



Footwear Chronicle

A Quarterly Journal by Central Footwear Training Institute, Chennai
An ISO 9001:2015 Certified Institution

Rs. 20
APRI - JUNE 2017

Volume II

Issue 2

Tamil / English / Hindi

a member of
SATRA
TECHNOLOGY
CENTRE

Award of ISO 9001:2015 Certification to CFTI, Chennai



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**Visit of Hon'ble Minister of MSME
Shri. Kalraj Misra to Chennai**



Visit of Mr. Indra Kumar, Deputy Director from NITI AAYOG



Visit of Shri. Arun Kumar ADC and Shri. Shanmuganathan, AIA



Visit of Shri. Vijayakumar, ADGP (Prisons), Govt. of Tamilnadu to CFTI, Chennai



GST Workshop at CFTI Chennai and participants



**Visit of Mr. Somnath Ganguly
Former Director, CFTI Agra**

**Visit of Mr. Rami D. Hamza, Vice President (Resources)
of M/s. Almandooos from Abu Dhabi, UAE**





सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
निर्माण भवन, नई दिल्ली-110108

GOVERNMENT OF INDIA
MINISTRY OF
MICRO, SMALL & MEDIUM ENTERPRISES
NIRMAN BHAWAN, NEW DELHI-110 108



FOREWORD

I am happy to learn that CFTI, Chennai is bringing out a quarterly magazine named “Footwear Chronicle” to portray their activities. I hereby place my appreciation for the innovative approach of the Institute.

CFTI, Chennai is one of the Premier Training Institutes in the field of Footwear sector and is one of the leading training partners of Leather Sector Skill Council. The Institute is successfully conducting “Pradhan Mantri Kaushal Vikas Yojana” (PMKVY) and is also rendering technical / consultancy services to Footwear & allied industries. I am also happy to learn that CFTI, Chennai has conducted training for 2000 candidates in the job roles of stitchers, cutters, pasting, attachers, folders, skiver, splitters and table helpers and also extremely happy to learn that the Institute has achieved a remarkable feat by arranging placements for 1887 candidates out of 2000, thus achieving a phenomenal 94.35% of placements.

I hope the magazine will go a long way to portray the developmental activities of the Institute and would bridge the gap for more public participation.

I wish CFTI, Chennai all the success.

(Surendra Nath Tripathi)

SIGNIFICANT ACHIEVEMENTS OF CFTI, CHENNAI

during APRIL - JUNE 2017

- CFTI, Chennai has received **ISO 9001:2015** International Standard certification after continuous improvement in the Quality Management System & standardization in all the areas of this Institute.
- CFTI Chennai actively participated, in Mobilisation camp conducted by **Tamilnadu Slum Clearance Board**.
- This Institute has conducted **3 workshops on GST** (Goods and Services Tax) at CFTI, Chennai premises in hands with PPDC, Agra for Industry entrepreneurs & Employees from Accounts.
- Registered and got activated in the **Government eMarket (GeM)** portal.
- This Institute has successfully completed the **Central E-Procurement** portal process till release of AOC to the eligible bidders towards the purchase of Machineries & Equipments.
- Task impart training for 2000 nos. completed and for additional skill training of 2500 nos. from **TNSDC, Govt. of Tamilnadu**.
- Task given by CSIR-CLRI for skill training for 550 candidates completed and addition allocation for 1,000 has been requested.
- This Institute was visited by **prominent visitors** like Shri. Arun Kumar, ADC, O/o DC (MSME), Mr. Vijay Kumar IPS, ADGP Prisons, Mr. Rami D Hamze Vice President Resources and Administration of M/s Almandos, Abu Dhabi & Mr. Indra Kumar, Deputy Director from NITI AAYOG.
- CFTI, Chennai signed **MOU with M/s CheyyarSeZ Developers Pvt Ltd.**, manufacturer of NIKE shoes with employment requirement for around 23000 nos in Krishnagiri District.
- **2017 SATRA Silver Membership** Certificate received by CFTI, Chennai for working with SATRA 5 Years.
- **Moderation** conducted for the 24th batch 2 year DFDP students of this Institute by Mr. Peter Racklyeft, Chief Moderator, Textile Institute, UK.
- The Managing Director from LIDKAR visited this Institute along with other officials from LIDKAR and issued the Certificates to the successful students, completed 1 year Certificate course in Footwear Technology.
- Rare feat by CFTI, Chennai since this institute is the only the third among the Central Government Autonomous bodies to get ISO Certification.

From the Director's Desk



Shri. K. Murali

It is indeed my pleasure and privilege to come closer to you through this news journal. Since this journal is a platform to portray many developmental activities of this Institute, this letter is bridging the gap between you and this Institute. I am able to communicate many developmental issues for improving day to day activities of this Institute. Being a pioneer organization in the field of footwear training in Leather Sector, our goal is to impart a world class training to meet out the manpower needs & requirements of shoe Industry. We have so far been able to achieve this goal with the help of well experienced Officers, Staffs and Trainers.

I am very happy to inform you that CFTI, Chennai is finally certified as ISO 9001:2015 organisation, (an International standard certification) after continuous improvement in the Quality Management System & to bring in standardization in all the areas of this Institute. Definitely the ISO 9001:2015 certification will be another milestone to bring one step ahead of this Institute's activities in training, Common Facility services & Consultancy services to meet the International standards.

This Institute conducts Placement Linked Skill training programme Sponsored by State / Central Govt agencies like TNSDC, TNSCB, Govt. of Tamilnadu, & CSIR – CLRI. So far as Skill Training programme is concerned during the quarter April 2017 to June 2017 a total number of 1248 candidates were trained by this Institute. CFTI, Chennai has now becomes as an affiliated Training partner of NSDC, TNSDC, CSIR – CLRI & LSSC,

In connection to the Placement linked Skill Training programme, CFTI, Chennai has made MOU with M/s CheyyarSEZ Developers Pvt Ltd to fulfil their trained manpower requirement at Krishnagiri Districts. Like wise I am inviting all the Footwear and allied Industries to utilize this Institute's Training services by the way of sending the filled in Survey report (Format sample is at page 54 of this magazine)

And also this Institute conducts *Recognition of Prior Learning (RPL) under TNSDC Scheme*. It is a platform to provide recognition to the informal learning through work to get equal acceptance as the formal levels of education. we request interested Industries to come forward to strengthen the initiatives taken by Ministry of Skill Development and Entrepreneurship (MSDE) by utilizing our training services.

This is to inform you that Central Footwear Training Institute (CFTI, Chennai), a Govt. of India Society, under Ministry of Micro Small and Medium Enterprises, situated in heart of the city provides training and rendering technical / consultancy services to Footwear & allied Industries.

In respect to the subject, we suggest and request all entrepreneurs to utilize our common facility services on the technical area and get benefited. The Institute has a workshop including Designing, Shoe CAD, Clicking, Closing and Lasting Sections. In addition to training activities, the Institute also undertakes job work activities at nominal costs for the benefit of small scale industries. For more details kindly visit our website www.cftichennai.in

Interested companies can register and enroll them as a member to avail the common facility services under priority basis and looking forward to service with our technical expertise.

