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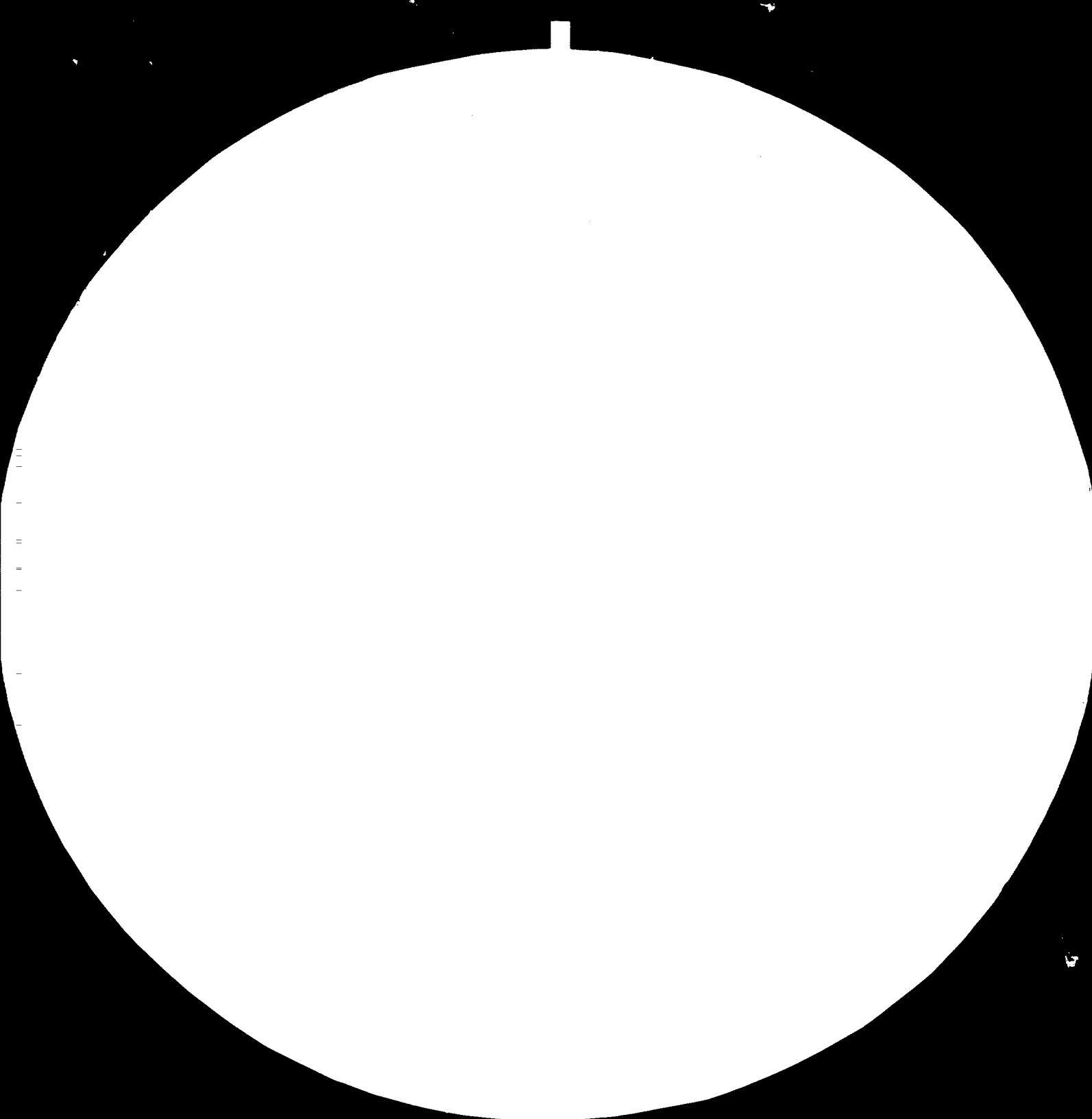
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MICRODRIFT RESOLUTION TEST CHART

100% DRIFT = 100% INCREASE IN DRIFT

RESTRICTED

12545

2 May 1983
English

ASSISTANCE TO THE CLPC *

DP/SRL/80/007

SRI LANKA

Technical Report: Shoe Industry Training .

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

Based on the work of William E. Cogger, expert
in shoe industry training

United Nations Industrial Development Organization
Vienna

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VISITS

Tannery

An on site study in the C.L.P.C. Tannery by the Expert enabled him to analyse the need for better finishing of the leather before being processed by the factory. The following points have to be recorded.

1. An intensive drive for better animal husbandry at top level extensive damage and branding done indiscriminately.
2. Horn and barbed wire damage.
3. Ticks and parasite damage much in evidence appearance of finished product spoilt.
4. Better handling of raw hides deterioration before processing.

A considerable saving would be made if attention was given to these points.

Recommendation

In my opinion an Expert is required to iron out these technical problems - to standardise leather substance - improve finished leather by better use of fillers, pigments and plating. A saving of many millions of rupees could be made and much better quality on the finished product.

AIMS AND OBJECTIVES

To provide an adequate reservoir of personnel qualified by education and training to assume positions of responsibility in the Middle-Management grades.

OBJECT

1. Developing job knowledge and skills on site.

This is job oriented. Developing knowledge and skills which will be useful to the staff member in his present job, and in his future job. Using skills in the general sense of the word, particularly organisational and managerial skills.

2. To develop Managers capable of meeting demands of tomorrow, who will accept delegation of authority and responsibility, be initiative and willing to make decisions.

3. Teach general, rather than job oriented information in classroom sessions e.g. "The Principles of Management" - Motivation - and Communication.

UNIDCO SIZING MACHINIST TRAINING SCHOOL

The Training School for Sizing and Infants has developed into a practical and successful project.

It is operational according to modern methodology, equipped by UNIDCO with a full complement of PFAFF sewing machines and equipment with aids for the analytical programme in operation, and working with satisfactory results and performance.

