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ASSISTANCE IN ESTABLISHING COMPUTERIZED PRODUCTION/PRODUCTIVITY CONTROL IN WEAVING

SI/HUN/89/801

THE HUNGARIAN PEOPLE'S REPUBLIC

Technical report: Findings and recommendations*

Prepared for the Government of the Hungarian People's Republic by the United Nations Industrial Development Organization, acting as executing agency for the United Nations Development Programme

Based on the work of D. M. MacDonald, consultant in computerized production control

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* This document has not been edited.

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PREFACE

This report is designed as a guide and operating manual for a computerised productivity and quality control system for operation in the weaving plant of DUNASILK in Sopron, Hungary.

The project arose from a UNIDO request for assistance in designing and programming a micro-computer based system for controlling production in a modern weaving plant. The scope of the tasks were outlined in a series of discussions between Mr. H. Boesch of GHERZI and Mr J. P. Moll of UNIDO, and were finalised during discussions held between Mr D. MacDonald of GHERZI, Mr J. P. Moll and the management of Soproni Szovogyar.

From these discussions it was decided to design a customised system, based on the dBase IV programming language, which could address the main problem areas facing the company, namely monitoring quality performance, measuring productivity and controlling loom spare part consumption. A full range of programmes have now been completed and installed to perform these tasks and are described in detail in this report.

During the second visit the company expressed a desire to also have a programme for controlling wages which could run directly from the quality data they would collect under the new system. As this task was outside the original brief and programming time had not been allocated for this task further work will have to be carried out in the future to fulfil the needs of the company in this It should be noted that the file structure of area. the system has been designed with an open architecture to allow for the easy addition of modules of this type and it is to be hoped that the company's own programmers will also undertake further development work on this and other related tasks to ensure that the system keeps pace with the companys needs.

WEAVING PRODUCTIVITY AND QUALITY CONTROL SYSTEM

1. Introduction

This system has been designed to run on an IBM micro computer and has been created using dBase IV. The system can be run as a "stand alone" application on a single PC or can be run on a PC network environment.

This document provides a full description of the system design and operation, and contains samples of the full range of output reports that can be generated from the system. Samples of these reports are included in the appendices of this report. It should be noted however that the data contained in these reports is fictional and is included simply to display the structure of the various reports.

The applications programmes are provided along with the dBase IV development version operating environment which will give users scope for future system expansion or development if required. All data files have been provided with easy access not only from the MENU system but also through the dBase IV Control Centre. This means that the user not only enjoys access to the full range of system reports but can also create new unique queries and reports through the Structured Query Language (SQL) which is included in the dBase package. A full description of all these features and their capabilities is given in the Ashton Tate manuals which accompany the dBase IV programmes. A listing of all the main types of application files created and the function of each group of files is given in the attached Appendices 11.1 to 11.5.

dBase IV PROGRAMME FEATURES

dBase IV is the very latest generation in the dBase family of products. It is a High-Level language with its own command structure which can be used to create a diverse range of data management systems. No knowledge of dBase IV is required to operate this system as all applications programming has been completed by the Gherzi Organisation to provide an easy to use system that is entirely menu driven. However if the operating organisation wishes to undertake any future system development work on the system then an understanding of the dBase IV components and command language is essential.

Full documentation on all the components of the dBase system is provided by Ashton-Tate and is included with the dBase IV software. In addition to the command language it should be noted that dBase IV Developers Edition includes all the following features which are shown schematically in the attached Appendix 12.

- 1) Control Centre user interface.
- 2) Structured Query Language (SOL).
- 3) Query-By-Example facility.
- RunTime capability.
- 5) Template Language.
- 6) Networking capability.
- 7) Applications Generator.

The system also provides a data import/export facility through the control centre medium to give the user an easy means of data transfer between dBase IV and other programmes.

Hardware & Software Configuration

Maximium benefit can be derived from this system when it is run on a networked environment where data collection and report access is made available to multiple users and can be readily expanded to cope with future growth in the use of the system. The hardware and software ordered for installation in Sopron has been selected to fulfil this goal and can be summarised as follows:

a. SYSTEM FILE SERVER

- FUTURE TECHNOLOGY PC-AT 386, Turbo System (at-386/302 Cache)
- High Resolution VGA Colour Graphic Card (800 * 600)
- 14 inch FUTURE VGA Colour Monitor (800 * 600)
- Archive 60/E 60 MB External Streamer

b. TERMINAL 1

- FUTURE TECHNOLOGY PC-AT 286
- Hercules/Colour Graphic Card with Printer Port
- 14 inch Flat Screen Monochrome monitor
- Etherboard (FD 0490)

c. TERMINAL 2

- FUTURE TECHNOLOGY LT-3240 PORTABLE

d. PRINTER

- FUTURE VP-1821 A3 Printer
- Printer Buffer PB-256-2

e. ANCILLARY ITEMS

- 100 m RG 58 Coaxial Cable
- 1 bnc Connector
- 2 Male BNC Kit RG 58
- Printer Cable
- 10 DS/DD 3.5 inch Diskettes
- 10 DS/HD 5.25 inch Diskettes
- 20 DL 600 Streamer Tapes
- 10 Printer Ribbons for VP-1821 Printer

f. SOFTWARE ITEMS

- Novell Advance Netware 2.15 Networking Software
- MS DOS 3.3
- dBase IV Multi-User Development Version.

4. APPLICATION SOFTWARE FOR CONTROL OF WEAVING

4.1 SYSTEM OVERVIEW

This system has been designed to provide a wide range of management information required to successfuly manage a modern weaving factory and will provide data on productivity, quality, spare part consumption and yarn management. The system also contains a module to allow operator wages to be calculated by the computer using the data collected on the volume and quality of cloth produced. The system allows for the creation of detailed reports which analyse production quality and productivity from a range of different view points e.g Article. Weaver, Loom, Mechanic, Shift and Inspector.

The reports are structured to clearly highlight the main problem areas thus giving management the opportunity to tackle the most pressing problems first and improve the overall effeciency of the business. The system requires a degree of discipline in collecting and entering the required quality and productivity data each day but will prove very useful as a management tool in terms of the quality of information it can provide about the weaving operation.

The system has been designed to be entirely menu driven and it is not therefore required that the user has a knowledge of dBase IV programming language in order to operate the system. Any system must however be dynamic in order to keep pace with new demands from users. It is important therefore that at least one person in the organisation is fully familiar with the system design concept. When the system and file structure is understood it is a comparitively simple matter to generate new reports and applications from the dBase IV software that will meet future demands from users. The main inputs which require to be fed into the computer on an on-going basis can be summarised as follows:

- 1. Cloth quality data from Grey Cloth Inspection
- 2. Productivity data from Loom Downtime Sheets
- Loomspare parts issues from Spare-Parts stores issue sheets.

With each of these areas it is important to establish a discipline of data entry to ensure that ALL available relevant data is entered onto the computer system as soon as the data becomes available. This will ensure that the data supplied in the output reports from the system are current, giving management the opportunity to spot variances and adverse trends at an early stage. The input and frequency of entry required for each of the above areas of data collection will be covered in detail in section 4.5 of this report.

Any database system of this nature requires a number of MASTER-FILES which are called into regular use during data entry and in formulation of output documents. This system contains MASTER-FILES covering a range of data topics from the names of weavers, article wage rates etc. Cross checks are available wherever possible to ensure that the required data is in the Master Files, but it is important that good manual support systems are established to ensure that these files are updated when changes occur, for instance when a new weaver joins the company or when an article wage rate is modified etc. Details of all the Master Files held by the system and a description of the data they contain is given in section 4.3 of this report.

It should be noted that the system also contains a file structure for controlling the weaving yarn store which can be activated at a future date if required. This yarn monitoring system is not envisaged for use at the present time in Sopron due to the unsatisfactory nature of the present yarn coding system in use in the company. A full description on the use of the yarn stock system and its associated output reports is given in section 4.6 of this report. When a new yarn coding system is introduced at Sopron, consideration should then be given to using the yarn stock reports available.

In designing the structure of the system database, file sizes have been kept as small as possible to speed data processing and to make the system as flexible as possible so that it can be easily modified or expanded to meet additional requirements from the company.

4.2 MAIN MENU

On entering the database system the main menu appears offering the user the following menu options.

- 1 SYSTEM MASTER FILE CONTROL
- 2 SYSTEM DATABASE CONTROL
- 3 INPUT DATABASE RECORDS
- 4 OUTPUT REPORT MENU
- 5 RE-INDEX ALL SYSTEM FILES
- 6 ACCESS DATABASE PROMPT
- 7 LEAVE DATABASE SYSTEM

Each of these options in turn leads to a range of sub-menus, the function and operation of which will now be explained in detail.

4.3 SYSTEM MASTER FILE CONTROL - (Main Menu Item 1)

The central feature of any database system are the data files which hold all the information required for the system to fulfil its function. In dBase IV related information which belong together logically are grouped into data base files and assigned the file extension .dbf by the system. Each file consists of a number of fields which hold specific types of information which has been determined during the file structure design stage. This option allows the user direct access to all the database files which have been classified as MASTER FILES, and it is important that these files are always kept up to date. A full listing of these Master Files and a description of the type of information they contain is given in Appendix 3.

If this option is selected the system will display a sub-menu offering the following options:

- 1. VIEW DATABASES
- 2. EDIT DATABASES
- 3. ADD NEW RECORDS TO DATABASES
- 4. OBTAIN DATABASE PRINTOUTS

Each of these menu items in turn lead to further sub-menus which allow the user to VIEW files, EDIT files, APPEND data to files or to take PRINTOUTS of entire files. Each menu item provides access to the following MASTER FILES:

- 1 List of Looms
- 2 List of Spare Parts
- 3 List of Mechanics
- 4 List of Cloth Faults
- 5 List of Loom Stop Reasons
- 6 List of Weavers
- 7 List of Sub-Contractors
- 8 Yarn Master Files
- 9 List of Articles
- 10 List of Cloth Inspectors

The VIEW and EDIT options are designed to offer an easy method of Viewing or Editing the data held in the above system database files. It is recommended that unless specific changes to the data in the files is envisaged the user should select the VIEW option to avoid accidental changes to data when scanning the files. When the system is in the VIEW mode it is impossible for the user to alter the stored data.

The ADD NEW RECORDS option is designed to give a customised entry screen for adding new records to each of the above Master Files. It should be noted that if any errors are made during the process of ADDING new records these can be quickly modified in the EDIT mode. The OBTAIN DATABASE PRINTOUTS option is designed to allow the user to call for hardcopy printouts of all the records in each of the Master Files which is printed in customised report formats. Samples of these reports are shown in appendices 1.1 - 1.9.

Appendix 1.1 shows the Loom List Report. This file holds the datails of all the looms in the factory that are available for production and the code number for each loom.

Appendix 1.2 shows the Loom Spare Part List. This file holds the details of all the spare parts that can be used by the looms and the code number allocated to each of these parts.

Appendix 1.3 shows the Loom Mechanics List. This file holds the details of all loom mechanics employed by the factory and the code number allocated to each mechanic.

Appendix 1.4 shows the Cloth Faults List. This file holds the details of all possible cloth faults that can occur and the code number allocated to each of these fault groups.

Appendix 1.5 shows the Loom Stoppage Reasons List. This file holds details of all possible reasons for a loom being stopped and the code number associated with each stoppage reason.

Appendix 1.6 shows the Weavers List. This file holds details of all the weavers employed by the factory and the code number allocated to each weaver.

Appendix 1.7 shows the Sub-Contractors List. This file holds the details of all companies for whom sub-contract work is likely to be carried out and the code number allocated to each of these companies.

Appendix 1.8 shows the Articles List. This file holds the technical details of all products likely to be woven at the factory and the article code number allocated to each of these products.

Appendix 1.9 shows the Cloth Inspectors List. This file holds details of all cloth inspectors employed by the factory and the code number allocated to each of the inspectors.

On selecting item 8 on the previous menu "YARN MASTER FILES" the user is presented with a menu offering the following selections:

- 1 YARN DESCRIPTIONS FILE
- 2 YARN COUNT FILE
- 3 YARN FILAMENTS FILE
- 4 YARN TWIST FILE
- 5 YARN TWIST DIRECTION FILE
- 6 YARN PACKAGES FILE
- 7 YARN SUPPLIERS FILE
- 8 YARN SHADE FILE
- 9 YARN BUYERS FILE

Each of these options offers the user the chance to obtain printouts of all the Master Files which are used to define various yarn perameters.

Sample printouts of each of these files are shown in the attached Appendices 2.1 - 2.9.

Appendix 2.1 shows the coding and description given to the various types of yarns that can be used in the company. This 3-digit code number forms the first 3 digits in the 12 figure code used for yarn coding at Sopron.

Appendix 2.2 shows the coding used for the various yarn count groupings in the company. This 3-digit code number forms the second 3 digits in the 12 figure code used for yarn coding at Sopron.

Appendix 2.3 shows the coding used for the number of filaments contained in each yarn. This 2-digit code number forms the 7th and 8th digits in the 12 figure code used for yarn coding at Sopron.

Appendix 2.4 shows the coding used for the yarn twist (tpm) contained in each yarn. This 2-digit code number forms the 9th and 10th digits in the 12 figure code used for yarn coding at Sopron.

Appendix 2.5 shows the coding used for the yarn twist direction in each yarn. This 1-digit code number forms the 11th digit in the 12 figure code used for yarn coding at Sopron.

Appendix 2.6 shows the coding used for the various yarn packages in use. This 1-digit code number forms the 12th digit in the 12 figure code used for yarn coding at Sopron.

Appendix 2.7 shows the coding used for the various yarn suppliers in use.

Appendix 2.8 shows the coding used for the various yarn shades in use.

Appendix 2.9 shows the coding used for the various yarn waste purchasers used by the company.

4.4 SYSTEM DATABASE CONTROL (Main Menu Item 2)

This menu option permits access to the system data files which the user is allowed to VIEW or EDIT. These files are again classified as database files and contain the dBase IV file extension .dbf. They differ from the Master Files only in the type of information they hold. These system databases are being constantly updated with new data that is collected each day, whereas the Master Files hold data that is changed infrequently and is called by the system when required to compose various reports.

On selecting this menu option the user is offered a choice of VIEWING or EDITING System Databases. Again it is recommended that unless specific changes are envisaged to the data held on file the user should select the VIEW option to avoid accidental changes to data when scanning the files. When the system is in the VIEW mode it is impossible for the user to alter the stored data. Both the VIEW and EDIT options give access to a menu offering the following selections:

- 1 QUALITY RECORDS BY DATE
- 2 QUALITY RECORDS BY LOOM
- 3 QUALITY RECORDS BY WEAVER
- 4 SPARE PART ISSUES BY DATE
- 5 SPARE PART CURRENT STOCK
- 6 PRODUCTIVITY RECORDS BY DATE

This menu offers direct access to the most important system files, QUALITY.dbf which holds details of cloth quality, PARTISSU.dbf which holds details of loom spare part issues, PARTSTOC.dbf which contains details of spare-part stock and PRODO.dbf which holds all loom efficiency records. As these files are of central importance to the system a full description is given in the attached Appendices 10.1 to 10.3. Each of these files is made available through the menu in an indexed or ordered format which makes it easier for the user to locate specific records of interest.

4.5 INPUT DATABASE RECORDS (Main Menu Item 3)

The function of this menu item is to give access to an entry format for adding new information to the main system database files. On selecting this option from the main menu a sub-menu appears offering the user the following options:

- 1. INPUT PRODUCTIVITY INFORMATION
- 2. INPUT QUALITY INFORMATION
- 3. INPUT SPARE-PART INFORMATION
- 4. INPUT YARN INFORMATION.

Each of these options gives the user a method of appending new data into the appropriate files and has a series of security checks to verify that the data being entered is valid. The operation of each of these entry programmes will now be described in more detail.

INPUT PRODUCTIVITY INFORMATION

The function of this item is to allow the user to enter data relating to loom productivty. The system operates by retaining data on the articles running on each loom including the pick reading at the end of each shift. This is expressed as a % against the theoretical maximium number of picks a loom could produce in a shift, bearing in mind loom speed and shift duration. On selecting this option the user is immediately presented with a sub-menu offering the following choices:

- 1. ENTER SHIFT PRODUCTION DATA
- 2. UPDATE PRODUCTION MASTER FILE
- 3. UPDATE PICK READING FILE

The first option ENTER SHIFT PRODUCTION DATA allows the user to enter daily productivity data from the loom sheets into the file PRODO.dbf. The user is first prompted for the required loom number and if a valid code number is given a customised entry screen is presented. The DATE, shift DURATION, LOOM code and ARTICLE fields are filled in automatically by the computer from MASTER FILE data but can be overwritten by the operator if required. When an entry has been completed by the user the following checks are carried out by the computer before the entry is added to the file:

- a) Loom code number is checked to ensure the loom exists in the Master File LOOM.dbf.
- b) Article code number is checked to ensure that it exists in the Master File ARTICLE1.dbf.
- C) Weavercode number is checked to ensure that it exists in the Master File WEAVER.dbf.
- d) The Loom code number is checked to ensure that it exists in the pick counter reading file LASTREAD.dbf.
- e) The calculated picks inserted in the shift are compared to the theoretical maximium possible picks. If calculated picks exceed the maximium a warning is given offering the user the chance to accept or reject the last entry.

If all the criteria listed in points a) to e) are accepted then the entry is added to the file and the user is given the option of adding further entries for the same loom, adding an entry for a new loom or terminating the productivity data entry procedure.

The second menu option UPDATE PRODUCTION MASTER FILE allows the user to update a file called LOOMAST.dbf. This file holds data about the article currently being woven on each of the company's looms and should be updated each time a new warp is loaded onto a loom. A full description of the file LOOMAST and the type of data it holds is given in the attached Appendix 10.4. This file is important as it is used to update the data entry screen for daily productivity entries, so speeding up this process. The file is also at the heart of another programme which predicts when each loom will require a warp change. On entering the option UPDATE PRODUCTION MASTER FILE the user is prompted to answer the following questions about the required loom:

- a) The code number of the article to be woven.
- b) The expected cloth length to be woven.
- c) The pick counter reading at the start of weaving.
- d) The loom speed in picks per minute.
- e) The code number of the warp to be woven.

If valid entries are made for each of the above questions the programme calaculates the total picks required and pick reading expected at the end of the weaving and stores all this data under the correct loom number in the file LOOMAST.dbf.

The third menu option UPDATE PICK READING allows the user to update a file called LASTREAD.dbf. This file contains the last recorded pick reading for each loom in the company and is updated automatically every time the user makes a valid daily productivity entry. This menu option gives the user a facility to update this reading manually if required. The user is prompted for a loom code number and when a vaild code is given the new pick reading is requested and this value then overwrites the existing value in the file.

INPUT QUALITY INFORMATION

The function of this item is to allow the user to enter the data relating to cloth quality which is extracted from the sheets completed by the grey cloth inspection department. All data entered from this menu option is stored in the system file QUALITY.dbf. On selecting this option from the menu the user is prompted to enter the code number of the loom for which a data entry is intended. When a valid code number is given the user is given a customised entry screen. When the entry of all the data shown on the screen has been completed the following checks are carried out by the computer before the entry is added to the QUALITY.dbf file:

- a) Loom code number is checked to ensure that the loom exists in the Master File LOOM.dbf.
- b) Article code number is checked to ensure that the article exists in the Master File ARTICLE1.dbf.
- c) Weaver code number is checked to ensure that it exists in the Master File WEAVER.dbf.
- d) A cross check is made to ensure that the total quantity inspected balances with the total designated as 1st quality, 2nd quality, 3rd quality and rags.
- e) A check is made to ensure that a wage rate exists in the file WAGERATE.dbf for the combination of article and machine limitation code submitted.

If all the criteria listed above are met then the entry is added to the file and the user is given the option of adding further data for the same loom, adding data for a different loom or terminating the entry sequence for quality data.

INPUT SPARE PART INFORMATION

The function of this item is to allow the user to enter data related to the issue and receipt of loom spare parts. On selecting this menu item the user is presented with a sub-menu offering the following choices:

- 1. ENTER SPARE PART ISSUES
- 2. ENTER SPARE PART RECEIPTS
- 3. SPARE PART STOCK ADJUSTMENT

The first option ENTER SPARE PART ISSUES gives a customised entry screen which asks the user for the code number and loom to which any spare part issued from stores has been allocated. The system checks that both the part code number and the loom code actually exist in their respective master files, and if they do the programme moves the entry and the issue date into a file called ISSUES.dbf and automatically reduces the stock position of that spare part by the issued volume.

