OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1770A
ANGLED LINES TEST CHART NO. 2
ASSISTANCE TO THE

CEYLON-LEATHER PRODUCTS CORPORATION

(CLPC)

DP/SRL/81/007

SRI LANKA.

Technical Report: Shoe Industry and Training Management Expert*

Prepared for the Government of Sri Lanka by the
United Nations Industrial Development Organization,
acting as executing agency for the United Nations
Development Programme

Based on the work of W.E. Cogger,
UNIDO Expert

* This report has been reproduced without formal editing.
POST TITLE - Expert in Shoe Industry Training/Management  
DP/SEL/S1/C07/11.07 - S1.7 D.

PURPOSE OF PROJECT

The Government has decided to modernize and expand the operations of Ceylon Leather Products Corporation and improve the production development capabilities of the Footwear Plant. Assistance is sought in the Training of Managers, Supervisors and Operators.

1. Organize and implement a Training Programme for Middle Management and Supervisors in:
   a. Cutting Room Management and Supervisory
   b. Closing Room " " "
   c. Assembling (Making)" " "

2. Undertake direct training of production operations in Cutting/Making.

3. Arrange and prepare training aids for such training and work out suitable syllabus for cutting room, closing room and making department training at relevant levels.

4. Introduce samples of work at every stage of operation and formulate suitable product specifications to facilitate introduction of new articles. Give documentation for Quality Control.
In presenting this second report to the Board, Chairman and General Manager of the Ceylon Leather Products Corporation (C.L.P.C.) and Ministry of Industries and Scientific Affairs, I wish to make further recommendations and give fair comments for urgent action to be taken, in order to improve the viability and performance of the Company, performance of the work force and quality standards of the products.

The Factory and Tannery have enormous potential and capable of meeting any challenge by competitors.

The writer in all sincerity points out strongly that the work force is not made to do the job they are paid for, and lack departmental discipline. There is no supervision worthy of mentioning. Supervisors, Foremen are just not motivated - leadership very much lacking - communication between workers and themselves zero. This is particularly noticeable with the older members of the staff. They are not capable of getting results.

The Expert, on the previous assignment, had a number of Management Trainees passed through his hands - there lies the future Management Team - Recruit from outside sources - But they must have an Induction Management and Technical skills Training before taking over duties.

A strict code of discipline has to be enforced, so that Trainees are not thrown in at the "deep end" and allowed to learn by themselves and do work for which they are not qualified.

It has been a great disappointment to the writer on his return to see how little had been achieved by his previous training programme. The recommendations made had not been "followed up" e.g. guides and gadgets, sewing aids for closing room not in use, hourly performance records not kept, standard of quality and workmanship throughout the factory at the lowest level.
Reviewing the Expert's project programme, it is impossible for him to complete this mammoth task because of the relaxed attitudes of the workforce, and having to generate and motivate work and methods previously introduced.

The production methodology, plant layout and work-flow can, and will be improved with the modernization programme. However, if the existing system in the factory was "made to work", there could be 100% improvement.

Managerial skills are lacking. This is the weakest link in the chain. In passing, which I hope is fair comment, when a UNIDO Expert is invited to assist, it would considerably enhance the result he achieves if consideration could be given to:

1. Having the programme prepared on his arrival.
2. No additional changes in work programme. If required, list priorities.

Men, materials and machines should be available.

Trainees attending the Management training programme should have a Counterpart in his department, doing the work target and departmental requirements. He must be free. At no time should they be permitted to return to department to attend to duties unless authorized by UNIDO Expert.

The Expert on this programme has introduced with success a series of "Case Studies" relating to staff's own problems - The participation and communication feedback has improved considerably. I believe this can and will achieve the results we are aiming for - communication - Leadership - Motivation - Technical Skills - Managerial Skills.
ACKNOWLEDGEMENT

The Expert expresses his sincere thanks and appreciation to those who made a generous contribution and assisted in many ways to ensure the assignment was a success, in particular the following:-

OPTION LEATHER PRODUCTS CORPORATION (O.L.P.C)

Chairman & Managing Director: MR. LAKSHAN R. WATAMALA, ACA., FCA., MIM., MIM.

