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table

**FINAL REPORT**

international

**Technical assistance to the Central Leather Research Institute  
(CLRI/Madras and Calcutta)**

**Project N° DG/IND/92/404. Contract N° 95/155  
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## RECOMMENDATIONS

- Continue to develop the links with the industry :
  - by organising systematically in-plant training for the trainees one month before the end of their training
  - by sending the instructors along with the trainees.
  - by organizing campus interviews with the industrialists.
- Leave at least one week gap between two training courses in order to allow the instructors to organize their new course, pedagogical aids, purchases, new models etc...
- Organize regular meetings (at least twice a month) between Patternmaking, Cutting and Assembly & Stitching sections.
- One instructor and one counterpart per section is a good organization provided that the instructor does not take this opportunity to leave regularly the workshop under the only supervision of the counterpart.
- Importance of quality control : this project is meant to help the Indian leather industry to develop products corresponding to international standards. The training institute must train their trainees to control each operation. It is the main responsibility of each instructor. A quality control tag should follow the product from the cutting section up to the end of the fabrication.
- A yearly collection should now be created using the prototypes realised by the patternmaking sections in leathergarments and leathergoods. These collections could be presented in the different national and international fairs.
- The patternmaking students have **to fabricate each model**. Otherwise they cannot be trained properly to do the necessary adjustments.
- A Patternmaking training has to be organised for the instructor in Assembly & Stitching Leathergarment and Cutting Leathergarment.
- For the Diploma students, the duration of the Cutting course can be reduced, giving more time for the Assembly & Stitching part as well as for the patternmaking.
- Efforts have to be put in two sections : Lasting/Footwear and Cutting & Clicking/leathertgoods (Madras)
- In Calcutta, further technical assistance would be needed for for the Assembly and Stitching section as well as for the Patternmaking section.

## 1. INTRODUCTION

This sub-contract is meant to ensure the sustainability of the training system set up at CLRI/Madras & CLRI/Calcutta since 1993.

UNIDO has asked AFPA/AFPIC to ensure 2 split-missions in the 2 institutes : one took place from 29 November to 15 December 1995, the second one from 18 November to 4 December 1996.

In addition, IILP/Madras got a technical assistance from AFPIC/AFPA. A separate report concerning that institute is sent separately.

## 2. ASSISTANCE TO CLRI/MADRAS

### 2.1. General remarks:

Most of the courses have now a counterpart which is a good idea as far as the transfer of know-how is concerned. It is reminded that this facility is meant to offer a better service to the trainees. The counterpart is there to help the trainees and to facilitate **the quality control of each operation**. He (she) is there neither to do the job at the place of the instructor nor to do production work for the institute.

### 2.2. Availability of products:

In a training institute, it is compulsory to be able at any moment of the training to show samples of the products made by the trainees. Since the trainees are making several pieces of the same model, the best one of each model should be kept, if not in the workshop itself, at least in the same building : in the fashion studio or in the store for instance.

This way the products can be shown to the visitors and especially to the industrialists. For the exam, the jury members must also be shown the products. We remind that 40 % of the mark is given for the work done during the training. Therefore, the product itself must be available until the end of each course.

At the end of the course, all the products except 2 or 3 pieces kept for samples have to be sent to the store for selling purpose but not before.

Seemingly an important effort has been done concerning the selling of the products because clients come regularly in the shop to purchase the products.

### 2.3. Displaying of the products :

Most of the products are displayed in the store located in the Leathergoods department. The potential clients should not come into the section. It disturbs the trainees and the instructors. The selling has to be taken in charge by the shopkeeper himself. Could another place close from the gate be found in the institute ?

An effort must still be done for the displaying of the <sup>products</sup> products in the shop :

-the leathersgoods products must be stuffed with newspaper or any other available paper,  
-the garments must put on hangers in a way not to damage them.  
-the products must be cleaned regularly in order to avoid humidity stains, which is not presently the case. **An urgent action has to be taken to save the leathersgoods and garments which are stored in the Leathersgoods shop.**

The paying formalities have to be facilitated. It takes a too long time to go through them.

#### **2.4. Leather garments & leather goods department**

Coordinator : Mr Jagadeeswaran

Maintenance : Mr Ramakrishnan

##### **2.4.1 Cutting sections**

Instructors : Mr Jagadeeswaran (leather garments) and Mr Subraman (leather goods)

Counterparts : Mr Rajani (leather garments) and Miss S. Seethalahshni (leather goods)

A common course for leather goods and leather garments has been created at everyone's satisfaction .

Both instructors are too busy with other works.

However Mr Jagadeeswaran's is well organised and the products well checked by Mr Kamal before being sent to the Assembly & Stitching section.