FOOTWEAR EVENTS (JULY 2017 - DECEMBER 2017)

Jul 6-Jul 8, 2017 | Shanghai, China
ISPO Shanghai

Jul 11-Jul 11, 2017 | London, UK
Lineapelle London

Jul 11-Jul 13, 2017 | Warwickshire, UK
Outdoor Trade Show

Jul 12-Jul 14, 2017 | Ho Chi Minh City, Vietnam
IFLE International Footwear & Leather Products Exhibition – Vietnam

Jul 23-Jul 25, 2017 | London, UK
Pure London Footwear & Fashion

Jul 25-Jul 28, 2017 | Kiev, Ukraine
Leather & Shoes International Fair of Shoes, Leather & Fur

Aug 6-Aug 8, 2017 | Birmingham, UK
Moda Footwear UK

Aug 9-Aug 11, 2017 | Bogotá, Colombia
IFLS International Footwear & Leather Show

Aug 9-Aug 12, 2017 | Dhaka, Bangladesh
Dhaka International Yarn & Fabric Show

Aug 16-Aug 18, 2017 | Stockholm, Sweden
Nordic Shoe & Bag Fair

Aug 20-Aug 22, 2017 | Toronto, Canada
Toronto Shoe Show

Aug 22-Aug 25, 2017 | Moscow, Russian Federation
Euro Shoes Premiere Collection

Aug 25-Aug 27, 2017 | Wenzhou, China
CSLF China International Synthetic Leather Fair

Aug 30-Sep 1, 2017 | Shanghai, China
All China Leather Exhibition

Sep 10-Sep 11, 2017 | London, UK
The Kensington Shoe Event

Sep 26-Sep 28, 2017 | Tokyo, Japan
JFW International Fashion Fair

Oct 4-Oct 6, 2017 | Milan, Italy
Lineapelle

Oct 11-Oct 13, 2017 | Shanghai, China
CHIC Shanghai

Oct 11-Oct 13, 2017 | Shanghai, China
China International Fashion Fair

Oct 11-Oct 13, 2017 | Tokyo, Japan
Fashion World Tokyo

Oct 17-Oct 20, 2017 | Izmir, Turkey
Shoexpo Izmir Footwear and Bags Fair

Oct 22-Oct 25, 2017 | Long Beach, US
Footwear Trade and Distribution Conference (FTDC)

Oct 25-Oct 28, 2017 | Dallas, US
Dallas Apparel & Accessories Market

Oct 31-Nov 2, 2017 | Guangzhou, China
Guangzhou China Shoes Fair

Oct 31-Nov 4, 2017 | Guangzhou, China
CantonSF Shoe Fair

Nov 3-Nov 5, 2017 | Agra, India
Meet at Agra

Nov 16-Nov 18, 2017 | Dhaka, Bangladesh
Leathertech Bangladesh

ABOUT THE INSTITUTE



CENTRAL FOOTWEAR TRAINING INSTITUTE (CFTI), Chennai an autonomous Institution under Ministry of Micro Small & Medium Enterprises, Government of India, has been working for development of Human Resources for Footwear & Allied Industries since 1957. The Institute was modernized through UNDP in 1993 and equipped with complete set of modern infrastructure. It conducts various Long term, Short term and Part time techno managerial courses in Footwear, Leather Goods and allied subjects. Its premier courses are the Two year Diploma course in "Footwear Design and Production" and 1½ years Post Graduate Higher Diploma course in Footwear technology & Management studies is accredited with Textile Institute, London and Leicester College of Footwear, UK.

AIM OF THE INSTITUTE

- (a) To provide training and related inputs to develop and augment a class of trained personnel in Footwear Technology and Allied Industry in the country.
- (b) To develop human resources in Footwear and Allied Industry by introduction of advanced training methods and courses, appropriate knowledge and skills to promote

rapid growth of footwear and allied industry in the country.

- (c) To promote in general and particular, the Indian Footwear Industry to attain international standards of production.

INFRASTRUCTURE

- ◁ The Institute is endowed with complete infrastructure for conducting training programmes.
- ◁ Land & Building at prime location in Chennai.
- ◁ Equipped with complete set of modern machinery, tools & equipments.
- ◁ Important Footwear Manufacturing & Material testing machines.
- ◁ Well equipped library with text books, periodicals, journals design magazine, SATRA bulletins & handouts related to footwear technology, industry management and trade.
- ◁ Teaching aids including OHP, Slide & LCD Projector, Audio, Video System & Computer, with shoe CAD facilities.
- ◁ Qualified, trained and Experienced Faculty.

OPPORTUNITY FOR STUDENTS

- ◁ Highly prospective career to suit the need of Footwear and Allied Industry in appropriate levels.
- ◁ Self-Employment by establishing own Industry of the Trade.
- ◁ 95% placement record till date.
- ◁ Suitable base for higher studies in Footwear field.
- ◁ Study at Leicester college of Footwear, UK.

OPPORTUNITY FOR ENTREPRENEURS & INDUSTRY

- ◁ Providing Techno-Managers to Footwear Industries.
- ◁ Technical Consultancy Services to existing and prospective Industries.
- ◁ Common Facility Services with Modern machinery including Shoe CAD.
- ◁ Process cum Product oriented EDP on Footwear, Leather Goods and Allied Industries.
- ◁ Availability of relevant information of Footwear Industry.
- ◁ Services of Die - Less Cutting System, PU Pouring Machine, Laser Cutting & Engraving machine.

PRODUCT RESEARCH AND DEVELOPMENT & SHOE CAD

The Institute through PRD Cell, undertakes:

- ◁ Responsibility of New Product development as per the given specification and concept.
- ◁ Development of Master Patterns and Grading of the components to different sizes through latest shoe CAD.
- ◁ Conversion of Different pattern files and cutting the patterns there of through Universal Converter system.
- ◁ Training on Shoe CAD.

OTHER ACTIVITIES

- ◁ Skill Upgradation Courses for Rural Artisans.

- ◁ Exclusive courses for SC/ST, BC/MBC and Women candidates.
- ◁ Courses for International Participants.
- ◁ Linkage with Footwear related Industry, Trade, Association and Organisations.
- ◁ Need Based Training Program for Industry, sponsored candidates.
- ◁ Specialized training programs on Productivity & Quality improvements.
- ◁ Patronized with "The Textile Institute, London, UK".
- ◁ Member of SATRA, UK
- ◁ 2 years Diploma Course approved by TI / Leicester College of Footwear Technology, London and Leicester College of Footwear, UK
- ◁ 1.5 Years Post Graduate Higher Diploma course (PGHD) extended with six weeks of International training exposure at Leicester College of Footwear, London, UK

SERVICE TO THE FOOTWEAR INDUSTRY

CFTI through its State of the art machinery provides common facility services to the footwear industries. With the latest machines the Die-Less Cutting System, Sole mould making plant and PU Pouring machine expects to expand the service network to the industry. Further to this the Ambur Sub-Centre of CFTI caters the service needs of the Footwear Industries of Ambur, Ranipet & Vellore.

PRESENT TRAINING ACTIVITIES OF CFTI, CHENNAI

CFTI conducts Skill Development Training Programmes for rural Footwear, Leather Goods artisans of Tamil Nadu in their locality. The objective of this programme is to develop the Footwear, Leather Goods making skill to the rural artisans at their door step. These programmes have good response among the artisans as they acquire technical knowledge on material management, cost effective programme etc.

Placement Linked entry level training programme sponsored by TNSDC, Govt. of Tamilnadu

CFTI, Chennai was given an order by TNSDC for imparting training under placement linked training programme for 2,300 candidates during 2015-16. CFTI, completed the training successfully and has also achieved a remarkable feat of 93.5% of placement.

On seeing the performance of CFTI, Chennai, TNSDC has given an order again for imparting training for 2,000 candidates under different job roles for the year 2017- 2018. On receipt of the order, CFTI has successfully completed training programme for 989 candidates in 17 centres and training programme for another 494 candidates in 8 centres are under progress in Krishnagiri District.

Pradhan Mantri Kaushal Vikas Yojna (PMKVY), Ministry of MSDE, Govt. of India

CFTI, Chennai conducts training on Centrally sponsored scheme called "Pradhan Mantri Kaushal Vikas Yojna (PMKVY)" (Phase IT of the STAR Scheme) which aims to skill unemployed youth by the New Ministry of Skill Development & Entrepreneurship (MSDE) on the

approved National Occupational Standards of NSDC. Under Phase-I CFTI has completed training for 5,166 candidates successfully. CFTI Chennai has been accredited as Training Centres for Phase-II but allocation for Phase-II is skill from NSDC.

