

# Applied technology vs. training or Evolution of training and culture



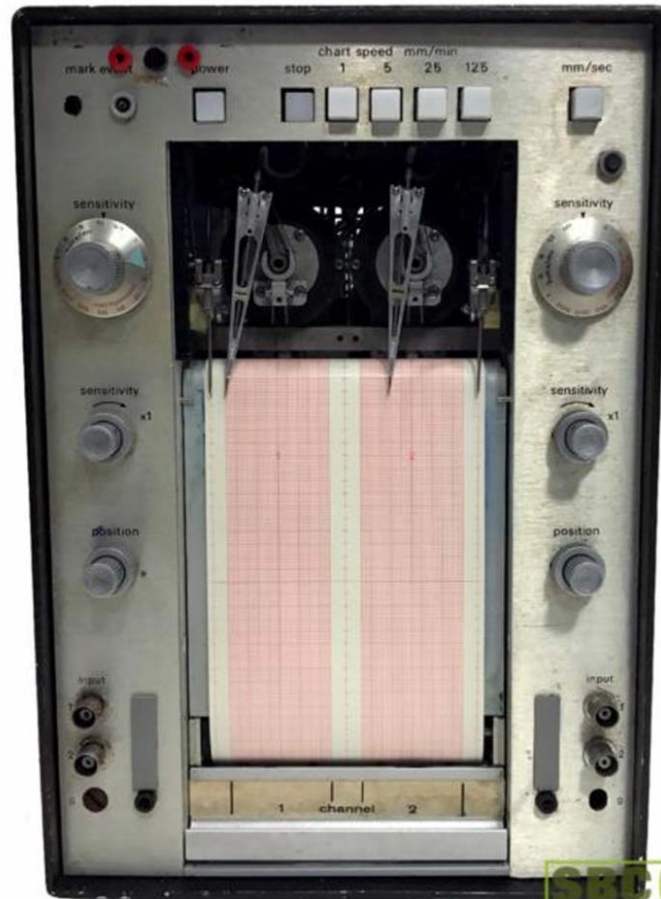
Roger Wallberg  
*Technical Director*  
AIC North America Corp.



# About 40 years ago



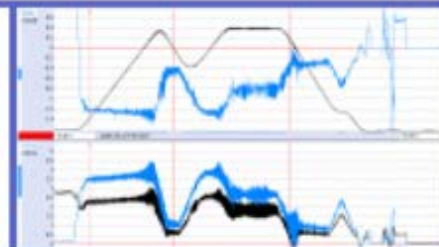
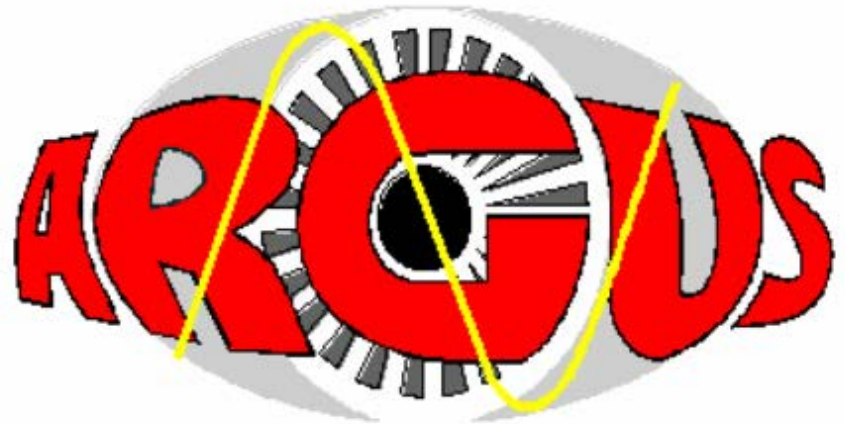
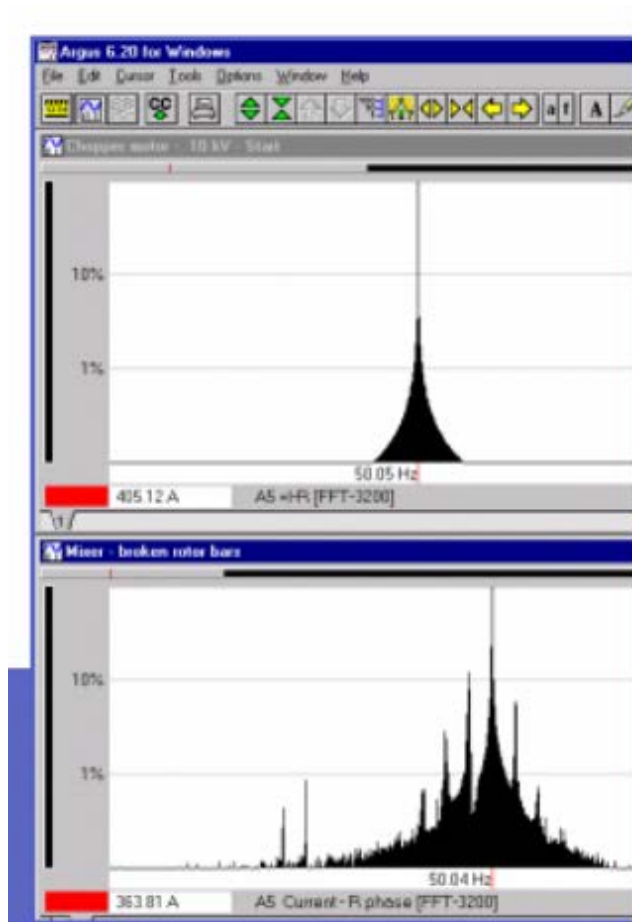
# The grandfather of today's Data Acquisition tools