The second option ENTER SPARE PART RECEIPTS is designed to handle data entry for delivery of loom spare parts into stock. This option also produces a customised data entry screen which asks for the code number of the part received and the date of delivery of the part. If the part number given is held on the SPARES.dbf master file then the entry will be accepted and the stock position for that part number increased by the quantity delivered.

The third menu option SPARE PART STOCK ADJUSTMENT is designed to give an easy method of manually adjusting the stock quantity for any spare part code number. On selecting this option the file PARTSTOC.dbf is opened in edit mode on the screen to allow the user direct access to the contents of the file. This option should prove useful if any stock adjustments have to be made following stock-taking etc.

4.6 OUTPUT REPORTS MENU (Main Menu Item 4)

This option gives the user access to a series of menus for calling the output reports that the system generates. The reports have been designed to allow the user to specify the time period that the report should cover, and to give a detailed view of the company's performance from a range of different viewpoints. The system at present contains a wide range of reports which will be described in detail in the following pages. It should be noted also that the dBase IV file structure and programming tools provided mean that it is also a relatively simple task for users to create further unique reports from the existing files and data that is collected. On selecting the OUTPUT REPORTS MENU the user is immediately presented with a screen offering the following options:

- 1. QUALITY REPORTS MENU
- 2. PRODUCTIVITY REPORTS MENU
- 3. STOCK REPORTS MENU
- 4. WAGES REPORTS
- 5. MULTIPLE REPORTS

Each of these items gives access to further sub-menus which offer the user access to a series of reports on the above topics which can be summarised as follows:

QUALITY REPORTS MENU

This item offers the user access to the full range of quality related reports generated by the system. On selecting this option the user is presented with a menu offering the following selections:

- 1 WEAVER QUALITY REPORTS
- 2 WEAVER FAULT ANALYSIS
- 3 LOOM QUALITY REPORTS
- 4 LOOM FAULT ANALYSIS
- 5 MECHANIC QUALITY REPORTS
- 6 ARTICLE QUALITY REPORTS
- 7 QC-INSPECTOR REPORTS
- 8 SHIFT QUALITY REPORT
- 9 WARP QUALITY REPORTS

Option 1 WEAVER QUALITY REPORTS gives two possible reports which analyse the quality of production being given by individual weavers. Both reports can be based on any time period that the user cares to define. The first report, which summarises the volume of 1st, 2nd, 3rd and 4th quality being

produced by each of the company's weavers is illustrated in the attached Appendix 5.01 The report is indexed to show in descending order the weavers credited with the highest volume of "Non-1st Quality" cloth. The second available report on weaver quality which is illustrated in the attached Appendix 5.02 gives a listing of the Quality History for any individual weaver over any time period that the user cares to define. This report should be useful for spotting quality trends with individual weavers.

Option 2 WEAVER FAULT ANALYSIS gives a detailed analysis of the distribution of cloth faults to display the type of faults most frequently occuring and the weavers which produce the greatest number of faults. A sample to illustrate the structure of this report is shown in the attached Appendix 5.03. It should be noted that this report is again indexed to show in descending order the weavers who generate the highest number of cloth faults. The report also summarises the factory's average number of faults recorded/100 LM which should allow the company to monitor the situation over a period of time and gauge the effectiveness of any actions taken to improve cloth quality.

Option 3 LOOM QUALITY REPORTS gives two possible reports which analyse the quality of production being given by the individual looms. reports can be based on any time period that the user cares to define. The first report, which summarises the volume of 1st, 2nd, 3rd and 4th quality being produced by each of the company's looms is illustrated in the attached Appendix 5.04. The report is indexed to show in ascending order the looms credited with the highest volume of "Non-1st Quality" cloth. The second available report on loom quality which is illustrated in the attached Appendix 5.05 gives a listing of the Quality History for any individual loom over any time period that the user cares to define. This report should be useful for spotting quality trends with individual looms.

Option 4 '.OOM FAULT ANALYSIS gives a detailed analysis of the distribution of cloth faults to display the type of faults most frequently occuring and the looms which produce the greatest number of faults. A sample to illustrate the structure of this report is shown in the attached Appendix 5.06. It should be noted that this report is again indexed to show in descending order the looms which generate the highest number of cloth faults. The report also summarises the factory's average number of faults recorded/100 LM which should allow the company to monitor the situation over a period of time and gauge the effectiveness of any actions taken to improve cloth quality.

Option 5 MECHANIC QUALITY REPORTS gives three possible reports which analyse the quality of production being given by individual mechanics. Both reports can be based on any time period that the user cares to define. The first report, which summarises the volume of 1st, 2nd, 3rd and 4th quality being produced by each of the company's mechanics is shown in the attached Appendix 5.07. The report is indexed to show in descending order mechanics credited with the highest volume of "Non-1st Quality" cloth.

The second available report on mechanic quality which is illustrated in the attached Appendix 5.08 gives a listing of the Quality History for any individual mechanic over any time period that the user cares to define. This report should be useful for spotting quality trends with individual weavers.

The third available report is the MECHANIC FAULT ANALYSIS which gives a detailed analysis of the distribution of cloth faults to display the type of faults most frequently occuring and the mechanics who produce the greatest number of faults. A sample to illustrate the structure of this report is shown in the attached Appendix 5.09. It should be noted that this report is again indexed to show in descending order mechanics who generate the highest number of cloth faults. The report also summarises the factory's average number of faults recorded/100 LM which should allow the company to monitor the situation over a period of time and measure the effectiveness of any actions taken to improve cloth quality.

Option 6 ARTICLE QUALITY REPORTS gives two possible reports which analyse the quality of production being given on each of the company's articles. Both reports can be based on any time period that the user cares to define. The first report, which summarises the volume of 1st, 2nd, 3rd and 4th quality being produced on each of the company's articles is illustrated in the attached Appendix 5.10. The report is indexed to show in descending order the articles which generate the highest volume of "Non-1st Quality" cloth. The second available report on article quality which is illustrated in the attached Appendix 5.11 gives a listing of the Quality History for any individual article over any time period that the user cares to define. This report should be useful for spotting quality trends with individual articles.

Option 7 QC-INSPECTOR REPORTS gives two possible reports which analyse the quality of production being passed by the QC Inspectors. Both reports can be based on any time period that the user cares to define. The first report, which summarises the volume of 1st, 2nd, 3rd and 4th quality being passed by each of the company's inspectors is

illustrated in the attached Appendix 5.12. The report is indexed to show in descending order the inspectors credited with detecting highest volume of "Non-1st Quality" clotn. The second available report on inspector quality which is illustrated in the attached Appendix 5.13 gives a listing of the Quality History for any individual inspector over any time period that the user cares to define. This report should be useful for spotting quality trends with individual QC Inspectors.

Option 8 SHIFT QUALITY REPORT produces a report which analyses the quality of production coming from individual shifts within the factory. The report which summarises the volume of 1st, 2nd, 3rd and 4th quality cloth produced on each shift is illustrated in the attached Appendix 5.14. The report indexes in ascending order the shifts producing the highest volume of "Non-1st Quality" cloth.

Option 9 WARP QUALITY REPORTS gives two possible reports which analyse production quality from the standpoint of individual warps. The first report summarises the volume of 1st, 2nd, 3rd and 4th quality cloth, and the number of faults detected by individual warp is illustrated in the attached Appendix 5.15. This report can be based on any user defined time period. The second available warp report is shown in the attached Appendix 5.16 and is intended as a daily summary report to show the quality of production on any user defined date.

PRODUCTIVITY REPORTS MENU

This item offers the user access to the full range of productivity related reports generated by the system. On selecting this option the user is presented with a menu offering the following selections:

- 1 LOOM DOWNTIME REPORT
- 2 LOOM EFFICIENCY REPORT
- 3 WEAVER DOWNTIME REPORT
- 4 WEAVER EFFICIENCY REPORT
- 5 MECHANIC DOWNTIME REPORT
- 6 MECHANIC EFFICIENCY REPORT
- 7 ARTICLE EFFICIENCY REPORT
- 8 WARP COMPLETION FORECAST
- 9 LOOM EFFICIENCY BY LOOM WIDTH

Option 1 LOOM DOWNTIME REPORT produces a report which analyses loom downtime distribution over the predetermined loom stoppage codes to highlight the most frequently occuring sources of lost time and to show which looms have the highest number of lost hours. Appendix 6.1 shows a

sample output which illustrates the structure of this report. It should be noted that this report is indexed to show in descending order the looms which have the highest percentage of lost time. This report can again be called for any user defined time period and shows an average lost time % for the company as a whole so that the effectiveness of any actions taken can be gauged over a period of time.

Option 2 LOOM EFFICIENCY REPORT produces a report which analyses loom efficiency for all looms over any user defined time period. Efficiency for this purpose is measured as actual picks inserted expressed as a % of the theoretical maximium number of picks that could have been inserted during the defined time period. Appendix 6.2 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed on the Lost Time field to show in descending order the looms with highest number of lost time hours.

Option 3 WEAVER DOWNTIME REPORT produces a report which analyses weaver downtime distribution over the predetermined loom stoppage codes to highlight the most frequently occuring sources of lost time and to show which weavers have the highest number of lost hours. Appendix 6.3 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed to snow in descending order the weavers who have the highest percentage of lost time. This report can again be called for any user defined time period and shows an average lost time % for the company as a whole so that the effectiveness of any actions taken can be measured over a period of time.

Option 4 WEAVER EFFICIENCY REPORT produces a report which analyses weaver efficiency over any user defined time period. Efficiency for this purpose is measured as actual picks inserted expressed as a % of the theoretical maximium number of picks that could have been inserted during the defined time period. Appendix 6.4 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed on the Lost Time field to show in descending order the weavers with the highest number of lost time hours.

Option 5 MECHANIC DOWNTIME REPORT produces a report which analyses mechanic downtime distribution over the predetermined loom stoppage codes to highlight the most frequently occuring sources of lost time and to show which mechanics have the highest number of lost hours. Appendix 6.5 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed to show in descending order the mechanics who have the highest percentage of lost time. This report can again be called for any user defined time period and shows an average lost time % for the company as a whole so that the effectiveness of any actions taken can be gauged over a period of time.

Option 6 MECHANIC EFFICIENCY REPORT produces a report which analyses mechanic efficiency over any user defined time period. Efficiency for this purpose is measured as actual picks inserted expressed as a % of the theoretical maximium number of picks that could have been inserted during the defined time period. Appendix 6.6 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed on the Lost Time field to show in descending order the mechanics with the highest number of lost time hours.

Option 7 ARTICLE EFFICIENCY REPORT produces a report which analyses article efficiency over any user defined time period. Efficiency for this purpose is measured as actual picks inserted expressed as a % of the theoretical maximium number of picks that could have been inserted during the defined time period. Appendix 6.7 shows a sample output which illustrates the structure of this report. It should be noted that this report is indexed on the Lost Time field to show in descending order the articles with highest number of lost time hours.

Option 8 WARP COMPLETION FORECAST produces a report which predicts when a warp is due to be finished weaving. The report works on the principle of calaculating the total picks required in each warp and comparing this to the known number of picks which have already been inserted at the time this report is called. Using the known loom speed and previous efficiency % achieved for the article it is possible to convert outstanding picks to be inserted into hours of weaving time. Appendix 6.8 shows a sample output which illustrates the structure of this report. It should be noted that the report is indexed on the PICKS REOD field to show in ascending order the looms with the least number of picks still required to complete the warp.

Option 9 LOOM EFFICIENCY BY LOOM WIDTH produces a report which analyses loom efficiency by loom width groupings over any user defined time period. Appendix 6.9 shows a sample output which illustrates the structure of this report. Efficiency for this purpose is measured as actual picks inserted expressed as a percentage of the theoretical maximium number of picks that could have been inserted during the defined time period. It should be noted that this report is presented in natural order.

STOCK REPORTS MENU

This item offers the user access to the full range of productivity related reports generated by the system. On selecting this option the user is presented with a menu offering the following selections:

- 1. LOOM SPARE PART CONSUMPTION
- 2. LOOM SPARE PART STOCK
- 3. YARN STOCK REPORTS

The LOOM SPARE PART CONSUMPTION option makes available a total of four separate reports which are offered on a sub-menu as follows:

- SPECIFIC LOOM REPORT
- LOOM SUMMARY REPORT
- PART ISSUES BY PART-CODE
- PART ISSUES BY QUANTITY

The SPECIFIC LOOM REPORT gives details of the spare part consumption of any individual loom within the factory. The user simply supplies the loom number and the time period that the report is to be based on. A sample output illustrating the structure of this report is shown in the attached appendix 7.1. The report is indexed on the date of spare part issue and should prove to be a useful report for spotting looms which are using high quantities of particular parts due to some other underlying problem with the machine.

The LOOM SUMMARY REPORT gives details of the volume and value of parts consumed by all the looms in the company for any particular user defined time period. A sample output illustrating the structure of this report is shown in the attached Appendix 7.2. This report is indexed by Value of Parts Issued in ascending order to highlight looms with a high consumption rate. From the details supplied in this report the user may want to run the SPECIFIC LOOM REPORT for the worst offending looms in terms of spares expenditure to get exact details of which parts were being used by the machine.

The PART ISSUE BY PART-CODE report gives details of the spare part consumption for all spare parts for any user defined time period. A sample output illustrating the structure of this report is shown in the attached Appendix 7.3. The report is indexed by spare-part code number and lists the quantity, cost and total value of issues made for each part held in the Spares Master File.

The PART ISSUES BY QUANTITY report is identical in structure to the PART ISSUES BY PART-CODE report outlined above except that this report is indexed by Issue Quantity instead of the spare part code number. A sample output illustrating the structure of this report is shown in the attached Appendix 7.4.

The LOOM SPARE PART STOCK option makes available a total of three separate reports which are offered on a sub-menu as follows:

- CURRENT STOCK BY PART CODE
- CURRENT STOCK BY QUANTITY
- SPARE PART STOCK FORECAST

The CURRENT STOCK BY PART CODE report gives details of the spare part stock in terms of quantity and values and is a real-time report reflecting the situation at the time of calling the report. A sample illustrating the structure of this report is shown in the attached Appendix 7.5. The report is indexed by ascending spare part code number.

The CURRENT STOCK BY QUANTITY is identical to the CURRENT STOCK BY PART CODE report outlined previously except that the index used in presenting the report is based on the quantity held in stock and not on part-code as in the previous report. The report is produced in ascending order of stock quantity to highlight items which are out of stock. A sample output illustrating the structure of this report is shown in the attached Appendix 7.6.

The SPARE PART STOCK FORECAST report shows the issues, current stock, annualised consumption rate and estimated run-out time for the present stock based on the calculated consumption rate. A sample output illustrating the structure of this report is shown in the attached Appendix 7.7. The report is indexed by spare part code number.

The YARN STOCK REPORTS option gives access to a range of programmes designed to control the issue and receipt of yarns for weaving. This section of the system is not envisaged for immediate use at Sopron due to the present outdated system of yarn coding. Yarns are currently coded at the head office with a 12 digit code number, and it is understood that the present system is under review and may be replaced in the near future. The system structure has been designed to fit the present coding system, but this can be easily modified and redesigned to fit with the existing file structure when a new, more logical coding system is implemented within the company.

A brief description of the Yarn Stock options available from the system is given for information purposes. On selecting the YARN STOCK REPORTS option the user is presented with a menu offering the following selections:

- SUMMARY OF YARN ISSUES
- SUMMARY OF YARN RECEIPTS
- CURRENT YARN STOCK REPORT
- SUMMARY OF OLD YARN STOCKS
- YARN QUALITY SUMMARY
- YARN REJECT SUMMARY
- SURPLUS YARN SALES
- SURPLUS YARN WRITE-OFFS

The SUMMARY OF YARN ISSUES report gives the user details of all yarns issued between any user defined dates. A sample output illustrating the structure of this report is shown in the attached Appendix 8.1.

The SUMMARY OF YARN RECEIPTS report gives the user details of all yarns received by the company between any user defined dates. A sample output illustrating the structure of this report is shown in the attached Appendix 8.2.

The CURRENT YARN STOCK REPORT gives the user details of all yarns held in stock at the time the report is called. A sample output illustrating the structure of this report is shown in the attached Appendix 8.3.

The SUMMARY OF OLD YARN STOCKS report gives the user details of all old yarns held in stock. The date prior to which a yarn is classified as old stock is defined by the user from a system prompt. A sample output illustrating the structure of this report is shown in the attached Appendix 8.4.

The YARN QUALITY SUMMARY report provides details of all past yarn quality problems registered for specific suppliers and batches and details the supplier response to the particular problem. A sample output illustrating the structure of this report is shown in the attached Appendix 8.5.

The YARN REJECT SUMMARY report gives details of all yarns which have been classified as rejects, listed by supplier and batch number and detailing the reason for rejection. A sample output illustrating the structure of this report is shown in the attached Appendix 8.6.

The SURPLUS YARN SALES report gives details of all surplus yarns not used by the company, which have been resold to other companies. A sample output illustrating the structure of this report is shown in the attached Appendix 8.7.

The SURPLUS YARN WRITE-OFFS report gives details of all surplus yarns not used by the company which have been written off. A sample output illustrating the structure of this report is shown in the attached Appendix 8.8.

WAGES REPORTS

The system also offers the user the opportunity to incorporate a wages system for weavers and mechanics directly from the data acquired on the volume and quality of the cloths produced. The system works from a Master File called WAGEPATE.dbf which hold details of the wage rates the the company will pay per meter for 1st, 2nd and 3rd quality grades of cloth for every article and loom code combination. This data is then linked with the details of cloth production and volume accredited to each weaver and mechanic which is stored in the file QUALITY.dbf. As with all Master Files it is important that WAGERATE.dbf is always kept up to date as the system will not permit the entry of quality inspection data if no wage rate can be found on file for the article and loom combination being entered.

On entering the WAGES REPORTS option the user is presented with a menu offering the following selections:

- 1. WEAVERS WAGES
- 2. WEAVERS WAGES SUMMARY
- MECHANICS WAGES

Option 1 WEAVERS WAGES offers a report for any user defined time period which details weaver by weaver the volume of cloth produced by grade/article and the corresponding wages due for this production including any bonuses to which the weaver is entitled. A sample output illustrating the structure of this report is shown on the attached Appendix 9.1.

Option 2 WEAVERS WAGES SUMMARY produces a summary report of the Quality of production and total wages paid to each weaver during any user defined time period. A sample output illustrating the structure of this report is shown on the attached Appendix 9.2.

Option 3 MECHANICS WAGES offers a report for any user defined time period which details for each mechanic the volume of cloth produced by grade/article and the corresponding wages due for this production including any bonuses to which the mechanic is entitled. A sample output illustrating the structure of this report is shown on the attached Appendix 9.3.

It should be noted that this wages system is outside the brief of this particular project and further programme development work requires to be carried out before this module can become operational. These programmes can be installed at a future date when programming is completed and will integrate fully with the system as it stands at the present time.

MULTIPLE REPORTS

The MULTIPLE REPORTS option is a feature that is included to speed up the production of QUALITY and PRODUCTIVITY reports. As each of these two sub-sections of the system contain a wide range of reports which will probably be required at the same time (i.e end of the month) this feature allows the user to produce all of these reports in sequence by defining the reporting period only ence and leaving the system to create and print the full range of available reports without any further user inputs. On selecting this option the user is presented with a menu offering the following choices:

- 1. PRINT QUALITY REPORTS
- 2. PRINT PRODUCTIVITY REPORTS

On selecting one or other of these options the user is prompted for the starting and finishing date of the reporting period and the system then produces the full range of Quality or Productivity output reports.