Recognition of Prior Learning (RPL)

Recognition of Prior Learning (RPL) is a platform to provide recognition to the informal learning through work to get equal acceptance as the formal levels of education. RPL is a process of assessment of an individual's prior learning to give due importance to learning as an outcome rather than learning as process.

Under PMKVY, special focus is given by this Institute to RPL by recognizing prior competencies of the assessed candidates and provides a certificate and monetary reward on successful completion of assessments.

Skill Training Program Sponsored by Central Leather Research Institute (CLRI)

In Association with Central Leather Research Institute (CLRI), CFTI - Chennai is imparting Skill training for 550 SC candidates. The training on job roles such as Stitching Footwear (300 Nos), Sample Maker (30 Nos), and Stitcher - Leather Goods (220 Nos) and Preassembly Operator (100 nos.) under Placement Linked in the field of Leather Footwear and allied Industries.

Shoe Upper training through Tamilnadu Slum Clearance Board (TNSCB), Govt. of Tamilnadu

CFTI, Chennai is conducting shoe upper training for 100 candidates of unemployed youth residing at Slum / Slum clearance board tenements sponsored by TNSCB.

Visit of MD, LIDKAR to CFTI, Chennai and Certificate Distribution to One Year CFT Students sponsored by LIDKAR, Govt. of Karnataka





Participation of CFTI in the Meeting conducted by TNSDC



Visit by The Director, CFTI & Mr. Peter Racklyft, Leicester College of Footwear, UK (London) to Skill Training Centres sponsored by TNSDC at Krishnagiri District



APPLICATION OF ERGONOMICS IN FOOTWEAR INDUSTRY

Prolonged standing is required in various occupations and can lead to discomfort and fatigue in the feet, legs, and lower back. Regular exposure to prolonged standing has been associated with an increased risk of musculoskeletal disorders (MSDs) as well as other issues like varicose veins and locked joints. Researchers have investigated multiple means of intervention such as anti-fatigue mats and shoe insoles to alleviate the associated risks and discomfort to the operators. Anti-fatigue mats are commonly used when operators are exposed to prolonged standing on hard concrete floors. In a majority of studies, it has been found that anti-fatigue mats are associated with significantly lower discomfort ratings when compared to concrete floors. Most of these studies were conducted over a 4- to 8-hour period and participants were required to complete a questionnaire about perceived fatigue and discomfort.

It is important to consider the following factors while investigating anti-fatigue matting:

- Mats should be firm enough to minimize the "bottoming out" effect. This effect causes the mat to deform while under heavy weights, eliminating the positive effects.
- Mats that are too soft can have adverse effects resulting in increased lower extremity fatigue.
- Ensure mats have beveled edges to minimize trip hazards.

- Place mats at least 8" under a workstation to prevent uneven standing surfaces.
- Avoid slippery surfaces when handling grease, oil etc.
- Ensure mat thickness is .05"
- Utilize interlocking edges to securely join adjacent pieces. Anti-fatigue insoles are another commonly used intervention to reduce lower extremity discomfort and fatigue. Anti-fatigue insoles fit directly into the operators' shoes and use a spring-like technology to absorb and return energy for an even force distribution. Insoles are often utilized when anti-fatigue mats are not conducive to the work environment, such as in clean rooms or high foot traffic operations. Previous studies have concluded that the anti-fatigue insoles significantly reduce general fatigue and lower extremity



discomfort when compared to hard concrete flooring. It is important to consider the following factors while investigating anti-fatigue insoles:

- Insoles should be made of a viscose elastic material.
- Insoles should be properly fit for each individual.
- Insoles can increase shoe tightness, resulting in adverse effects. In addition, many studies have suggested that the use of anti-fatigue mats and shoe insoles are not mutually exclusive. Research revealed that subjects generally experienced less discomfort with the

combination of insoles and anti-fatigue matting. Particularly, older subjects expressed positive influences in reducing both leg and general fatigue and discomfort in the feet, ankles, legs and lower back. Research has confirmed that the use of anti-fatigue matting, insoles, or a combination can be beneficial in reducing fatigue and discomfort from prolonged standing.

The Importance of Ergonomics in the Workplace. ... The benefits of working in an **ergonomic** environment are endless, but some of the major benefits are attractive to employers as well as employees, such as reducing costs, increasing productivity, increasing employee morale and improves the quality of work.

Benefits of a Workplace Ergonomics Process

Here are five of the proven benefits of a strong workplace ergonomics process:

1. Ergonomics reduces costs. By systematically reducing ergonomic risk factors, you can prevent costly MSDs. With approximately \$1 out of every \$3 in workers compensation costs attributed to MSDs, this represents an opportunity for significant cost savings. Also, don't forget that indirect costs can be up to twenty times the direct cost of an injury.

2. Ergonomics improves productivity. The best ergonomic solutions will often improve productivity. By designing a job to allow for good posture, less exertion, fewer motions and better heights and reaches, the workstation becomes more efficient.

3. Ergonomics improves quality. Poor ergonomics leads to frustrated and fatigued workers that don't do their best work. When the job task is too

physically taxing on the worker, they may not perform their job like they were trained. For example, an employee might not fasten a screw tight enough due to a high force requirement which could create a product quality issue.

4. Ergonomics improves employee engagement. Employees notice when the company is putting forth their best efforts to ensure their health and safety. If an employee does not experience fatigue and discomfort during their workday, it can reduce turnover, decrease absenteeism, improve morale and increase employee involvement.

5. Ergonomics creates a better safety culture. Ergonomics shows your company's commitment to safety and health as a core value. The cumulative effect of the previous four benefits of ergonomics is a stronger safety culture for your company. Healthy employees are your most valuable asset; creating and fostering the safety & health culture at your company will lead to better human performance for your organization.

Typical losses from the failure to apply constructive ergonomics include:

- Lower production output • Increased lost time
- Higher medical and material costs • Increased absenteeism
- Low-quality work • Injuries, strains, fatigue
- Increased incidence of accidents and errors
- Increased labor turnover
- Less spare capacity to deal with emergencies
- Reduced productivity • Reduced competitiveness

By **PRASANNA S. RAO,**
Technical Expert (QA)
TTF, Ethiopia



Moderation of CFT 1st batch of Ambur Subcentre by Director, CFTI Chennai

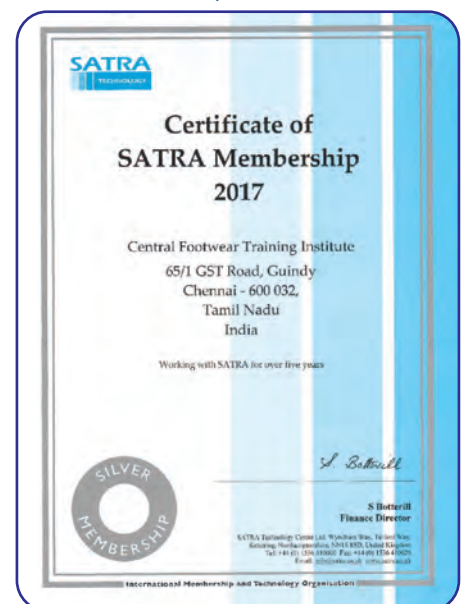


Moderation by Mr. Peter Racklyft from Leicester Textile Institute, UK at CFTI, Chennai



ISO 9001:2015 Certification to CFTI, Chennai

SATRA Silver Membership Certificate to CFTI, Chennai





Sample Maker Training conducted by CFTI Chennai sponsored by CSIR-CLRI



Samples developed by the trainees



"Director's participation in the Meeting of NOS Sub-Committee of LSSC at Hotel Le Royal Meridien, Guindy, Chennai"



Inspection by The Director, CFTI at Skill Training Centres sponsored by TNSDC at Krishnagiri



Participation of CFTI Chennai in Mobilisation Camp conducted by TNSCB



TNSDC Sponsored Trainees on industry exposure visit



DEVELOPMENT FOR CHILDRENS FOOTWEAR IN DEVELOPING COUNTRIES

Children walking, running and playing barefoot is a common sight in many undeveloped countries across the globe. Over time their feet build up calluses that reduce the discomfort of walking on rugged terrain, but this does not protect these children from cutting and infecting their foot or contracting soil-transmitted diseases like hookworm and schistosomiasis. Many parents are unaware of these dangers and do not prioritize footwear for their children, or are simply unable to continually purchase new shoes for their children as they are outgrown or worn out. These issues by creating affordable footwear that offers increased durability and adjustability to accommodate a child's growing foot.