Mini Making Department

The training centre is established near to each facility in the production work-plan, separate and with access to all departments, providing an ideal choice of site, allowing trainees to work without interference - 6 sq. metres are required for each trainee. This will need to be increased when trainees reach production work after 2-3 weeks. (see Appendix)

With the space available and hourly, it could be extended to incorporate a mini Making Department e.g. Lasting, roughing, pressing etc. for stuck on process having in the same area pre-training from upper-cutting, stitching and making at little or no cost to Management.

Technical Conditions

The sewing machines must be set up very carefully - the thread guides, the unit bench heights, the position of the lower lift mechanisms and treadles should be set correctly and maintained at all times. It is important that chairs are provided with adjustable seats and back rest. The stools in use at the moment are not satisfactory and should be changed.

The maintenance of machines should be planned and continuous. Training machines requiring repair should receive "top priority".

Material Supply

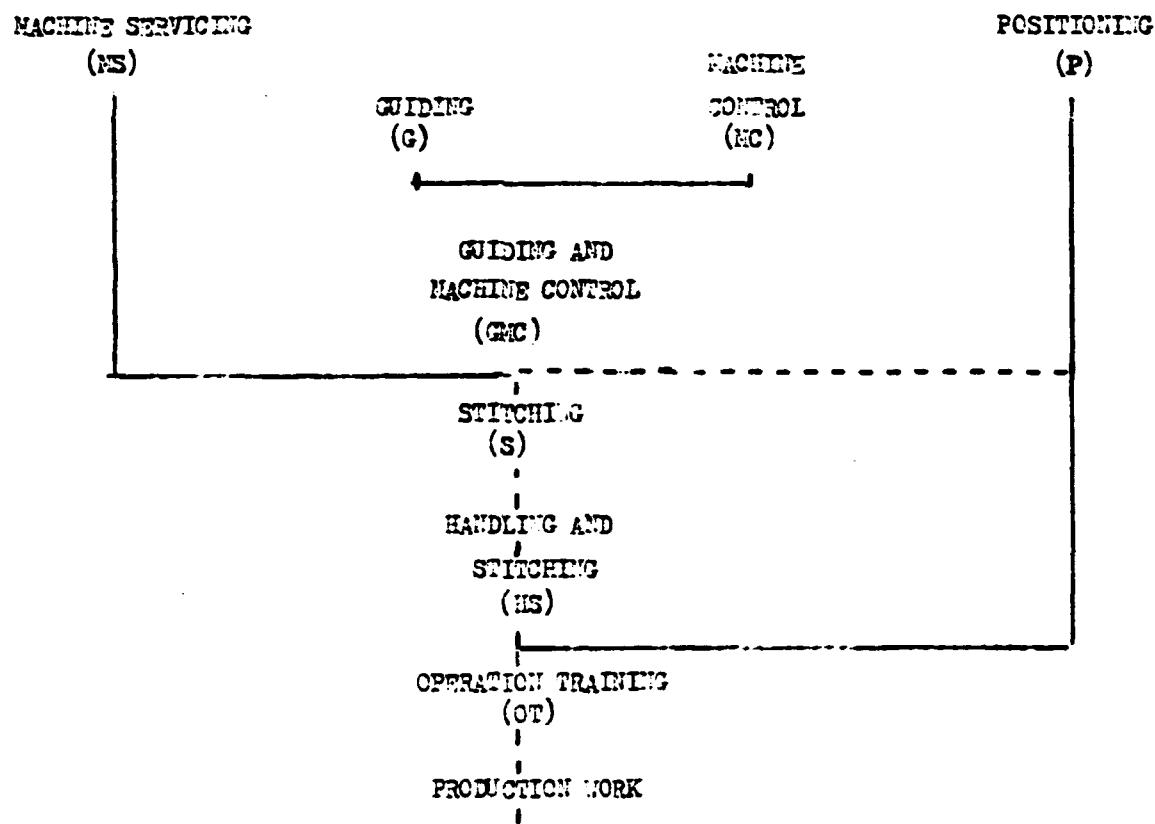
It is essential that a steady flow of stitching components are available at all times (using waste and scrap leather). Production work when required by the school should be made freely available to develop the skills for which the Machinists have been trained.

Visual Aids

Attention to visual aids during the training period - these have to be up-dated -

- (a) Upper samples made by the individual
- (b) Charts, records, hourly production

SKILL ANALYSIS TRAINING SYSTEM



TRANSFER TO PRODUCTION DEPARTMENT

SUPERVISION

1. MACHINE SERVICING (MS)
2. GUIDING (G)
3. MACHINE CONTROL (MC)
4. POSITIONING (P)
5. GUIDING AND MACHINE CONTROL (GMC)
6. STITCHING (S)
7. HANDLING & STITCHING (HS)
8. OPERATION TRAINING (OT)
9. PRODUCTION WORK (PW)
10. TRANSFER TO PRODUCTION DEPARTMENT SUPERVISION.

The organizing of training

To take the individual training needs, Green Labour should have priority. Re-Training experienced Mechanists is a much slower process. The effectiveness of the training must be surveyed, the achieved results evaluated, the weakness of methods and systems should be revealed, in order to improve them.

The benefits given by proper training

With the introduction of the S.A. training system, it is vitally important that the instructors are never taken from the school to be employed on the production line, even for short periods. The following benefits will be achieved :-

1. The best, most effective working methods can be elaborated, the technological processes can be developed step by step.
2. The performance increases, because the skilled/trained workers are 20-40 per cent faster - the quality will improve and the operator's fitness will not be lower at the same time.
3. Proposals and innovations can be elaborated for the development and standardization of the machines.
4. The proper working methods can be spread throughout the factory by teachers.
5. The work satisfaction increases and the motivation and labour problems decrease.
6. The workers will be interested in future training - the level of the labour force will improve.
7. Business accept the new system and adapt to the changes of stitching operations more easily.
8. The trained Mechanists have increased their skills and the Company have improved their labour force to become inter-changeable within their limits -
 e.g. Old System - 1 Mechanist one job only
 S.A. New - 1 Mechanist 6 skills (inter-changeable).
9. The Engineers accept the challenge to improve their compatibility.
10. The Mechanist is made more concerned with life, performance and quality.