General Manager: MR. C. RATWANGALA

Factory Manager: MR. M.H.M. PITTASENA

Asst. Gen. Mgr: MR. M.D. SIRIHANES

Chief Accountant: MR. V. WIJERATNE

Personnel Manager: MR. J.A.A.S. RAMASINGE

Sales Manager: MR. A.J.P. TISSEVIRASINGE

Maintenance Manager: MR. D.L.H. DAYANANDA

U.N.D.P.: All members of the U.N.D.P. Headquarters in Colombo.


Project Counterpart: Mr. R. Cholmondely Ameesekers

Trainees: The Expert places on record the participants attending the training programme willingly accepted the new Technical skills and Methodology. Regrettably they are hesitant to apply the Managerial skills - communication - leadership and motivation. Technical skills are not applied in their daily tasks.
VISITS

A visit to the Korea - Ceylon Footwear Manufacturing Co. Ltd., in the Free Trade Zone was profitable. Mr. D. Cyril Nathaniel, Director/General Manager made the factory open for our inspection.

The purpose of the visit was to study on site the Rubber Factory Milling Department, Machines and Equipment in preparation for the C.L.P.C. Modernization and Expansion Project, accompanied by Mr. Thakurta. Much useful information and data was obtained.

The Expert was invited by Rotary International to speak on behalf of UNDP celebrating U.N. Day on the Expert's assignment at C.L.P.C. Also invited as guest speaker to Lions International and Toast Masters Association.

A three day Workshop was held by C.L.P.C. at the Agricultural Research Training Institute. The Expert being invited to attend and participate in the deliberations. The Chairman presenting the Corporation's objectives in the Modernization and Expansion Project. A successful exercise and well received.
FINDINGS

Absentees
Insufficient people in the department create work-flow problems - components are cut - placed on preparing table and await Foreman (who should not do this job) or spare body to do marking - sorting and preparing boxes.

Cutting Manipulation - Methodology
Immediate investigation on cutting methods of cutters revealed the following:

1. Damaged knives
2. Insufficient knives for the design - The operator because of this cuts only one side with knife available. Then he turns the skin over to cut at her foot. It is no wonder, poor quality work is produced. He is unable to see the faults.

Insole Moulding
The correct moulds for the various lasts are not available. The operator uses only one size mould for all sizes, all designs. A very serious effect this has on the lasting of the shoe - also sole attaching. Immediate action should be taken to correct this.

Design 786
White textile used for stitching back seam taping - with so much waste material split suede self colour could be used. Stitching Top-line collar - This operation could be improved if a 24 mm self bending tube is used as in design 402. These can be obtained from H/s. Pfaff, Colombo.

Design D 791 - Boots
Excessive wastage of good upper material. All knives checked against master pattern - request made to Chairman and Factory Manager for two (2) sets of metal templates to be made without delay -

1 set to production
1 set to Engineering Dept.
FINDINGS

Top Priority must be given by the Engineering Workshop to repair or replace damaged knives - Cutting Room Operators delayed days and often weeks - no action or repairs made - they continue cutting with damaged parts - Result - substandard quality from Closing Room - Lasting and Making Department unable to make a good job with bad fitting uppers.

Upper Cutting Department

The receiving and issuing of leather and textiles does not function properly. The system in operation is satisfactory, and the Expert feels there is no need to change it. But inexperience of the staff in charge creates many problems which affect the whole work-flow throughout the factory and this has to be made to work.

1. Daily plan issued for cutters in sq. ft. is never completed mainly due to:

   a) Very low grade of hides
   b) Insufficient allowance made for this
   c) The Operator and Foreman never take into consideration the loss of pairs but use leather from the next issue. Therefore it is impossible for a correct Profit/Loss to be made of the cutter's ability in manipulating the poor quality e.g.

   one day loss in leather issues:
   \[
   \begin{align*}
   \text{Grade 6 leather issued.} \\
   \text{Des. 721} & \quad \text{Black lining} \quad 375 \text{ ft.} \\
   708 & \quad \text{Rum Full Grain} \quad 200 \text{ ft.} \\
   704 & \quad \text{Pebble} \quad 350 \text{ ft.} \\
   340 & \quad \text{Coffee Straps} \quad 200 \text{ ft.} \\
   \end{align*}
   \]

Closing Room Staff Training

Every training programme has to meet a certain criteria of on-and-off-the job training.

An on site study by the Expert revealed -

1) The quality standard was at a low ebb.
2) Departmental order and cleanliness very poor.
3) Work-flow completely mixed in parts and sizes. Component parts in boxes not correct and does not operate.
FINDINGS

Closing Room Staff Training (Contd.)