In the footwear design number of factors that had emerged from a survey has conducted. Two features of primary importance were safety and security. Footwear design should allow children to feel independent by allowing them to explore and play without supervision, even on rough terrain. The children should also feel secure as they are protected from potential injuries and parasites. Similarly, children's families should feel secure knowing their children are sufficiently protected. Visual appeal also ranked very highly on the survey: the shoes must exhibit

some personality to make them appealing to children who desire a sense of individuality. A design with visual appeal would also prompt children to encourage parents to make the purchasing decision even if they are unaware of the potential health risks of walking barefoot. At the same time the shoes must be reliable and durable.

By realized that a family's footwear costs could be reduced by creating a shoe a child can wear as he or she grows. The solution must enable children to continue moving in the same ways (e.g., walking, running, playing) and in new ways (explore new areas, play sports with shoes on). The last design factor was cost.



Shoes has converged on a modular shoe design consisting of a toecap and a heelcap with links that can be inserted between the caps to lengthen the shoe. While this design created additional technical hurdles due to its multitude of components, it boasted superior qualities from a manufacturing cost and simplicity standpoint. From a technical standpoint, our challenge was to find the optimal balance between strength and comfort considering the shoe material and component geometry. A softer material increases comfort but also increases the likelihood components will snap out of position,

break, or wear out over time. The geometry of the interlocking components faces a similar tradeoff between improved user experience and product functionality. Additionally, geometries must be designed to eliminate gaps between components during bending to keep dirt and debris from lodging in the gap - and to prevent pinching the wearer's foot.

The basic design concept was refined and iterated through a combination of software modeling and simulation, and physical testing of prototypes. 3D printing technology was used to create molds of varying geometry; we filled those molds with a variety of resin and rubber-based materials to determine the best solution for the needs of our stakeholders. The design was also modeled virtually by creating 3D renderings of the concept sketches. Tested the virtual model by using a set of loading conditions that simulates the bending forces present during walking or running. These simulations identified structural weak points in our design and provided information about its overall strength.

Finally we arrived at the final design concept, a full-size shoe built of extruded polymer parts that slide together to adjust the size of the resulting shoe. Heel and toe pieces are built with appropriate strapping to secure the shoe to the user. By adding dyes of varying colors to different pieces, the shoe appeals aesthetically to children and their parents.

Product cost was a major factor in all design decisions as we recognized the financial constraints of our target consumer. Therefore the components were heavily designed for ease of manufacturability. The simple process begins by extruding three different

profiles of rubber (or a soft plastic depending on the desired shoe performance), for each of the three unique components, which are cut to an appropriate length. These components are then stamped to create holes for the straps to be threaded through, and to potentially create a comfortable texture on the shoe's top and a gripping texture on its sole. The product could potentially be packed for shipping at this point, leaving assembly to occur at the point of sale or by the user, since the shoe is designed to be assembled and adjusted with ease. The minimal amount of equipment and dies reduces the startup capital required to produce the shoe. Further, it opens the potential for a localized manufacturing effort that can boost the local economy and reduce supply chain costs. The modular shoe is primarily competing with the flip flop or an equivalently inexpensive sandal. Finally, product seeks to differentiate by offering increased durability and adjustability that increases its lifetime. While the added complexity may result in a higher price point than the flip flop, the increased product life span offers a superior solution from a long-term cost efficiency perspective.



By
S. Wellington Raja, B.Tech
Faculty, CFTI, Chennai

Inspection by The TNSDC officials at Skill Training Centres



Distribution of Certificates and Stipend to Trainees sponsored by TNSDC - Phase I





Skill Training under Placement Linked Training Program sponsored by TNSDC, Govt. of Tamilnadu, Phase - III



ECO-DESIGN FOOTWEAR

Product design determines most of the environmental impacts that a product will potentially have during its life cycle. Design choices such as type of materials and manufacturing processes define whether end-of life strategies for closing the loop of the materials will be potentially feasible or not, influencing the waste and pollution generated by our consuming society. Eco-design can help in the substitution of materials for others with less environmental impact.

The following criteria can be considered to manufacture an eco-shoe:

- Energy consumption
- Reduction of water consumption
- Use of recycled material
- Limitation of water pollution
- Have materials of high quality
- Reduction of air pollution
- Exclusion of the use of substances harmful for the health and the environment
- Last at least for a year lifespan
- Performance and durability
- Advice to consumers
- Limitation of toxic and other residues in the shoes



For making this eco-shoe, we need to know and change the materials and some manufacture aspects for obtain

less impact in the environment footprints. Some of this information was provided by the Shoe Manufacturers, in Italy, that currently manufactures eco-shoes.

- Vegetal tanned leather, with tanino, mimosa and chestnut, without use of chemicals.
- Natural rubber resin for the sole.
- Fiberglass in the tongue.
- Solvents and glues based in water.
- Textiles without polyester and polyurethane.
- Used recycled material
- Reduce the normal energy consumption, with a renewable energy.
- Based chemicals hexane
- Latex foam
- Remove fabric and interlining

The major environmental impacts of leather production originate from liquid, solid and gaseous emissions resulting from the consumption of rawhides, energy, chemicals and water. (Joseph and Nithya, 2009). The authors reported that only a few slaughterhouses possess waste management facilities and hence, average, country specific data were used for waste management part of slaughtering, tanning and finishing activities for the study. The transportation of the main materials like hides, water, salt, chromium salt, and fuel is important to be considered for further analysis. This was developed based on the material flow data generated during this study for the leather required to make a pair of shoes.

Extrapolation of the data over 776 million pairs of leather footwear reveals that about 2.25 million tons of chemicals are used and most of which are released to the environment, consequently polluting the locations surrounding the tannery clusters. Similar extrapolations of other parameters and their impacts on the local and global environment make it clear that there is urgent need to take dramatic actions to help to ensure that the leather production industry reduces its negative environmental and human



health impacts. In making such reductions, the leather production industry can help to contribute to societal sustainability.

By **K. SRINIVASAN**, M.Tech
Faculty, CFTI, Chennai

ARTICLE APPEARED IN "INDIAN EXPRESS" ON 28.04.2017

Shot in the arm for leather industry as tannery residual salt can be processed, marketed

which contributes 40 percent of the country's \$6 billion leather exports, scientists of the Central Leather Research Institute (CLRI) and Central Salt & Marine Chemicals Research Institute (CSMCR) in Bhavnagar in Gujarat, have discovered a novel method that converts waste residual salt into saleable raw material.

The State was staring at a major environmental hazard as nearly one lakh tonnes of residual salt produced by tanneries piled up at Common Effluent Treatment

ing units in 2001. Though the measure was taken by the Tamil Nadu Pollution Control Board (TNPCB) to prevent untreated effluents polluting the waterbodies, it has resulted in accumulation of residual salt over the years, and has become a big cause of concern.

