

CERTIFICATE

No. 017/MH711-Reg/FRI/X/2004



Drs. SUKIR, MT.

attended successfully the Festo Didactic Training program
from 11 - 14 October 2004

Mechatronics MH 711

in Jakarta

The following subject matter was covered in this seminar:

Identifying and describing the construction, design features and operating principles of:

- Pneumatic and Electro-pneumatic components
- Electronic and pneumatic sensors
- Pneumatic and electric motors

Demonstrating the practical skills to install, commission and troubleshoot (in a safe manner):

- Pneumatic and Electro-pneumatic components
- Electronic and pneumatic sensors
- PLC's and the associated hardware components

Interpreting technical specifications, symbols and data relating to:

- Pneumatic and Electro-pneumatic components
- Electronic and pneumatic sensors
- PLC's and the associated hardware components

Interpreting and describing:

- Pneumatic and Electro-pneumatic circuit diagrams
- Electrical wiring diagrams
- The control systems operating and then troubleshoot in a systematic manner and/or perform adjustment to the system operation

Performing

- Basic interrogation (diagnostics) of PLC operations
- Downloading of software to a PLC in a safe manner and in accordance with manufacturers recommended procedure and then re-commissions the control system

Jakarta, 14 October 2004

Muhammad Purwawanto
Lecturer