4) Supervisory staff unable to communicate with work force.
5) Excessive loss in machine performance and not used to capacity.
6) Considerable wastage in leather and sundries.
7) Sewing guides and aids not in use.
8) Operators' hourly performance not recorded.
9) Very low targets achieved - work not supervised or controlled.
10) Basic skills and manual dexterity not utilized.
11) Preparation of sewing boxes and components parts not done correctly. Only basic parts put into box.
12) Machinists wonder about looking for Tongues, Eyelet stays, small parts, etc.
13) Quality Controller not technically skilled in Closing Room - Making - Cutting Section. Crash course to be devised.
14) Quality checking not strict - substandard work passed to Making Department.
15) Good housing much below par - uppers and material on floor - department and equipment untidy.
16) Insufficient lighting for machinists. Existing equipment could be lowered to give wider spread.
17) Chipped and missing parts on leather and lining parts.
18) Worn markers for aprons 412.
FINDINGS

Work-flow in Closing Room most irregular. Too many unnecessary moves by Machinists. Machines badly placed for work in hand.

Cutting attachments on Post type edge trimming and fitting linings not efficient, knives not kept sharp and machines not efficient.

Skiving widths too wide and badly executed.

Stitches too large on most operations $\frac{1}{4}$ - $\frac{3}{4}$ cm on D H S Boots, $3 - 3\frac{1}{2}$ cm on standard work.

Hourly performance records not kept. Machines not used to capacity.

Factory discipline much to be desired. Order and cleanliness throughout the factory very poor.

Code marking dices and plates badly worked - needs replacing.

Too many sewing machines are without adequate lighting and extremely difficult for Machinists as the lighting in department is poor.

No sample boards or specifications on display - Foreman's responsibility.

Two needle flat bed machines not used to capacity.

Upper and bottom cutting clicking blocks in poor condition. Urgently need planing level. Knives broken and damaged because of this.

All cutting knives should be cleaned and given thin coat of oil. In the workshop climatic conditions have caused them to rust. Also they should be in racks as per design (complete).

Not sufficient wooden horses in department to allow for leather preparation for complete plans ready for cutters.

Leather waste thrown on floor. Russian bags should be provided for each cutter and removed daily.
FINDINGS

Leather Upper Cutting Department

Receiving of leather from Tannery short supply required for daily plan.

Considerable difference in substance of leather - D.H.S. printed.

Leather received very dry texture creates stitching and lasting hazard.

Issuing of daily plans - this should be prepared on material with cutter's name - quantity issued - assortment - and cost allowance.

Adjustment of the upper cutting machine - excessive wear on the plastic cutting blocks.

Standardization of upper and bottom cutting knives.

- Heavy duty only 33 mm
- Normal requirement 19 mm

Damaged cutting knives - poorly welded by Engineering section - shape of knife not correct to pattern specification issued by Designing Department.

Majority of cutting knives used on D M S production need to be sharpened.

Cutting Operator do not cut complete components and fully utilising the skin when on cutting table - large pieces cut - rest of skin deposited on floor for another cutter.

During knife making it would seem overheating takes place - material is brittle - life of knife shortened by this.

Sock knives for D M S production range 5 - 8 completely worn out and damaged beyond repair - To be replaced by 19 mm knives.
Counter knives do not have centre V for insertion into upper - modification required.

**Design 416** - Textile vamp and tongue not satisfactory - modification made to stitching methodology and skiving.

**Design 416** - Stitching methodology incorrect for Intacking Derby vamps - This if corrected quality improves.

**Design 402** - Badly fitting counters - pattern and new knife made - improved quality - stitching method changed.

**Design 416** - Marker for Apron stitching 6 mm difference - modification to design/pattern and knife.

**Boots 701** - Damaged back strap and quarter knife.

No hourly record of Cutters' performance and productivity - Introduced.

No profit and loss of material issued and received - Introduced.

Cutters - cutting indiscriminately and not following stretch of leather - Excessive wastage.

Grading of leather much to be desired.

Considerable difference in colours, especially for export orders.

No identification for matching colours supplied by Tannery. This should be controlled at source.

Calculation sheets and costing information not correctly processed by Departmental Head.