B Chandrasekaran, Director, CLRI, told *Express* on the sidelines of the Commemoration Day celebrations, about 15 common effluent treatment plants that are stocking close to one lakh tonnes of salt, which is a mixture of sodium chlo-

off. It is a huge burden on the industry and a storm like Vardah has drained this stock leading to environment disaster. So, we came out with a solution to separate sodium chloride and sodium sulphate using a simple technique and market them separately," he said.

Laboratory trials have proved successful, and now a pilot project is envisaged with the help of the industry represented by the All India Skin & Hide Tanners & Merchants Association (AISHTMA) for which a Memorandum of Under-

standing (MoU) was signed recently

Amitsava Das, Director, CSM-CRI, said that trials have given the desired purity (98.8) acceptable for the industry. The technology has proved very economical. The pilot unit is planned at salt farms in Bhavnagar, and once technology is developed into a commercial product, it will be implemented in CETPs.

Chandrasekaran said the salt can be converted into raw material and sold within a year. AISHTMA president, Rafeeq Ahmed, expressed gratitude to scientists for developing such a cost-effective technology.

How residual salt is produced in tannery

Tannery waste liquid is presently subjected to RO desalination, and the reject water is evaporated up to dryness stage using high-intensity forced evaporation. The solid residue generated during the process is found to be a mixture of sodium chloride and sodium sulphate



SIZE OF INDUSTRY

Exports \$6 billion | Domestic \$7 billion

MAJOR STATES

Tamil Nadu, Uttar Pradesh, West Bengal and Punjab

Benefits of the technology

① The new technology helps in separation of sodium chloride and sodium sulphate

② Sodium chloride can be sold to chlor-alkaline units which produce chlorine and sodium hydroxide. Sodium sulphate has a large market, and is highly priced

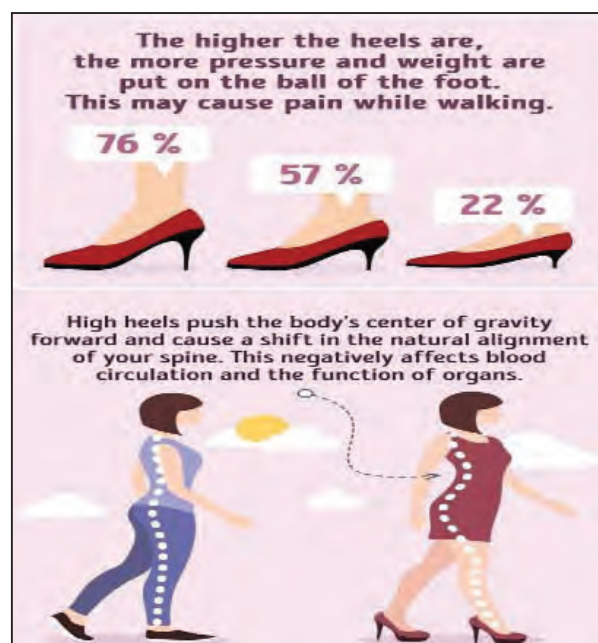
③ Scientists say the cost of treatment can be met by selling sodium chloride and the remaining is profit

④ Residual salt will no longer be stocked and pose environmental threat

HOW TO WEAR HIGH HEELS TO AVOID HEALTH PROBLEMS

High-heeled shoes are a fashion staple in many women's wardrobes. But wearing them too often is not only painful, it can be dangerous too. Not paying enough attention to your feet may lead to posture problems and foot deformities.

Today, we at **Bright Side** have prepared this infographic that will explain how to wear your favorite pumps and stilettos without killing your feet.



MINIMIZING THE NEGATIVE EFFECTS OF WEARING HIGH HEELS



Wear pumps and stilettos only 2-3 times a week, alternating them with flat shoes.

Every 2 hours, take off your shoes to massage your feet.



If you wear stilettos every day, go for heels that are no more than 2 inches high.



Before you go to bed, make a foot bath and soak your feet in warm water for 15 minutes.



Sea salt helps to relax the muscles of the feet.



St. John's wort helps to heal small wounds.



Linden improves blood flow.



Menthol essential oil reduces swelling.



Milk softens the skin.



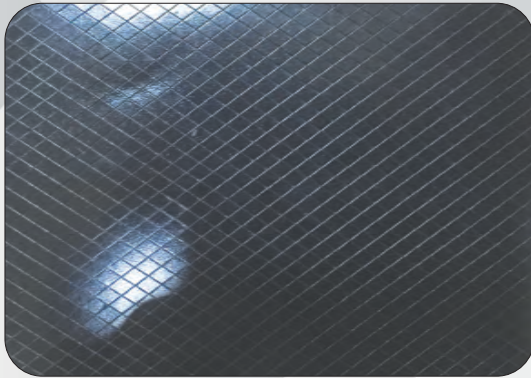
Oak bark reduces sweating of the feet.

After the procedure, be sure to put on warm socks.

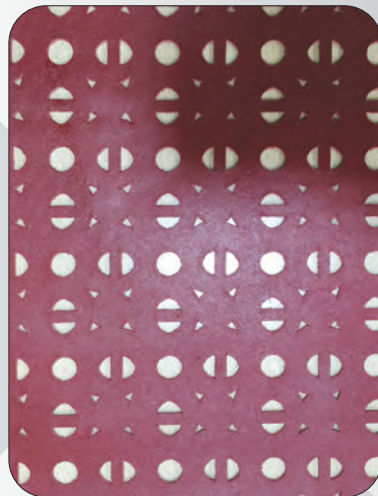
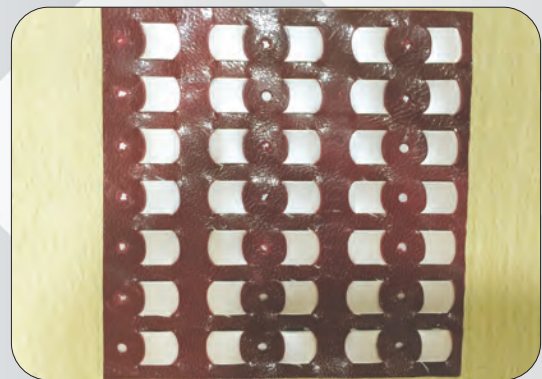
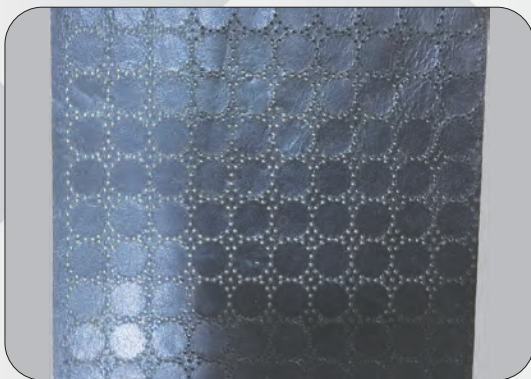
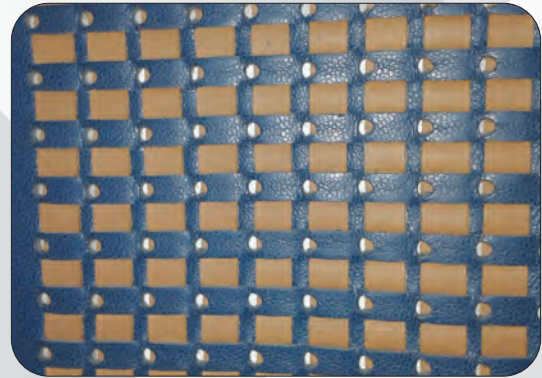
By **M.G. Brindha Suresh**
Faculty, CFTI, Chennai