Miss S. Seethalahshni recently came from the Assembly & Stitching section and does not know enough about Cutting to take care of the trainees alone . In spite of all the efforts done during every mission, Mr Subraman is not complying with the requirements of our experts. He is using the previous instructor's file. No lesson preparation is being done. He has no time to check nor the products nor the files of the trainees. The programme is not being followed. The products are being cut without specific order. We recall that the products must be cut obviously starting with the easiest ones and going to the more complicated ones as it was taught during the pedagogical courses Mr Subranian followed in 1993. The pedagogical order has been given in the previous reports. **The minimum which is expected from every instructor is that he prepares his own file and daily prepares his lessons.**

**Recall :** As mentioned at each one of our visits, it is **the responsibility of the instructor to check :**

-the files of the trainees and

-all the components before they go to the Assembly & Stitching section.

##### **2.4.2. Assembly & Stitching (Leather Garments)**

Instructor : Mr Dileepkumar

Counterpart : Mr Seshasai.

- **Products**

During the first course, 173 gents' garments have been fabricated either in textile or in leather. There are still many difficulties to sell the ladies' garments, but otherwise there is no stock

left. The production of ladies' garments cannot be completely stopped since the industry requires this type of skills.

For instance, the fabrication of pants should be maintained but in textile only. In order to solve the problem of the selling, a pattern for gents will be done by the patternmaking section. The trainees will therefore acquire the technology of the fabrication through this exercise. Four new models created by the patternmaking section have been introduced.

**Table 1 : Leathergarments products**

<b>Products</b>	<b>Textile</b>	<b>Leather</b>
<i>1. Ladies garments</i>		
Pants	2	1
Spencer	6	1
Skirt	6	5
<i>2. Gents jackets</i>		
Vest coat	12	19
Manfred ( <i>new model</i> )	15	22
James Dean	13	32
Jasper ( <i>new model</i> )	11	12
Nevada	1	7
IS 2000 ( <i>new model</i> )		1
Tanguy		5
Aviator		2
<b>Total : 173</b>	<b>66</b>	<b>107</b>

- Fabrication and industrial work

Since all the products are now being easily sold, CLRI does not feel the necessity to take subcontracting work. The trainees have enough opportunities to practice on the CLRI models.

In case another decision is taken, we would like to remind that the subcontracting jobs can be undertaken **after the third month** of training only in order to allow sufficient practice.

### **2.4.3. Assembly & Stitching (Leather Goods)**

Instructor : Mr Siva Subramanian

Counterparts : Mr Kamal

- Products

The level of production of the trainees is good as shown on table 2.

Three new models have been introduced : two school bags and another handbag. The collection has to be enriched regularly using the models elaborated by the patternmaking section.

**Table 2 : Leathergoods products**

Products	Number of pieces per product
<i>1.Small leathergoods</i>	
grain de café	25
capouch	3
small purse	5
belts	5
wallet	15
key case	10
<i>2.Hand bags and luggage bags</i>	
Nadine small	3
Nadine big ( <i>new model</i> )	3
Wilson	5
Saxo	5
Sim	3
Voyageur	2
Schoolbag ( <i>new model</i> )	5
College bag ( <i>new model</i> )	5
<b>Total</b>	<b>94</b>

The above order has to be followed for the fabrication in order to take the difficulties into consideration.

- Quality control

The quality of the products is much better. As requested, the special machine for binding is being used and the size of needle and thread is being thought of for the small leather goods.

#### **2.4. Pattern-making courses**

Pattern-making courses are now running in leather garments as well as in leather goods.

##### **2.4.4. Pattern-making course (Leather Garments)**

Instructor : Dr Chandrasekaran

Counterparts : Mr Sundararaman and Mr Rajkumar.

- Models

After the pre-training part, the trainees have done the following garments :

-ladies' garments : 4 skirts, 1 pant, 4 jackets (tailored, rider, parka and safari)

-gents garments : 4 jackets ( parka, sportswear)

No in-plant training is planned but the trainees worked on 2 industry gents' models which gave them a good experience.

The trainees make one single piece of each model.



- Quality control

The quality of the trainees' work is fairly good.

When grading, as mentioned above, it is reminded that a sample **per different size** must be prepared. It has then to be adjusted **if needed** before going to the production line in a factory or in the Assembly & Stitching course at CLRI.

In order to prepare the trainees for the industry, the course might be organised with different options. A specific module should be offered for gents jackets for instance which is the main requirement of the industry. The trainees would then have an opportunity to work on 4 or 5 different models.

It is also reminded to check carefully the lining patterns. It is one of the most delicate part of a garment and the proper lining gives the right falling of the jacket.

- Short term courses

Three 3 weeks courses per year are being run successfully for industry candidates. (see programme in Annex 1). More short-term courses can be organized offering a specialization in gents' jackets for instance.

#### **2.4.5. Pattern-making (Leather Goods)**

Instructor : Mr Araganathan.