At the request of Management, a specially organised and prepared Management Trainee Selection programme was introduced with the following assessment :- B. C. D. symbols denote oral test - B = 50% C = 70% D = 60%

Trainees were given on site studies in -

- (a) Tanneries
- (b) Upper and bottom cutting Dept.
- (c) Closing Room
- (d) Making Department
- (e) Quality control

A written test paper was given at the completion of programme and an oral test for self presentation and communication.

Trainees	%
T.A.V. Chandrasiri	B 20
W.S.K. Somagedara	B 20
W.D. Eularatne	B 14.5
A.N.R. Gunasekera	B 23
J.S. Hettiarachchi	C 16.5
S.A.T. Peiris	D 14.5
L.H.P. Cabral	C 21
P.R.D. Rodrigo	D 19.5
L.I.C. Amarasinghe	C 20.5
N. Fernando (only 1 day)	D 14.5

W.E. COGGER - UNIDO EXPERT.

Training Staff Assessment

On site Instructional Training for the staff, who will continue the WITCO Sewing Mechanists School has progressed at a steady pace, as can be seen by the re-cap of activities undertaken.

W.A. KUMARAPPILLAI - Counterpart - Future Head of Training School

S.H.C. SURESH - Assistant Counterpart

SEWING INSTRUCTORS 1. Clinton Perera
 2. N.D. Pratilla
 3. M. Indumathi

This group had a specialised programme in modern methodology - step-by-step analytical training with green labour and the Re-Training; and skill development of present mechanists in closing room.

Prepared lectures were given to trainees by the Instructors, the subjects being as follows:-

Care of machines

Oiling and cleaning

Needles & Threads

General care of scissors and stitching aids provided in the school
Good House-keeping in the Training Room

Average samples of work required by trainees with operation and design specifications recorded on "Sample Boards" displayed in school.

Special attention given to Quality at every stage of the sewing operation.
Hourly and Daily Records of trainees performance and progress chart introduced.

Quality control of production work received, checked and the attention of the department is called to put future work in order.

Each trainee in this group received a "small course" programme, attaining a fair standard of performance. This can be improved with practice, using the jigs for this purpose. Exercises include Machine Service, Oiling, Machine Control, Fixing Flat Laid and Coat type, (C.X.C.) Sewing Machine Control (Machine No.1 - 10, Heddle); and stitching (see Appendix).

Mechanics Pernam, Brusilov and Tolmachev are competent machinists in their own right, the new methodology introduced to improve their teaching skills - communication is a major problem. The development of this skill has to be pursued and every opportunity given to all the staff. Trainees will learn by the "look and see" method - staff development by managerial skills attained from "In Company Training", Seminars, Technical College or other informal sources.

His Counterpart, Mr. V.A. Kurnakovskiy having been selected for a Fellowship in England is leaving in September. The ten week training course is not really adequate - having little or no technical background, a serious disadvantage for him. His assistant Mr. S.N.G. Zhurav, a very willing person, has no technical 'know how' and is a poor communicator. This does not give the best support. Leadership and Motivation have to be in evidence to attain success for the Training School. Every opportunity should be given by Management to improve these essential managerial skills.

WORKERS

The Training School

The preparation of the Training Room and installation of essential equipment was very much delayed as was the non-arrival of the shipment of sewing machines and training aids. Top priority was given to speed up the work deliveries.

1. Installation of suitable lighting;
2. Ordering and making transport system
3. Sewing stools to be made
4. Electrical wiring and power point connections
5. Overhead fans for air circulation
6. Painting of Training Room

The arrival from the docks of Pfaff machines and equipment created a problem - machines being packed in cardboard containers, machines damaged, parts missing, one machine head missing (see separate report of Mr. Fashir). Insurance claim will be supervised by the UNDP Office, Colombo.

Pfaff Technical Staff assembled and set up the machines to the best of their ability. The Post Trimmers giving much trouble and had to be adjusted almost daily due to mechanical failure. Knife adjustments - needle and timing of machines required - missing part (bobbin case) gave concern and progress delayed in the school.

The leather substance throughout the production is too heavy - variations from 1.5 mm - 2.2 mm - 3 mm. This created many problems with machine feeder system, also quality severely impaired.

The upper splitting machine, of which there is only one, has only 25% output being badly in need of a major overhaul - all parts being worn - it being impossible to produce an acceptable standard of substance or output.

Only one Rubbing Down Back Seam machine in the factory. This being in a state of collapse, back seams and linings are very poorly finished, resulting in poor quality and heel soots, also uneven top line stitching on the back seam.

FINDINGSGood Housekeeping

Sewing boms used on the transporter system are misused - waste and damaged materials mixed with the component parts, cotton and top line trimming waste on floor, giving the department an untidy appearance.

Code-Marking

The daily code and design stamping is very indistinct and numbers difficult to read.

Sewing Machines

Are aged in the Closing Room and attention has to be given to order replacements. The Expert has submitted a list of requirements to the Production Manager for presentation to Management.

Lighting

In work areas is much to be desired.

Single needle machines are being used, where if two needle machines were installed the output would be increased.

There are few stitching aids e.g. guides for stitching back seams, decoration, G.C. Pressers which works by helping the machine to steer itself.

No sample boards with specifications are displayed.

Hand cutting of Uppers uneven, particularly on the quarters.

Stitch marking aids done by white ball pen and not efficiently.

Big variance in leather substance, incorrect splitting and skiving.

Standard of quality from Tanning differs - dry and hard especially on printed DMS production.

FINDINGS

Closing Room

The general mechanical performance of the machines is much below standard, in order to attain a reasonable and acceptable standard of quality - worn out parts, guides missing - machines out of date.

Threads

Various thickness of threads are used in all closing operations e.g. cottons No.12 - 24 - 30. Machinists use the various thickness together resulting in poor tension and appearance.

Needles

On the majority of machines, needles are too large for the type of thread used. Quality and appearance are damaged by this type of presentation. Needles Nos.140 - 170 are used and the thickness of cotton not suitable to fill in the hole.

