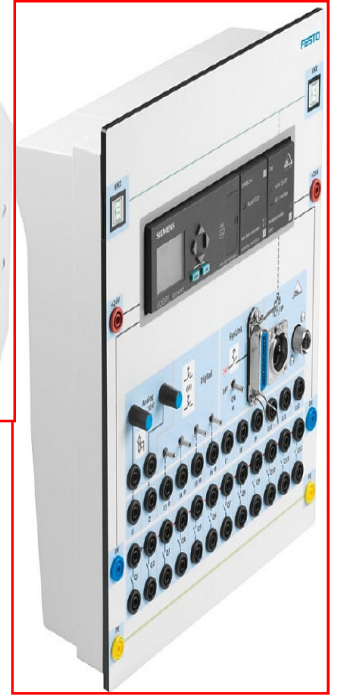
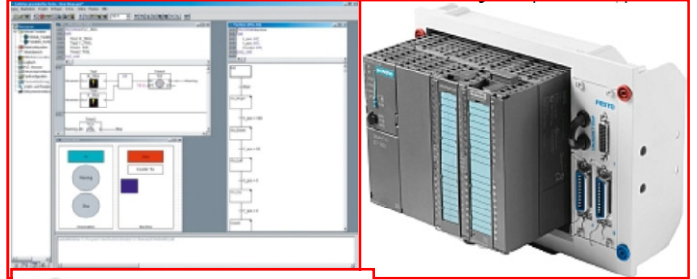
- ✓ Universal holder system with control systems, power supply unit and simulations.
- ✓ Alternative connections for 4mm safety sockets (if a circuit diagram to leads into controller configuration) and for SysLink (SubD or Centronics for complex circuits or if correct wiring is no longer a key focus).
- ✓ Table-top rack or A4 plate for A4 mounting frames.
- ✓ Variable equipment including market leading control systems and 19” simulation plates.
- ✓ Online configuration to provide support in selecting and combining the appropriate components.
- ✓ Flexible hardware & open for all kinds of control tasks.
- ✓ Very simple Kit to commission and to program.
- ✓ Compatible programming software system for range of industrial controllers.
- ✓ Training Kit is to allow for Ethernet communication for simple programming with module library.
- ✓ Software should allow for purely PC-based training in programming.

#### Requirements of Practical exercises and Training Course Documents:

- ✓ Demonstration and clarification of the use of sensors in automation.
- ✓ Demonstration and clarification of the use electro-Pneumatics into PLC technology.
- ✓ Provide a practical introduction to the world of field buses.

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مدير معمل التحكم ACC ومسئول إدارة الدبلوم  
رئيس مجموعة الموائع والمرشد الأكاديمي للمجموعة  
مدير وحدة ضمان الجودة في القسم





نماذج من أجهزة تجارية موجودة في السوق المحلي والعالمى