Counterpart : none at the moment

- Models :

In 1996, only one prototype has been realised in leather. We would like to remind that each model has to be fabricated in order to see if there is any problem. There should not be a restriction there because the products can be sold either to the trainees themselves or in the CLRI shop.

The files of the trainees are very well kept and the different operations well described.

More new models created should be introduced in the Assembly & Stitching course. For this one or two weeks gap is necessary between two courses. This gap would give time to the instructor to introduce the new models in their courses. A time of preparation must be left for that.

For the final exam, the trainees should present a personal or collective project following the trends of the seasonal fashion. This is already organised in the footwear department.

Too much time has been spent on production work in this course. This should be avoided or at least reduced to one per course. The patternmaking course is meant to teach creativity, patternmaking and fabrication of each model, not 100 pieces of the same product.

The production work can only be given to the Assembly & Stitching course which has already difficulties to comply with the products coming out from the CLRI own Cutting and Clicking sections.

## **2.5. Remarks concerning the equipment**

### **2.5.1. Maintenance of the machines**

The weekly maintenance seems to be done by the trainees every Friday. There are still problems of spare parts which seemingly are not kept in stock. Whenever there is a break down, the machine is out of use for several weeks and even several months.

### **2.5.2. Adaptation of the equipment**

It has been mentioned during our previous missions that a metal or wood flat bed should be manufactured for all the cylinder machines. This type of attachments can easily be fabricated at CLRI. This would permit the students to have more machines to work on. 2 Pfaff flat bed machines are already available. Once the above mentioned attachments are available, the trainees will not have to wait in line to work on the same ones. Therefore this work should be **promptly** undertaken. This will be useful for Assembly & Stitching course as well as for the Pattern-making one.

### **2.5.3. Needs for new equipment**

New machines have been provided in the leathersgoods section. An additional cylinder machine should be provided to the patternmaking section in order to allow the trainees to fabricate their prototypes.

## **3. FOOTWEAR DEPARTMENT**

Coordinator : Mr Devabalan

### **3.1. Cutting & Clicking**

Instructor : Mr Prabhu

Counterpart : Mr Lawrance

No special remarks.

The course is going steadily under the conducting of the instructor.

Good organisation, good follow-up of the trainees.

### **3.2. Closing**

Instructor : Mr Danasekaran

Counterpart : Mr Nawaz

No special remarks. The quality control of the different operations is being done properly. A constant effort must be maintained to train the trainees to set the different machines according to the job undertaken : different thread, needle, pressure etc...

### **3.2.1.Maintenance**

The machines were all in running conditions due to the regular preventive maintenance done by the instructor. A good mechanist has to be called in for the occasional major breakdowns.

There is still a problem of spare parts in case of breakdown. Nno stock is available and therefore a long delay is the consequence every time it occurs.

### **3.3. Lasting & Finishing**

Instructor : Mr Madivalan

Counterparts : Mr Chitravas

Maintenance : Mr P.P. Rao, counterpart : Mr Mohadevan

- Quality of the products

The quality of the products has improved a lot.

However once more the instructor has been asked to be more present behind the trainees while they are operating with the machines. This way they are able to intervene on time in case of mistakes.

Seemingly this is not being done once the foreign experts have left.

- Short term courses:

#### **3.3.1.Equipment**

A precise list of the existing equipment has been established (see Annex 2).

- 1st priority :

The first priority consists in buying attachments for the Reges M/c, leather matrix for the Corimac M/c and a brush for the Torielli roughing M/c.

- 2d priority :

Additional equipment is needed when financial means are available :

- replacement of the Cox & Wright heat activation M/c

-Machine for wall edge M/c.

#### **3.3.2.Maintenance**

As in the closing course, weekly maintenance is being done. The instructors have to become more familiar with heavier maintenance or a specialist must be called in more often.

Mr Mohadevan has a very good potential to work in this field. He seems very mechanical minded and should be trained properly to solve part of the problems this section is facing since the beginning of the project.

### **3.3.3. Lay-out**

The lay-out of the machines has to be thought in a logical way. The situation of the different machines in the workshop should be related to the order of the different operations. Enough space should be left between the trolley and the machines in order to :

- allow the trainees to move around them and observe the demonstration done by the instructor,
- allow the regular maintenance of the machines.

### **3.4. Pattern-making**

Instructor : Mr Murugan

M.Murugan is doing well. He has to keep up-grading his technical skills.

CLRI has successfully presented a shoe collection at the Madras and Delhi international fairs. Three models created by the trainees have been sold to industrialists.

However we feel that this course should be longer in order to allow the students to get better skills.

## **4. PEDAGOGICAL COURSES**

Pedagogical managers : Mr Nachiapan

Only two courses have been organized in 1996 : a module 1 (3 weeks) for 7 instructors and a one week module for 4 persons.