4.7 RE-INDEX ALL SYSTEM FILES (Main Menu Item 5)

In order for the system to operate as speedily as possible and to maintain data integrity the system runs a number of indexes in conjunction with the data files. A special programme is required to keep these indexes up to date and also to maintain the data files in good working order and this programme is accessed through Option 5, RE-INDEX ALL SYSTEM FILES. The programme will remove all redundant records and also move any file updates into the correct indexes. It is strongly recommended that this programme be run whenever data in the files has been EDITED, DELETED, APPENDED or in any way modified to ensure data accuracy. In fact it is often a good routine to establish that this programme is run at the start or finish of every working session with the computer. When this programme is run the system displays a wait message for the user and gives an estimate of the time required for the re-indexing process to be completed. When this programme is being run, access to the system and its files is not permitted.

4.8 ACCESS DATABASE PROMPT (Main Menu Item 6)

This option allows the user direct access to the dBase IV dot prompt. This is important only if the user wishes to look directly at the structure of the application programmes or to carry out some additional programming or file access work. The dBase IV manual supplied with the system gives a full description of the commands contained in the language and a guide to working with dBase from the dot prompt. When the user has finished working from the dBase prompt the main menu for the system can be restored by giving the command DO SOPRON at the dot from the dot prompt.

4.9 LEAVE DATABASE SYSTEM (Main Menu Item 7)

This option allows the user to end a working session with dBase IV and returns control of the system to the DOS environment. It is important to give this command and return to DOS before the system is switched off as the programme ensures that all open files are closed and that data integrity is maintained.

SOFRON WEAVING : LOON LISTING

LOOM CODE	MECHANIC GROUP	M/C TYPE : WIDTH	WEFT ENDS
1201	2	SZTB - 175 Cms	2
1202	2	SITE - 173 Cms	2
1203	2	SZTB - 175 Cms	2
1204	2	SZTB - 175 Cms	2
1205	2	SZTB - 175 Cms	2
1208	2	SITE - 175 Cms	2
1207	3	SZTB - 175 Cms	5
1208	Ē	SZTR - 175 Cms	
1207	<u>.</u>	SITB - 175 Cms	5
1210	ŝ	SITE - 175 Cms	ā
1211	ŝ	SZTB - 175 Cms	<u> </u>
1212	- -	SZTB - 175 Cms	~
1301	2	SITB - 175 Cms	2
1302	2	SZTB - 175 Cms	ž
1303	2	SZTB - 175 Cms	ĩ
1304	5	SITB - 175 Cms	
1305	2	SZTB - 175 Cms	,
1306	÷	SITE - 175 Cms	<u> </u>
1307	** ***	SZTB - 175 Cms	=
1308		SZTB - 175 Cmg	-
1309	∵		~
1313	~ ₹	SITB - 175 Cms SITB - 175 Cms	-
1311	<u> </u>	SITB - 175 Cms	<u> </u>
1312	<u>~</u>	SZTB - 175 Cms	
1401	<u>,</u>		
1402	2	SZTB - 173 Cms SZTB - 175 Cms	2
1403	~		2
1404	adaqabbbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb	SITE - 175 Cms	न्या वा
1405	~	SZTB - 175 Cms	=
1405	÷	SZT0 - 175 Cms	=======================================
1407	-	SZTB - 175 Cms	2
1408		SZTB - 175 Cms	<u> </u>
1409	್ -	SZTB - 175 Cms	= =
1410	-	SITB - 175 Cms SITB - 175 Cms	2
1411	<u>~</u> ~		-
1412		SZTB - 175 Cms	2
1501	3 2 2	SZTB - 175 Cms	2
1502	<u> </u>	SITE - 175 Cms	2
	4	SZTB - 175 Cms	7
1601 1602	4	SZTB - 175 Cms	2
1602	4	SZTB - 175 Cms	2
1604	4	SZTB - 175 Cms	2
1605		SZTB - 175 Cms	2
1606	5	SITB - 175 Cms	2
1607	5	SZTB - 175 Cms	2
1608	5	SITB - 173 Cms	2
1509	5	SITE - 175 Cms	2
	6	SZTB - 175 Cms	2
1611	6	SZTB - 175 Cms	2
1612	6	SZTB - 175 Cms	2
1613	7	SZTR - 175 Cms	2
1614	7	SZTB - 175 Cms	2
1615	7	SZTB - 175 Cms	2
1616	7	SZTB - 175 Cms	2
1701	4	SZTB - 175 Cms	2
1702	4	SZTB - 175 Cms	2
1703	4	SZTB - 175 Cms	
1704	4 5	SZTR - 175 Cms	
1705	₹	SZTB - 175 Cms	2

SOFRON : LOOM SPARE PARTS LIST

FART CODE NUMBER	PART DESCRIPTION	PART COST
10100220	1311 KONZOL	1379.50
10100420	1313 MENETESRUD	135.00
10170013	TARTOLAP	71.70
10170023	BILINCS	91.70
10170033	BALLONKEPZO DUGO	141.50
10200020	0006 SKALA	240.30
10200060	0009 ALATET	5.20
10200063	0009 ALATET	3.60
10200073	REZ SZEGECS 216-2-7	5.40
10200074	REZ SZEGECS	0.00
10200080	0011 KEZI KEREK	605.20
10200090	0012 SZIJTARCSA	2232.00
10200094	MEGHAJTOSZIJTARCSA	0.00
10200095	SZIJTARCSA	319.50
10200100	KUPLUNG KERESZT	329.30
10200110	ATMENETI CSATLAKOZO	48.10
10200120	0015 MEGH.TENGELY	1053.20
10200123	0015 MEGHAJTOTENGELY	699.50
10200124	MEGHAJTOTENGELY	0.00
10200126	MEGHAJTOTENGELY	113.90
10200140	0017 KUPOS PERSELY	70.50
10200150	0016 TUZOORSO	19.80
10200153	OSSZEKOTOCSAVAR	8.90
10200160	0017 SZORITOCSAF	34.30
10200163	SZARITOCSAP	32.90
10200164	SZORITOCSAP	0.00
10200170	0020 ALATET	361.30
10200170	0021 CSUSZKA	127.30
10200160	0022 RUGO	203.30
10200170	1334 TAMCSAFAGY	200.30
10200200	1335 TAMASZTO ALAJET	174.40
10200210	1335 TARESA 100%	52.50
10200220	0023 SZORITOCSAP	3 6. 30
10200223	SZORITOCSAP 216-2-22	31.20
10200224	SZORITOCSAP	0.00
10200233	TARCSA	67.40
10200233	TARCSA	0.00
10200234	0024 TENG.KAPCS.KAR	592.70
10200240	0025 SZAB.TAM.CSAVAR	18.70
10200280	0023 SZMB. FART. CSHCAR 0027 FEKSZALAG	106.30
	·- ·	
10200297	FÉKSZALAG	91.70
10200300	0028 FEKBETET	95.50
10200380	0031 ALLITOCSAVAR	53.00
10200390	0033 RUGO	31.20
10200400	1341 CSAP	38.40
10200430	0034 RUGO	43.10
10200450	0035 OSSZEKOTOLEC	181.60
10200493	CSAP	28.90
10200500	0037 ZAROCSAPSZEG	27.00
10200520	0038 FDGANTYU	17.60
10200540	0039 HATAROLO	89.00
10200600	0040 INDITOKARUTKOZO	19.60
10200603	0043 INDITOKARUTKOZO	8.90
10200604	INDITOKARUTKOZO	0.00
10200693	SZIJTARCSA 216-2-69	87.20
10200694	MOTORSZIJT.216-2-69	0.00
10200696	MOTORSZIJTARCSA	43,60
10200000	0045 TENGELY	348.50

SOPRON : LIST OF LOOM MECHANICS

MECHANICAL	MECHANIC		
GROUP	CODE	MECHANICS NAME	SHIFT
1	01	GYULA GYDRVARY	A
1	02	ANDRAS NEMETH	В
1	03	TIBOR HUSZAR	Ċ
2	04	FERENC MURAI	A
2	05	FERENC PECZA	В
2	06	GYULA MOGYAROSI	Ċ
3	07	ATTILA GRACZOL	Ä
3	80	ATTILA GORGYAN	В
3	09	BELA TOTH	Č
4	10	FRENC TRINKL	Ā
4	11	HELMUT HEISSENBERGER	В
4	12	ERNO RUZSOVITS	Ċ
5	13	FERENC TOTH	Ā
5	14	REZSO LEITNER	В
5	15	ZOLTEN NAGY	Č
6	16	KAROLY KANITCH	Ā
6	17	JOZSEF DOMINEK	В
6	18	GEBOR TOBL	Ē
7	19	LASZLO IVAN	Ā
7	20	SANDOR HORVATH	В
7	21	JOZSEF CZAKLER	Č
8	22	ARPAD FINTA	F
8	23	TAMAS HEGYKOI	В
8	24	GABOR KOVACS	Ċ
9	25	IMRE SZALAY	A
9	26	ELEMER SZABO	В
9	27	JENO TOTH	Č
11	28	GEZA KOVACS	A
11	29	PETER PODMANICZKI	В
11	30	IMRE SZUKITS	Č
			_

SOPRON : LIST OF GREY CLOTH FAULTS

FAULT CODE	FAULT DESCRIPTION
1	WARP FAULTS
2	SELVEDGE/CLOTH WARP
3	WARP STRIPES (LUSTRE)
4	LACING - INCORRECT WRONG WARP
5	WEFT STRIPING DUE TO LOOM STOPPAGE
6	WEFT FAULTS, TONE
?	MISSING WEFT PICK
8	WEFT STRIPING - WRONG YARN, ETC
9	WEFT FAULTS, KNOTS, LOOPS ETC
10	OILY WARP OR WEFT PICK
11	PATTERN FAULT
12	OIL STAIN OR DIRTY MARK
14	SELVEDGE FAULTS
16	OTHER WEAVING FAULTS
18	RECURRING WARP STRIP
19	SHADE VARIATIONS
20	OTHER YARN FAILURES

SOPRON : LIST OF LOGM STOPPAGE REASONS

STOPPAGE CODE	STOPPAGE DESCRIPTION
•	LOOM REPAIR
1 2	WARP CHANGE
2 3	TYING-IN NEW WARP
-	PATTERNING CARD REPAIR/REPLACEMENT
4	
5	REPAIR BROKEN WARP END
6	REPAIR MULTIPLE BROKEN ENDS
10	SERVICE MAINTENANCE
12	BREAKDOWN
13	WARP SHORTAGE
14	WEFT SHORTAGE
15	SPARE PART SHORTAGE
16	WEAVER SHORTAGE
17	MECHANIC SHORTAGE

SOPRON : LIST OF WEAVERS

CODE	NAME	SHIFT	WAGE RATE
1	MARIANN MISS	-	0.00
2		<u>T</u>	
3	MONIKA MEZO RITA MOLNAR	Ţ	0.00
4	SZILVIA ROZMAN	Ţ	0.00
5	SZILVIA MARKUS	τ -	0.00
		<u>T</u>	0.00
6	SZILVIA KOZAK	<u>T</u>	0.00
3 9	TUNDE FUZI	<u>T</u>	0.00
•	BARBARA BIHARI	<u>T</u>	0.00
10	KATALIN FINTER	T ~	0.00
11 13	ELVIRA DOBOR	<u>T</u>	0.00
	ZSUZSANNA KALMAR	T ~	0.00
14 15	CECILIA NYITRAI GERTRUD CSAPO	T -	0.00
16		Ţ	0.00
17	HELGA HARGITAI	T ~	0.00
12	PIROSKA ROZMAN LIVIA NEMETH	T ~	0.00
17	TIMEA ABRAHAM	Ť	0.00
20	BARBARA BIHARI	T T	0.00
21		<u>T</u>	0.00
	ANDREA CZETIN	T ~-	0.00
22	ANNA KALMAR	Υ	0.00
23	JUDIT ZSUGONITS	<u>T</u>	0.00
24	VALERIA TARCSAI	T	0.00
26	MARTA TAKACS	Ŧ	0.00
27	JUDIT KOVACS	T	0.00
23	MELINDA BALOGH	T	0.00
29	MARIA LANYI	T	0.00
30	ELEONORA HIDEGH	T	0.00
51	JANOSNE VARGA	A	0.00
52	ERZSEBET SZAKALY	A	30.30
53	IMRENE FAZEKAS	A	27.60
54	ISTAVANNE LANG	A	29.30
56	GYULANE FEHER	A	0.00
57	MELINDA EDELMAYER	A	27.60
58	LASZLONE SZASZVAROSI	A	30.30
59	PALNE MESZAROS	A	30.30
61	TEREZ ZISS	A	29.30
63	ISTAVANNE MOLNAR	A	30.30
64	ERIKA MUTZHAUSZ	A	0.00
65	JOZSEFNE FEKETE	A	30.30
66	ZOLTANNE FELEK	A	0.00
73	SANDORNE II TAKACS	A	29.30
74	ANASZTAZIA GOSZTOLA	Α	29.30
75	KRISTA ROZMAN	B	0.00
76	IMRENE VARGA	A	0.00
80	TIBORNE VARGA	F.	27.60
83	JENONE VISSI	A	27.60
85	IDA 5005	A	29.30
87	BAK EVA	A	27.60
88	GYULANE KRANITZ	A	30.30
87	VILMOSNE FEKETE	В	0.00
92	IMRENE ORI	ñ	0.00
93	PETERNE DARABOS	A	
95	PALNE FABIANKOVICS	A	27.60 27.60
97	VERONIKA POLYAK	A	27.60
98	ERNONE BALASKO		0.00
100	MARTA CSETKOVICS	A	0.00
351	JOZSEFNE KOVACS	A	29.30
354	MARIA FERENCZI	E .	27.60
355	IREN NAGY	B	0.00
ن ل ر.	TUCH INHOT	B	29.30

SOPRON : LIST OF SUB-CONTRACTORS

CONTRACTOR CODE	SUB-CONTRACTOR NAME
1 2 3 4 5	RABATEXT BUDAFLAX BUDAKLARASZ BUDAFLAX GYORILENSZOVO PATEX PNYV

ARTICLE MASTER-FILE REPORT

CODE	ARTICLE NAME	ERAVING IN WIDTH	REED	REED DENSITY	SELVEDGE ENDS	RIDIH SEFAEDRE	SEVLEDGE YARN CODE	WARP CONTRACTION	PICKS /10 CHS C	SUR- ONTRACTOR	MACHINE LIMITATION
2308368	DOLLY	163.3	165.3	22.0	156	3.8	232106245622	4.2	0.0	0	12
2308580	DOLGRES	153.3	183.3	22.9	156	3.4	232106245622	4.5	0.0	9	12
2307066	ERKA	172.0	172.9	15.0	69	3.8	232106245622	5.5	0.0	0	13
605501	FANTA	173.3	173.3	15.0	157	3.6	231058352724	4.7	0.0	0	12
1202788	FATIME	173.3	173.3	39.0	150	3.5	210058241715	5.1	0.0	Ú	15
\$85701	FELICIA	163.3	183.3	13.6	95	3.5	350173870152	6.2	0.0	0	ii
836401	FF. FUEGONY	305.0	308.0	11.0	114	3.5	134104222322	6.3	0.0	0	33
885402	FF.FUSGCHY	305.0	306.0	0.11	114	3.5	134104222322	5.9	0.0	0	33
2303058	FIGARO	163.3	183.3	15.9	134	3.5	281104323624	4.8	0.0	0	13
835301	FILOKENA	163.5	163.5	15.0	152	3.5	210058390903	5.1	0.0	Ü	13
686702	ISARELL	171.0	171.0	21.0	154	3.5	100058102123	6.2	0.0	C	13
595301	HILUS	165.0	165.0	20.0	144	3.5	250111201713	4.5	0.0	0	31
838302	NINIVE	165.9	165.0	20.0	144	3.6	250111201713	3.9	0.0	0	11
2303553	PAMENA	152.3	162.3	17.0	103	3.5	250111201719	6.2	0.0	0	13
1407058	PIRAMIS	161.3	151.3	17.9	120	3. š	133104242323	5.6	0.0	0	41
1492658	VERONA	154.6	154.5	17.0	120	3.6	281104323624	5.0	0.0	0	11
	AVERAGE :	132.7	132.7	<u>13.1</u>	<u>131</u>	3.5		5.2	0.0		

SOPRON : LIST OF CLOTH INSPECTORS

INSPECTORS CODE	INSPECTORS NAME	
	DETERME OR ACCEV	
11	DEZSONE POLACSEK	
12	FERENCNE CSASIAR	
13	FERENCNE KOVACS	
14	TIBORNE MIHOCZA	
15	MATYASNE NEMETH	
16	SANDORNE SZABO	
21	GYORGYNE JOOS	
22	IMRENE KOCSIS	
23	ISTAVANNE KOVACSICS	
24	ANTALNE NAGY	
25	FERENCNE SZEKENDI	
26	MIHALYNE TRACKL	

APPENDIX 2 - YARN MASTER FILE REPORTS

MASTER FILE : YARN DESCRIPTIONS

IDENTIFCATION CODE	YARN DESCRIPTION
<u>001</u>	100 % VICOS FENYES
031	PA 6 FELMATT N ZS FEKETE
<u>035</u>	PA6 FM NEMSZUG ENG VELKOL
<u>036</u>	PES FENYES FEKETE SZOVOF
<u>037</u>	PA6 FM NEMSZUG 10% ENG
039	VISKI FENYES KONTINUE
040	PA6 F CSILLAMLO NEMSZUG
<u>050</u>	VISCOS MATT
<u>058</u>	36% PES 64% PA66 BOUCLE FM
060	PES FENYES NEMSZUG
880	PES FENYES MFEST Z FZSUG
083	PES KREPP M NZS TORLEN
<u>086</u>	PES TORLEN
087	PES FMATT TORLEN
093	VISCOS FENYES ELOHENGER
<u>095</u>	VISCOZ FENYES
100	PA6 MATT NEMZSUGORITOTT
101	INDXOR 0,25 MN
<u>127</u>	93% ACRYL 7% VISCOS
<u>133</u>	PES MATT NYERS
134	PES FM NYERS LENGYEL
<u>159</u>	85% PES 15% BOURETTE
<u>169</u>	PES FM T FSZIN DIS 1 SETT
173	PES FM TEXTURALT CANELLAS
177	PA 6 FM NZS NYERS
<u>196</u>	PES NYERS LEGFUV TERJED
198	PES T FM SETT TORLEN SZ
201	ACETAT 100%
202	PES TERJ SET FE FON FEST

MASTER FILE : YARN COUNT CODING

11131611 1 166 1		
IDENTIFCATION CODE	YARN CO	<u>DDE</u>
000	10	<u>dtex</u>
001	11	<u>dtex</u>
002	<u>12</u>	dtex
003	12.2	dtex
004	<u>13</u>	dtex
<u>005</u>	13.4	dtex
006	14	<u>dte*</u>
007	14.4	<u>dtex</u>
<u>008</u>	<u>15</u>	<u>dtex</u>
<u>009</u>	<u>15.6</u>	<u>dtex</u>
010	<u>16</u>	dtex
<u>011</u>	16.6	<u>dtex</u>
012	<u>17</u>	dtex
013	17.6	dtex
014	18	dtex
015	18.8	dtex
016	<u>19</u>	<u>dtex</u>
017	<u>20</u>	dtex
018	21	dtex
019	<u>22</u>	<u>dtex</u>
020	22.2	dtex
<u>021</u>	<u>23</u>	<u>dtex</u>
022	23.2	dtex
023	<u>24</u>	dtex
<u>024</u>	24.4	dtex
<u>025</u>	<u>25</u>	dtex
<u>026</u>	25.6	dtex
<u>027</u>	<u>26</u>	dtex
028	26.6	dtex

MASTER FILE : NUMBER OF FILAMENTS

FILAMENT	CODE NUMBER OF FILAMENTS
00	0
01	1
02	2
03	3
04	4
05	5
06	6
07	7
08	8
09	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28

MASTER FILE : YARN TWIST CODING

TWIST CODE	YARN TWIST RANGE (tpm)
TATOL CODE	
01	0-20
02	21-40
03	41-60
04	61-70
05	71-80
06	81-90
07	91-100
80	101-110
09	111-120
10	121-130
11	131-140
12	141-150
13	151-160
14	161-170
15	171-180
16	181-190
17	191-200
18	201-225
19	226-250
20	251-275
21	276-300
22	301-325
23	326-350
24	351-375
25	376-400
26	401-425
27	426-450
28	451-475
29	476-500