Excessive wastage in DMS Embossed Leather. Vamp pattern too large. Urgently need correction 0721 Design.
New designs "Waste Leather"

1. Using waste D H S Pebble print design 406 - Mens casual shoe was cut, stitched and produced and submitted to Chairman and Factory Manager for approval.
   One Trainee cutter has been given this task. A daily plan of 50 pairs is envisaged.

2. Childrens sandal des 176 given approval. Trainee cutter will be responsible for producing full range size 5 - 8.

3. Design 416 - Approval given by Chairman and Factory Manager for new set of Upper and textile vamp knives. This shoe is now a saleable product and inside shoe quality enhanced by the modification.

   A breakdown in suitable buffalo hides from the Tannery has been overcome by careful selection of good grades from stockroom previously rejected by colour difference and after sole attached these are painted self colour and acceptable standard of quality.
1. Using waste leather - one cutter employed in Training Room producing children's sandals 176/8 - Arm stitching required - this can be done by trainee Machinists Des. 178 - 2/5 = 3.35.00 6/8 = 3.37.00

2. Textile Vamps - new set of knives introduced - creases and folds eliminated - Quality of product enhanced.

3. Methodology for stitching tongues corrected.


5. A systematic checking of all cutting knives against "Master Pattern". All necessary repairs and alterations made.

6. Stitching guides re-introduced for Vx seams, sandal work and where required for accuracy. Foreman in department failed to make Operators use them.

**Design 402** - Creases in counter lining eliminated by new and modified counter knives.

**Design 416** - Stitching methodology modified and corrected for Derby intacking. Eliminating creases in linings.

Tongue stitching completely reorganised - new method of single stitching tongue to apron - after top line stitching and lining fitting second line added - saving of double tongue lining and textile.

Modification to textile vamp - eliminating creases, also single substance material in flexing and pressure point.
RECOMMENDATIONS


A Mulling chamber for conditioning uppers should be operational at all times. The climatic conditions demand this.

A Trainee Foreman is presently cutting sandal uppers, design 196 for experience. The Expert strongly recommends he continues and obtain further skills in leather manipulation, provided he is supervised and given a daily target. He can be up-graded into cutting production work.

There must be a "follow up" to his programme and a "feed back" of his progress demanded.

Middle Management Training

Daily lectures have been held, supported by on site practical exercises especially in regard to Upper Cutting Manipulation. These have been particularly interesting and successful. Case studies of the trainee's departmental problems proved to be interesting and stimulating and each participant is doing the actual job.

The writer feels if these could be continued and in greater detail and depth, the trainees will learn to associate the technical and managerial skills with their job of work.

Mini Making Department & School

With the Modernization and Expansion project to commence in the near future, Management could consider using the Training School Sewing with the Making Department - Lasting roughing finishing for stick on footwear would be ideal.

Alternatively, having started Childrens' sandals, cut and made from waste material, this could be sited here. Another alternative could be, all pilot and trial runs could be made here.
Finally, the Expert feels the machines and equipment are not being fully utilized. Management could recoup training expenses by inviting Garment and Shoe Manufacturers to send their staff for training at a fee of a few hundred rupees per person. This would keep the C.L.P.C. staff fully employed and use of the School for which it was designed.

As requested by the Chairman, the writer has produced a possible work-flow and organization chart for consideration to fit in with the Modernization and Expansion Programme.

As can be seen, it involves a major change and siting for all the production units.

The writer would suggest, the moving should be arranged to be done step-by-step starting with Bottom and Upper Manipulation followed by Closing Room and Making.

The movement should be organized to take place during a weekend or holiday period. Exact siting of machines should be made ready for work force to start on Monday morning.
RECOMMENDED ACTION

Leather Manipulation

Strict control on the daily target despatched from Tanmer. Unnecessary delay throughout factory when plan is not delivered complete.

DMS Leather - very dry texture - Investigate formula for shortage of oil and chemicals. Substance and quality needs controlling.

Issuing of cutters' daily plan - It has to be supplied complete. No accurate costing in Profit/Loss can be made until this is achieved.

Grading of skins - It would greatly improve the cutter's target performance if higher grade skins were supplied for him e.g. Grades 2/3. Presently issued D and grade 6.

Planned maintenance on all clicking presses - some machines in very poor mechanical condition, not having been overhauled for many years.

Plastic Cutting Blocks - With correct cutting pressure, these will last for years. Engineering department should check these at least once a week.

Demaged Cutting Knives - Regular inspection against Master Pattern desirable weekly. One person should be made responsible to do this weekly and report all damage to E/Production Manager for immediate action. Regular sharpening is essential.