This is not enough considering the responsibility of CLRI to demultiply the different technical courses in other institutes all over the country.

We remind that all the instructors must follow this course before undertaking a teaching job. They might be good technically, they still must learn how to transfer their know-how to the trainees.

The quality of the dissemination of the training system set at CLRI will be questionable if the quality of the pedagogical course is not adequate.

## **5. STATISTICS CONCERNING THE STUDENTS**

The level of registration is fair and we observe that if ladies are still not very numerous, the number is slowly increasing. According to the interviews of the trainees, it seems that the trainees' motivation goes first to leathersgoods and leathergarments.

Two certificate courses and one diploma course per year are being organized in each institute. Year per year we can see that less and less students are registering for the Certificate course. Most of them are interested by the Diploma course. In that line, it is suggested to shorten the duration of the Cutting course and to allow more time in the Assembly & Stitching courses as well as in the Patternmaking courses.

**Table 3** : Outputs for 1995-1996 (CLRI Madras)

<b>Courses</b>	<b>Gents</b>	<b>Ladies</b>	<b>Total</b>
Cutting (leather garments and leather goods)	31	3	34
Assembly & Stitching (leather garments)	9	3	12
Pattern making (leather garments)	16	1	17
Assembly & Stitching (leather goods)	15	2	17
Pattern making (leather goods)	15	5	20
Cutting & Clicking (footwear)	14	1	15
Closing (footwear)	16	4	20
Lasting & Finishing (footwear)	25		25
Pattern making (footwear)	16	5	21
Diploma (leathergoods manufacture)	27	4	31
Diploma (leathergarments manufacture)	30	8	38
Diploma (footwear manufacture)	8	4	12
<b>TOTAL</b>			<b>262</b>
Pedagogical course (module 1)			13
One week course			4
Short term course (pattern making leather garment)-3 weeks duration			7

The diploma course in Footwear has been cancelled in 1996.

### **5. Dissemination of the courses in other Indian Institutes**

The dissemination of the courses in different Indian institutes was one of the objectives of this programme. It has started in the following places : IILP/Madras, Ambur Training Institute, KCET (Ambur), VTA Institute of Leather & Leather products, Lidkar (Leather Industries Development Corporation of Karnataka), the CLRI regional centers : Bombay, Ahmedabad and Jalandhar. More projects are planned in Assam, Andhra Pradesh (Osmania University), Baroda and Madhya Pradesh.

### **3. CLRI CALCUTTA - Leather Goods Courses**

#### **3.1. Cutting and Clicking Course**

Instructor : Mr Das, counterpart : Mr Chowdary.

Mr Das is now an experienced instructor, at ease with his trainees. His approach of the subject is more fluent and his knowledge of the situation in the leathergoods industries in Calcutta helps him to find solutions in managing his courses.

In order to improve the trainees' knowledge and abilities to detect defects and thus be capable to analyse rapidly, it is reminded that sufficient materials of different types are to be provided.

##### **3.1.1. Quality control of the products**

A control of the trainees' work showed that the leather used was of a mediocre quality. It is a fact that for training purposes, a grade leather must not be used, but on the other hand a medium quality is advisable.

Up to now, according to the trainees, they have been cutting only one type of leather : grained split leather of very poor quality which is normally used for initiation. It results that either quality of articles goes down or leather wastage goes up. The trainers whose preferences go to quantity instead of quality do not help in what we expected from this type of course.

Selecting the right type of leather according to the types of articles is very important for the future of this course.

Everybody must bear in mind that if cutting is not good, the quality of assembled articles will suffer. This problem may cause serious damage to all the trainees in all sections.

Controlling the cut articles was a very difficult task, applying the principle that quality prevails upon quantity. The trainees have been asked to change quite a lot of components, thus resulting in raising the percentage of wastage. A normal percentage of wastage has to be expected and accepted.

According to Mr Das, leather supplies is very difficult. If such is the case something must be done in this field. For instance, selecting and buying the right type of leather must be done both by Mr Das and Mr Saha, the Assembly and Stitching instructor.

Mr Das must do a very severe control of all cut articles. All defective components must be rejected and replaced. This is the only way to upgrade the quality.

As mentioned during the previous visits, the trainees must do the first control after cutting before submitting their work to Mr Das. They must find by themselves the errors they have done. The final control before sending the articles for assembly must be done by Mr Das.

##### **3.1.2. Quality control of the trainees' files**

As in other sections, it is very difficult to have a look at the trainees' files. What is surprising is that the trainees do not have their files at hand. Only three or four files could be controlled which happened to be well kept.

## **3.2.ASSEMBLY & STITCHING COURSE**

Instructor : Mr Saha , counterpart : Mr Ball.