MASTER FILE : TWIST DIRECTION CODING

TWIST DIDECTION CODE	DESCRIPTION OF TWIST DIRECTION
<u>o</u>	PARHUZ
<u>1</u>	S SODR
<u>2</u>	Z SODR
<u>3</u>	Z=S CE
<u>4</u>	S=7 CE
<u>5</u>	S+Z=S
<u>6</u>	<u>S+2 = 2</u>
<u>7</u>	<u>s fo</u>
<u>8</u>	<u> 7 FO</u>
<u>9</u>	<u>S+Z FO</u>

MASTER FILE : YARN PACKAGE CODING

PACKAGE CODE	DESCRIPTION OF YARN PACKAGE
<u>o</u>	KALACS
<u>1</u>	MOTRIN
<u>2</u>	SIK X
<u>3</u>	KUPOS_X
4	S KONUS
<u>5</u>	K KONUS
<u>6</u>	T CSEVE
<u>7</u>	KOPS
<u>8</u>	SAJT X
<u>9</u>	HENGER

MASTER FILE : YARN SUPPLIER LISTING

SUPPLIER CODE	SUPPLIER NAME
01	COURTAULDS
02	LUSTRE FIBRES
03	
04	ICI
05	MARGLAS
06	GLAS FIBRES
07	
98	
09	
10	ROCHRUDE
100	JET SETA
11	RHGDIACETA
12	RHONE POULENCE
13	REXOR S.A
14	CHAVANOZ/ISERIA
15	
16	VERRE TEXTILE
17	
18	
19	
20	SNIA/ITAVISCOZA
21	ANIC
22	SCHATILLON
23	ORSI MANGELLI
24	RHODIATOCE
25	MONTEFIBRE
26	BERTRAND
27	MILANO VITROFIL
28	METALREX

MASTER FILE : YARN SHADE CODING

	
SHADE CODE	YARN SHADE
0000	UNDYED
1115	SARGA
1120	DARANY
1215	MUSTA
1230	NARANCS
2205	ROSA
2225	PIROS
2230	TERRAKOTTA
2235	BORDO
2245	BORDO
2250	BORDOK
2300	ROZSA
2320	LILA
3005	V. KEK
3007	V. KEK
3015	KEK
3025	AC. KEK
3040	S. KEK
3045	KEK
3055	KEK
3060	S. KEK
4310	ZOLD
4500	ZOLD
4512	ZOLD
4515	S. ZOLD
5505	<u>BE I GE</u>
5510	DRAPP
5520	DRAPP
5530	BRANDY

LIST OF WASTE YARN PURCHASERS

BUYER		
CODE	BUYERS NAME	BUYERS ADDRESS
1	HUNGARIAN KNITTERS	202 RADGASSE BUDAPEST HUNGARY
2	THE KNITTING CO	24 KOENIG STR. STUTTGART GERMANY
3	FULLY FASHIONED PLC	29 ACKERSTR. SOPRON HUNGARY
4	TEXTILE WASTE LTD	46 AYERS LANE BRADFORD ENGLAND

Appendix 3.0

DESCRIPTION OF SYSTEM MASTER FILES

FILE NAME DESCRIPTION

- 1. WEAVER.dbf Lists the code number and full name of all WEAVERS employed by the company. File also holds details of the wage rate bonus percentage each weaver is entitled to.
- 2. LOOMS.dbf Lists the code number and technical parameters of all weaving machines available for production in the factory. The file also contains details of the mechanical group assigned to the loom.
- 3. MECHANIC.dbf Lists the code number and full name of all loom mechanics employed by the company. The file also holds details of which shift the mechanic works and to which group of looms he is assigned to.
- 4. CLOTHERR.dbf Lists the code number and description of all possible cloth faults which can occur at the company.
- 5. LOOMSTOP.dbf Lists the code number and description of all the possible reasons for a loom stoppage which can occur at the company.
- 6. SUBCONT.dbf Lists the code number and name of all the companies for whom sub contracted weaving may be carried out.
- 7. INSPECT.dbf List the code number and full names of all the cloth inspectors employed by the company.
- 8. ARTICLE1.dbf Lists the code number, name and the technical perameters of all articles produced by the company.
- 9. SPARES.dbf Lists the code number and description of all the possible loom spare parts that the company holds.
- 10. YARNAME.dbf Lists the code number and description of all yarns used by the company.

Appendix 3.0 (Contin.)

DESCRIPTION OF SYSTEM MASTER FILES

	FILE NAME	DESCRIPTION
11.	YARCNT.dbf -	Lists the code number and description of all yarn count groups used by the company.
12.	YARNFIL.dbf -	Lists the code number and description of all filament groups (number of filaments) used by the company.
13.	YARTWIST.dbf -	Lists the code number and description of all yarn twist groups in use (TPI).
14.	YARDIR.dbf -	Lists the code number and description of all twist types used by the company.
15.	YARPACK.dbf -	Lists the code number and description of all yarn package types used by the company.
16.	YARNSUP.DBF -	Lists the code number and names of all yarn suppliers used by the company.
17.	YARNCOL.dbf -	Lists the code number and names of all yarn shades used by the company.
18.	YARBUY.dbf -	Lists the code number and names of all purchasers of waste yarn used by the company.

Appendix 4.0

DESCRIPTION OF MAIN SYSTEM DATA FILES

FILE NAME DESCRIPTION

- 1. QUALITY.dbf This file is used to hold all the quality related data which is entered each day from the Grey Cloth inspection sheets. This file is extremely important to the operation of the system as the data it contains is used in conjunction with various Master Files to create the entire range system Quality Reports shown in Appendices 5.01 to 5.16. This file is also directly involved in supplying the data required to produce the wages reports (Appendices 9.1 9.3) produced by the system. A full description of the file structure of QUALITY.DBF is given in Appendix 10.1
- 2. PRODO.dbf This is the databases file used to hold all the productivity related data which is entered each day from the individual loom productivity sheets. This file consequently provides all the data required to create the full range of productivity related reports shown in the attached Appendices 6.1 to 6.9. A full description of the file structure of PRODO.DBF is given in Appendix 10.2.
- 3. PARTISSU.dbf This file holds all data relating to the issue of loom spare-parts from stores to the looms. The data from this file is used to produce the spare-part issues related reports which are shown in Appendices 7.1 to 7.4. A full description of the file structure of PARTISSU.DBF is given in Appendix 10.3.
- 4. PARTSTCC.dbf This file holds details of the current stock position for each loom spare part used by the company. This file is updated automatically each time the system is informed of a loom spare-part issue or receipt. The data from this file is used to produce the spare-part stock related report which are shown in the attached Appendices 7.5 to 7.7. A full description of the file structure of PARTSTOC.DBF is given in the attached Appendix 10.3

APPENDIX 5 - SAMPLE QUALITY OUTPUT REPORTS

QUALITY ANALYSIS SUMMARISED BY WEAVER - FROM 01/01/89 - 31/12/89

WEAVER CODE	TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd QUALITY	TOTAL 3rd QUALITY	TOTAL RAGS	<u>% OF NON-</u> 1st QUALITY	VOLUME OF NOT	N WEAVERS NAME
677	2790	1610	785	285	110	42.3 %	1180	TIBORNE NICKL
380	450	200	200	0	50	55.6 %	250	KRISZTINA ROZMAN
351	600	400	120	30	50	<u>33.3</u> %	200	JOZSEFNE KOVACS
695	287	157	120	0	10	45.3 %	130	TEREZ FARKAS
092	500	400	50	50	0	20.0 %	100	IMRENE ORI
371	500	400	100	0	0	20.0 %	100	EDIT KEREKES
679	390	300	90	0	0	23.1 %	90	ANTALNE HORVATH
097	200	140	30	20	10	30.0 %	60	VERONIKA POLYAK
064	250	190	10	10	40	24.0 %	60	ERIKA MUTZHAUSZ
089	80	20	50	10	0	75.0 %	60	VILMOSNE FEKETE
692	110	80	10	10	10	27.3 %	30	JANOSNE PADANYI
680	90	60	10	20	0	33.3 %	30	ERZSEBET MONOSTARI
660	90	70	0	0	20	22.2 %	20	KATALIN DULICZ
397	100	80	5	5	10	20.0 %	20	SANDORNE KULCSAR
100	95	90	5	0	0	<u>5.3</u> %	5	MARTA CSETKOVICS
TOTAL _	6532	4197	1585	440	310	<u>35.7</u> %	2335 M	<u>IETERS</u>

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Appendix 5.01

WEAVER QUALITY HISTORY FROM - 01/01/89 TO 31/12/89

WEAVER 677 - TIBORNE NICKL

DATE	TOTAL INSPECTED	TOTAL 1st QUALITY	TOTAL 2nd	TOTAL 3rd QUALITY	TOTAL RAGS	% OF NON- 1st QUALITY
06/06/89	200	100	50	50	0	50.0 %
07/06/89	300	200	50	20	30	33.3 %
08/06/89	150	140	10	0	0	6.7 %
08/06/89	100	50	25	25	0	50.0 %
09/06/89	300	100	200	0	0	66.7 %
09/06/89	100	30	40	30	0	70.0 %
10/06/89	50	50	0	O	ဂ	0.0 %
11/06/89	250	200	0	40	10	20.0 %
12/06/89	200	90	100	10	0	55.0 %
13/06/89	20	20	Q	0	0	0.0 %
13/06/89	100	30	70	0	0	70.0 %
14/06/89	300	100	100	50	50	66.7 %
15/06/89	120	110	0	0	10	B.3 %
16/06/89	300	120	120	50	10	60.0 %
17/06/89	100	. 90	10	0	0	10.0 %
18/06/89	100	80	10	10	0	20.0 %
23/06/89	100	100	0	0	0	0.0 %
23/00/07	100					40.7 "
TOTAL :	2790	1610	785	285	110	<u>42.3</u> %

	1	<u>2</u>	<u>F A</u>	ULT.	C O D 5	<u>E N U</u>	HRERS	<u>8</u>	9	<u>10</u>	11	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	18	<u>17</u>	<u>20</u>	TOTAL FAULTS	TOTAL PRODH	FAULTS /100 LM	WEAVERS NAME	
	•	-	-	-	_	_	_		_				_		_						,	10	14.7	TOUGOUITS WALT	
	0	0	0	0	0	1	0	0	2	0	ņ	0	0	0	0	0	0	0	0 0	() ()	3	18 17	$\frac{16.7}{06.0}$	ROZMAN PIROSMA	
	0	0	0	0	0	0	0	0	0	0	0	0	0	()	0	U	V	V	v	V	•	• •		EGGHAN TINGSTA	
FAU	LTS SUMMAR	RY						10	TAL FAU	LTS	X of FA	ULTS													
				WARP FA				:		0		0 %					7								
				SELVEDE				:		0		0 X	TUTAL I	CLOTH PF	00000110	: N		<u>5 LM.</u>							
			-	KARP ST				:		0		0 %	AUCDACI	C		ER/100	144 -	۵ ،							
							ONS WARP			0		0 1	HVERRE	E FAULTS	NELURI	1E D7 100	Lu -	0.0							٠,
							LOOK STOP	1				0 2													č
				WEFT FA	•			:		1	33.	0 %													ı
				HISSING			UADN	;	•	Ų A		0 %													
				WEFT ST				:		ບ າ	65.														
							COPS ETC			U .		0 %													
				OILY WA		izri rit	Α.			0		0 %													
				OIL STA		1DTV #6	.br	•		٨		จะ													
		CODE			IN UK L	AUT DA	IRK	•		ů		0 1													
				SELVEDS	E EAIN T			:		ñ		0 %													
		CODE			LINULI	3		•		0		0 %													
				OTHER #	FAVING	FAUL TS		2		Ô		0 %													
		COUE						-		0		0 1													
				RECURRI	NS WARP	STRIPE		:		0		0 1													
				SHADE V				:		0		0 I													
				OTHER Y				:		0		0 2													
					TOTAL	FAULTS	RECORDED	;		3	100	0 %													;
																									7

QUALITY ANALYSIS SUMMARISED BY LOOM - FROM 07/09/89 - 11/09/89

LOOM	<u> 11</u>	TOTAL NSPECTED	TOTAL 1st	TOTAL 2nd QUALITY	TOTAL 3rd QUALITY	TOTAL RAGS	% OF NON- 1st QUALITY	VOLUME OF NON 1st QUALITY
2402	:	289	289	0	0	0	00.0 %	0
2320	:	35	26	9	0	0	25.9 %	9
6008	:	48	22	0	26	0	54.1 %	26
1203	:	50	0	50	0	٥	100.0 %	50
1202	:	95	_ 29	66	0	0	69.5 %	66
TOTAL :		517	366	125	<u>26</u> _	0	29.2 %	151

LOOM QUALITY HISTORY FROM - 01/01/89 TO 07/17/91

LOOM : 1210

DATE	SHIFT	TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd QUALITY	TOTAL 3rd	TOTAL RAGS	% OF NON- 1st QUALITY
06/06/89	С	200	100	50	50	0	50.0 %
06/08/89	Č	150	140	10	0	0	6.7 %
06/08/89	A	100	50	25	25	ဂ	50.0 %
06/09/89	Ċ	300	100	200	0	0	66.7 %
06/07/89	В	100	30	40	30	Q	70.0 %
06/10/89	č	50	50	O	Q	0	0.0 %
06/11/89	Č	250	200	0	40	10	20.0 %
06/12/89	Č	200	90	100	10	0	55.0 %
06/12/89	В	500	400	100	0	0	20.0 %
06/13/89	A	100	30	70	0	0	70.0 %
06/14/89	Ċ	300	100	100	50	50	66.7 %
06/15/89	Č	120	110	0	0	10	8.3 %
06/16/89	Č	300	120	120	50	10	60.0 %
06/17/89	Ċ	100	90	10	0	0	10.0 %
06/29/89	Ä	12	12	0	0	0	0.0 %
06/30/89	A	120	110	10	0	0	8.3 %
TOTAL :		2902	1732	<u>835</u>	255	80	40.3 %

SREY CLOTH FAULT ANALYSIS BY LOOM : REPORT PERIOD 07/09/89 TO 10/09/89

1	2	FAL	ULT_	C O D E	<u>6</u>	M R E R	<u>s</u>	9	<u>10</u>	<u>11</u>	12	<u>13</u>	14	<u>15</u>	<u>16</u>	12	18	<u>19</u>	<u>20</u>	TOTAL FAULTS	<u>total</u> Prodn	FAULTS /100 LM	LOOM CODE
+	-	-	<u> </u>	4	=	-	-	-	_		-		-	_	_	_			_				
22	0	٥	0	6	0	0	0	0	0	þ	0	Q	0	0	0	0	0	Ü	0	28	95		1202
0	5	9					0	Ú	Ó	0	0	0	0	0	0	0	0	0	()	5	50	10.0	<u>1203</u>
0	0	0	0	0	8 1	0	0	2	(t	0	0	0	0	ø	0	0	0	0	Ģ	3	35	8.6	2320
FAULTS SI	ukkary						10	TAL FAL	LTS	7 of FA	UL TS												
•																							
	CODE	1 - 1	warp fa	IULTS			1	7	2	61.				· · ·									
	CODE	2 -	SELVEDE	E/CLOTH	WARP		:		5	13.5		TOTAL	CLOTH PI	RODUCTI	CH :	180	LM.						
		-		RIPES (L			:		0		0 %						20.0						
						ONG WARP			0		2 %	<u>AVERAG</u>	E FAULT	RECOR	DEBLIDO	Ln ≖	20.0						
						LOOM STOP	1		6	16.													
				ULTS, TO			:		1		3 %												
				WEFT PI			;		0	0.0													
				RIPING -			:		0	0.0													
				•		OOPS ETC	1		2	5.6													
				AP OR NO	FT PIC	X.	;		0	0.6													
			PATTERN				;		0		0 %												
			DIL STA	IN OR DI	RIY KA	R);	;		0	0.0													
		13 -					:		0	0.0													
			SELVEDS	E FAULTS	i		:		0	0.0													
		15 -					:		())												
			OTHER W	EAVING F	AULIS		;		0	0.0													
		17 -					;		()	0.0													
				NS WARP			:		0	0.0													
				ARIATION			:		0	0.0													
	CODE	20 - (OTHER Y	ARN FAIL	URES		:		0	0.0	, <u>,</u>												
				TOTAL	FAULTS	RECORDED	:	3	6	100	2												

QUALITY ANALYSIS SUMMARISED BY MECHANIC - FROM 01/01/89 - 31/12/89

MECHANIC CODE	TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd QUALITY	TOTAL 3rd QUALITY	TOTAL RAGS	% OF NON- 1st QUALITY	VOLUME OF NON 1st QUALITY	MECHANICS NAME
09	2050	1110	650	200	90	<u>45.9</u> %	940	BELA TOTH
25	450	200	200	0	50	<u>55.6</u> %	250	IMRE SZALAY
05	605	405	120	40	40	33.1 %	200	GYULA MOGYAROSI
07	677	482	120	35	40	28.8 %	195	ATTILA GRACIOL
08	700	510	145	35	10	27.1 %	190	ATTILA GORGYAN
04	480	320	150	10	0	<u>33.3</u> %	160	FERENC MURAI
05	300	200	20	30	50	33.3 %	100	FERENC PECZA
14	500	400	50	50	0	20.0 %	100	REZSO LEITNER
21	390	300	90	0	0	23.1 %	90	JOZSEF CZAKLER
13	200	140	30	20	10	30.0 %	60	FERENC TOTH
12	90	60	10	20	0	33.3 %	30	ERNO RUZSOVITS
18	90	70	0	0	20	22.2 %	20	GEBOR TOBL
TOTAL	6532	4197	1585	440	310	<u>35.7</u> %	2335 ME	TERS

QUALITY ANALYSIS SUMMARISED BY MECHANICAL GROUP - FROM 01/01/89 - 31/12/89

TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd QUALITY	TOTAL 3rd	TOTAL RAGS	% OF NON-	VOLUME OF NON 1st QUALITY	MECHANICAL GROUP
3427	2102	915	270	140	38.7 %	1325	3
1385	925	290	80	90	33.2 %	460	2
450	200	200	0	50	<u>55.6</u> %	250	9
700	540	80	70	10	22.9 %	160	5
390	300	90	0	0	23.1 %	90	7
90	60	10	20	0	<u>33.3</u> %	30	4
90	70	0	0	20	22.2 %	20	6
6532	4197	1585	440	310	35.7 %	2335	

10

15

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FAULTS SUSHAI	<u> </u>						10	TAL FAUL	TS.	Z of FAUL	15												1
	0015		100 CAU					30		46.2	y												61
			ARP FAU ELVEDGE		MADD		•	5		7.7		TOTAL C	LOTH PR	ODUCTIO	N : _	483	LM.						1
			arp sir				;	Ŏ		0.0		<u> </u>		1111									
						ONG WARP	1	o		0.0		AVERAGE	FAULTS	RECORD	ED/100	LH =	13.5						
						LOOM STOP		9		13.8	X.												
			EFT FAU				;	0		0.0													
			ISSING				;	0		0.0													
	3003	8 - K	EFT STR	IPING .	- NRONE	YARN	:	0		0.0													
						COPS ETC	:	9		13.8													
					EFT PIC	X	:	0		0.0													
			ATTERN				:	0		0.0													
			IL STAI	N OR D	IRTY HA	RK	1	2		3.1 0.0													
	CODE		F: 115855	PANI T	_			10		15.4													
	CODE		ELVEDBE	PHULIS	3		;	0		0.0													
			THER WE	AUING I	FAIII TS		:	0		0.0													
	CODE		INCK WC	MAIND I	r HOL 13		•	0		0.0													⊳
			FOURRIN	S WARP	STRIPE		1	Ò		0.0													מ
			HADE VA				1	0		0.0													Ĕ
		-	THER YA				:	0		0.0	1												Appendix
				TOTAL	FAULTS	RECORDED	;	65		100	1												x 5.09
																		-		-2jg 2' g	للما خالي	=	

