WCC&M!

Wim Cranen, Controls & More!

1988 tot 2001 - Employer: Hegenscheidt-MFD in Erkelenz (Duitsland) and Detroit - Michigan.

Duty:

Senior Electro engineer and senior controls engineer in the automotive industry.

Daily duties:

Leading large projects for several producers of car engines. (Project names: L850, L5/L6, I4/I5, W8/W12, Zetec-1 en Zetec-2, Puma, Lynx, Duratec)

Within the projects responsible for the following items:

- At the offer stage; responsible for the pre-calculation of the electrical side of machinery

- <u>In the negotiation stage</u>; technical negotiations with the customer regarding specifications and standards

- <u>At the production stage</u>; leading a team of electrical engineers, monitoring the progress in the manufacturing, designing and commissioning of hardware and software, composing and writing the manuals and preparation of the machines for the inspection (FAT and SAT) by the customer

- In the acceptance stage (FAT and SAT); monitoring the state of acceptance by the customer

- in het afnamestadium (FAT en ook SAT); voor de begeleiding van de afname door de klant

Lead engineer in a product team.

For each machine type there was composed a team of product specialists in various fields. In two of these teams, I was the control specialist for the hardware and software part. This product teams had the task to continue to develop the machine, to search for cost favorable solutions and to implement standardization and monitor production methods. One can see this as a forerunner of systems like e.g. 6-Sigma and Kaizen.

Development and introduction of ISO9000 certification.

For the introduction of quality management system ISO 9000 and derivatives it was necessary to create teams to describe predefined work standards in each department. For the electric engineering department, I played a leading role with regard to the quality standard for electrical work standards and the archiving of electronic data.

Introduction of CAD for electrical schematics and drawings.

Until 1993 electrical schematics were still drawn on paper. I made myself strong for the introduction of a CAD system with additional software. The choice was AutoCAD at that time, because this system was already known for the mechanical drawings and it also has the necessary flexibility. This is the lowest layer of the system. As a top layer the choice was MG-CAD. This MG-CAD extended AutoCAD with the necessary "intelligence" and functionality for electrical schematics. Thus, parts lists, terminal drawings, cable drawings, plug drawings etc. could be generated. This system is set up and administered by me for a period of approximately 5 years.

Design and implementation of a work standard for a subsidiary.

The company has a subsidiary in Detroit Michigan. Within the department control techniques (controls) the way of standardization at a lower level than in Germany, with bad calculable commissioning times and profitability. Together with a team of three colleagues we have introduced a working standard and monitored this way of working for 2 years.

Introduction and making use of PC 's and laptops instead of programming devices.

In order to reduce the diversity of the proprietary programming equipment we have investigated the possibility to use PC's and laptops instead. This has meant that since the year 1995, no proprietary programming device was used any more in this company, except for service on older controllers.

Adding recourses to the team of straightening programmers

The straightening roller computer was set up within a Siemens Sicomp microcomputer. The operating system used is R-MOS. The applications are programmed in C and C ++.