### **3.2.1.Quality control of the products**

Mr Saha has been reminded to make the sequences once with the students. In a second step, they must follow the written sequences to make the second model under the instructor's supervision.

Mr Saha and Mr Ball are doing their best to improve the quality of the bags but more control must be done. The instructors must not hesitate to ask the trainees to repeat some operations which they believe they are not perfect.

### **3.2.2.Lessons' preparation**

Mr Saha has to be more precise in his lessons' preparation. More details must be given in order not to forget certain essential points.

The operation sequences described in the students' files are not sufficiently developed. Mr Saha must pay more attention to this point. The operations sequences are meant to help the student in making his articles by following the right procedure. Any lack of important points may result in a disaster as far as the final product is concerned.

Mr Saha has clearly understood the basic principles of the lesson preparation, but still has some difficulties in delivering the message to the trainees. The lessons must be prepared for the application period but also for the initiation period which has a major importance in this type of training.

### **3.2.3.Pedagogical approach**

Mr Ball is a good technician but the problem is that he does not speak at all during his demonstrations. He only shows how to do such and such operation without the participation of the students. The lessons must be prepared more precisely in order to avoid errors during the demonstration.

At least 3 sets of each model must be prepared for the trainees. One for the first trial which must be done step by step by the instructor and executed by the students. The second set is done by the students alone, following the sequences of operations. The third set is done taking into consideration the time factor.

**Recommendation** : as any new instructor, Mr Ball should follow a complete pedagogical course in order to enable him to face this problem.

### 3.2.3. PATTERN-MAKING COURSE

Instructor : Mr Jana

### 3.2.4. Pedagogical approach

Mr Jana is very close to his trainees who are themselves very motivated. Every mistake must be pointed out in order to improve the quality of the work. A special attention must be given to the level of the different students. Mr Jana must therefore be careful to the students who have some difficulties to follow.

A thorough preparation of the lessons will allow all the trainees to follow the course without any difficulties. This aspect has improved since Mr Jana participated in the Module 1 at Madras.

The new models created in this course have to be introduced in the Cutting & Clicking course as well as in the Assembly course. However all the technical difficulties involved in the different must be covered.

### 3.2.5. Equipment

For this new course, some new sewing machines must be provided according to the list of equipment included in the Anex.

### 3.3. General remarks concerning the trainees

- Absenteism and lateness are the major problems.
- Placement of trainees : a few ex-trainees who came to the Institute have been interviewed. All of them are working either as manager, assistant manager or supervisor. Their salary range from 1500 INR to 4500 INR per month.

### 3.4. Subcontracting orders

In order to solve the problem concerning needs for various types of leather, the Institute must call on factories for subcontracting job. Some factories already send their employees to the Institute for cutting their articles. Therefore the trainees can do this job for the factories.

### 3.5. Statistics concerning the trainees

Table 4 : Outcomes 1995-1996 (CLRI Calcutta)

Courses	Gents	Ladies	Total
Cutting (leather goods)	3		3
Assembly & Stitching (leather goods)	10	1	11
Patternmaking	13		13
Diploma in leathergoods manufacture	33	1	34
<b>Total</b>	<b>59</b>	<b>2</b>	<b>61</b>



The 2 first ladies who registered for these courses are diploma students.

#### **4. CONCLUSION**

At the end of this project which started in April 1993, the outcomes are quite positive on the quantitative side as well as on the qualitative side.

One of the main outcomes concerns the links developed with the industry. All the trainees found an employment either in the firms or in the training institutes. Many entrepreneurs visit the training sections and acknowledge their satisfaction concerning the skills obtained through the systematic training given at CLRI.

## ANNEX 1

### 1. Suggested additional equipment for the patternmaking courses in Leathersgoods

Designation	Quantity	Specification
PFAFF sewing M/C,ref N° 1245-706/07-40/07).	1	Flat bed,single needle, lockstitch, unison feed, max stitch length 4,5 m/m, speed : 2800 spm, bar stroke : 35 m/m,needle : 1311-35, needle size -80-100, Binding component
-PFAFF sewing m/c, ref N° 335-2/27 BLN, medium duty, cylinder bed	1	cylinder bed, single needle, lockstitch, unison feed, speed : 2800 s/m, max. stitch length : 4,4 m/m, bar stroke : 35 m/m, needle system : 134/35, needle size : 110/130, binding component
-PFAFF sewing m/c, ref N° 491-755/13-725/04, medium duty, post bed	1	Post bed, single needle, high speed, needle feed, wheel feed & roller presser, speed - 2500 s/m, stitch length - 4,5 m/m, needle 134/35, needle size 110-140

### 2. Macintosh computer leathersgoods CAD

In addition, for the near future, a CAD system is advisable :