Stitching Guides

This simple stitching aid is not used. A 'T' guide for sandal strap stitching, stitching back seams, stitching linings, decoration stitching etc. can be produced by the Engineering Department.

Scissors/Clippers

Work is poorly finished in the closing with raw edges and cotton ends showing. Machinists require replacement of worn and damaged scissors.

Production Records

No operator machinists hourly production or daily closing room performance records are kept. This is essential for performance, productivity and quality in use throughout the Closing Room.

FINDINGS

Edge stitching with under trimming throughout the closing department was of an exceptional low standard of quality -

- (a) Method completely wrong - free holding by Machinists "ad-hoc" use of hand, foot and eye co-ordination not in evidence - standard of work for vampng and lasting not acceptable.
- (b) Under trimming knives not sharp
- (c) Linings not skived - substance too heavy
- (d) Back seams stitched 2 - 5 mm wide
- (e) Rubbing Down Back Seams on the Upper and linings not being made
- (f) Approx. 3 - 3½ stitches per c.m. being much too big
- (g) Most Uppers after stitching trimmed waste by scissors (not acceptable)
- (h) Low performance output per machinist

Sciving

Uppers and linings - sciving on leather upper quarters and
varies from a variation of 10-14 mm specification for top line
sciving should be 3 mm only. The machine operators and
Foremen do not have simple guides to ensure the correct width
is scived.

Linings were not scived, resulting in bulky back seam,
extra heavy top line, poor quality, no sales appeal and very
poor finish.

Uneven Stitching

The specification for stitch length is 5-6 mm according to
the design requirements. In closing run 2½ - 3 was the norm -
appearance and sales appeal being lost by the poorly finished
upper closing.

Fra Gertting

Rubber solution is used for folding quarters, overlays and
other small parts. The operators are very careless in the
application, resulting in a very dirty and untidy presentation
of work, quality and machine performance is impaired and
unnecessary wear and tear on the machine.

LESSONS LEARNED

Correct method for Top line stitching with under-cutters -
machines adjusted, correct stitching, knives damaged - replaced

Machinists taught in Training Room and on site correct part
placement, correct method to stitch from-bolting

Rubbing Down of Back Seats and linings - Heavy substance
reduced by skiving edges

Regular Service by Engineering Department to sharpen knives
2 - 3 times daily or as required

Free-hold stitching for under cycle seat stays - eliminating excess
slack on quarters and linings

Appearance and sales appeal much improved by this introduction.

RECOMMENDATIONS

It is strongly recommended that the earliest attention should be given to checking all knives against the original patterns.

Many discrepancies show in assembling parts in the closing room particularly in fitting linings and stitching seams.

It should be noted, greater accuracy would be achieved if pin marks are incorporated in the knives as stitching aids, instead of the white biro pen marks which vary considerably when made by operators.

Quality Controller

In the opinion of the Expert, the engagement of two males to be trained as full time Quality Controllers would enhance the finished work e.g.

(a) Checking

All leather and cut component parts for Upper and Bottom work, quality of leather and substance.

(b) All closing room operations and finished Uppers -
All preparation, lasting, scouring and finishing in
the Making department.

(c) Jointly check finished goods/articles before despatch
to stockroom.

RECOMMENDATION

Urgently required to ensure good quality in edge stitching, top line, under cutting

MAIER MACHINE Model SO-C4

1) and Universal Knife Holder

combined knife and scissor for grinding D.K. 1,650

2) Universal knife holder for grinding

N/c. No.V 491-755/13-725-04-940/02

B/2LX2 CHF " 185

Ordered from Kimsaladharma Machines & Tools,
No.9/2 Old Airport Road,
Ratmalana

Agents for PFAFF

RECOMMENDATIONS

That Management give serious consideration to either of the following :-

(a) The existing Middle Management team is on the male side, aged - without managerial skills - little or no technical background - no leadership qualities - no motivation, limited interest in good housekeeping and quality checking - poor communicators.

Female Foremen good machinists, but like their male counterparts have no qualities in evidence to achieve target figures daily with an acceptable standard of quality.

This negative approach to the work on hand could be due to pending retirement.

(b) If Management is satisfied with the performance - Training to a good standard of technical ability, and managerial skills should be given "Top Priority" by an Expert at the earliest.

The Training programme should be on the following format :-

(1) Departmental Foremen

- (a) Upper cutting and management
- (b) Closing Room stitching and management
- (c) Making, quality and management

Built in lectures daily - on the job training and job related exercises with active participation for developing - communication, skills leadership, motivation and general managerial background.

If for the future expansion development programme - consideration could be given to :-

Select and engage University graduates interested in an industrial career type similar to the induction programme given by the Expert in early February - give them the training programme as outlined above, under the guidance and tuition of an Expert (on site).

It is strongly recommended, under no circumstances should this type of trainee be sent into the factory to learn from the existing staff members who have little to offer except confusion. If this is done, the disease will be transmitted and any hope of making a good departmental manager will be completely lost. It is not recommended for trainee management to be sent for external programmes - local tuition will attain the best results.

RECOMMENDATIONS2 Week UNIDO Management Training

The daily lectures which have been held, supported with visual aids, slide vistas, practical demonstrations with trainees participating have been most successful.

The writer feels that training of this nature should be continued, and in greater depth and detail.

6

The following subjects were covered in the programme :-

1. The Task, Task - Individual
2. The Profession of Management
3. The Role of the Instructor
4. Practical exercises, tracing and cutting upper leather correctly
5. Communications - Lecturette "My Job"
6. Quality control - practical demonstrations
7. Effective speaking exercises
8. Case study "The Shoe from C.I.P.C."
9. Slide Vista - UNIDO Training School Instruction and Quality Faults

It is important that a qualified counterpart is available to interpret. During the programme, this service was not satisfactory. Staff members failed to get the full impact of the spoken word. But practical examples in job related work the response was better. No written "feed back" was introduced - the staff not being up to standard.