Short of cutting knives - False economy by the designing department in providing insufficient knives for the cutting department e.g. counter knives should be for two sizes only - not the full range.

DMS Boots shortage of knives and damaged, the cutters HAVE TO REVERSE the skin to cut the opposite foot. This is an impossible situation and should not be tolerated.

The cutter - to do his job correctly should have a complete set of cutters, so he can manipulate the skin correctly. As he does not have these, he cuts what he has and the rest of the leather put aside for someone else to complete - costing is impossible.
RECOMMENDED ACTION

Short of cutting knives (Contd.)

Workmanship received from Engineering Department on knife repair is of a very low standard, over welding - overheating - cutting edges not neatly filed for producing good components - the standard is unacceptable and should not be tolerated.

Design 416 - The cut and knife components are completely different to the design e.g.

1. Original design overlay was for leather edge binding with the eyelet saddle straight on the Top line - with rounded quarter for eyelets on the bottom and heavy stitching.

2. Modifications were made to simplify the closed upper, but knife design was not changed.

3. Closing room is producing a two rounded quarter - one made from this straight edge - Result Vamp and quarters do not fit together.

Designing Department to modify the -

1. Saddle and lining knives, giving both round corners
2. Correct the large slit for the insertion of linings (this is too big).
3. Modify textile lining vamp, so this can be stitched as normal.
4. Intackting for this design should be "L" shape, 5 stitches x 1 x 4.

Size marking with paint is not very satisfactory. Expert suggests a series of \( \_\) be put into knife e.g.

\[
\begin{align*}
\_ & = 3 \\
\_\_ & = 4 \\
\_\_\_ & = 5 \\
\_\_\_\_ & = 6 \\
\text{half sizes} & = \frac{3}{2} \\
\_\_\_\_ & = 4 \frac{1}{2} \\
\_\_\_\_\_ & = 5 \frac{1}{2} \\
\_\_\_\_\_ & = 6
\end{align*}
\]

Left and Right components should be marked by \( \_\_\) on the inside for easy identification.
1. The existing batch card system presently in operation is adequate for complete control of loss and profit in Upper and Bottom manipulations. The following procedure is essential for its success:

2. The clerk when preparing the Batch Card MUST include the following information:
   - Department ...
   - Plan ...
   - Batch Card Number ...
   - Design ...
   - Size Range ...
   - Amount of leather issued for order ...
   - Loss ...
   - Cost per square foot Rs. ...

3. The Foreman in charge of department issues only the quantity of leather for the order to the cutter. If more leather is required to complete the order, this has to be recorded on the Batch Card e.g.
   
   **Example**
   
   Leather issued 100 sq. feet
   " required to finish order 20 "
   120
   
   Loss on order 20 sq.ft. @ Rs. 20/- = Rs. 400/-

4. The Foreman of department should have a record book for all extra leather issued daily. This book should be submitted to Costing Department and Factory Manager for filing and future reference.
RECOMMENDED ACTION

Modernization and Expansion Project

The Expert has drawn up the attached work-flow plan.

It will be seen, a major move/change will need careful planning and organising and in no way should it be attempted in one go.