Creation / Innovations by CFTI, Chennai

Interlace Design & Interlace Shoe Making

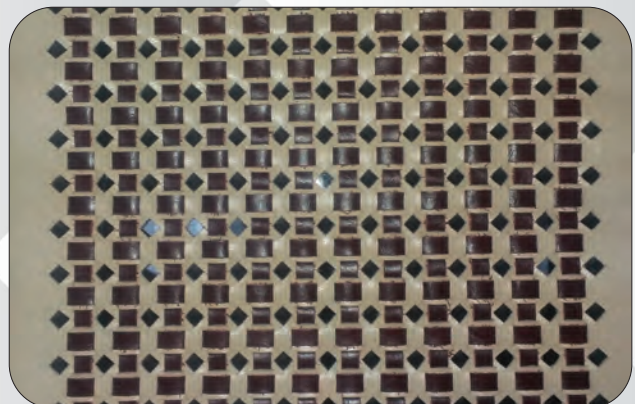
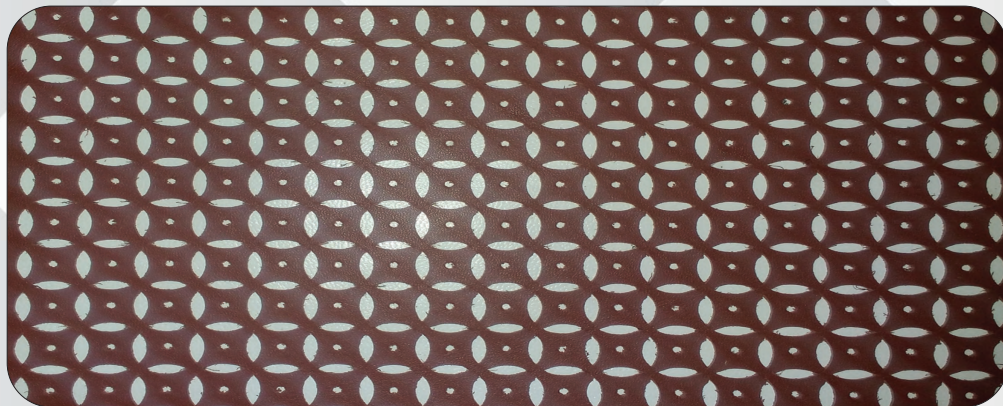
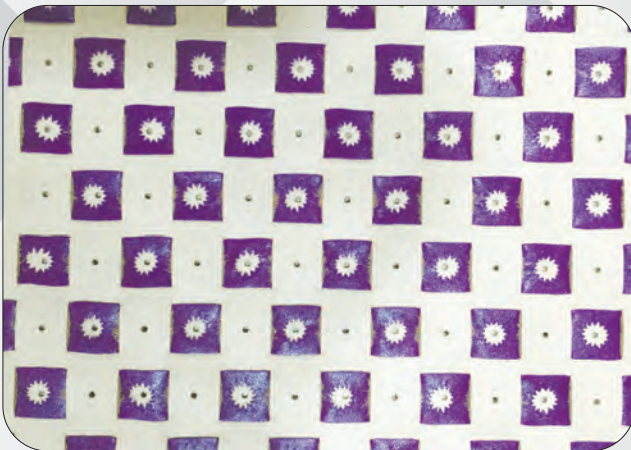
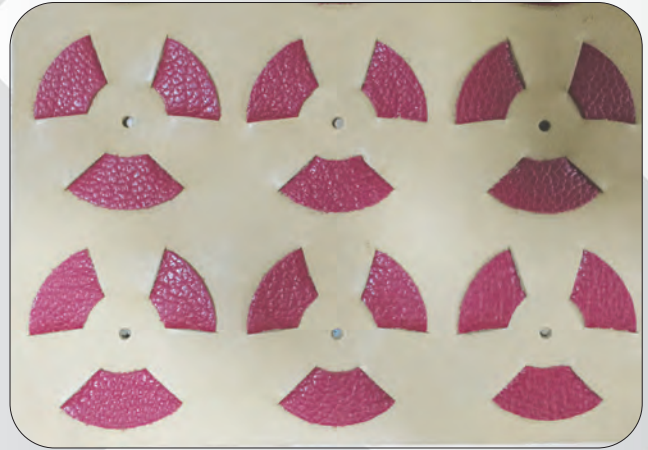


Half Cut



Creation / Innovations by CFTI, Chennai

Interlace Design & Interlace Shoe Making





Creation / Innovations by CFTI, Chennai

Interlace Design & Interlace Shoe Making



NEW ARRIVALS

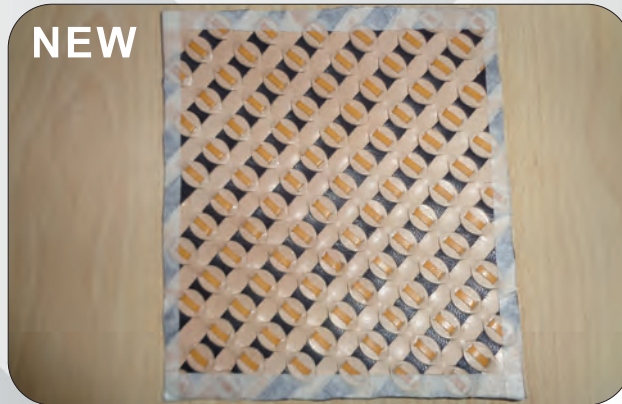
NEW



NEW



NEW



Developed by
JAYAKUMAR
Dieless Cutting Division
CFTI, Chennai

NEW



NEW



NEW



Developed by
M. MOHAMED ZUBAIR
Dieless Cutting Division
CFTI, Chennai



Government of India

CENTRAL FOOTWEAR TRAINING INSTITUTE, CHENNAI

MSME - TECHNOLOGY DEVELOPMENT CENTRE

(Ministry of Micro, Small & Medium Enterprises,
Govt. of India Society,)

65/1, GST Road, Guindy, Chennai - 600 032.

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**100%
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assisted.**

**Hostel facility
Available for
Boys**

FEE STRUCTURE

An ISO 9001:2015 Certified Institute

**INVITES APPLICATIONS FROM ELIGIBLE CANDIDATES FOR THE FOLLOWING
JOB ORIENTED PART TIME COURSES**

S. No	Name of the Course	Duration	Eligibility	Tuition Fee	Raw Material Fee	Total Fee	Contact Person & Mobile No.
1.	Designing & Pattern Cutting	3 Months	10 th	10,000/-	1,700/-	11,700/-	Zubair Mohamed 9791044606
2.	Shoe CAD	1 Month	10 th	10,000/-	1,700/-	11,700/-	Rakesh Sharma 9884367247
3.	Shoe Upper Clicking	1 Month	8 th	10,000/-	2,000/-	12,000/-	Saravana Bhavan 9884712549
4.	Shoe Upper Closing	3 Months	8 th	12,500/-	2,000/-	14,500/-	
5.	Lasting, Full Shoe Making & Finishing	3 Months	8 th	12,500/-	2,000/-	14,500/-	
6.	Die-less cutting and Design	1 Month	Having design knowledge	12,000/-	1,500/-	13,500/-	Jaikumar 9941803131

HOSTEL FEE STRUCTURE (BOYS)

S. No	Type of Accommodation	Per Month	Per Annum
1.	Dormitory	5000/-	60000/-
2.	Three Sharing Room	5500/-	66000/-
3.	Double Sharing Room	7500/-	90000/-
4.	Double Sharing A/C Room	9000/-	108000/-

1. For SC/ST tuition fee is not chargeable but raw material fee is chargeable.
2. The above duration is based on 3 hours of class a day.
3. The classes are conducted during office timings as well as after the office timings as well as after the office hours.
4. Provision is made to complete the classes in lesser duration by attending full day classes.
5. Hostel facilities is available with mess for boys but on chargeable basis.
6. Certificate issued by CFTI, Government of India.