101AL 101AL FAULTS
20 FAULTS PEODN /100 LM

18

MECHANICS NAME

QUALITY ANALYSIS SUMMARISED BY ARTICLE - FROM 01/01/89 - 31/12/89

ARTICLE CODE	ARTICLE NAME	TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd	TOTAL 3rd	TOTAL RAGS	% OF NON- 15t QUALITY	VOLUME OF NON
686402	FF.FUGGONY	2290	1320	640	220	110	42.4 %	970
686702	ISABELL	800	490	245	65	0	38.8 %	310
1202966	FATIME	545	290	205	o	50	46.8 %	255
2308058	F1GARO	572	382	160	20	10	33.2 %	190 ¹ 8
1402658	VERONA	590	470	50	50	20	20.3 %	120
685601	FANTA	300	200	20	30	50	33.3 %	100
686401	FF. FUGGONY	500	400	100	O	0	20.0 %	100
2307066	ERNA	200	140	30	20	10	30.0 %	<u>60</u>
1407056	PIRAMIS	80	20	50	10	0	75.0 %	Appendi
686301	NILUS	250	190	10	10	40	24.0 %	
2306660	DOLORES	75	25	50	0	0	66.7 %	
2308658	PAMINA	110	80	10	10	10	27.3 %	30 0
5208268	DOLLY	100	80	5	5	10	20.0 %	
685801	FILOMENA	120	110	10	0	0	8.3 %	10
22.2.2	TOTAL :	6532	4197	1585	440	310	<u>35.7</u> %	2335 METI

ARTICLE QUALITY HISTORY FROM - 01/01/89 - 31/12/89

ARTICLE 686402 - FF. FUGGONY

DATE	TOTAL INSPECTED	TOTAL 1st QUALITY	TOTAL 2nd QUALITY	TOTAL 3rd QUALITY	TOTAL RAGS	% OF NON- 1st QUALITY
06/06/89	200	100	50	50	0	50.0 %
07/06/89	300	200	50	20	30	33.3 %
08/06/89	150	140	10	0	0	6.7 %
09/06/89	300	100	200	0	0	66.7 %
10/06/89	50	50	0	0	0	0.0 %
11/05/89	250	200	Q	40	10	20.0 %
12/06/89	200	90	100	10	Q	55.0 %
13/06/89	20	20	0	0	0	0.0 %
14/06/89	300	100	100	50	50	66.7 %
15/06/89	120	110	0	0	10	8.3 %
16/06/89	300	120	120	50	10	60.0 %
17/06/89	100	90	10	0	0	10.0 %
TOTAL :	2290	1320	640	220	110	42.4 %

QUALITY ANALYSIS SUMMARISED BY INSPECTOR - FROM 01/01/89 - 31/12/89

TOTAL INSPECTED	TOTAL 1st	TOTAL 2nd	TOTAL 3rd	TOTAL RAGS	TOTAL F	/100 L.M	% OF NON- 1st QUALITY	VOLUME OF NON -1ST QUALITY	INSPECTOR NOS & SURNAM
1677	1027	475	95	80	534	31.8	38.8 %	650	11 (POLACSEK
1560	1010	265	155	130	499	32.0	35.3 %	550	12 (CSASZAR)
750	320	320	50	60	274	36.5	<u>57.3</u> %	430	22 (KOCSIS)
500	300	150	30	20	367	73.4	40.0 %	200	13 (KOVACS)
705	570	115	10	10	123	17.4	19.1 %	135	23 (KOVACSIC
500	400	50	50	0	55	11.0	20.0 %	100	16 (SZABO)
200	100	50	50	0	41	20.5	50.0 %	100	25 (SZEKENDI
390	300	90	0	0	45	11.5	23.1 %	90	21 (J00S)
80	10	60	0	10	33	41.3	87.5 %	70	14 (MIHOCZA)
170	160	10	0	0	23	13.5	<u>5.9</u> %	10	24 (NAGY)
6532	4197	1585	440	310	1994	30.5	<u>35.7</u> %	2335	- 64

INSPECTOR QUALITY HISTORY FROM - 01/01/89 TO 31/12/89

INSPECTOR 11 - DEZSONE POLACSEK

DATE	<u>TOTAL</u> INSPECTED	TOTAL 1st QUALITY	TOTAL 2nd QUALITY	TOTAL 3rd QUALITY	TOTAL RAGS	TOTAL FAULTS RECORDED	AV. FAULTS /100 L.M	% OF NON- 1st QUALITY
17/01/00	100	80	5	5	10	23	23.0	20.0 %
13/04/89			10	20	0	42	46.7	30.0 %
21/05/89	90	60			•	55	73.3	50.0 %
23/05/89	75	25	50	0	0			60.0 %
24/05/89	250	190	10	10	40	109	43.6	
- · · · · · ·		200	50	20	30	41	13.7	100.0 %
07/06/89	300		= -	0	0	56	18.7	200.0 %
09/06/89	300	100	200	•	=	48	48.0	70.0 % .
09/06/89	100	30	40	30	Q			•
10/06/89	50	50	0	0	0	14	28.0	5
	200	90	100	10	0	117	58.5	110.0 %5
12/06/89			10		0	22	22.0	10.0 % '
17/06/89	100	90	- -	•		0	0.0	0.0 %
23/06/89	100	100	0	0	0	-		0.0 %
29/06/89	12	12	0	0	0	7	58.3	0.0 %
TOTAL :	1677	1027	475	95	80	534	31.8	38.8 %

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Appendix
5.14

SHIFT	<u>TOTAL</u> INSPECTED	TOTAL 1st	TOTAL 2nd	TOTAL 3rd	TOTAL RAGS	% OF NON- 1st QUALITY	VOLUME OF NON 1st QUALITY
B :	1500	1110	215	115	60	26.0 %	<u>390</u>
A :	1807	1142	500	65	100	<u>36.8</u> %	665
C :	3225	1945	B70	260	150	39.7 %	1280
TOTAL :	<u>6532</u>	4197	<u> 1585</u>	440	310	35.7 %	2335 METERS

QUALITY ANALYSIS SUMMARISED BY SHIFT - FROM 01/01/89 - 31/12/89

<u>17</u>

GREY CLOTH FAULT ANALYSIS BY WARP : REPORT PERIOD 17/09/69 TO 17/09/89

	TOTAL	1st	<u> 2nd</u>	<u>3rd</u>	4th			FAI	ULT	C 0 D	E NU	HBE	R S							
ARTICLE	FROON		QUAL	QUAL	DUAL	1	2	3	4	<u>5</u>	<u>6</u>	2	3	9	<u>10</u>	11	13	13	14	
E14 DGRIAN	113	113.4	0.0	0.0	0.0	3	0	0	0	1	1	0	0	3	0	0	0	2	2	
345 PELENKA		222.0	0.0	0.0	0.0	0	0	0	0	2	0	0	0	3	2 0	0	0	0	8	
117 FELENKA	241	243.8	0.0	0.0	0.0	0 2	0	0	0		0	0	0	9	0	0	0	0	0	
17 FELENKA		251.0	0.0	0.0	0.0	0	0	ů	0	2	0	0	0	4	0	0	0	0	0	
-1173 SUMMARY						TOTAL FA	ULTS	Z of FAUL	<u> 15</u>											
CCI	DE 1 - LAN	CFORAL H	IBAK			:	5	10.4												
103	DE 2 - BOR	DACSIK,	LIRACSI	(3	0	0.0		TOTAL C	LOTH PR	ODUCTIO	N :	827	7 LM.					
	DE 3 - LAN		•		YESSE	1	0	0.0												
	E 4 - ELF				:	:	0	0.0		AVERAGE	FAULTS	RECORD	ED/100	LM =	5.8					
	YE 5 - IHD		•	A CSIK	:	:	9	18.8												
	E 8 - VET				:	}	1	2.1												
	E 7 - HIA				;	}	0	0.0												
	134 - 8 3				SSZ F		0	0.0												
	E 9 - VET						19	39.6												
	E 10 - OLA				AL :	,	2	4.2												
	E 11 - HIN				}		0	0.1												
	E 12 - OLA	JFGLTOK I	ES ESTEE	FOLTO	S SIE :		0	0.0												
	E 13 -				:		2	4.2												
	E 14 - SIE	Lehibak			:	1	10	20.9												
	E 15 -				1		0	0.0												
	E 16 - EGY	EB SZOVES	SI HIBAK		:		0	0.0												
	E 17 -				. 3		0	0.0												
	E 18 - RAPI						0	0.0												
	E 19 - TABI			DÚ TURI	:5 }		0	0.0												
COD	E 20 - E6YI	B FONALI	11 PAK		:		0	9.0												
		101	TAL FAUL	TS RECO	RDED :	•	18	100	I											
																	و المساوي			E

GREY CLOTH FAULT ANALYSIS BY WARP : FOR 17/09/69

BUSITER SEEM MOOS	TOTAL PSOON	<u>ist</u> gval	<u>2nd</u> <u>2031</u>	<u>3rd</u> <u>094L</u>	4th SUAL	1	2	<u>></u>	<u> </u>	<u> </u>	Ė	<u>cot</u>	<u>g</u>			11 11	12	<u>13</u>	14	<u>15</u>	14	<u>17</u>	13	13		FAULTS	FAULTS 7100 L?	į
1604 1814/10 DORIAN 1504 1814/10 DORIAN 1504 1814/10 DORIAN 2416 1 13 FELENKA 2416 1845/13 FELENKA 2415 1645/13 FELENKA	34.4 3 28.0 1 7.0 45.0 4	11.0 14.4 13.0 7.0 15.0 15.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	0 1 2 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	1 0 0 0 1 1 0	0 0 0 0	0 9 0 0 0	0 0 0 0 0 0 0 0 0	2 1 0 1 0 0 2 0	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0	20004040	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 3 1 5 1 6	13.7 5.3 10.7 14.3 10.9 2.2 10.3 6.0	- 6
1416 1645/13 FELENKA 2416 1645/13 FELENKA 1416 1645/13 FELENKA 2312 2013/ 5 FELENKA 2312 2017/ 5 FELENKA 2516 2017/ 5 FELENKA 2516 2017/ 5 FELENKA	7.0 58.0 51.0 52.0 17.4 51.0 17.4 52.0 10.0 115.5	7.0 53.0 51.0 52.0 17.4 51.0 17.4 52.0 10.0 15.5 10.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 1 1 0 1 0 1 0 1	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 2 2 1 1 2 0 2 0 2	0 2 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	000000000000000000000000000000000000000	2 3 3 1 2 1 5 0 3 0 3	3.4 5.7 5.5 5.7 3.7 5.6 0.0 2.6 0.0	58 -

<u>s</u>	109	246	£ 8	EAS	Q R	000	Ę Ķ	0.8.8	£ 8 3				TIME AVAIL	TOTAL LOST	LOST TIME	LOCK
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<u> 1904</u>	LOST	TIME SUMMARY		TOTAL LOST TIME	t LOST TIME
2003	i -	LOON REPAIR	:	13.3	20.2 5
Cose	2 -	WASP_CHANGE	:	0.0	3 6.60
CODE	3 -	IVING-IN NEW KARP	:	2.7	3.6 %
CCDE	4 -	PATTERNING CARD REPAIR/REPLACE	:	14.4	16.0 I
CODE	5 -	REPAIR BROKEN WARP END	:	3.4	3.8 1
COBE	ė -	REPAIR BULTIPLE SHOVEN ENTS	:	5.3	7.5 %
CODE	7 -	SERVICE MAINTENANCE	:	5.5	5.1 7
CODE	3 -	<u> </u>	;	14.0	15.5 %
CODE	Ģ -	WARP SHORTAGE	:	7.7	8.8 %
CODE	10 -	KEFT SHORTAGE	:	3.2	9.1 %
2003	:: -	SPARE PART SHORTAGE	;	0.6	9.5 %
CODE	12 -	MEAVER SHORTAGE	:	7.4	3.1 1
CODE	15 -	MECHANIC SHORTAGE	:	1.0	1.1 2

AVERAGE LOST TIME PER LOCK : 27.4 %

0.00 : (20H) 3MIT TEOL MODE 14TOT

100.0 7

LOGN EFFICIENCY ANALYSIS : 01/01/EF TO 31/12/EF

FEGN MANSES	FOST TIKE	<u> 21073</u>	PICLS	<u>seoss</u> Efficiency
<u>2565</u>	14.7	3163	1930	34.1 %
23.65	13.5	3349	959	23.7 1
1204	12.5	52 0200	(4759)	59.8 7
2302	19.3	2375	457	29.7 1
5701 2771	7.;	7980	570	19.6 1
2595	5.7	2160	£00	27.8 %
1205	4.7	384000	232000	£2.6 T
1202	3.8	137200	165800	28.53
1400	2.7	93600	35000	37.4 %
<u>2513</u>	2.6	2778	8 2)	22.7 %
<u>1293</u>	2.4	75000	52000	54.2 %
<u>1291</u>	2.0	100800	44000	43.7 1
17/5	1.3	96000	55699	9.31
<u>2511</u>	1.3	1006	460	33.7 %
1509	0.9	100800	55009	54.8%
1705	0.4	85400	79500	92.0 I
1791	0.4	91200	36500	94.3 %
<u>1406</u>	ŷ . 4	96 990	59750	62.2 2
TOTAL :	90.0	1930438	1222762	<u>63.3</u> 1

NERNES 20007200 ANALYSIS : 01/01/89 TO 31/12/99

	<u>S T </u>		3 3 £	k E	£ 5 9 :	i C	386	H D	K 5 E	8.3						
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•	ŷ	Ù	ð	ŷ	2	!	1	5	i	ě.	à	Ó	64.0	8.5	13.5	IREN KASY
ú	9	0	0	ð	ŷ	ù	ý	ý	5	Ú	Ġ	4	9.0	4.5	57.5	JULIA TARCSAT
i	ş	Ú	Ú	0	ŷ	ý,	÷	9	Ð	6	ŷ	Ó	15.0	4.5	23.1	ERIKA MUTIHAUSI
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Ģ	9	ij	2	ŋ	ð	9	ÿ	Ģ	ŷ.	û	i	Ģ	8.0	3.3	41.7	JENONE MESTAROS
9	9	Ġ.	i	ij	6	a.	1	Ġ	Ġ	4	:	9	9.0	5.0	37.5	TERET FARMAS
i	9	0	Ó	ð	ŷ	ŷ	i	ĝ.	Ģ	i	ű	Ç	8.9	2.9		FERENCHE RASITOVICS
ij	9	9	1	9	Ú	ý	ġ	Û	?	÷	ij	9	6.9	2.5	36.5	
	0	Ů.	i	Ġ	ĝ	ý	ij	û	9	¢	Õ	9	8.9	2.8	35.4	JOISEFRE KOVACS
2	9	Ģ	Ô	ŷ	0	ŷ)	1	Ó	9	Ģ	9	6.0	2.7	33.3	ISTAVANNE II MORVATE
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i	Ģ.	ņ	ı	9	9	i	ŷ	9	Ģ.	9	9	9	3.0	2.4	30.2	LASILONE STASTVARGS!
!	0	9	0	ŷ	9	÷	Ü	1	9	9	9	•)	8.6	2.2	27.1	ISTAVANNE HORVATH
ì	•)	9	Ģ	9	ĝ	9	ŷ	i	9	ģ	0	9	9.0	1.7	20.3	ARISTINA HRUSTYAK
i	9	0	I	ð	ŷ	9	ŷ	9	ġ	ý	e	Ó	3.0	1.7	29.8	IMPERE VAREA
i	ý	÷	Û	ù	ŷ	ŷ	Ð	9	9	r,	Ġ	9	3.0	1.7	16.7	JOISEFRE CLUPPON
÷	Ģ	ð	Ò	1	Û	0	ÿ	ą.	ð.	ð	÷	ŷ.	3.9	1.2	14.6	AMASIYAZIA BOSZTOŁA
**	9	•)	:	9	û	Ģ	÷	9	ŷ	9	9	Ą	3.0	1.0	12.5	GYGRGYNE SEBESTYEN
i	9	Ģ	ŷ	Ģ	6	ç	Ģ	Ģ	Ġ.	ē	ĉ	9	3.0	9.9		IREN BALGEN
:	9	Ġ	ij	ij	ζ;	9	Ą	ģ	ij	ð	9	•)	2.0	0.9	11.5	VILMOSKE FENETE
)	9	9	Ô	ij.	6	Ģ	Ģ	G	0	Ģ	9	Û	8.0	0.3	7.4	PALKE FABIANTOVICS
Ģ	Ģ	Ģ	9	Q	ij	9	ŷ	9	Ú	Ĉ.	-)	0	8.0	9.3	7.4	ANDRASNE BOXOR

<u> 100</u> K	1.69	TIME SUMMARY		TOTAL LOST TIME	I LOST TIME
C095	1 -	LOON REPAIR	:	18.2	20.2 1
CGDE	2 -	WARP CHANGE	:	6.0	00.0 Z
CODE	3 -	TAINE-IN NEM RAUS	:	2.7	3.0 %
CODE	4 -	PATTERNING CARD REPAIR/REPLACE	:	14.4	16.0 I
CODE	5 -	REPAIR BROXEN WARP END	:	3.4	3.8 I
CODE	6 -	REPAIR MULTIPLE PROMEN ENDS	:	6.3	7.5 1
CODE	7 -	SERVICE NATHTENANCE	:	5.5	6.1 I
CODE	8 -	BREAKDOWH	:	14.0	15.6 I
CODE	9 -	WARP SHORTAGE	:	7.7	3.3 %
CODE	10 -	MEFT SHORTAGE	:	8.2	9.1 %
CODE	11 -	SPARE PART SHORTAGE	;	0.6	0.6 1
CODE	12 -	WEAVER SHORTAGE	:	7.4	8.2 1
CODE	13 -	MECHANIC SHORTAGE	:	1.0	i.i I
		TOTAL LOON LOST TIME (HRS)	:	90.0	100.0 I

AVERAGE LOST TIME PER KEAVER : 27.4 T

WEAVER EFFICIENCY ANALYSIS : 01/01/87 TO 31/12/89

-				
MEAVER HAME	LOST TIME (HOURS)	POSSIBLE PICKS	ACTUAL PICES	<u>gross</u> Efficiency
JENONE VISSI	10.2	3552	1380	38.7 1
IPEK KAGY	8.5	744000	582250	75.6 %
JULIA TARCSAL	4.5	792	150	13.7 I
ERIKA MUTZHAUSZ	4.5	1794	212	12.4 2
MARTA CSETVOVICS	4.5	201500	92500	45.7 %
TERET TISS	4.6	772	329	40.4 Z
VESCHIJA FOLYAK	4.0	960	170	17.8 7
PALNE ACS	3.8	100200	3 7 000	38.7 %
MIHALYNE FULL	3.3	960	190	17.8 7
VIKTORNE HORVATH	3.7	772	179	21.5 %
GYULANE KRANITI	3.5	720	339	45.8 :
JENONE MESTAROS	3.3	640	259	29.2 1
TEREZ FARKAS	5.0	792	210	25.5 I
FERENCHE RASITOVICS	2.7	240	160	11.3 %
SANDORNE II TAKACS	2.9	640	350	41.7 %
JOTSEFNE KOVACS	2.3	93400	\$0000	96.2 I
ISTAVANNE IL HORVATH	2.7	93500	35000	37.4 %
SANDORNE I TAKACS	2.6	772	280	35.4 i
LASILONE SIASIVAROSI	2.4	96000	52000	54.2 I
ISTAVANNE HORVATH	2.2	720	70	9.7 I
KRISZTINA HRUSTYAK	1.7	760	190	17.3 I
IMPENE VARGA	1.7	190900	61500	61.0 7
JOISEFNE CTUPPON	1.3	96000	55090	57.3 1
ANASITAZIA GOSZTOLA	1.2	96000	45500	47.4 %
GYORGYNE SERESTYEN	1.0	720	200	27.8 1
IREN BALOGH	0.9	93660	75800	81.0 I
VILHOSNE FENETE	0.9	100800	55000	54.6 1
PALHE FABIANKOVICS	0.8	912	120	13.2 1
ANDRASNE POKOR	0.8	96000	54500	56.8 1

