CERTIFICATE

No. 020/MH711-Reg/FRI/X/2004

FESTO

YUWONO INDRO HATMOJO, S. Pd.

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