# The grandfather of today's PLC



# Early Data Acquisition System



# ARGUS from the Greek mythology





# PLC and HMI

- More capacity and faster processors.
  - Simplify Man Machine Interface
  - Better and faster MMI presentation
  - L2 system



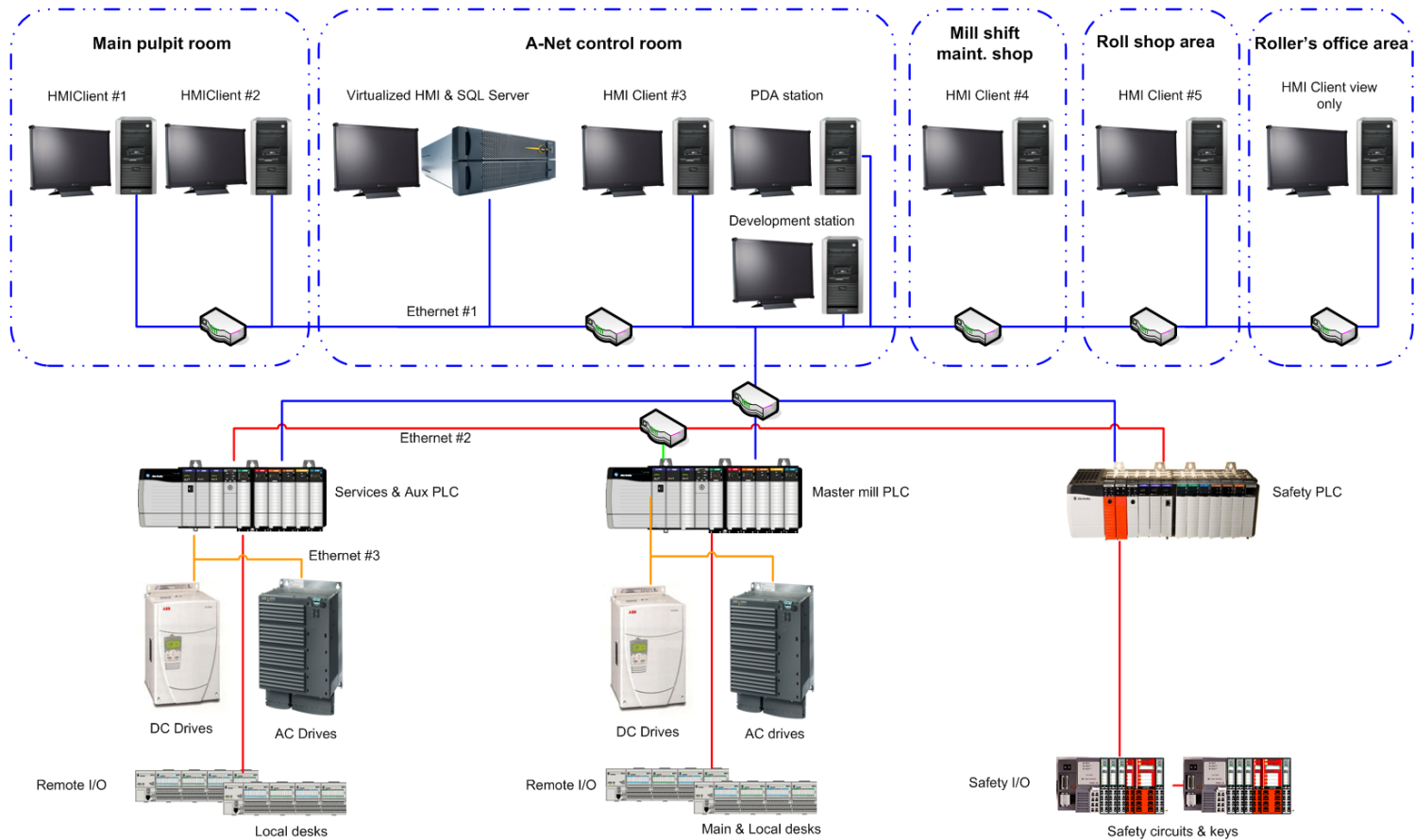
## Resistance to new Technology



and modernization



# Automation and drive systems

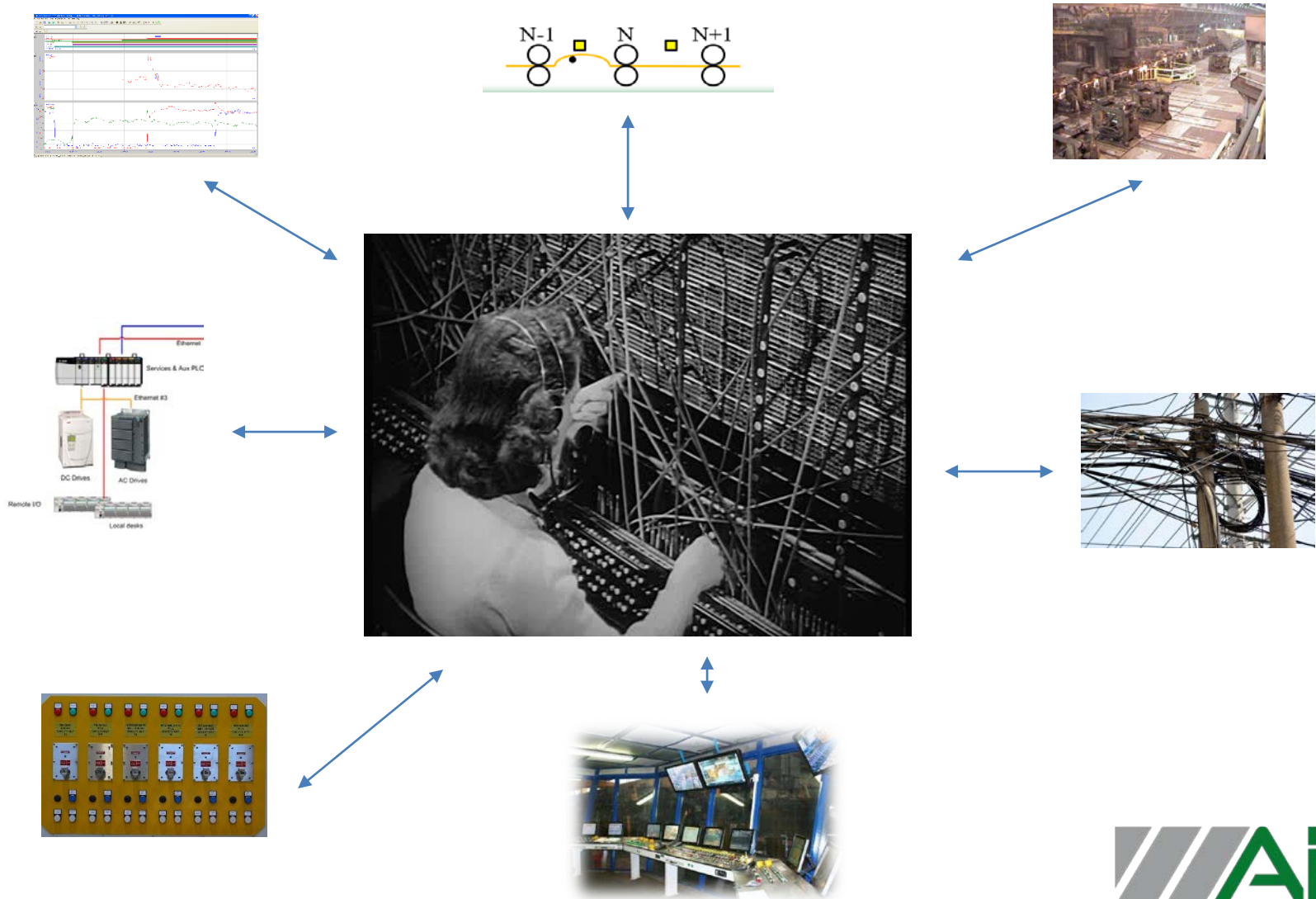


# AC and DC drives

- High precision speed and torque control