Application can be downloaded from website: www.cftichennai.in

*For any other clarifications other than technical as part of the course
you may contact on the following phone nos.*

Phone: 044-22501429 Mobile: 96779 43633 / 96779 43733

CFTI Trainer imparting practical sessions on the job roles Stitcher, Preassembly Operator & Skiving Operator





**Pre Screening Test Conducted by beneficiary industry
for the next batch on Skill Training Program**



Skill Training under Placement Linked Training Program Sponsored by TNSDC - Phase-II



Selected candidates after Pre Screening to be trained by CFTI, Chennai for TNSDC / CLRI sponsored training



Distribution of Certificates and Stipend to TNSDC sponsored trainees - Phase-I



ERGONOMIC FACTORS IN FOOTWEAR DESIGN

Good shoes should behave like an extension of the foot, which is a complex structure of bone, muscle and fatty tissues. To enhance performance, sophisticated shoe structures are employed which make use of viscous and elastic foam materials such as ethylene vinyl acetate (EVA) and polyurethane (PU). The use of viscous plastics in the heel area serves to absorb the impact forces during the initial ground contact, and provides the foot with a soft 'cushioning' effect. In the forefoot area, on the other hand, highly elastic plastics are used, which help to minimize the loss of the energy transmitted to the shoe during the running movement. For the foot to be protected, it is of fundamental importance that the shoes do not 'bottom out'. This happens when, even at relatively low forces, the whole deformation capacity of the sole materials is used up, so that at higher forces there is no more deformation capacity left.

Materials Characteristics

A shoe upper material contributes to comfort in proportion to its (1) breathability; (2) conformability; (3) weight; (4) suppleness or softness.

Exercising or mobility makes human's feet overheating. The material



from which the shoe is made can affect fit and comfort. Softer materials decrease the amount of pressure the shoe places on the foot. Stiff materials can cause blisters.

INSIDE-SHOE CLIMATE: According to qualified investigators (Satra, Natick Army Research Laboratories, Tanners Council Research Laboratory, etc.) inside-shoe climate is among the most important shoe comfort factors -- and, one of the most overlooked by consumer. Inside shoe climate involves temperature, humidity, moisture, breathability, insulation; in short, the thermal conditions.

BREATHABILITY: It is the combination of **heat, moisture, and friction** that combine to break down materials inside the shoe. Since the feet have more sweat glands per square inch than any other part of the body (approximately 250,000), adequate air circulation is essential to keep them healthy. Socks that absorb moisture are made of cotton, wool, or a mixture of both. Trapped in tightly laced-up shoes with little room to breathe, our feet often suffer in an unpleasant environment and in turn make the human uncomfortable as well. **Special openings** in the sides, toes, heels and soles should allow fresh air into the shoe exactly where it is needed.

MOISTURE ABSORBENCY: Leather absorbs moisture away from the foot and out of the shoe. Shoes that are made of leather and that fit well, healthiest and most comfortable design. A great deal of sweat is absorbed by insoles and by the uppers of shoes.

SUMMER SHOES:

- Thin leather or inserts and the woven leather at the certain points of the upper.
- Holes punched in the leather for the total air permeability.
- Open areas of the upper allow air circulation for the cool and comfortable footwear.
- Thin leather or the materials which allow air circulation.
- Thinner and lighter soles.



WINTER SHOES: Winter shoes /winter training shoes must have soles insulated against the cold ground. The sole's tread must be efficient for running on slippery surfaces.

WEIGHT: Suede leather is usually lighter than full-grain leather, and heavy synthetic fabric (Cordura etc) is

lighter than leather. Equally, big clumpy soles are obviously heavier than thinner soles.

New lighter stronger and more durable materials, particularly in the outsole and midsole, have drastically reduced the weight of shoes. Many shoes have replaced part of the midsole in the midfoot with a thermoplastic or carbon fibre plate. This reduces the weight without sacrificing any stability.

DURABILITY: A shoe's durability is often determined by the hardness of the outsole rubber, the density and firmness of the midsole foam, and the stretch of the upper materials. Durability, of course means, the shoe's ability to endure and perform over time - to last and continue to maintain its stability, traction, flexibility and shape (fit). Durability is dependent on the materials, structure and construction of the shoe and is managed in each shoe component differently. Durability of the upper is dependent on the materials used commensurate with the sport and foot motions.

By **T. GNANAPAZHANI**, M.Tech
Faculty, CFTI, Chennai

An article appeared in 'TAMIL MURASU'





QUALITY TRAINING PROGRAMME ENSURED



All Training Programmes conducted by CFTI, Chennai undergoes rigorous Internal Assessment by CFTI Supervisors and External Assessors by Sponsors

Assessment conducted by SCVT officials, Govt. of Tamil Nadu at Skill Training Centres sponsored by TNSDC



Assessment conducted by SCVT officials, Govt. of Tamil Nadu at Skill Training Centres in Krishnagiri District



Assessment conducted by industry at one of the Training Centres



Internal Assessment by User Industry on trainees



Final Assessment conducted by TNSDC officials





Final Assessment of Candidates & TNSDC officials for “Stitchers”, “Preassembly Operators”



Assessment by TNSDC Assessors at one of the Skill Training Centres in Krishnagiri District conducted by CFTI, Chennai



Assessment done for TNSDC sponsored candidates trained by CFTI, Chennai at Krishnagiri



Skill Training Internal Assessment conducted by CFTI Supervisors at various Training Centres



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THE SCENARIO OF UNSKILLED WORKERS IN THE INDIAN FOOTWEAR INDUSTRY

Introduction:

Indian Footwear Industry is one of the most vital industry, which rather than machinery, also depends on craftsmanship and manpower. Footwear Export is among top ten Export products of the country. China is the largest manufacturer of Footwear, but we are ahead of it in good craftsmanship. Being a second Largest Footwear manufacturer of the world, Indian Footwear Industry is divided in two sectors, large & small scale.

Personnel management, which includes methods of recruitment, selection, training, terms of employment, methods and standards of remuneration, working condition, maintenance and effective use of facilities, is important for both large and small scale industry. In Big companies, good relationship is maintained through various welfare schemes and activities, but in small scale sector, adequate attention has not been paid to this aspect. In Southern part of India, small scale sector is systematic. There are some regions in India, where there is a scope of improvement. For the proper development in these regions, due recognition to the importance of the human factor has to be given. It is a fact that this has not been given sufficient attention in the past. Till now we have not achieved benchmark, when we talk about personnel management, safety management, cleanliness and technical education.

As per the data maintained by Council of Leather Exports, Indian

Footwear Industry has share of 13% in global footwear production of 16 million pairs. India produces 2065 million pairs of different categories of footwear. But the craftsmen, who are devoting whole life in footwear industry are not having safe working condition. They are not having regular jobs. Maximum workers are working in contracts. The owners have no social



responsibility for them. If any worker is affected by any injury, he cannot claim for compensation, because there is a lack of records & attendance. Workers are forced to work in a scorching heating condition. They

have no facilities like Provident Funds, Medical benefits etc. They work on holidays and night hours. They are working in worse conditions with maximum pressure and minimum wages. Their so called "Maalik" cries with the continuous dialogue of "Low fund".

It is essential to study the effect of management-staff relations on the development of this sector. The footwear manufacturer must understand that it is a part of the management function, which is primarily concerned with human relationship within an organization. The objective is to maintain a relationship with each individual of its concern so that every employee contributes his service with great zeal and effective work. This is for effective relationship between employers and employees. The importance this relationship has not so far been realized fully by the footwear manufacturer and

this is must for the advancement of this sector.