Stage I  Upper and Bottom Manipulation

II  Closing Room

III  Making Department
<table>
<thead>
<tr>
<th>DESIGN</th>
<th>GG</th>
<th>EMB</th>
<th>HUNT</th>
<th>NAKED</th>
<th>KATAI</th>
<th>LINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/3</td>
<td>105</td>
<td>346</td>
<td></td>
<td></td>
<td></td>
<td>73</td>
</tr>
<tr>
<td>3/1</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>148</td>
</tr>
<tr>
<td>703</td>
<td>37</td>
<td>519</td>
<td></td>
<td></td>
<td></td>
<td>69</td>
</tr>
<tr>
<td>704</td>
<td>41</td>
<td>282</td>
<td></td>
<td></td>
<td></td>
<td>143</td>
</tr>
<tr>
<td>705</td>
<td></td>
<td>325</td>
<td></td>
<td></td>
<td></td>
<td>99</td>
</tr>
<tr>
<td>721</td>
<td>41</td>
<td>575</td>
<td></td>
<td></td>
<td></td>
<td>192</td>
</tr>
<tr>
<td>402</td>
<td></td>
<td>273</td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>708</td>
<td></td>
<td>273</td>
<td></td>
<td></td>
<td></td>
<td>149</td>
</tr>
<tr>
<td>783</td>
<td>251</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>119</td>
</tr>
<tr>
<td>795</td>
<td>282</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>148</td>
</tr>
<tr>
<td>120 Boys Group 2</td>
<td>147</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>Group 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>796</td>
<td></td>
<td></td>
<td></td>
<td>250</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>782</td>
<td>241</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>956</td>
<td></td>
<td>24</td>
<td></td>
<td>65</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>926</td>
<td></td>
<td>37</td>
<td></td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>362</td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>357</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>181 Boys Group 4</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>126</td>
</tr>
<tr>
<td>364</td>
<td></td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>786</td>
<td></td>
<td>303</td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>366</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>49</td>
</tr>
<tr>
<td>412</td>
<td></td>
<td>239</td>
<td></td>
<td></td>
<td></td>
<td>42</td>
</tr>
<tr>
<td>831</td>
<td>158</td>
<td></td>
<td></td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>704 P</td>
<td>41</td>
<td>282</td>
<td></td>
<td></td>
<td></td>
<td>143</td>
</tr>
<tr>
<td>Leather Type</td>
<td>Grade 4</td>
<td>Grade R</td>
<td>Grade D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Grain Upper Leather 1.6 - 1.8</td>
<td>10.30</td>
<td>9.71</td>
<td>9.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embossed</td>
<td>8.63</td>
<td>8.11</td>
<td>7.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naked</td>
<td>8.75</td>
<td>8.25</td>
<td>7.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting Calf Skins</td>
<td>10.60</td>
<td>9.96</td>
<td>9.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kattai</td>
<td>12.36</td>
<td>11.62</td>
<td>10.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kattai Embossed</td>
<td>12.24</td>
<td>11.51</td>
<td>10.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lining Leather</td>
<td>7.41</td>
<td>6.97</td>
<td>6.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRADE</td>
<td>% OF CUTTING VALUE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>95% and Over</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>85% ... 95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>75% ... 85%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>65% ... 75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>55% ... 65%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>45% ... 55%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>35% ... 45%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>25% ... Below</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REJECTED LEATHER**

25% - Below
CONCLUSION

A great deal has been achieved on this assignment. However, the Expert expresses his disappointment that more could, and would have been achieved if his job specification had been less. It covered a too wide a range of activities.

Wishing to give the Corporation satisfaction, every effort was made to show some results in all areas.

The Upper and Bottom cutting manipulation was only scratched on the surface, mainly due to irregular supply of leather and absentees - Performance records difficult to assess - costing Profit and Loss for the cutting operator very difficult - random checks and controls indicate considerable savings.

The up-grading of the Foreman in this department to Leather Grade in the Iamency in the opinion of the Expert is a mistake. He was efficient and had fair control of the workforce. Also he had been on the previous Management Training Course. It would have been better to have retained him in this position with increased status or increment.

The factory's main loss is in this department - only the best Supervision is good enough.

The Management training programme was delayed two weeks - no preparation had been made for them to be engaged or released from their departmental duties. For future T/programmes more attention should be given to planning and organising the programme.

Utilization of waste and raw materials being a major part of the assignment, the Expert introduced design 179 Children's Sen-dals using "all waste" leather uppers and "dead stock" for buckles trims, soleing and bindings. This should not be allowed to lapse. Trainee cutters and Machinists can complete daily target as part of their training.

Sample and specification boards have been made and introduced in the closing room. This could help improve quality standards.
CONCLUSION (Contd.)

A Quality Conference held for several days had to be cancelled due to lack of support by staff members.
For the betterment and improvement of quality, it is essential this be introduced by Management at the earliest (See sample record of a daily conference).

Finally, Management should keep these points on the Top Priority list and enforce factory discipline with positive action.