  - quick recovery from big load changes
  - better tension control
  - better loop control

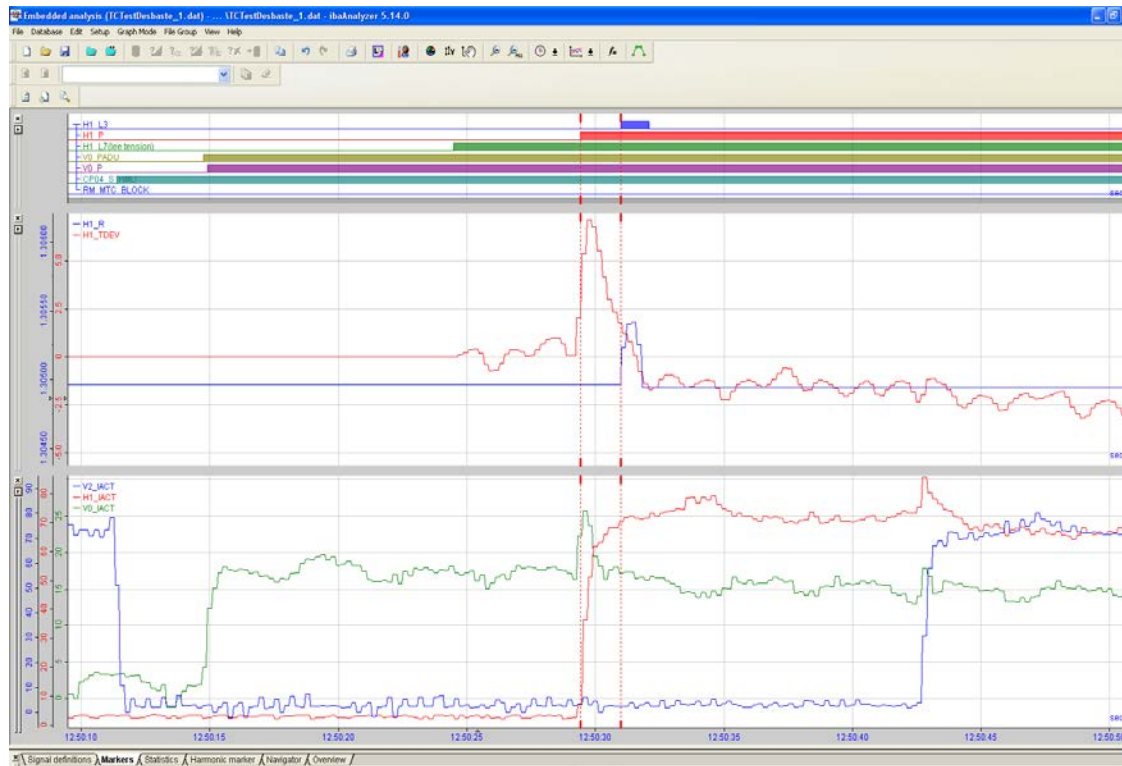


# The challenge to keep the operator up to date.



# Data Acquisition System

- A good training tool



The procedure are focused on:

- Setting up the tension control
- Setting up the loop control
- Improving the recipes
- Improving the start up of the rolling mill
- Preventive rolling.
- Compensate for the pass ware.



### We aim to achieve

- Improve the know how of the automation and rolling process.
- Improve the start up of the mill.
- Improve the setup of the mill.
- Give better analysis tools to control the rolling process.
- Create procedures to assure:
  - Everybody reacts the same way to the same situation.
  - The tasks to are performed when and as requested.
- Improve the speed control and other areas of the automation.
- Continuous improvement.
- Help the customer to improve their KPI's

# Happy ending

