

SUMMARY REPORT ON FIRST INDUSTRIAL TRAINING PERIOD

NAME: David Mark Wozny

COURSE OF STUDY: BENG HONOURS COMPUTER-AIDED ENGINEERING

PERIOD OF TRAINING: 8TH OCTOBER 1990 - 8TH FEBRUARY 1991

NUMBER OF WEEKS TRAINING RECEIVED: 17

TASK: TO IMPLEMENT AND DEVELOP A COMPUTER-MANAGED CENTRALISED STORES FACILITY FOR THE MAINTENANCE DEPARTMENT

COMPANY: GEC ALSTHOM TURBINE GENERATORS LIMITED
STAFFORD



A Brief Summary of the Work Undertaken
During my Industrial Training Period
in the Maintenance Department at
GEC ALSTHOM, STAFFORD

The project which I was responsible for during my placement could roughly be divided into two areas:

(i) To transfer all existing machine maintenance items from satellite stores in six different locations throughout the factory, into a newly created centralised maintenance stores located conveniently near the maintenance shop. These obsolete satellite stores then had to be closed down.

(ii) To identify all of the items transferred, label them and keep records of all of these items and their locations. Consumables, such as belts, filters, bearings, fuses, seals, etc. and strategic spares would then be logged onto a specially tailored stores management computer package. This gave us strict control over items which are of critical importance to minimise down time on machine tools during breakdown and other areas under the branch of machine maintenance.

When I arrived there was little control of strategic spares and nearly all of the items in the different satellite locations were unidentified. Therefore, the first logical progression was to identify all the spares held and to establish which items were of strategic importance to the particular machines. When all of the items had been identified, they then needed moving into the centralised maintenance stores. Great emphasis was made on the fact that while there was inevitably going to be a period of disruption during the transfer, it was imperative that maintenance personnel should still be able to locate spares without great difficulty.

I was singularly responsible for the logging of strategic items onto the 'MECCA' computer package. Through close liaison with the maintenance foremen and maintenance personnel, I was able to establish parameters for the items, such as: minimum safety stock level; basis re-ordering quantities and lead times.

I believe that the stores are now in a healthy condition and that with a strict control of items entering and leaving the stores, they will play a large role in the cost effectiveness of the plant as a whole by decreasing down time on critical machine tools.

A Brief Appraisal of the Skills Acquired
and the Experience Gained During my
Industrial Training

Prior to my industrial training period with GEC ALSTHOM my knowledge of engineering was concentrated on the production side of manufacturing: I completed three years of apprenticeship training as a C.N.C. machine tool operator and programmer.

The project which I undertook, to implement and develop a stores facility for the maintenance department, drew relatively little on this past experience on the 'work side of things', however, I believe that my past experience in an industrial environment was of immense benefit in communicating and liaising with the maintenance personnel and members of different departments. I felt confident enough with these people to keep asking questions until I got the responses that I desired. I also feel that the workers treated me as another employee rather than just some student who's come to do as little as possible and to get his placement over with as quick as possible.

A great deal of the project was implemented through my initiatives, e.g. the part numbering creation guidelines and the maintenance stores procedures, with only a general instruction from my superiors. It is this aspect which has made it very satisfying to see the stores working effectively.

The process of routinely identifying all of the items transferred into the centralised stores, helped by the machine fitters, electricians and pipe fitters has given me a thorough understanding in the recognition of machine spares; for instance, I have always known of the clutch in a lathe, but never actually knew what one looked like or how it works, this is not so now!

The logging of consumables and strategic spares onto the stores management computer software run by GEC is primarily an exercise in product control and cost-effectiveness. Information contained on each item includes minimum safety stock and economic re-ordering quantity. These parameters were set after liaison with the relevant maintenance foreman and make it possible to manage each item strictly and ensure that strategic spares for each machine will be available from the stores in the event of breakdown, minimising down time and increasing the cost-effectiveness of the company.