MECHANIC DOWNTING ANALYSIS : 01/01/89 TO 31/12/89

	5 1 (<u> </u>	<u> 4 6 E</u>	RE	4 5 0 F	<u> [[[</u>	0 D E	N (I	4 5 E	r s						
1	2	7	4	<u>5</u>	<u>5</u>	<u>1</u>	<u>s</u> _	9	ĪÙ	11	12	15	THE AVAIL	101AL L251	LOST TIME	
_													(EDURS)	TIPE (HAS)	121	MECHANIC
ō.	0	2	2	2	2	0	5	ġ	3	6	3	Õ	40.0	13.5	46.3	FRENC TRINIL
5	0	0	2	0	2	1	3	9	ŷ	9	ġ	9	56.0	12.3	21.9	FERENC PECZA
0	0	Ó	6	0	0	9	4	ŷ	Ô	9	i	9	32.0	11.3		HELMUT HEISSENGE
2	0	0	1	9	û	ð	2	2	C	1	1	0	32.0	7.8	30.5	ERMO RUISCULTS
7	0	0	0	Ò	0	;	0	9	ı	Q	1	0	49.0	7.7	17.2	SYULA MOSYAROSI
0	0	9	1	1	0	0	0	4	0	0	1	0	14.0	7.5	46.9	FERENC TOTH
4	0	ı	1	i	0	I	Q	0	9	0	0	Q	32.0	7.2	22.4	FERENC MIRAL
1	0	0	0	Đ	ð	0	0	0	5	0	9	9	24.9	5.4	22.6	IOLTEN KASY
2	0	0	0	0	0	G	G	1	9	0	ð	9	3.0	2.7	33.3	MAYBROD AJITTA
Q	0	9	0	0	2	ð	0	ð	٥	Đ	9	Ō	9.0	2.6		REISO LEITNER
1	0	1	0	0	1	0	9	ŋ	Þ	9	ŷ	9	24.0	2.&		LASTLO IVAN
ŷ	0	9	1	Q	9	0	9	ð	9	0	ø	0	3.0	1.3		KARDLY KAKITCH
i	3	0	0	9	ð	Ģ	ð	9	Ü	0	Ð	¢	6.9	9.7	11.5	JOISEF GOMINEK

		TOTAL	
LOOK LOST TINE SUMMARY		FOST TEWE	T LOST TIME
CODE 1 - LOOK REPAIR	:	18.2	20.2 %
CODE 2 - KARP_CHANGE	:	0.ú	7 0.00
CODE 3 - TYING-IN HER KARP	:	2.7	3.9 %
CODE 4 - PATTERNING CARD REPAIR/REPLACE	:	15.4	16.0 I
CODE 5 - REPAIR BROKEN WARP END	:	3.4	3.6 1
CODE 6 - REPAIR MULTIPLE BROKEN ENDS	:	4.3	7.5 1
CODE 7 - SERVICE MAINTENANCE	:	5.5	6.1 1
CODE 8 - REENKOONN	:	14.0	15.6 7
CODE 9 - WARP SHORTAGE	:	7.3	8.8 1
CODE 10 - WEFT SHORTAGE	:	2.2	7.1 7
CODE 11 - SPARE PART SHORTAGE	:	0.6	0.5 7
CODE 12 - WEAVER SHORTAGE	:	7.4	8.2 1
CODE 13 - MECHANIC SHORTAGE	:	1.0	1.1 1
TOTAL LOOK LOST TIME (HRS)	:	30.0	109.0 I

AVERAGE LOST TIME PER MECHANIC : 27.4 T

MECHANIC SEFICIENCY ANALYSIS : 01/01/89 TO 31/12/69

KECHANIC	[MONES]	POSSIFLE PICKS	<u>actual</u> <u>Picks</u>	<u>GRUSS</u> <u>Efficienc</u> s	MECHANIC NAME
10	13.5	4152	1272	27.7 %	FEERE TRIBUL
05	12.3	603568	420000	71.7 1	FERENC PECTA
11	11.3	3312	310	26.5 2	HELMIT HEISSENBESSER
12	3.2	3312	579	17.2 I	EENO EUISOVITS
96	7.7	477599	274390	57.4 2	SYULA MOSYAROSI
13	7.5	1:3;	450	41.0 I	FERENC TOTH
04	7.2	383800	254500	69.3 I	FERENC MURAL
15	5.4	183192	139400	76.1 I	TOTTEN MYEA
50	2.7	93600	35000	37.4 I	ATTILA SCREYAN
14	2.6	792	260	35.4 %	RETSO LETTHER
19	2.6	2736	820	22.7 %	LASTLO IVAN
15	1.3	[9)3	4 ¢0	39.7 2	FARGLY KARTICH
17	6.7	100300	55,000	54.6 1	force company
<u> ICIFL</u> : _	30.6	1930488	1222762	<u>63.3</u> I	

ARTICLE EFFICIENCY AMALYSIS : 01/01/39 TO 01/10/65

RATICLE	ARTICLE NAME	(HOURS)	<u> 21013</u>	PIOLS	GF035 EFFICIENCY
585701	FELICIA	14.7	3163	1030	34.1 %
2308058	FIGAG	15.6	3360	95-)	28.5 %
2307056	ERM	15.5	67454	57392	51.2 I
686402	FF.FUESCHY	19.4	378400	201000	50.5 1
1407656	FIREMIS	9.5	2380	579	17.2 I
625391	HILUS	8.6	477938	277820	9.5 1
2308658	PANTNA	6.7	2160	Fûû	27.5 :
688491	FF. FUESONY	4.7	167299	175999	65.8 T
££5601	FRATA	3.6	137700	185860	88.6 I
6853-)2	RIRIVE	2.3	37449)	284750	75.1 %
598702	ISSEELL	1.3	96000	55999	97.3 1
2308783	PGLLY	9.7	19959)	\$5909	54.6 %
	<u> 1874L</u> :	96.9	1934453	1222762	<u> 63.7</u> :

WARP COMPLETION FORECAST : ASSUMED EFFICIENCY 75 %

LOOM	ARTICLE	NAME	PICKS REUD (*100)	SPEED (PPM)	WEAVING TIME (HOURS)
2513 2517 2520 2516 2514 2301 2511 2512 2515 2304 2305 2303 2519 2518	686301 2306660 686301 1202966 686302 1407056 2307066 686702 2308658 2308058 685701 2308658 686401 686402	NILUS DOLORES NILUS FATIME NINIVE PIRAMIS ERNA ISABELL PAMINA FIGARO FELICIA PAMINA FF. FUGGONY FF.FUGGONY	(*100) 1180 1700 1800 2000 2300 2520 2800 2900 2900 3050 3210 4170 4350 4650 6198	190 190 200 190 200 210 200 190 175 165 150 200 190	13.8 19.9 20.0 23.4 26.9 28.0 29.6 32.2 33.9 38.7 43.2 61.8 48.3 54.4 83.5
2302	2307066	ERNA	0170	100	

WIDTH EFFICIENCY ANALYSIS : 19/09/89 TO 20/09/89

LOOM WIDTH	LOST TIME (HOURS)	<u>POSSIBLE</u> <u>PICKS</u> (* 100)	ACTUAL PICKS (* 100)	PICKS /HOUR	<u>GROSS</u> EFFICIENCY
175	38.8	90564	78081	10609	86.2 %
180	11.0	44870	40984	11137	91.3 %
330	69.2	25656	9126	3803	35.6 %
TOTAL :	119.0	161090	128191		<u>79.6</u> %

APPENDIX 7 - SAMPLE LOOM SPAREPART REPORTS

LOOM SPARE-PART CONSUMPTION - FROM 01/01/89 TO 31/12/89

LOOM NUMBER : 1201

DATE		SPARE PART CODE NUMBER	OUANTITY ISSUED	PART COST	TOTAL VALUE OF PARTS
18/06/89	0011 KEZI KEREK	10200080	1	605.20	605.2
07/07/89	SZORITOCSAP 216-2-22	10200223	2	31.20	62.4
07/07/89	0028 FEKBETET	10200300	2	95.50	191.0
07/07/89	0031 ALLITOCSAVAR	10200380	2	53.00	106.0
07/07/89	0033 RUGO	10200390	1	31.20	31.2
07/07/89	0034 RUGO	10200430	2	48.10	96.2
07/07/89	CSAP	10200493	1	28.90	28.9
07/07/89	0037 ZAROCSAPSZEG	10200500	2	27.00	54.0
09/07/89	FÉKSZALAG	10200297	1	91.70	91.7
			14		1266.6

SPARE-PART ISSUES SUMMARISED BY LOOM - FROM 01/01/89 TO 31/12/89

			QUANTITY OF	TOTAL VALUE OF
LOOM		LOOM TYPE / WIDTH	PARTS ISSUED	PARTS ISSUED
				
1312	:	SZTB / 175 Cms	1	0.0
1212	:	SITB / 175 Cms	1	34.3
1611	:	SZTB / 175 Cms	1	38.4
1605	:	SZTB / 175 Cms	2	39.6
1702	:	SITB / 175 Cms	1	52.5
1407	:	SZTB / 175 Cms	1	53.0
1206	:	SZTB / 175 Cms	2	54.0
1409	:	SZTB / 175 Cms	2	54.0
1401	:	SZTB / 175 Cms	2	57.8
1404	:	SZTB / 175 Cms	2	57.8
1501	:	SZTB / 175 Cms	2	68.6
1704	:	SZTB / 175 Cms	8	84.8
1412	:	SZTB / 175 Cms	2	96.2
1202	:	SZTB / 175 Cms	3	221.2
1705	:	SZTB / 175 Cms	9	257.0
1406	:	SZTB / 175 Cms	2	283.0
1211	:	SZTB / 175 Cms	6	342.6
1311	:	SZTB / 175 Cms	1	368.5
1201	:	SZTB / 175 Cms	14	1266.6
1502	:	SZTB / 175 Cms	2	1448.9
1204	:	SZTB / 175 Cms	5	2861.9
1606	:	SZTB / 175 Cms	3	4138.5
		<u>TOTAL</u> :	72	11879.2

SPARE-PART ISSUES RANKED BY PART CODE - FROM 01/01/89 TO 31/12/89

SPARE-PART CODE	SPARE PART NAME	QUANTITY OF PARTS ISSUED	PART COST	TOTAL VALUE OF PARTS ISSUED
10100220	1311 KONZOL	6	1379.50	8277.0
10170033	BALLONKEPZO DUGO	2	141.50	283.0
10200080	0011 KEZI KEREK	1	605.20	605.2
10200150	0016 TUZDORSO	4	19.80	79.2
10200160	0019 SZORITOCSAP	6	34.30	205.8
10200164	SZORITOCSAP	1	0.00	0.0
10200213	1335 TARCSA 100%	1	52.50	52.5
10200220	0023 SZORITOCSAP	1	36.30	36.3
10200223	SZORITOCSAP 216-2-22	2 2	31.20	62.4
10200224	SZORITOCSAP	2	0.00	0.0
10200233	TARCSA	3	69.40	208.2
10200234	TARCSA	3	0.00	0.0
10200297	FÉKSZALAG	1	91.70	91.7
10200300	002B FEKBETET	2	95.50	191.0
10200380	0031 ALLITOCSAVAR	4	53.00	212.0
10200390	0033 RUGO	1	31.20	31.2
10200400	1341 CSAP	1	38.40	38.4
10200430	0034 RUGO	4	48.10	192.4
10200450	0035 OSSZEKOTOLEC	1	181.60	181.6
10200493	CSAP	8	28.90	231.2
10200500	0037 ZAROCSAPSZEG	10	27.00	270.0
10200604	INDITOKARUTKOZO	4	0.00	0.0
10200693	SZIJTARCSA 216-2-69	3	87.20	261.6
10200830	0045 TENGELY	1	368.50	368.5
<u> 10</u> -	<u>ral</u>	72		11879.2

SPARE-PART ISSUES RANKED BY STOCK QUANTITY - FROM 01/01/89 TO 31/12/89

SPARE-PART CODE	SPARE PART NAME	QUANTITY OF PARTS ISSUED	PART COST	TOTAL VALUE OF PARTS ISSUED
10200213	1335 TARC - : 00%	1	52.50	52.5
10200220	OC23 SZOF CSAP	1	36.30	36.3
10200297	FEKSZALAG	1	91.70	91.7
10200450	0035 OSSZEKOTOLEC	1	181.60	181.6
10200400	1341 CSAP	1	38.40	38.4
10200164	SZORITOCSAP	1	0.00	0.0
10200830	0045 TENGELY	1	368.50	368.5
10200080	0011 KEZI KEREK	1	605.20	605.2
10200390	0033 RUGO	1	31.20	31.2
10200223	SZORITOCSAP 216-2-2	_	31.20	62.4
10200224	SZORITOCSAP	2	0.00	0.0
10170033	BALLONKEPZO DUGO	2	141.50	283.0
10200300	002B FEKBETET	2	95.50	191.0
10200233	TARCSA	3	69.40	208.2
10200234	TARCSA	3	0.00	0.0
10200693	SZIJTARCSA 216-2-69	3	87.20	261.6
10200380	0031 ALLITOCSAVAR	4	53.00	212.0
· 10200430	0034 RUGO	4	48.10	192.4
10200604	INDITOKARUTKOZO	4	0.00	0.0
10200150	0016 TUZDORSO	4	19.80	79.2
10100220	1311 KONZOL	6	1379.50	8277.0
10200160	0019 SZORITOCSAP	6	34.30	205.8
10200493	CSAP	8	28.90	231.2
10200500	0037 ZAROCSAPSZEG	10	27.00	270.0
<u>10</u>	TAL	72		11879.2

LOOM SPAPE PART STOCK : LISTED BY PART-CODE

CODE NUMBER	PART DE: IPTION	UNIT COST	STOCK	STOCK VALUE
10100220	1311 KONZOL	1379.50	29	40005.5
10100420	1313 MENETESRUD	135.00	10	1350.0
10170013	TARTOLAP	91.70	4	366.8
10170023	BILINCS	91.70	5	458.5
10170023	BALLONKEPZO DUGO	141.50	9	1273.5
10200020	0006 SKALA	240.30	ó	0.0
10200020	0009 ALATET	6.20	2	12.4
10200063	0009 ALATET	3.60	3	10.8
10200033	REZ SZEGECS 216-2-7	5.40	40	216.0
10200073	REZ SZEGECS	0.00	9	0.0
10200074	0011 KEZI KEREK	605.20	18	10893.6
10200080	0012 SZIJTARCSA	2282.00	34	77588.0
10200070	MEGHAJTOSZIJTARCSA	0.00	23	0.0
10200074	SZIJTARCSA	319.50	25	7987.5
10200078	KUPLUNG KERESZT	329.30	20	6586.0
10200100	ATMENETI CSATLAKOZO	48.10	40	1924.0
10200110	0015 MEGH. TENGELY	1063.20	1	1063.3
10200123	0015 MEGHAJTOTENGELY	499.50	2	1399.0
10200123	MEGHAJTOTENGELY	0.00	7	0.0
10200124	MEGHAJTOTENGELY	113.90	, 5	569.5
10200128	0017 KUPOS PERSELY	70.60	o	0.0
10200140	0016 TUZODRSO	19.80	4	7₹.2
	OSSZEKOTOCSAVAR	8.90	0	0.0
10200153 10200160	0019 SZORITOCSAP	34.30	2	68.6
10200160	SZARITOCSAP	32.90	5	164.5
10200163	SZORITOCSAP	0.00	4	0.0
10200184	0020 ALATET	361.30	3	1083.9
10200170	0020 HEHTET	129.80	6	778.8
10200180	0021 C3632KH 0022 RUGO	202.30	8	1666.4
10200170	1334 TAMCSAPAGY	200.30	19	3805.7
10200200	1335 TAMASZTO ALATET	174.40	39	6801.6
10200210	1335 TARCSA 100%	52.50	ó	0.0
10200213	0023 SZORITOCSAP	36.30	2	د .72
10200223	SZORITOCSAP 216-2-22	31.20	1	31.2
10200224	SZORITOCSAP	0.00	5	0.0
10200233	TARCSA	69.40	3	208.2
10200234	TARCSA	0.00	7	0.0
10200234	0024 TENG.KAPCS.KAR	592.70	3	1778.1
10200260	0025 SZAB.TAM.CSAVAR	18.70	8	149.6
10200290	0027 FEKSZALAG	106.80	5	534.0
10200297	FEKSZALAG	91.70	B	733.6
10200300	0028 FEKBETET	95.50	6	573.0
10200380	0031 ALLITOCSAVAR	53.00	12	636.0
10200390	0033 RUGO	31.20	15	468.0
10200400	1341 CSAP	38.40	8	307.2
10200430	0034 RUGD	48.10	16	769.6
10200450	0035 OSSZEKOTOLEC	181.60	18	3268.8
10200493	CSAP	28.90	17	491.3
10200500	0037 ZAROCSAPSZEG	27.00	18	486.0
10200520	UO38 FOGANTYU	19.60	3	50.8
10200540	0039 HATAROLD	89.00	C	801.0
10200600	0040 INDITOKARUTKOZO	19.60		0.0
10200603	0043 INDITOKARUTKOZO	8.90		17.8
10200604	INDITOKARUTKOZO	0.00		0.0
10200693	SZIJTARCSA 216-2-69	87.20	0	0.0
10200694	MOTORSZIJT.216-2-69	0.00	4	0.0
10200696	MOTORSZIJTARCSA	43.60	5	218.0
10200830	0045 TENGELY	368.50	ÿ	3316.5
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LOOM SPARE PART STOCK : LISTED BY STOCK QUANTITY

CODE NUMBER	PART DESCRIPTION	UNIT COST	STOCK	STOCK VALUE
10200020	0006 SKALA	240.30	0	0.0
10200213	1335 TARCSA 100%	52.50	0	0.0
10200693	SZIJTARCSA 216-2-69	87.20	0	0.0
10270014	TAVTARTOGYURU	0.00	0	0.0
10300100	2392 GYURU	11.60	0	0.0
10250036	FEKSZALAG	405.40	0	0.0
10200600	0040 INDITOKARUTKOZO	19.60	0	0.0
10300010	<u>1366 KAR</u>	213.60	0	0.0
10200153	<u>OSSZEKOTOCSAVAR</u>	8.90	0	0.0
10200140	0017 KUPOS PERSELY	70.60	0	0.0
10300250	0071 KOZBETET	96.50	0	0.0
10300260	0072 KOZ.BET.HUVELY	33.20	1	33.2
10200223	SZORITOCSAP 216-2-22	31.20	1	31.2
10200604	INDITOKARUTKOZO	0.00	1	0.0
10300236	TENG.FOGASKEREKKEL	206.50	1	206.5
10200120	0015 MEGH.TENGELY MEGHAJTOKERESIT	1063.20	1	1063.2 0.0
10250044	2374 TENGELY	0.00 237.60	1 2	475.2
10200950 10200123	0015 MEGHAJTOTENGELY	237.80 699.50	2	1399.0
10200123	0009 ALATET	6.20	2	12.4
10200080	0023 SZORITOCSAP	36.30	2	72.6
10300020	0053 GORGO	99.70	2	199.4
10200603	0043 INDITOKARUTKOZO	B.90	2	17.8
10200160	0019 SZORITOCSAP	34.30	2	68.6
10300246	0070 PERSELY JAV.	1295.00	3	3885.0
10250030	0052 FEKSZALAG 3-1	1104.50	3	3313.5
10200170	0020 ALATET	361.30	3	1083.9
10300110	0060 GORGO	29.10	3	87.3
10200233	TARCSA	69.40	3	208.2
10300090	0059 BUTYKOSTARCSA	184.80	3	554.4
10200063	0009 ALATET	3.60	3	10.8
10200240	0024 TENG.KAPCS.KAR	592.70	3	1778.1
10200520	0038 FOGANTYU	19.60	3	58.8
10200694	MOTORSZIJT.216-2-69	0.00	4	0.0
10200150	0016 TUZDORSO	19.80	4	79.2
10250050	2379 FEKDOB	2749.20	4	10996.B
10170013	TARTOLAP	91.70	4	366.8
10200164	SZORITOCSAP	0.00	4	0.0
10300130	0062 KIEGY ALATET	6.20	4	24.8
10300040	0055 GYURU	184.90	4	739.6
10200163	SZARITOCSAP	32.90	5	164.5
10200126	MEGHAJTOTENGELY	113.90	5	569.5
10300270	0073 TARCSA	61.40	5	307.0
10200224	SZORITOCSAP	0.00	5	0.0
10200290	0027 FEKSZALAG	106.80	5	534.0
10250020 10300070	0051 KRSZT.KOMPL.1-2 0057 HAZ	2694.30 1054.40	5 5	13471.5
10300070	KULONLEGES ALATET	12.50	5 5	5272.0
10200696	MOTORSZIJTARCSA	43.60	5	62.5
10170023	BILINCS	91.70	5 5	218.0 458.5
10200300	OC2B FEKBETET	95.50	6	573.0
10200180	0021 CSUSZKA	129.80	6	778.8
10300230	0069 TENG.FDG.KEREK	4484.70	6	26908.2
10201013	UTKOZO	16.90	6	101.4
10300050	0056_CSAPSZEG	69.50	6	417.0
10250046	0000 KRSZT.KOMPL.JAV	673.70	6	4042.2
10300200	0067 GYURU	543.80	7	3806.6
10200234	TARCSA	0.00	7	0.0
		- -	•	2.3