•**Power Mac 8100/80 -32 Mo/GIGA**

-CD/AV Soft Windows

- 1 monitor 17 inches APPLE
- 1 Thunder card II 1360 GX

•**Power Mac 7100/CD 24 Mo/500**

- + Vram 2 Mo
- 1 monitor 17 inches APPLE

**•Peripherals**

- Hard disc 1 external GIGA
- Scanner ARCUSPLUS + Photoshop
- Camera photo quick take
- Printer NB Laser writer NT
- Color printer Phaser 3001-22 Mo

**•Softwares**

- Painter
- Clarisworks
- Aldus Collection
- Power CADD
- Photoshop
- Studio 32
- Quarts Express

**ANNEX 2**  
**FOOTWEAR LIST OF EXISTING EQUIPMENT**

## 1.CLOSING COURSE

Machines specification	Use	Description	Problem encountered	Remarks
ALLWYN (2 nbr))	Useless	1 needle flat-bed	Too speedy for training needs	Useless unless the motor is changed
PFAFF 138/49/01 BL (1 nbr)	For average thread use	zig-zag flat bed		OK for special use only
PFAFF 224/944/01 BL (1 nbr)	For average thread only	2 needles flat bed	has been adjusted for 1 needle (very delicate adjustment for other thread)	OK but might easily break down
MERRITT (9 nbr)	For textile or paper only	1 needle flat bed	no use for leather	Have to be replace either by flat bed M/c or post bed M/C specific for leather work . 3 M/c are out of order
PFAFF 901-1244 007-005(1 nbr)	For big thread use only	2 needles flat-bed	has been adjusted for 1 needle	OK but will easily break down
PFAFF 34-705/03 (1 nbr)	For average thread only use	1 needle flat bed	very old model (1980)	OK
PFAFF 491-755 (1 nbr)	For average thread only use	1 needle post m/c		OK
PFAFF 194-944-01 BL (1 nbr)	For average thread only	2 needles post m/c	spare parts are missing	out of order
PFAFF 1294-901-1294 (1 nbr)	For big thread only	2 needles post m/c	has been adjusted for one needle	OK but will easily break down
PFAFF 335 H3 (1 nbr)	For average thread only	binding machine optional use		OK
TORTI Salgemmo 840-133 (1 nbr)	For average thread only	binding machine optional use		OK

PFAFF Ref 1293 (1 nbr)		1 needle post M/c	Needs adjustment and repair	"
PFAFF Ref.191(1 nbr)		1 needle post bed M/c	"	"
OMACO skiving machine (1 nbr)	Skiving	skiving M/c	Needs repairs	out of order
ALBACO folding machine (1 nbr)	Folding	folding M/c		out of order
TORIELLI skiving M/c (1 nbr)				OK
BUSM folding M/c (1 nbr)				OK
Seam rubbing M/c (1 nbr)				OK
Seam taping M/c (1 nbr)			pneumatic connection not working	out of order
TORIELLI rotary ironing press (1 nbr)	Ironing			OK
TORIELLI crimping M/c (1 nbr)	Crimping		pneumatic column to be cleaned	very average condition
Latex spray M/c (1 nbr)			not needed for this training programme	OK
Torielli splitting M/c (1 nbr)	Splitting			OK
TORTI eylet M/c (1 nbr)				OK
METCH pre-forming M/c (1 nbr)			Has only one last	OK but too limited. Needs other lasts)
STROBEL stitching M/c (1 nbr)	In sole + upper stitching (sport shoes)			OK
PFAFF bar tacker (1 nbr)	Automatic stitches			OK but not very useful for this training *

\* could be sold to buy flat bed M/c or post bed m/c more useful

## 2. LASTING AND FINISHING COURSE

Machines specifications	Use	Remarks
Torti Salgemo	In sole attaching and trimming	out of order (pneumatic valve)
Torielli	Toe puff attaching	OK
USM	Counter molding	OK
Torielli	Mulling M/c	OK
Reges	Toe lasting	OK <b>but needs attachments for different types of lasts</b>
Torti Salgemmo	Side lasting	out of order (pneumatic valve)
Corimac	Heel seat lasting	OK for glue, out of order for nails, <b>needs leather matrix</b>
Torti Sagemmo	Pounding M/c	OK
Hot air blower	Hot air blower	To be repaired
Table for hand lasting	hand lasting	Too high. Has to be reduced to 90 cm
USM	Heat setting	OK
Torielli	Roughing M/c	OK . <b>Needs a brush for wall edge sole</b>
Cox & Wright	Heat activation	very poor quality, does not correspond to the needs. <b>HAS TO BE REPLACED</b>
Torti Salgemmo	Sole press	OK, <b>another machine for wall edge soles is needed</b>
Falan	Sole stitching M/c	OK
Torielli	Heel nailing M/c	OK
Torielli	In sole moulding M/c	OK
Torti Sagemmo	Lamination press	OK
Torielli	Spray booth	OK
Combined finishing M/c	Finishing	OK
Torti Sagemmo	Brushing M/c	OK
Torielli	Scooping M/c	OK
Torti Sagemmo	Sole lavelling	OK
Sole splitting M/c	Sole splitting	OK
Torti Sagemmo	Sole trimming M/c	OK
Torielli	Heel nailing M/c	OK
Roughing M/c	Paper roughing M/c	OK