Staff Training

Training People:

1. Develop forces of competent industrial talent.
2. Provide skills necessary to make a profit and stay in business.
3. Train Managers to deal with new, better educated and more sophisticated breed of workers.
4. Anticipate Management needs.
5. Provide training that is new in concept form and impact.
### 400 daily Des. 795

| 1. Preparing | 1. Preparing |
| 2. St Becks | 2. Marking |
| 4. St Lining & Vamps | 4. R/D/B Seam |
| 5. St Decoration S/N (2) | 5. St Back Strap |
| 7. Lining fitting T/Top line | 7. St Tongues |
| 8. Eyeletting | 9. St Eyelet fixing & Tongue |
| 10. St Oxford Vamp & Qt. (2) | 10. St Straps |
| 11. Checking | 11. St Toe Caps |
| 12. Lacing | 12. Eyeletting |

**Total 16**

**Allowance for absentees 4**

**Total 20**

### St Derby & Casual 400

| 1. Preparing |
| 2. Marking |
| 3. St Back Seam |
| 4. R/D/B Seam |
| 5. St Lining |
| 6. St Tongues |
| 7. Fit linings & Top line | 2 |
| 8. St Decoration - Aprons | (2) |
| 9. St Eyelet Stay & Qtts 2N | (2) |
| 10. Derby Intack | (2) |
| 11. Eyeletting |
| 12. Lacing |
| 13. Checking |

**Total 18**

**Allowance for absentees 4**

**Total 22**

### Sandals/Chappels 800

| 1. Preparing |
| 2. Straps |
| 3. St Counters |
| 4. Decorations |
| 5. Joining Vamp/Qt. |
| 6. Cem. Straps/Preparing | 3 |
| 7. Rivoting | 2 |
| 8. St Insoles/Soaks | 2 |
| 9. Back lining/Lacing |
| 10. Checking Quarters |

**Total 15**

**Allowance for absentees 4**

**Total 19**
Mr. W.E. Cogger, UNIDO Specialist has instructed S. Piyaratne Silva No.764, working in Dept. 220 to do some practical training in Dept. 241 on 18.10.83. He was also instructed to make a note of all the work he did in the department. Accordingly it was done and this is an English translation forwarded herewith pl.

This Section produced only Gents' Cemented shoes. The uppers required for the job are supplied by Dept. 231, 232 and Component Bank.

(1) Upper and Insole cementing. (application by H/c.)
(2) Loading of lasts (Placing lasts in the racks available in the conveyer.
(3) Insole tacking (Tacking of insoles with lasts)
(4) Toe cap
(5) Countering (application of teepol on uppers)
(6) Cutting insoles (by hand)
(7) Lasting (by pulling over machine)
(8) Side lasting
(9) Removing tacks
(10) Toe lasting (fixing nails on the toe by m/c.)
(11) Seat lasting (Fixing nails round the toe by m/c.)
(12) Pounding up (cutting the sole by machine)
(13) Upper roughing (roughing round by machine)
(14) Application of Filler (Cementing and fixing tan piece)
(15) Cementing (application of solution in side)
(16) Sole Cementing (application of solution on the rubber sole)
(17) Application of solution on the heel and fixing the sole on to the upper.
(18) Sole pressing (by machine)
(19) Last removal (by machine)
(20) Edge trimming (cutting out the extra material)
(21) Heel trimming (cutting off the extra material)
(22) Heel scouring (by machine - sand paper)
(23) Edge scouring (by machine - sand paper)
(24) Removal of solution (by hand)
(25) Application of dye
(26) Inserting insock lining
(27) Application of Upper dressing (spraying uppers)
(28) Checking (marking the Production Report after every hour)
(29) Lacing and boxing.

The Batch card sent either by Component Bank or by Dept. 231 to the loader of this Dept. is next sent to the Checker of Dept. 241 B. This checker (241 B), despatches the number of finished pairs to Shoe Stores.

1983 October 24th.
**DEPARTMENT 220 - BOTTOM CUTTING - SOLE MOULDING OPERATIONS**

<table>
<thead>
<tr>
<th>Moulds</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>9007</td>
<td>5 - 12</td>
</tr>
<tr>
<td>2007</td>
<td>5 - 10</td>
</tr>
<tr>
<td>5001</td>
<td>6 - 4½</td>
</tr>
<tr>
<td>5004</td>
<td>(6-7-8) (9-10-11)</td>
</tr>
<tr>
<td></td>
<td>(12.13.01) (2.3.4½)</td>
</tr>
</tbody>
</table>