RECOMMENDATIONS

Sewing Outfits

Introduced for flat bed machines e.g. St. Nick Sewer, Lining, Social Strapping. One (1) unit (2) days - the use of these to continue - quality and performance much improved.

Sample Boards

Current production and specifications to be kept up-dated. New designs to be made immediately.

Daily Flap Code Marking

The stamping pads on the machines need to be changed at regular intervals. Supervision by Foremen required daily.

Lighting System in Closing Room & Making Department

The fittings at present are fixed at roof level approximately 20 ft. plus. Also many need new starters. The fittings should be lowered to 12 feet. This will give operators a good spread of light - quality can be much improved.

Leather Substance

Quality of work will be enhanced if a uniform substance of leather can be produced - e.g. Service to splitting machines in the Tannery - also in upper cutting department - replacement of worn bearings, rollers, knife.

Stitch Marking Aids

Pin marks fitted into the knives would considerably improve the accuracy for stitching mechanists. A second alternative - the purchase of a silver silk screen - cost minimal - quality of work excellent, high performance.

Rubbing Down Back Seams

A complete overhaul and replacement of all worn parts urgently required. Capacity for machine 3000 daily sufficient for all quarters and linings to be reduced - Top Priority - Poor Quality and finish of Top line and back seams are created by this machine not being in order.

I. ACKNOWLEDGEMENT

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

Carilon Leather Products Corporation. (CLPC)

Chairman &
Managing Director. MR. LAKSHMI R. MUTHALAI,
ACM., FIFIA., MIE., MIE.

General Manager MR. C. BIRAMUKKAL.

Factory Manager MR. M.H.M. PIYASWA

Asst. Gen. Mng. MR. M.D. SIRIBALI

Chief Accountant MR. V. WIDEWARATNE

Personnel Manager MR. J.A.A.S. DAWATTHE

Sales Manager MR. A.J.P. DASSWEDAWWA

Maintenance Manager MR. D.L.E. DAYAWANADA

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

U.N.I.D.D.O. Project
Experts All members of the U.N.D.P. Team under
the leadership of Mr. M. Bashir.

Project Counterpart Mr. W.A. Kumaraupperuma

Trainees It has to be put on record that the
willingness and enthusiasm of the
participants was outstanding and a pleasure
to the Expert to impart new machines, skills
and methodology which was accepted without
protest or comment.

CONCLUSION

Two five week intensive UNIDO Training Programmes for sewing Machinists using the analytical step by step method has been successfully completed.

A high standard of performance and skills attained (see Appendix)

e.g. Green Labour Machinists	$2 \times 7 = 14$
Re-Trained Machinists	81
Counterpart and School Instructors	<u>5</u>
Total	<u>100</u>

The Green Labour Machinists stitched 300 pairs plus of design 120 Boy's derby shoes, also range of sandal work, moccasin vamping with success and acceptable standard of quality.

Re-Trained Machinists

Skill development, method improvement, performance and quality control under strict supervision.

Freehold stitching of linings introduced, part placement of components corrected (see Introduction).

The success or failure of this programme will depend on the correct supervision of Machinists by the staff Foremen and Supervisors.

A crash training programme is urgently required for this group, having no managerial skills, very little technical "know how".

Top Priority should be given in future training programme.

PROPOSAL FOR MANAGEMENT TRAINING PROGRAMME 1987/88THE COURSE

Directed to "ON THE JOB TRAINING". The course is a practical one which allows each participant to build upon his experience and share it with others, gain a knowledge and understanding of the many issues facing managers today, and become more effective by learning to apply the appropriate management skills and knowledge to his current and future managerial skills.

WHO IS IT FOR?

The course is intended for :-

- Managers of Departments and Assistant Managers
- Supervisors who wish to promote their own career and who wish to become more effective.
- Key Workers who wish to "top up" and improve their skills, and who will also benefit from this training programme.

COURSE AIMS

The course is designed to help participants develop :

- their understanding of the role of the manager in the light of the changing environment and the dynamic nature of management processes and systems.
- their skills and competence as individual managers and as members of management teams.
- their potential for future self development as individuals who will be concerned above all with the management of change.

COURSE CONTENTStage I

- Managerial Behaviour
- Managerial Environment
- Decision Making
- Leadership
- Motivation
- Employee Relations
- Operations Management
- Management Accounting
- Law for Managers
- Policy Analysis

ASSESSMENT

Each participant will be expected to undertake a major practical project as part of the course code. Submitting sample upper in clothing making complete shoe

M.R. COOPER THEO COOPER

Appendix 2

8th February 1933.

Junior Management Training Programme
8th - 11th February 1995

Names	T.A.V. Chandrasiri	A - B	V.S.K. Sumangadasa
	W.D. Kularatne	C - D	A.H.R. Gunasekera
	J.S. Hettiarachchi	E - F	S.A.I.G.I. Peiris
	L.H.P. Cabral	G - H	P.R.D. Rodrigo

The trainees will make "on site studies" and "feed back" to UNIDO expert, e.g.

Group A - B Upper Cutting/Bottom Preparation
Study Methods - Quality - No. of pairs output per hour.

" C - D Closing Room (a) Proprietary Boxes
(b) Drilling
(c) Stitching Back Seats - Counters

Record output of each operator per hour.

" E - F Making Department (a) Preparing Last, Stitching Insoles
(b) Pulling Over
(c) Heel, Waist Lasting;
(d) Sewing Bottoms

Record output of each operator per hour.

" G - II D.H.S.Moulded (a) Study Method and Process
(b) Check Waste
(c) Work Flow

Record output of each program into file.

"Feed Back" and discussion. Hand out self-evaluations to Class Room.

M.E.COGGER
VIDEO SYSTEM

1720

APPENDIX 3

Required Equipment specified by WHO
for the Sewing Mechanist Training School

The following quantities are sufficient for course of 12 months.
 Trainers.

The Bonded Fibre Exercises No.1-17 are sufficient for 12 months. If extra care and attention is given by the Instructors, this could be extended to 18 months.