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SPARE-PART USAGE & STOCK FORECAST - FROM 01/01/89 TO 31/12/89

PART CODE	SPARE PART NAME	DUANTITY ISSUED	CURRENT STOCK	ANNUAL CONSUMPTION	SPARE PAR STOCK (WEE
10100220	1311 KONZOL	6	20	6	173
10170033	BALLONKEPZO DUGO	2	9	2	233
10200080	0011 KEZI KEREK	1	18	1	933
10200150	0016 TUZOORSO	4	4	4	52
10200160	0019 SZORITOCSAP	6	2	6	17
10200164	SZORITOCSAF	1	4	1	207
10200213	1335 TARCSA 100%	1	0	1	0
10200220	0023 SZORITOCSAP	1	2	1	104
10200223	SZORITOCSAP 216-2-22	2 2	1	2	26
10200224	SZORITOCSAP	2	5	2	130
10200233	TARCSA	3	3	3	52
10200234	TARCSA	3	7	3	121
10200297	FéKSZALAG	1	8	1	415
10200300	0028 FEKBETET	2	6	2	156
10200380	0031 ALLITOCSAVAR	4	12	4	156
10200390	0033 RUGO	1	15	1	778
10200400	1341 CSAP	í	8	1	415
10200430	0034 RUGO	4	16	4	207
10200450	0035 OSSZEKOTOLEC	1	18	1	933
10200493	CSAP	8	17	8	110
10200500	0037 ZAROCSAPSZEG	10	18	10	93
10200604	INDITOKARUTKOZO	4	1	4	13
10200693	SZIJTARCSA 216-2-69	3	o	3	0
10200830	0045 TENGELY	1	9	1	467

TOTAL 72 203

AVERAGE SPARE-PART STOCK POSITION = 241.3

APPENDIX 8 - SAMPLE YARN STOCK REPORTS

SOPRON REPORT ON YARN ISSUES

									<u>017</u>	
PATCH	CODE NUMBER	YARN DESCRIPTION	O H DIET	FILAME	IT THIS	<u> </u>	SHADE	DATE	<u>issued</u>	<u> </u>
7278	095194400514	VISCOZ FENYES	333	42	71-60	S SODR	SZURKE	09/10/87	200	290.55
1723	001043122044	100 Z VICOS FENYES	35.6	12	251-275	S=1 CE	UNDYED	14/08/89	590	293.55
4342	060161404313	PES FENYES NEMSZUG	167	42	1351-1400	S SOOR	MOGYORO	08/08/39	800	321.31
7278	095134400514	VISCOZ FENYES	333	42	71-80	S SODR	SIURKE	31/07/83	400	290.55
2384	379227682714	86% AC 14% NYLON BOUCLE	767	200	426-450	3 SOOR	PRANDY	30/07/89	500	359.95
8115	281048240302	PES FENYES	50	24	41-50	PARHUZ	DRAPP	29/07/89	450	367.20
1723	001043122044	100 % VICOS FENYES	35.6	12	251-275	S=1 CE	UNDYED	08/07/89	800	293.55
2384	377227692714	BAZ AC 14% NYLON BOUCLE	769	200	426-450	S 2002	BRANDY	30/06/89	350	359.95
4942	060161404313	PES FENYES RENSTUG	187	42	1351-1400	S 300R	KOGYORO	30/05/89	200	321.81
4942	060161404818	PES FENYES NEMSZUS	167	42	1351-1400	S SOOR	MOGYORO	04/04/89	500	321.81

SOPRON REPORT ON YARN RECEIPTS

<u>BATCH</u>	CODE NUMBER	YARN DESCRIPTION	DIEX	FILAMENT	TWIS	<u>T</u>	<u>SHADE</u>	YARN SUPPLIER	DATE	STOCK	COST
8115	281058240302	PES FENYES	50	24	41-50	PARHUZ	DRAPP	MARUJEN]	61/69/59	7000	367.20
			333	42	71-90	s soda	SZURKE	VERRE TEXTILE	03/03/89	1355	290.55
4342	050161404818	PES FENYES NEMSZUG	167	42	1351-1400	S SCOR	MOSYORO	REXOR S.A	02/03/89	5000	321.21
1723	001043122044	100 % VICOS FENYES	35.6	12	251-275	S=1 CE	UNDYED	LEIZETEIT	02/02/89	800	293.55
2384	377227682714	36% AC 14% NYLON BOUCLE	763	200	426-450	S 500R	Brangy	MEXIKO FILOFIBRA	05/01/83	4000	359.93

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	SOPRON	CURRENT YARH ST	рск	P 0 3 1	1 1 0 N					
HOTER BATCH	CODE NUMBER	YARN DESCRIPTION	DIEI	FILAMENT	THIS	Ī	SHADE	<u> </u>	COST S	STOCK VALUE
02/02/89 1723 2	001043122044	100 I VICOS FENYES	35.6	12	251-275	S=1 CE	UNOYED	800	293.55	234840
05/01/89 2384 1	379227682714	86% AC 14% NYLON POUCLE	769	200	426-450	S SOOR	BRANDY	4000	359.95	1439800
02/03/89 4942 1	060161404918	PES FENYES NEMSZUG	157	42	1351-1400	s soor	MOGYORO	5000	321.81	1609050
03/03/89 7278 1	035194400514	VISCOZ FENYES	333	42	71-80	S SOOR	SZURKE	1355	290.55	393695
01/09/89 8115 1	281058240302	PES FERYES	50	24	41-60	PARHU?	DRAPP	7000	367.20	2570400
							TOTAL :	18155		6247735

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		SOPRON	REDUNDANT YARN S	TOC): P 0	51110	H LYAR	H RECEIVED PRIOR	10 - 30/	14/89)			
DATE	PATCH	CODE NUMBER	YARN DESCRIPTION	DIEX	FILAMENT	TWIS	<u>†</u>	SHADE	LUSTRE I	XTURE	STOCK	COST	STOCK VALUE
06/01/89	2384 1	379227682714	86% AC 14% NYLON BOUCLE	769	200	425-450	S SOOR	BRANDY	FM	SET	4000	359.95	1439800
02/02/89	1723 2	001043122044	100 I VICOS FENYES	35.6	12	251-275	S=1 CE	UNDYED	FM	SET	800	293.55	234840
02/03/89	4942 1	050161404818	PES FENYES KENSZUG	167	42	1351-1400	S SODR	KOSYORO	MA	POY	5000	321.81	1807050
03/03/89	7278 1	075194400514	VISCOZ FENYES	333	42	71-80	S SODR	SZURNE	KA	FCY	1355	290.55	393675
									TOTAL	;	11155	_	3677385

SOPRON REPORT ON YARN QUALITY PROBLEMS

RATCH YARN DESCRIPTION	DTEX F	ILAMEN	H IN LS	: 1	SHADE	SUF-CODE	YARN SUPPLIER	<u>eate</u>	STOCK	COMPLAINT
8280 VISCOS FENYES ELOHENGER RESPONSE TO CONPLAINT : 10 I DISCOUNT			71-20	7 SOER	Sarga	04	101	01/01/39	200	UNEVENESS
1271 100 % VICOS FENYES RESPONSE TO COMPLAINT : 10 % DISCOUNT		0	551-600	1 950R	UNDYED	04	101	06/03/39	800	NEAK YARN
8115 FES FENYES RESPONSE TO COMPLAINT : NO COMPENSATI	50 ON	24	41-60	FARHUZ	DRAPP	04	101	01/69/89	1000	EXCESSIVE PRO12
7278 VISCOZ FENYES RESPONSE TO COMPLAINT : 20 % DISCOUNT		42	71-99	S SOOR	SZURI.E	16	VERRE TEXTILE	03/03/87	100	UNLEVEL DYEING
1723 100 % VICOS FENYES RESPONSE TO COMPLAINT : NO COMPENSATI			251-275	S=1 CE	UNDYED	36	LEIZETEIT	02/02/89	400	THICKNESS VARIATION
2384 86% AC 14% NYLON BOUCLE RESPONSE TO COMPLAINT: 15 % DISCOUNT		200	426-450	S SOOR	BRANDY	58	MEXIKO FILOFIBRA	06/01/89	270	DYE VARIATION
1276 PE SET NIS TREV POY SI RESPONSE TO COMPLAINT: NO COMPENSATI	_	32	141-150	S SOOR	UNDYED	72	NEFF CO	02/11/89	120	UNLEVEL YARM.
1105 PE FM WIS CREP TORL NYUJT RESPONSE TO COMPLAINT : NO COMPENSATI		24	0-20	2 SODR	UNDYED	75	NORDFASEV	04/05/87	900	UNLEVEL YARN

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SOPRON REI			YARN Tuls	RETUR	SHADE	O SUPPLIERS SUP-CODE YARN SUPPLIER	<u>DATE</u> <u>RETURNED</u>	COMPLAINT
7278 VISCOZ FENYES RESPONSE TO COMPLAINT :	333	42	71-60	s sodr	SZURKE	16 VERRE TEXTILE	08/07/89 300	THICK & THIN PLACES
1723 100 % VICOS FENYES RESPONSE TO COMPLAINT :	35.8	12	251-275	S=1 CE	DAPKER	38 LETTETETT	12/11/89 200	OIL STAINS IN YARN

SOPRON	REPORT O	K SURPLUS	YARN	SALES

BATCH	YARN DESCRIFTION	DIEI	FILAMEN	<u> </u>	<u>5_1</u>	<u>SHADE</u>	SALE DATE	COST	SALE PRICE	OTY SOLD	SALES VALUE	YARN BUYER
1276	PE SET HIS TREV POY SI	75.7	25	141-150	S SOOR	DAYCHU	06/05/87	291.74	10.00	200	2000	HUNGARIAN KHITTERS
1271	100 1 VICOS FENYES	167	0	551-600	1 SCOR	UKOYED	06/03/69	275.77	5.00	100	500	THE KNITTING CO
7278	VISCOZ FENYES	223	42	71-80	S SODR	SZURKE	03/03/89	290.55	7.50	150	1125	FULLY FASHIONED PLC
									TOTAL :	450	3625	

SOPRON REPORT ON SURPLUS YARN WRITTEN-OFF

BATCH	YARN DESCRIFTION	DTEX	FILAMENT	1415	<u>s 1</u>	SHADE	SALE DATE	<u> </u>	OTY WRITTEN-OFF	ROOK VALUE
1271	100 I VICOS FENYES	167	Ç	551-600	≀ SODR	UNDYED	08/07/87	275.77	9 00	248193
	PE SET NIS TREV POY SI	75.7	32	141-150	S SOOR	UNDYED	07/03/89	291.74	700	204213
1105	PE FM HZS EREP TORL HYUJT	107.8	24	0-20	1 SCDR	UNDYED	05/03/37	134.15	1000	134150
7273	VISCOI FENYES	333	42	71-80	S SOOR	SZURKE	03/03/39	290.55	350	101873
								TOTAL :	2750	638254

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Appendix 9.1

APPENDIX 9 - SAMPLE WAGE REPORTS

MECHANICS WAGE REPORT : FROM 01/09/89 TO 30/09/89

MECHANIC : 01 - GYORVARY SYULA

L003	ARTICLE	INSPECTED	Ist GOALITY	PAY-RATE	1st QUALITY	2nd QUALITY	PAY-RATE	2nd QUALITY	3rd QUALITY	PAY-RATE	3rd QUALITY	101AL	TOTAL
			METERS	Ft/HT	<u>Pay</u>	KETERS	Ft/MT	<u> Pay</u>	METERS	FL/MT	<u>Pay</u>	PAGS	PAY
8095	CSABA	45.0	45.0	2.00	92.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	92.0
6003	CSARA	33.5	33.5	2.00	67.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	67.0
5005	CS49A	41.0	41.0	2.00	82.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	82.6
£007	ASARO	20.3	20.3	2.00	40.6	0.0	1.00	0.0	0.0	0.00	0.0	0.0	40.5
6010	CS45A	42.0	42.0	2.00	84.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	84.0
6011	CSAZA	36.5	38.5	2.00	73.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	73.0
8012	CSABA	45.0	45.0	2.00	90.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	90.0
	TOTAL :	254.3	254.3		528.6	0.0		0.0	0.0		0.0	0.0	528.8
			TOTAL NEAT	VER WASES	:	523.6 Ft							
			MECHANIC I	MACEC	_	717 7 54							

MECHANIC WAGES = 317.2 Ft

WEAVE	<u>r</u> hame	INCRECTER	tes OHAL TIN	T-4 CHALLTY	Tad DUNI STW	7074	****
		Inster 165	METERS	Znd GUALITY METERS	3rd QUALITY MITERS	TOTAL RASS	TGTAL PAY
001	KISS MARIANN	277.9	203.8	33.7	35.4	0.0	0.00
	MSZO MONIKA	229.1	173.0	39.1	17.0	0.0	0.00
003	MOLMAR RITA	513.0	473.9	0.0	40.0	0.0	0.00
	edinan siilvia	51.0	36.0	25.0	0.0	0.0	0.60
005	MARKUS SIILVIA	709.2	\$79.7	31.0	49.0	9.0	0.00
	KOZAK SZILVIA	633.7	633.7	0.0	0.0	0.0	0.00
008	FUZI TUNDE	62.0	45.0	15.0	0.0	0.0	0.00
	NYITEAI CECILIA	38.0	30.0	0.0	3.0	3.0	0.00
	HARGITAI HELGA	40.0	40.0	9.9	0.0	0.0	0.00
	SIAMALY ERISEBET	27.0	0.0	0.0	29.0	0.0	9.00
	FAZEKAS IMRENE	36.0	36.0	9.0	0.0	6.0	0.60
	LANG ISTAVANNE	349.5	322.5	27.0	0.0	0.0	0.00
	KISS TEREZ	256.7	197.9	v.o	58.9	0.0	0.00
	Bihari Barbara	782.7	515.7	107.3	27.0	37.5	0.00
	FEKETE JOZSEFNE	319.4	290.0	25.4	0.0	5.0	0.00
	CIETIN ANDREA	445.7	445.7	0.0	0.0	0.0	0.00
	VARGA TIBORNE	558.2	510.5	47.7	0.0	0.0	0.00
	AIRRI TEMBKE	447.1	374.1	75.0	0.0	6.0	0.00
	SOOS IDA	422.1	422.1	9.0	0.0	0.0	0.00
	KRANITZ GYULANZ	571.5	671.5	0.0	0.0	0.0	0.00
	DARABOS PETERNE	309.5	217.8	53.0	35.9	0.0	0.00
	FABIANKOVICS PALME	459.9	459.9	0.0	0.0	0.0	0.00
	TARCSAI JULIA	587.0	545.1	12.9	0.0	31.0	0.00
	RALASNO EPHONE	245.0	210.9	38.0	0.0	0.0	0.00
100	CSETKOVICS MARTA	511.6	590.6	31.0	0.6	0.0	0.00
	KOVACS JOZSEFNE	953.5	863.4	55.1	0.0	0.0	9.00
355	NAGY IREN	427.5	380.4	47.1	0.0	0.0	0.00
357	ZERGI ATTILANE	484.9	427.9	57.0	9.0	0.0	C.00
359	KASIA JANGSHE	637.7	637.7	0.0	0.9	0.0	0.00
	ABRAHAM TIMEA	331.3	313.3	32.0	33.0	3.0	0.00
362	STALAT IMRENE	340.3	300.3	0.0	0.0	0.0	0.00
388	NEMETH MIKLOSHE	1074.9	1045.7	49.0	0.0	0.0	0.00
	VISSI IMPENE	716.0	715.0	0.0	0. 0	0.0	0.00
359	KOLOSSVARI ENDRENE	17.0	0.0	0.0	17.0	0.0	0.00
373	FUII MIHALYNE	544.9	436.5	80.5	27.8	0.0	0.00
375	RETI IMRENE	579.7	643.3	31.4	0.0	0.0	0.00
	TOTH PALNE	34.8	34.9	0.0	Ú. Ú	0.0	0.00
382	TAKACS SANDORNE I	554.2	479.3	74.9	0.0	0.0	0.00
386	BALAIS FERENCHE	31.0	0.0	0.0	31.0	0.0	0.00
391	MESZAROS F. JENONE	521.0	436.0	44.0	41.0	0.0	0.00
	HORVATH VIKTORNE	228.1	228.1	0.0	0.0	0.0	0.00
	KULCSAR SANDORNE	924.7	821.1	72.6	0.0	31.0	0.00
	SZIGETI MARIA	519.3	439.9	79.4	0.0	0.0	0.00
	XISS GYULANE	344.4	797.4	45.0	0.0	9.0	0.00
	DULICZ KATALIN	270.1	209.1	45.0	0.0	15.0	0.00
	RASITOVICS FERENCHE	43.0	0.6	0.0	26.0	17.0	0.00
	TRIMPL FERENCHE	778.2	740.4	37.8	0.0	0.0	0.00
	PALOGH TREN	421.7	421.7	0.9	0.0	0.6	0.00
	POISGAL SANDORNE	509.5	488.0	0.0	0.0	21.5	0.00
	GOSZTOLA GYULAKE	712.8	673.7	0.0	0.0	14.1	0.00
	NICKL TIBORNE	615.7	615.7	0.0	0.0	0.0	0.00
	HORVATH ISTVANNE II	803.1	603.1	0.0	0.0	9.0	0.00
	HORVATH ANTALNE	38.0	0.0	0.0	39.0	0.0	0.00
	MCHOSTOR! ERISERET	367.7	441.7	23.0	38.0	0.6	0.00
	NAGY 190LYA	80.0	60.0	0.0	0.0	9.0	0.00
	PADANYI JANOSNE	723.3	583.6	97.3	0.0	41.0	0.00
	BOKOR ANDRASMS	270.8	243.9	0.0	27.0	0.0	0.00
575	FARKAS TEREZ	367.4	312.4	43.0	0.0	0.0	0.00

MEAVERS WASE REPORT : FROM 11/09/89 TO 18/09/89

MEAVER : 001 - MISS MARIANN

<u>1007</u>	ARTICLE	INSPECTED	Ist GUALITY	FAY-RATE	1st QUALITY	2nd GUALITY	EAY-RATE	2nd QUALITY	3rd QUALITY	PAY-RATE	3rd QUALITY	TOTAL	<u>TOTAL</u>
			METERS	FL/M!	FRY	KETERS	FE/NT	PAY	METERS	FL/NT	PAY	RAGS	PAY
1504	DOLCRES	51.0	51.0	1.50	76.5	0.0	0.75	0.0	0.0	0.00	0.0	0.0	76.5
1617	Paning	5.2	5.2	3.00	15.6	0.0	1.50	0.0	0.0	0.00	0.0	0.0	
1703	HINIVE	35.4	0.0	2.00	0.0	0.0	1.00	0.0	35.4	0.00			15.5
2503	Piranis	25.3	25.3	2.00	50.5	0.0	1.00	0.0	0.0		0.0	0.0	0.0
2504	PIRANIS	27.1	27.1	2.00	54.2	0.0	1.00			0.00	0.0	0.0	50.6
2510	PIRAMIS	33.7	9.0	2.00	0.0	33.7		0.0	0.0	0.00	0.0	0.0	54.2
2512	PIRAMIS	40.0	40.0	2.00			1.00	33.7	0.0	0.00	0.0	0.0	33.7
	FIRAMIS	23.0			90.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	80.0
	KILUS		23.0	2.00	45.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	46.0
		32.0	32.0	2.00	64.0	0.0	1.00	0.0	0.0	0.50	0.0	0.0	84.0
2564	MILUS	5.2	5.2	2.00	10.4	0.0	1.00	0.0	0.0	0.50	0.0	0.0	10.4
			*										
	TOTAL :	277.9	209.8		397.3	33.7		33.7	35,4		0.0	0.0	451.0