**Existing equipment in Assembly & Stitching leathersgoods/Madras**

<b>Designation</b>	<b>Quantity</b>	<b>Specification</b>
PFAFF sewing M/C,ref N° 1245-706/07-40/07).		Flat bed,single needle, lockstitch, unison feed, max stitch length 4,5 m/m, speed : 2800 spm, bar stroke : 35 m/m,needle : 1311-35, needle size -80-100, Binding component
-PFAFF sewing m/c, ref N° 335-2/27 BLN, medium duty, cylinder bed		cylinder bed, single needle, lockstitch, unison feed, speed : 2800 s/m, max. stitch length : 4,4 m/m, bar stroke : 35 m/m, needle system : 134/35, needle size : 110/130, binding component
-PFAFF sewing m/c, ref N° 491-755/13-725/04, medium duty, post bed		Post bed, single needle, high speed, needle feed, wheel feed & roller presser, speed - 2500 s/m, stitch length - 4,5 m/m, needle 134/35, needle size 110-140
-Folding machine	1	
-Finishing bench	1	
-electric hand tools for creasing and finishing		



## Participants

This programme is intended for personnel involved in the area of leather garments design and development. Prior working knowledge in garment production (Assembly & Stitching/Cutting) is essential.

## Course Fee

Rs.5000/- per participant (includes course materials). Demand Draft in favour of "The Director, Central Leather Research Institute" shall be sent to

Head, Education & Training Division  
Central Leather Research Institute,  
Adyar, Madras-600 020.

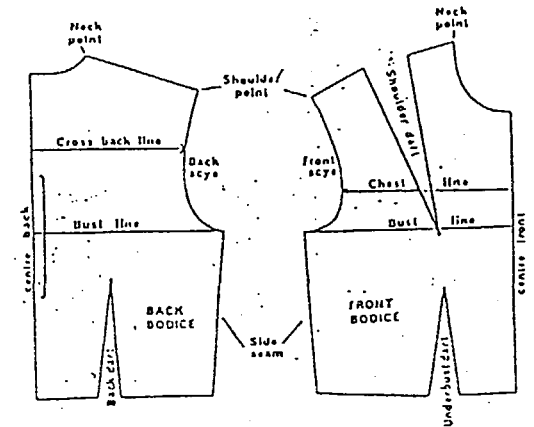
For further Details Contact:

Dr.M.S.Olivannan, Head, CLAD  
(or)

Dr.B.Chandrasekaran  
(Course Coordinator), CLAD  
Central Leather Research Institute,  
Adyar, Madras-600 020

Telephone 4910953, 4911386  
Telegram LESERCH  
Telex 41-21014 CLRI IN  
FAX 044-4911589

## TRAINING PROGRAMME IN LEATHER GARMENT PATTERN DESIGNING



11th to 29th December 1995



CENTRAL LEATHER RESEARCH INSTITUTE  
ADYAR, MADRAS-600 020

## INTRODUCTION

The Indian leather garments industry has been expanding rapidly and its exports performance in the last five years is very striking. The need for the manufacture of sophisticated, fashion oriented and value added leather products has been necessitated by the ever growing competitive International market. Any improvement from the current scenario of functioning as "Jobbers" requires good understanding of the International demand in terms of fashion, design and quality.

The phenomenal growth in the Indian leather garment industry now attracts professional entrepreneurs from leather and non-leather sectors.

At this stage of development, there is a long felt need for short duration courses, preferably of part-time in nature. The CLRI launches this new training programme to provide necessary technical expertise in pattern designing of leather garments meeting the requirements of fashion and quality conscious International market. The proposed course is expected to fulfill this need. The well equipped facilities of CLRI under the National Leather Development Programme will be utilised for conducting this course. The participants will also be exposed to the most modern, state-of-art CAD facilities for garment design and grading.

## COURSE CONTENTS

- Sizes & Measurements:**
  - International sizing methods
- Standard Pattern Blocks:**
  - Skirt
  - Bodice (Ladies & Gents)
  - Trouser (Ladies & Gents)
- Details:**
  - Collars,- Sleeves, PocketsTheir construction and choice of selection.
- Women's Garments:**
  - Dart manipulation
  - Enlargements
  - Adaptation of basic block
- Men's Wear:**
  - Enlargements
  - Adaptation of basic block
- Pattern Grading:**
  - Relevance of sizing & measurement
  - Computer Aided Design (CAD) for pattern design & grading.