<u>Equipment & Materials</u>	<u>Quantity</u>	<u>Comment</u>
Swing arm clicking press KIEN 3105 with 2 spare cutting blocks	1	
Upper skipping machine KIEN-3217 with motor & bench	1	
Auxiliary equipment for skill analysis training	1 set	
Threading scissors	12	
Hand cutting knives	30	
Spare blades for Hand Cutting knives	30	
Folding hammers	8	
Scoring sheets for Performance measurement	1 set	
Auxiliary materials for skill analysis	1 set	
Cutting dies for skill analysis training	1 set	
Marking dies for skill analysis training	1 set	
<u>Machines</u>		
467-544/01-72 single needle sewing machine with Table/Motor/Stand	1	
401-755/13-940/02-B/CLN 7 single needle Foot Bed with Table/Stand/Motor	1	
401-755/13-725/04-940/02-B/CLN 7 x 20 single needle Foot Bed with Table/Stand/Motor	1	
703-944/01 DLXH single needle Foot Bed with Table/Stand/Motor	1	
463-944/01 CL single needle Flat Bed with Table/Stand/Motor	5	(Note: One machine Head is missing)
1245-706/40-6/07 - DLXET single needle Flat Bed with Stand/Table/Motor	1	
594-944/01 - DLXH x 4,8 two needles Foot Bed sewing machine with Table/Stand/Motor	1	
Hand Tachometer (JAQUET)	1	
Stop Watches	8	
Counters	2	

APPENDIX 4MATERIALSQuantity

Quilting and stitching components cut from suitable leather or artificial leather and marked (only reject materials)	60 sq.m.
from these: 32 x 254 mm, 4 rows	600
Ø 203 mm semi-circle, 12 rows	420
Ø 127 mm circle, 6 rows	420
114 x 203 mm oval, 7 rows	300
32 x 95 mm unmarked	120
51 x 76 mm unmarked	120
51 x 203 mm unmarked	60
+ following the cup profile CLPC design	-
+ fancy seam exercise " "	-
Bonded fibre sheets printed with different rows	480 sq.m.
from these: GMC 1	1200
GMC 2	500
GMC 3	700
GMC 4	800
GMC 5	600
GMC 6	700
GMC 7	600
GMC 8	200
GMC 9	300
GMC 10	800
GMC 11	600
GMC 12	700
GMC 13	500
GMC 14 Small parts overlays stitched to previous Exercises	300
GMC 15	-
GMC 16 " "	-
GMC 17 " "	-
using waste materials	

APPENDIX A

Material

Training forms altogether	
from these:	
DF 1	50 sq.m.
PC 4	50
SS 2	250
MDS 2	50
MDS 5	50
OTS 2 134 - 8 - 100	250
Needle /different sizes/ No.15'S - 100 - 110 - 120	50
Thread /different sizes, materials and colours/ Nylon 60/3	6
Blackboard	1
Ball point pen	8
Notebook	2
Chalk	20
Cleaning rag	/as required/
A/4 size pattern sheets /white/	10
Projector pen set /4 colors/	3
A/4 size paper sheet	200
Adhesive	/as required/

APPENDIX 5

Activity Report 1st Feb. - 4th March

TO : Mr. Bushir
FROM: W.T. Cooper
DATE: 4th March '63

Starting on 1st Feb. a selection of 10 Management Trainees were accepted at the request of CLPC Management and given 1 week on site crash induction programme including ternary, bottom and upper cutting, cleaning and making department. On the final day a written test paper and oral interview was given. Satisfactory results were achieved.

Middle Management Training Course was introduced whilst awaiting the Training School to be made ready and arrival of machines and equipment from the docks. 11 Foremen and Junior Managers attended. It is regretted by the Expert this has to be cancelled - "It is the weakest link in the chain" and should at a later stage be re-introduced. The existing work load for the Expert is too heavy to give any satisfaction, as the following chart indicates :

Mechanists and Other Trainee Groups - Existing Mechanists & Mr. Coopers 43 Trainees

S.L.P.C. Column

Open Labour Mechanists 2 x 5 week course -	6 Trainees	12
Re-Training Production Mechanists 10 x 1 1/2 hour a day "	"	60
Training School Instructors 10 days "	3 "	3
Assistant Counterpart "	1 "	1
Counterpart "	<u>1</u> "	<u>1</u>
Total	<u>77</u>	<u>77</u>

Total Trainees allocated for this Training Programme = 77.

Film

Quality, Managerial skills and Training Vista screened for 36 Foremen - Supervisors - Mechanist Trainees.

Trainees in the Training School produce a mini tangent daily of 50 pairs of boy's derby shoes using waste material. This develops 6 extra skills. The Expert believes all training equipment can be recovered by producing

This target and Management and Sales Department should work to this end.

It has the following benefits :-

- 1) Excellent Training practice and experience
- 2) Trainers are quality conscious under strict supervision
- 3) strict procurement from project materials
- 4) Cost of materials recovered by sale of shoes
- 5) Attract customers for bargain price footwear

Hourly and daily records introduced to all Machinists with quality marking at all stages of stitching.

Top line stitching with univ-trimmers, methods changed correction in skiving; and rubbing down back seam corrected.

Pattern adjustment made to Derby Walking design 8402 for improvement in stitching.

To date 12 Re-trained Machinists have been returned to Closing Room.

Elimination of pre-cemented parts to firm holding introduced.

Sample Boards for each operation in the Closing Room were started but have been curtailed. Time does not permit the Expert to continue - suggest this be re-introduced if and when a "follow up" programme is made and can be continued with Management Training - quality, costing and factory organisation and work-plan in Phase II, if this is part of the future project planning.

M. R. Dugay
UNIDO EXPERT

1. The Aims of Training.

1. To enable operators to reach the standard of output and quality of the experienced worker in the shortest possible time.
2. To assist operators to acquire versatility in skills and thus become part of a flexible labour force.
3. To encourage the development of individuals as far as their abilities will allow.
4. To develop people as people and as members of an industrial group.