TOTAL PIECE	RATE NAGES	:	431,0 Ft
WEAVER WAGE	SUPPLEMENT	0.02 =	0.0 Ft
JATOT GRAND	OF NAGES DUE	:	431.0 Ft

APPENDIX 10 - STRUCTURE OF MAIN DATA FILES

Appendix 10.1

Structure of file QUALITY.DBF

FIELD	TYPE	WIDTH	DECRIPTION
	_		
ARTICLE	C	10	ARTICLE CODE
WEAVER	С	3	WEAVER CODE
LOOM	C	4	LOOM CODE
MECHCODE	C	2	LOOM MECHANIC CODE
MECH_GRP		2	MECHANICAL GROUP OF LOOM
DATE	D	8	DATE OF QUALITY ENTRY
CHECKER	C	3	CODE OF GREY CLOTH INSPECTOR
TOTAL_M	N	8,1	TOTAL METERS EXAMINED
TOT_1ST	N	8,1	TOTAL METERS GRADED AS 1st QUALITY
TOT_2ND	N	8,1	TOTAL METERS GRADED AS 2nd QUALITY
TOT_3RD	N	8,1	TOTAL METERS GRADED AS 3rd QUALITY TOTAL METERS GRADED AS WASTE
TOT_RAGS	N	8,1 8,1	TOTAL VOLUME NON-1ST QUALITY CLOTH
NON_1ST	И.		SHIFT ON WHICH CLOTH WAS PRODUCED
SHIFT	C N	1 5	TOTAL FAULTS FOUND FOR CODE .!os 1.
FAULT_1 FAULT_2	N	5	TOTAL FAULTS FOUND FOR CODE Nos 2.
FAULT_3	N	5	TOTAL FAULTS FOUND FOR CODE NOS 3.
FAULT_4	N	5	TOTAL FAULTS FOUND FOR CODE Nos 4.
FAULT_5	N	5	TOTAL FAULTS FOUND FOR CODE Nos 5.
FAULT_6	N	5	TOTAL FAULTS FOUND FOR CODE Nos 6.
FAULT 7	N	5	TOTAL FAULTS FOUND FOR CODE Nos 7.
FAULT_8	N	5	TOTAL FAULTS FOUND FOR CODE Nos 8.
FAULT 9	N	5	TOTAL FAULTS FOUND FOR CODE Nos 9.
FAULT_10		5	TOTAL FAULTS FOUND FOR CODE Nos 10.
FAULT 11	N	5	TOTAL FAULTS FOUND FOR CODE Nos 11.
FAULT 12	N	5	TOTAL FAULTS FOUND FOR CODE Nos 12.
FAULT_13	N	5	TOTAL FAULTS FOUND FOR CODE Nos 13.
FAULT 14	N	5	TOTAL FAULTS FOUND FOR CODE Nos 14.
FAULT_15	N	5	TOTAL FAULTS FOUND FOR CODE Nos 15.
FAULT_16	N	5	TOTAL FAULTS FOUND FOR CODE Nos 16.
FAULT_17	N	5	TOTAL FAULTS FOUND FOR CODE Nos 17.
FAULT_18	N	5	TOTAL FAULTS FOUND FOR CODE Nos 18.
FAULT_19	N	5	TOTAL FAULTS FOUND FOR CODE Nos 19.
FAULT_20	N	5	TOTAL FAULTS FOUND FOR CODE Nos 20.
TOTFAULT	N	7	SUM TOTAL OF ALL FAULTS RECORDED
WARP	C	4	WARP CODING
PIECE	N	2	WARP PIECE NUMBER
CHAR	С	1	PIECE DESCRIPTION CODE
RATE_1	N	6.2	PAY RATE FOR THE 1st QUALITY CLOTH
RATE_2	N	6,2	PAY RATE FOR THE 2nd QUALITY CLOTH
RATE_3	N	6,2	PAY RATE FOR THE 3rd QUALITY CLOTH
ΤΩΤΡΏΥ	N	6,2	TOTAL PAY EARNED BY THE WEAVER

Appendix 10.2

Structure of the file PRODO.DBF

LOOM	С	4	LOOM CODE				
WEAVER	С	3	WEAVER CODE				
MECH_GRP	С	2	MECHANICAL GROUP OF LOOM				
MECHCODE	С	2	LOOM MECHANIC CODE				
ARTICLE	С	10	ARTICLE CODE				
SHIFT	C	1	SHIFT ON WHICH CLOTH WAS PRODUCED				
DATE	a	8	DATE OF PRODUCTIVITY ENTRY				
PICKS	N	6	ACTUAL NUMBER OF PICKS INSERTED				
POSSPICK	N	6	MAXIMIUM NUMBER OF PICKS POSSIBLE				
SPEED	N	4	LOOM SPEED IN RPM				
TIME	N	6	DURATION OF SHIFT IN MINUTES				
DT1	N	3	LOST TIME DUE TO DOWNTIME CODE 1.				
DT2	N	3	LOST TIME DUE TO DOWNTIME CODE 2.				
DT3	N	3	LOST TIME DUE TO DOWNTIME CODE 3.				
DT4	N	3	LOST TIME DUE TO DOWNTIME CODE 4.				
DT5	N	3	LOST TIME DUE TO DOWNTIME CODE 5.				
DTG	N	3	LOST TIME DUE TO DOWNTIME CODE 6.				
DT7	N	3	LOST TIME DUE TO DOWNTIME CODE 7.				
DT8	N	3	LOST TIME DUE TO DOWNTIME CODE 8.				
DT9	N	3	LOST TIME DUE TO DOWNTIME CODE 9.				
DT10	N	3	LOST TIME DUE TO DOWNTIME CODE 10.				
DT11	N	3	LOST TIME DUE TO DOWNTIME CODE 11.				
DT12	N	3	LOST TIME DUE TO DOWNTIME CODE 12.				
DT13	N	3	LOST TIME DUE TO DOWNTIME CODE 13.				
DT14	N	3	LOST TIME DUE TO DOWNTIME CODE 14.				
DT15	N	3	LOST TIME DUE TO DOWNTIME CODE 15.				
DT16	N	3	LOST TIME DUE TO DOWNTIME CODE 16.				
DT17	N	3	LOST TIME DUE TO DOWNTIME CODE 17.				

Appendix 10.3

Structure of the file PARTISSU.DBF

PARTCODE	С	8	LOOM SPARE-PART CODE
QTY	N	2	LOOM SPARE-PART ISSUE QUANTITY
DATE	D	8	LOOM SPARE-PART ISSUE DATE
LOOM	C	4	CODE OF LOOM RECEIVING SPARE-PART
		Structure	of file PARTSTOC.DBF
PARTCODE	С	8	LOOM SPARE-PART CODE
STOCK	N	5	LOOM SPARE-PART STOCK QUANTITY

Appendix 10.4

Structure of the file LOOMAST.DBF

FIELD	TYPE	WIDTH	DECRIPTION
LOOM	С	4	LOOM CODE
ARTICLE	С	10	ARTICLE CODE
SPEED	N	4	LOOM SPEED RPM
PICKNOW	N	5	PRESENT LOOM PICK COUNTER READING
PICKEND	N	5	FINAL EXPECTED PICK COUNTER READING
PICKNEED	N	5	TOTAL PICKS REQUIRED
PICKIN	N	5	PICKS INSERTED ON CURRENT WARP
PICKTOGO	N	5	PICKS STILL TO BE INSERTED
CLOTHLEN	N	4	EXPECTED CLOTH LENGTH (Meters)
WARP	С	4	WARP CODE

APPENDIX 11 - SUMMARY OF APPLICATION FILES

DATABASE FILES (.dbf EXTENSION)

SUBCONT.DBF TEMP4.DBF BAD.DBF MECH1.DBF PRODO.DBF BAD5.DBF WEAVER.DBF BAD12.DBF DON3.DBF SPARES.DBF YARDIR.DBF PRCD1.DBF MECHANIC.DBF PARTISSU.DBF YARWRITE.DBF 61864214.DBF	CLOTHERR.DBF YARTWIST.DBF BAD2.DBF MECH2.DBF BAD1.DBF BAD6.DBF BAD8.DBF BAD13.DBF TEMP3.DBF YARNAME.DBF YARNAME.DBF YARNSUP.DBF WEAV2.DBF DON4.DBF YARN.DBF YARN.DBF PICKREAD.DBF LASZLO.DBF	LOOMSTOP.DBF TEMPIN.DBF BAD3.DBF TEMPB.DBF YARCNT.DBF BAD7.DBF INSPECT.DBF YARBACK.DBF YARINP.DBF FCST1.DBF LOOMPROD.DBF YARNREJ.DBF LOOMS.DBF LOOMS.DBF YARSALE.DBF BAD30.DBF LASZLOZ.DBF	ARTICLE2.DBF PARTOUT.DBF TEMP7.DBF YARCOL.DBF BAD4.DBF TEMPOUT.DBF YARPACK.DBF BAD11.DBF YAROUT.DBF YAROUT.DBF FCST2.DBF YARFIL.DBF WEAV1.DBF ART1.DBF PARTSTOC.DBF YARBUY.DBF 92027260.DBF WAGE1.DBF
61864214.DBF LOOMAST.DBF QUALITY.DBF	LASZLO.DBF WAGERATE.DBF WAGES2.DBF	LAS7LO2.DBF ARTICLE.DBF WAGES3.DBF	WAGE1.DBF WAGE2.DBF WAGE6.DBF

Thase are the system data files used to hold all the data that the system requires to produce output reports. These files are always given the extension .dbf by dBase IV.

PROGRAMME/COMMAND FILES (.prg EXTENSION)

NSOPRON.PRG SOPDBASE.PRG SOPEDIT.PRG ART1.PRG SOPDATA.PRG MECHQUAL.PRG SPARADD.PRG SUBADD.PRG LOOMADD.PRG LOOMADD.PRG GUAL_B.PRG LOOMREPO.PRG DATAVIEW.PRG ARTADD.PRG ARTIN.PRG ARTADD.PRG ARTUEW.PRG ARTUEW.PRG ARTUEW.PRG ARTUEW.PRG PARTOT.PRG PARTECST.PRG PARTECST.P	FIBINP.PRG SOPADD.PRG SOPREPO.PRG SOPGUAL.PRG BLANKS.PRG FLTQUAL.PRG INSPOUAL.PRG PARTUSE.PRG REP2.PRG INSPOL2.PRG MISPOL2.PRG MISPOL2.PRG MISPOUT.PRG MIPEOUT.PRG MTLADD.PRG QUAL_3.PRG YARBACK.PRG OUAL_3.PRG YARNADD.PRG S_MULTI.PRG SINGLOOM.PRG YARSTK_1.PRG YARSTK_1.PRG YARN_1.PRG YARN_1.PRG YARSTK_4.PRG YAROUT.PRG WAROUT.PRG WARNING2.PRG WEAV1.PRG	SOPOUT.PRG PARTSTOC.PRG ART1ADD.PRG ARTQUAL.PRG WEAVOUAL.PRG MECHADD.PRG BLANK3.PRG PARTSIN.PRG WEAVADD.PRG SOPINDEX.PRG WEAVREPO.PRG YARET.PRG DATAEDIT.PRG PARTSORT.PRG PARTSORT.PRG GUALDAY.PRG QUAL_4.PRG REP3.PRG REP3.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNEPO.PRG YARNES.PRG YARNSTK.PRG YARNSTK.PRG YARNES.PRG	SOPRON.PRG SOPVIEW.PRG ARTEDIT.PRG BLANK4.PRG LOOMQUAL.PRG QUAL_7.PRG SOPSTOCK.PRG P2_MULTI.PRG STOPADD.PRG YARNVIEW.PRG MESSAGE.PRG PICKAWAY.PRG SOPINP.PRG YARADD.PRG INSPADD.PRG INSPADD.PRG FLTGUAL2.PRG LGOMGL2.PRG WEAVGL2.PRG VARNEDIT.PRG REP6.PRG LOOMSPAR.PRG QUAL_5.PRG CNTADD.PRG PRODADD.PRG YARN_3.PRG YARN_7.PRG YARN_7.PRG YARN_9.PRG YARNLTI.PRG WARPROD.PRG WEAV2.PRG
ARTVIEW.PRG	YARBACK.PRG	QUALDAY.PRG	LCOMQL2.PRG
ARTQUAL2.PRG	QUAL 3.PRG	QUAL 4.PRG	WEAVOL2.PRG
	-	_	
PLURAL.PRG	REP4.PRG		REP6.PRG
REP7.PRG	S_MULTI.PRG	YARNREPO.PRG	LOOMSPAR.PRG
PARTOT.PRG	SINGLOOM.PRG	PARTRANK.PRG	QUAL_5.PRG
PARTFCST.PRG	YARSTK_1.PRG	WAGES.PRG	CNTADD.PRG
	YARSTK_2.PRG	P4_MULTI.PRG	PRODADD.PRG
	-		YARN_3.PRG
	YARN_5.PRG	YARN_6.PRG	YARN_7.PRG
	_	YARNSTK.PRG	YARN_9.PRG
— .		PRODINP.PRG	
		-	
		- · · · - -	_
			
MECHQL2.PRG	REASON.PRG	PRODZ.PRG	MECH2.PRG
MECH1.PRG Q MULTI.PRG	P_MULTI.PRG TWDESC.PRG	FILADD.PRG	TWSTADD.PRG
01 MULTI PRG	02 MULTI.PRG	REASON2.PRG 03_MULTI.PRG	PACKADD.PRG Q4 MULTI.PRG
Q5_NULTI.PRG	06 MULTI.PRG	Q7 MULTI.PRG	08 MULTI.PRG
Q9 MULTI.PRG	D10 MULT.PRG	SUPADD.PRG	SHADADD.PRG
GUAL O.PRG	FLTWARP.PRG	DAYWARP.PRG	NSOPDB.PRG
GEPSZ.PRG	BUYADD.PRG	DESCADD.PRG	MASTUPU.PRG
YARSTK_7.PRG	YARADJ.PRG	YARWRITE.PRG	YARMOVE . PRG
YARSTK B.PRG	YARSTK_6.PRG	SOPPROD.PRG	WEAVWAGE PRG
WEAVSUM.PRG	REDUCER.PRG	RATEINFO.PRG	MECHWAGE . PRG

These are the command files which contain the programming code to tell the cystem which tasks it must perform. Each of these files with the extension .prg is designated as a source file in ASCII format and when the programme is implemented an object file written in machine code is compiled by the system and given the same ifile name but with an extension of .dbo instead of .prg.

REPORT FORMS (.frm EXTENSION)

ARTY.FRM PARTSTOC.FRM WEAVY.FRM PARTSTOC.FRM WEAVER.FRM SPARES.FRM MECHANIC.F SUBCONT.FRM WEAVFLT.FR INSPECT.FRM LOOMDAY.FRM WEAVDAY.FR LOOMDAY.FRM WEAVDAY.FR WEAVDAY.FR WEAVDAY.FR PARTICLE.FR WEAVDAY.FR WEAVDAY.FR WEAVFLT.FR WARDAY.FRM WARPOUT.FRM PRODGL.FRM PTSTK_1.FR WARNS.FRM WAGEY2.FRM WAGEY3.FRM	FRM CLOTHERR.FRM RM LOOMFLT.FRM RM ARTDAY.FRM RM ARTY2.FRM LCMSPAR.FRM FRM MECHY.FRM MYARFIL.FRM MYARCOL.FRM MYARVOL.FRM MECHFLT.FRM MECHFLT.FRM MARPFLT.FRM MARYOL.FRM MYARVOL.FRM MYARVOL.FRM MYARVOL.FRM MYARVOL.FRM MYARVOL.FRM MYARVOL.FRM	MECHY2.FRM LOOMS.FRM LOOMSTOP.FRM PARTISSU.FRM INSPECT2.FRM WEAVY2.FRM SINGLOOM.FRM FORECAST.FRM YARTWIST.FRM YARNSUP.FRM YARNI.FRM WEAVEFF.FRM MECHEFF.FRM DAYFLT.FRM WAGEY.FRM
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These are the files created from the system report designer which customise the format of output reports produced from the system. When this file is created dBase IV automatically creates a second file with the same name but having the extension *.frg which contains the programming code required to make the report. When an output report is finally printed the .frg file is compiled and the object code written to a file with the extension .fro.

SCREEN FORMS (.scr EXTENSION)

LOOMS.SCR	MECHANIC.SCR	SUBCONT.SCR	SPARES.SCR
QUALITY.SCR	WEAVER.SCR	LOOMSTOP.SCR	CLOTHERR.SCR
ARTICLE.SCR	PARTOUT.SCR	PARTIN.SCR	PRODO.SCR
ARTICLE2.SCR	INSP.SCR	LCOMADD.SCR	YARINP.SCR
YARNREJ.SCR	YAROUT.SCR	LOOMAST.SCR	YARBACK.SCR
YARCNT.SCR	YARFIL.SCR	YARTWIST.SCR	YARDIR.SCR
YARPACK.SCP	YARNSUP.SCR	DESCRIP6.SCR	DESCADD.SCR
YARCOL.SCR	YARBUY.SCR	YARSALE.SCR	YARWRITE.SCR

These are the files used by the system to customise screen formats. When this file is saved the system automatically creates a second file with the same name but having the extension .fmt, which contains the programming code necessary to reproduce the customised screen.

INDEX FILES (.ndx & .mdx EXTENSION)

. dir *.md× LOOMS.MDX INSPECT.MDX YARCNT.MDX YARCOL.MDX YARBUY.MDX	ARTICLE.MDX YARNSUP.MDX YARFIL.MDX YAROUT.MDX WAGERATE.MDX	SPARES.MDX PARTSTOC.MDX YARTWIST.MDX MECHANIC.MDX	WEAVER.MDX YARNAME.MDX YARDIR.MDX HASZNALO.MDX
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These files hold data from the databases files in an indexed format. Files which are indexed on a single databases field are given the extension .ndx and those with multiple indexes are designated as .mdx files. The purpose of these files is to speed up data searching in the database files.

dBASE IV ENVIRONMENT

This illustration shows you how the dBASE components are related and which books to check for more information. It also points vote, where appropriate, to the on-line Help system.

Control Center

Use the Control Center to learn and work in dBASE IV. New and experienced users can easily manipulate files and accomplish database management tasks, such as creating and using database

files, catalogs, views, forms. reports, and labels. See Using the Menn System and on-line Help.

dBASE Language Processor

Use the commands and functions from the dot prompt or in programs to directly access data and to build dDASE applications. You can also modify programs created with the

Applications Generator, See Language Reference, Programming with dBASE IV. Sample Program-ming Code, Quick Reference, and on-line Help.

SQL

Use SQL to com-bine the language standard of mainframe computers with the power and flexibility of the dBASE language. SQL commands and func-

APPENDIX

12

DBASE

7

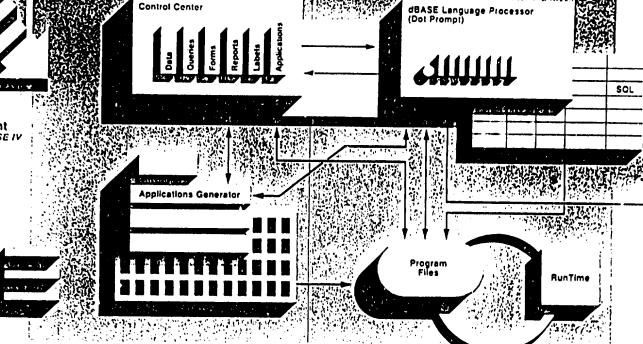
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SCHEMATIC LAYOUT

Entering the dBASE IV Environment

See Getting Started with dBASE IV Developer's Edition.

Enhancements to dBASE III PLUS See dBASE IV Change Summery.



Applications Generator

Use the Applica-tions Generator to create applications without program-ming. New application developers benefit by learning the basics of application design.

Experienced devel-

and effort, without forfeiting access to the dBASE Junguage. See Using the dBASE IV Applications Generotor, Template Language, and on-line Help.

RunTime

Use RunTime to prepare applications for distribution to others. Professional developers can distrib. ute applications with RunTime to their clients. See Progresuming with