## Course Duration & Timing

The course duration will be three weeks and to facilitate the active participation of personnel from the Industry, the programme timing has been kept from 2.00-6.00 p.m.

## REGISTRATION FORM (Leather Garment Pattern Designing)

I am/We are interested in joining the above training programme and furnish the details as below:

Name (s): \_\_\_\_\_  
\_\_\_\_\_

Organisation : \_\_\_\_\_

Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Particulars of Payment:

Demand draft drawn on  
No:  
Date:

Signature

# SHOE STYLING COURSE

## ENTRY LEVEL

### Announcement

- Course Duration : 12 Weeks  
Course Dates : 6th Course - March 10, 1997 - May 31, 1997  
: 7th Course - July 7, 1997 to Sept. 30, 1997  
Course Timings : 9.30 a.m. to 3.30 p.m. (Monday - Friday)  
Total No. of Seats : Six  
Eligibility : Tenth Standard Passed  
: Working experience in a footwear  
factory & aptitude for design compulsory  
Sponsorship : Industry sponsored candidates preferred  
Entry to course : Aptitude test & Interview  
Last date for receipt of application  
: 6th Course : Feb. 10, 1997  
: 7th Course : June 25, 1997  
Date of aptitude test and interview  
: 6th Course : Feb. 25, 1997  
: 7th Course : June 25, 1997  
Course Fee : Rs.20,000 per candidate, includes cost of  
design kit

Kindly forward your applications to:

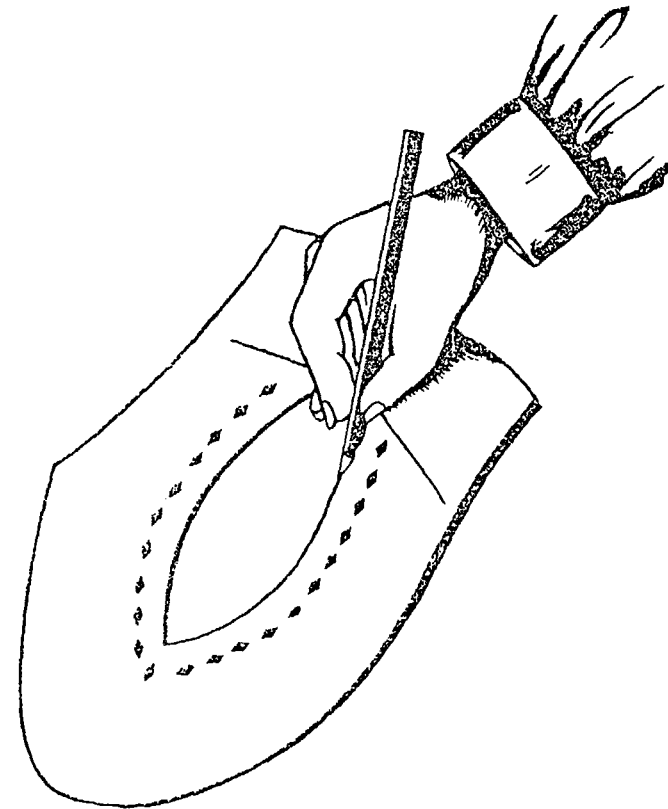
Shoe Design and Development Centre  
CENTRAL LEATHER RESEARCH INSTITUTE

Adyar, Madras 600 020, India  
Phone: 91-44-41 8269, 491 1386  
Fax : 91-44-491 1589, 491 2150



# CLRI SHOE STYLING COURSE

## ENTRY LEVEL



Announcing the 6th & 7th Courses  
1997

# SHOE STYLING COURSE

## ENTRY LEVEL

### Course Rationale

The "Shoe Styling Course" is designed such that the students completing this 12 week entry level programme at CLRl will develop a general awareness to fashion and the various influences which effect it; production of detailed footwear sketches; generate pattern for major styles for men and women; the methods of costing of footwear and a final integrated design project to combine all skills learned.

### Structure of Programme

- ▮ Duration 12 weeks in full day sessions of 6 hours each.
- ▮ Learning support time 15 hours per week.
- ▮ Student centered time 15 hours per week.
- ▮ Independent study and use of the Fashion Studio information sources and facilities are essential for this course which requires student centered learning. Access to the Fashion Studio outside content time is a prerequisite of the learning programme.

SPECIFIC UNITS			
Unit No.	Title	Learning Support Time	Student Centered Learning
1	Footwear Fashion Studies	20 Hours	20 Hours
2	Footwear Design Studies	20 Hours	20 Hours
3	Pattern cutting & CAD	100 Hours	100 Hours
4	Costing	10 Hours	10 Hours
5	Final Integrated Project	30 Hours	30 Hours