2. The Traditional Approach to Training.

In the majority of industrial situations a systematic approach to training has not yet been adopted and the traditional methods of training persist, as was noted in an earlier session. These involve merely setting the new entrant to work with an experienced operator who is unable to give sufficient attention to the learner. This method is called Exposure Method or more commonly, "Sitting Next to Nellie".

To recap, the disadvantages of the traditional approach are:-

- (i) very long learning time
- (ii) poor quality coupled with high rate of rejected work.
- (iii) people leave because they,
 - (a) do not achieve expected earnings
 - (b) do not achieve job satisfaction
 - (c) lose confidence in themselves and become worried and frustrated
- (iv) output and machine efficiency remain low and production costs are consequently excessive.

These results are due to the basic weaknesses of the "Sitting Next to Nellie" method of training which are:-

- (i) possible bad instruction from tutor and instructors.
- (ii) possible use of incorrect method.
- (iii) lack of systematic training programme.
- (iv) little opportunity for practice.
- (v) isolation from the dynamics of production.
- (vi) worker is often told only what to do and not how to do it, normally it must be done in a particular way.
- (vii) little motivation from the instructor/operator, encouraged by placing the blame on the new worker to learn the job alone.
- (viii) no knowledge of results and no measure of the effectiveness of training.

" HOW TO INSTRUCT. "

PRESENTATION
OF THE PERSON FOR INSTRUCTION
PRESENTATION OF THE
INFORMATION (LOGICAL) AND IN SEQUENCE
TRY OUT THE LEARNER
PUTTING THE LEARNER TO WORK

" FOR INSTRUCTION "

AIM COMPLETE UNDERSTANDING
DISTRACT THE WRONG WAY
MAKE A COMPARISON RIGHT WAY
PREPARATION
PUT TRAINEE AT EASE
DEMONSTRATE & REPEAT BY TRAINEE

" HOW TO HANDLE HUMAN RELATIONS. "

GET THE FACTS
WEIGH AND DECIDE
TAKE ACTION
CHECK RESULTS

" HANDLING HUMAN PROBLEMS "

COLLECT ALL RELEVANT FACTS
DETERMINE THE RIGHT ACTION
CHECK THE RESULTS OF THE ACTION.

W. E. COGGER.

UNIDENTIFIED EXPERT

POST TITLE: Shoe Industry Training Report
DP/SIG/03/007/11-03/31.7.D

PURPOSE OF PROJECT

To extend and to modernise the Operators of the Ceylon Leather Products Corporation (CLPC) and a Training Programme for Middle Management and skilled workers through modern training methodology is therefore introduced.

Advice on the functions of the new training centre, and to train a group of instructors to make the training centre operational according to modern methodology.

Arrange and prepare lectures and training aids for the future use of the training unit and work out suitable syllabus for sewing machinists according to skill analysis system.

Arrange samples of work at every stage of operation and introduce suitable product specifications to facilitate easy introduction of new articles and give documentation for quality control.

PROJECT:

The purpose of this preliminary Technical Report presented to the Chairman and General Manager of the Ceylon Leather Products Corporation (CLPC) and Ministry of Industries and Scientific Affairs is to make recommendations and suggest certain alterations in Training School and Cleaning Room Technology and work-plan, and to point out some facts which could, and may be considered worthy of introduction at the earliest, and to "follow up" those introduced and recommended by the Expert.

The potential of the work force is tremendous, and is capable of meeting the productivity required and quality standards of the Company.

The writer feels, and the UNIDO Training Programme "feed back" exercises indicate Managerial skills - Leadership - Motivation Supervision are the 'weakest link' in the management structure - Technical skills and 20½ years of Middle Management experience attended the introduction to Management Training. But it is not fully exploited and utilized to obtain the best results.

The Expert believes the future training programme for the Company should be geared to "on the job" and "on site" training, where the trainee is able to participate in his own environment the managerial instructions given by the Company's own expertise, or if and when possible importing specialized Experts to conduct seminars - on site studies, job related exercises - practical training at a basic level.

Past experience has proved to the Expert that Trainees sent for external tuition face the following difficulties :-

1. Great stress- travel - money - social differences
2. Language and comprehension problems
3. Strange environment socially and at work places
4. Machines and technology too advanced for him/her to absorb.
5. Availability of equipment direct ex-stock, which is not so in his own company.
6. At the completion of his/her training programme, on his return to the company, they are unable to adjust themselves to a system which does not match up to his training.

They are confused, usually much disturbed, and find it impossible to justify the expenses paid for training. Invitably the management is dissatisfied and the trainee will often leave the employment to seek his fortune where the "grass is greener" and a way of life they find more acceptable.