Lests not in use

- 7177
- 6967
- 12387
- 9007
- 2717
- 9677
- 9077
- 5001
- 5002
- 5003
<table>
<thead>
<tr>
<th>D E P T.</th>
<th>SPECIAL UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>240</td>
<td></td>
</tr>
<tr>
<td>1. Pulling over</td>
<td>1. Heel obtaining not even</td>
</tr>
<tr>
<td>2. Fitting of sock</td>
<td>2. Centre shown little heavy</td>
</tr>
<tr>
<td>3. Poor finish</td>
<td>3. Stitching of socks (needs a gui)</td>
</tr>
<tr>
<td>242</td>
<td></td>
</tr>
<tr>
<td>1. Loose leather</td>
<td></td>
</tr>
<tr>
<td>2. Poor edge trimming</td>
<td></td>
</tr>
<tr>
<td>3. Counter stitching</td>
<td></td>
</tr>
<tr>
<td>4. Poor finish (403)</td>
<td></td>
</tr>
<tr>
<td>5. Solution on the strap (231)</td>
<td></td>
</tr>
<tr>
<td>241</td>
<td></td>
</tr>
<tr>
<td>1. Crease lining</td>
<td></td>
</tr>
<tr>
<td>2. Poor finish</td>
<td></td>
</tr>
<tr>
<td>3. Heel lasting</td>
<td>402 - Pulling over no proper shape</td>
</tr>
<tr>
<td>4. Pulling over (412)</td>
<td></td>
</tr>
<tr>
<td>5. Damage by the cutting line</td>
<td></td>
</tr>
<tr>
<td>6. Damage Toe Ruff</td>
<td></td>
</tr>
<tr>
<td>7. Folding top line</td>
<td></td>
</tr>
</tbody>
</table>

W.E. Cogger
UNIDO EXPERT
** Specimen Copy **

** Re-cap Closing Room & Upper Cutting Performance **

<table>
<thead>
<tr>
<th>Date</th>
<th>Department</th>
<th>Items</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th Oct</td>
<td></td>
<td>No production recorded</td>
<td></td>
</tr>
<tr>
<td>26th &quot;</td>
<td></td>
<td>Total stitched</td>
<td>680</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No cutting recorded</td>
<td></td>
</tr>
<tr>
<td>27th &quot;</td>
<td></td>
<td>Total Uppers stitched</td>
<td>1182</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upper cutting</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D M S Boots</td>
<td>382</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dept.</td>
<td></td>
</tr>
<tr>
<td>29th &quot;</td>
<td>232</td>
<td>Sandals</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>416 des etc.</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>233</td>
<td>Boots</td>
<td>325</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>Closed Uppers</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>935</td>
</tr>
<tr>
<td>31st &quot;</td>
<td>230</td>
<td>Closed Uppers</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>des 783/410</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>232</td>
<td></td>
<td>270</td>
</tr>
<tr>
<td></td>
<td>233</td>
<td>No record</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>425</td>
</tr>
<tr>
<td>1st Nov</td>
<td>230</td>
<td></td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>power cut</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>232</td>
<td></td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>233</td>
<td>No record</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>380</td>
</tr>
<tr>
<td>2nd Nov</td>
<td>230</td>
<td></td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>231</td>
<td>power cut</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>232</td>
<td></td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>233</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>540</td>
</tr>
</tbody>
</table>
Shoe Factory,
18th October, 1967.

Mr. W.E. Cogger,
UNIDO Training Expert.

TRAINING PROGRAMME - BY MR. COGGER

Following trainees (from 17th October to 4th November) have been assigned to follow the training programme prepared by you.

1) Mr. Amarasakara Cholomondley - Counterpart
2) " P.R.D. Rodrigo " Management Trainee, Comp. Dept.
3) " S. Somawardene " Lasting & Assembling (M.T.)
4) " S.K.G. Ariyage " Management Trainee, Closing
5) " A.C.D. Senanayake " Technical Trainee
6) " D.T.D. Nagahawatte " - do -
7) " W.H. Ettiarachchi " - do -
8) " C. Withanage " - do -
9) " W. Dhamasena " Asst. Production Manager - Lasting Dept.
10) " C. de Silva " Foreman - Upper Component
11) " Vincent Joseph " Foreman - Lasting & Assembling 7/School
12) " Piyaratne Silva " I C C - Upper Component (Sewing) (ABSENT)
13) " R.T. de Silva " Marketing Department (Sales)
14) " C. de Silva " Technical Assistant Q/C Dept.
15) " D.B. Chandrawathie " Costing (Calculation)
16) " R.M. Jayasiri " Typist

Sgd:...

FACTORY MANAGER, S/F

Copies to: Chairman.
General Manager.
Personnel Manager.