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SUMMARY ANALYSIS CHART

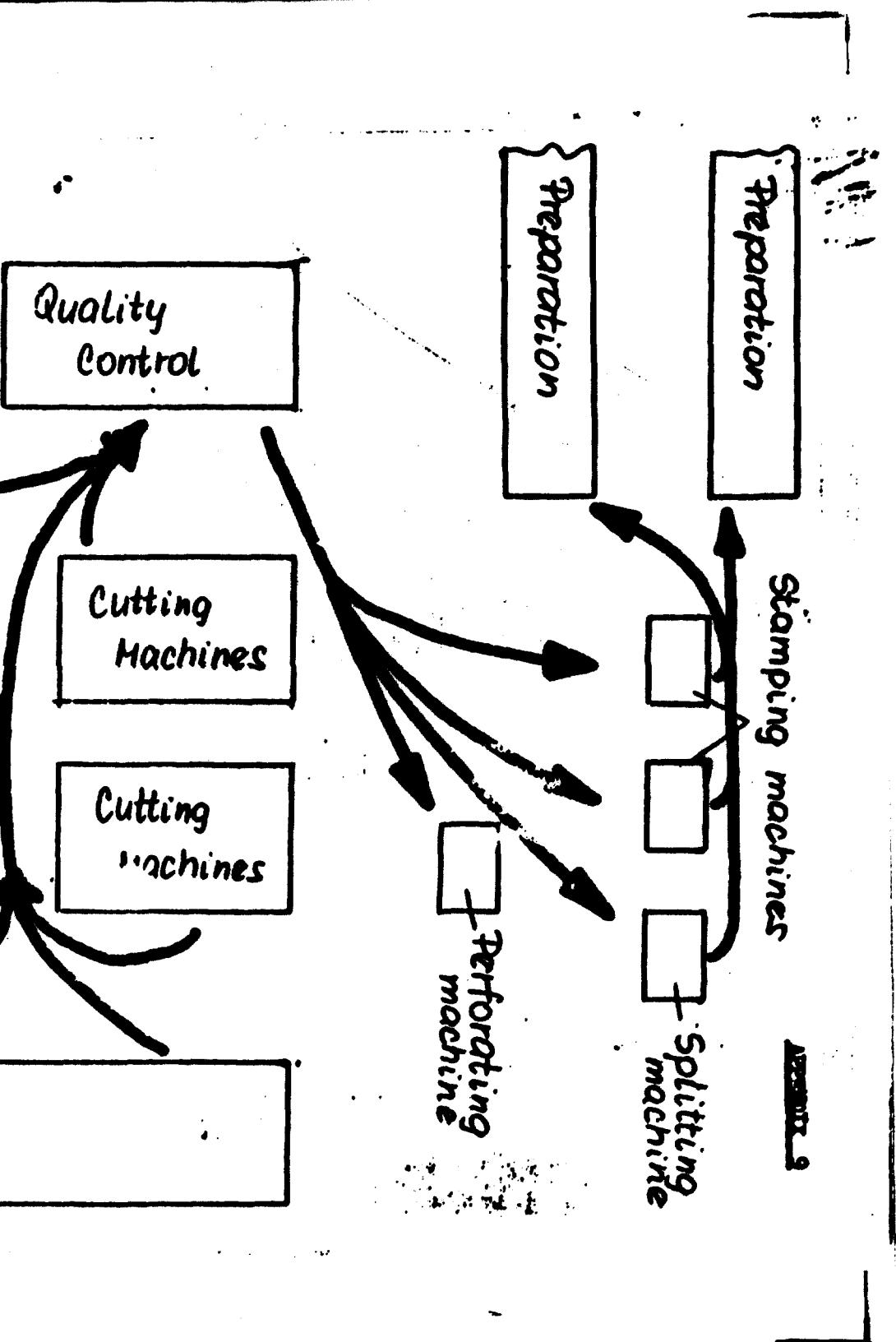
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Cutting Machines

Cutting Machines

Cutting Machines

Cutting Machines



Plan of work-flow

APPENDIX 10

1. Bottom assembly



2. Cutting Department



3. Stamping, branding



4. Reinforcement, perforation



5. Quality checking, preparation



6. Stitching Department



7. Stock room



8. Making Department

APPENDIX 11

SKILLS ANALYSIS CHART

21. 3. 83

COURSE II

NAME

(5 Week Trainees)

	Factory Number	Department Number	Skiving	St. Back Seams	St. Linings	St. Buck Straps	St. Overlays	St. Violet Steys	St. Top Line with Under trimming	St. Decoration (2 Needles)	St. Derby Vamping	St. Toe Caps D.M.S. (2 Needles)	St. Tongues to Vamps
1. Madura Kulatunga	1148	231	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2. Shanthi Rajapaksa	1100	231	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3. R. Pushpa	1218	231	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4. D.S.I. Wijesinghe	1078	232	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. K.A. Sumanavathie	1057	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Re-Trainees (Leather Goods)

1. R.A.D.D. Kusumalatha	767	-	✓	✓	✓	✓	✓	✓	-	-	✓	-	✓
2. M.K. Jayawathie	513	-	✓	✓	✓	✓	✓	✓	✓	-	✓	-	✓

(Re-Trainees)

1. R. Priya Withachchi	1182	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2. M.K.J.M.R. Alwis	1075	232	-	✓	✓	✓	✓	✓	✓	-	-	-	✓
3. D.A. Karunawathie	522	230	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4. N. Jayasekera	1145	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. P.W. Amulawathie	491	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6. J.A.S. Ranasinghe	929	230	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7. R.A. Susila Perera	785	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8. P.M.A. Ilanganage	1219	230	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
9. H.K. Ariyanandani	502	232	-	✓	✓	✓	✓	✓	-	-	✓	-	✓
10. K.P. Late Prematilake	1217	233	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11. H.I.S. Abeyseña	791	232	✓	✓	✓	-	-	✓	✓	-	-	-	✓
12. C.H.K. Hapuarachchi	1109	233	✓	✓	✓	-	-	-	-	-	✓	-	✓
13. D.M.I.J. Heragoda	1192	232	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
14. K.L. Vijitha	1203	231	-	✓	✓	✓	✓	-	✓	✓	✓	✓	-
15. J.D.P. Violet	1282	233	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	-
16. A.W. Amaraduwakara	1283	233											
17. K.A. Pushpakantti	1340	232											
18. G.G. Basnayake	1346	230	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
19. K.B.S. Manel Banjane	1347	232											
20. Kanthi de Silva	1348	230											
21. K.P.P. Ariyabandu	1349	231											
22. N.D. Yapage	1363	230	✓	✓	✓	✓	✓	✓	✓	-	-	-	-

Mrs. K.P. Dayawathie (Foreman) Closing
Dept. for 10 days

Note: This Analysis was at the time of preparation incomplete - further
Machinists for Re-Training have still to be submitted and assessment
made.

APPENDIX 12

UNIDO TRAINING SCHOOL

Re-cam of Hand - Foot - Eye co-ordination Exercises,
and completed production work by Trainee Mechanists -

Course I	82,791 $\frac{1}{2}$
" II	<u>72,915</u>
Total	<u>152,606$\frac{1}{2}$</u>

Complete Uppers - Course I - 120 design .. 103 pairs
0181 " .. 130 "

Complete Uppers - Course II - 120 design .. 83 pairs
0181 " .. 90 "

Stitching New design for Trade
Fair 410 " .. 24 "
Total 420 "

Note: Pilot scheme introduced for all Upper stitching
including Eyelet Stays "free holding", Overlays
Wallets and bags.