Effect of Human relations:



Human relation in a factory plays a crucial role which contributes to high productivity and is most essential in order to lay a firm foundation of good creative atmosphere within an organization. It should be realized that in absence of essential facilities provided to the workers, it is difficult to get good work from them. For better results, it is essential that a joint consultation committee be formed in each factory to hear grievances and deal effectively with them. The formation of such committee would help the management to appreciate some of the difficulties confronting the workers and likewise the workers are made aware of management's problems. This mutual understanding will thus reduce the chances of distrust between management and employees.

Cleanliness in the factory:

Whether we process through ISO (International Organization for standardization) or SA (Social accountability), the motive is clean and systematic work. The working conditions in most of the small scale footwear units are far below the requirement. A high standard of cleanliness should be provided in the factories and the workers should not be compelled to work under sub-standard conditions. Good working conditions ultimately result in the improvement of the productivity, quality of the product

and overall development of the industry.

Safety Measures:

There had been several accidents occurred due to fire explosions in the factories of Northern India, which are enough to tell the truth. I still remember the ten years back fire injury incident of Shree Ji Leathers Agra in 2002, when a large number of workers lost their life due to improper storage of adhesives & lack of emergency exit. Some fresh cases are observed in Kanpur & Delhi. To avoid these incidents in future, some regulations must be followed. There should be separate place for storing hazardous adhesives & inflammable chemicals. The workshop should be equipped with fire extinguishers. Each employee should be trained for fire drills. There should be emergency exit in the workshop. First Aid facility should be available near working area.

Initiative by Government:

Government is developing small industries to extend work opportunities, raise incomes and standard of living and to bring about a more balanced and integrated economy. Industrialization will also change from simple crafts meeting elementary needs to small industries based on steadily improving techniques and designed to satisfy the needs of a more advanced character. Government is very strict against child labour, which was most common in small scale sector.



Technical Education:

Most of the workers engaged in the cottage and small scale footwear industry are illiterate and carry out their jobs on the lines they and their forefathers had been doing traditionally. For developing the industry, it is desirable that the workers should technically train.

Conclusion:

The small scale footwear manufacturers should realize the necessity for promoting industrial

welfare and take suitable implementations. They should know their responsibilities and should not work only for the sake of their personal profits. This measure would ultimately give sake of satisfaction to their staff as well as helping them to bring solidity within the industry. Otherwise we will lack good craftsman in Footwear Industry.

By **M.G.Brindha Suresh**
Faculty CFTI, Chennai

वर्कआउट के जूते चुनते वक्त न करें ये 5 गलतियां

- ❑ दौड़ने और टेनिस के लिए अलग-अलग जूते होते हैं।
- ❑ वर्कआउट के समय पुराने जूतों का इस्तेमाल न करें।
- ❑ इन जूतों का प्रयोग 300 से 500 मील तक ही करें।
- ❑ दौड़ने वाले जूते की ग्रिप अच्छी हो और चोट न लगे।

रोज वर्कआउट करते वक्त आपको सबसे अधिक किसकी जरूरत होती है, आई-पॉड, पानी की बॉटल, घड़ी, स्पोर्ट्स के कपड़े, अगर आप इनके बारे में सोचते हैं तो आप गलत हैं। वर्कआउट में क्या-क्या आता है, पहले इसे जानें। दौड़ना, एरोबिक करना, टेनिस खेलना, पहाड़ पर चढ़ना, बास्केटबॉल खेलना ही वर्कआउट की श्रेणी में आते हैं। इन सबके लिए सबसे अधिक जरूरी है एक अच्छा जूता। ऐसा जूता जिसके कारण आपको चोट न लगे और आसानी से वर्कआउट कर पायें। लेकिन आप अक्सर वर्कआउट के जूते खरीदते वक्त कुछ बड़ी गलतियां करते हैं।

1 पुराने जूते

अगर आप वर्कआउट यानी रनिंग और जॉगिंग की शुरुआत करना चाहते हैं तो पुराने जूतों का प्रयोग इसके लिए कभी भी न करें। पुराने जूते आपके पैरों में फिट भी नहीं होंगे और इनके कारण आप आराम भी महसूस नहीं कर पायेंगे। इनके कारण पैरों में मोच भी लग सकती है क्योंकि ये सही तरीके से फिट नहीं होते।

2 सही जूते का चुनाव

अगर आप वर्कआउट करने जा रहे हैं तो अपने वर्कआउट के हिसाब से ही जूते चुनें। दौड़ने वाले जूते बास्केटबॉल और टेनिस के जूतों से अलग होते हैं। दौड़ते वक्त ऐसे जूते पहने जो आपके पैरों का ग्रिप सही तरीके से बनायें और गिरने न दें। ऐसे जूते चुनें जिनकी ग्रिप अच्छी हो, आपके पैरों में अच्छे से फिट हो जायें, और उनका वजन भी अधिक न हो।

3 बहुत अधिक पहनना

आपके वर्कआउट के जूते वर्कआउट के लिए हैं, न कि गली मोहल्ले में पहनकर घूमने के लिए। इसलिए अपने वर्कआउट के जूतों से अधिक प्यार न करें। जब भी वर्कआउट करें उन्हें पहने, जिस वर्कआउट के लिए जो जूते हैं उनका भी ध्यान रखें।

4 अधिक समय तक प्रयोग करना

वर्कआउट जूते खरीदने के बाद कुछ लोग यह भी गलतियां करते हैं कि उन्हें बहुत दिनों तक बदलते नहीं, उनका प्रयोग कई सालों तक करते हैं। लेकिन अगर जूतों का प्रयोग अधिक दिनों तक किया जाये तो इसके कारण पैरों में दर्द, घुटनों में दर्द, कूलहों और कमर में दर्द की समस्या हो सकती है। विशेषज्ञों की मानें तो दौड़ने के लिए प्रयोग किये जाने वाले जूतों को 300 से 500 मील के बाद बदल देना चाहिए। अगर आप अधिक दौड़ते नहीं हैं तब भी अपने जूतों को एक साल में बदल दें। लेकिन अगर आप नियमित व्यायाम करते हैं तो एक जूते का प्रयोग 6 महीने से अधिक न करें।

5 खुद से चुनें

बहुत प्रयास करने के बाद अगर आपको अपने पैरों के हिसाब से वर्कआउट के लिए सही जूते नहीं मिल पा रहे हैं, तो स्पोर्ट्स के सामान बेचने वाली अच्छी दुकान पर जायें। अगर आपको दौड़ने वाले जूते चाहिए तो इन जूतों को पहनकर ट्रेडमिल पर थोड़ी देर दौड़े, अगर आपको लगे कि यह आपके पैरों में फिट हैं तो उन्हें ही खरीदें।

अच्छे और फिटिंग वाले जूते आपके वर्कआउट को रोमांचक बना सकते हैं। खराब जूतों का चयन आपके वर्कआउट में बाधक बन सकता है। इसलिए सही और अच्छी गुणवत्ता वाले जूते ही खरीदें।

சிறுதொழில் காலணி உற்பத்தியாளர்கள் கவனிக்க வேண்டியவை

இந்திய காலணி தொழிற்சாலை மிகவும் முக்கிய தொழில்துறையில் ஒன்றாகும். இது இயந்திரங்களை விடவும், கைத்திறன் மற்றும் மனித வர்கத்தை சார்ந்திருக்கிறது நாட்டின் பத்து ஏற்றுமதிப் பொருட்களில் காலணி ஏற்றுமதி ஆகும். சீனாவே காலணிகள் மிகப்பெரிய உற்பத்தியாளராக உள்ளது. ஆனால் நாம் சிறப்பான கைவினைத் திறன் கொண்டவர்களாக இருக்கிறோம் உலகின் இரண்டாது பெரிய

இந்த பிராந்தியங்களில் சரியான வளர்ச்சிக்கு மனித காரணிகளின் முக்கியத்துவத்திற்கு அவசியமான அங்கீகாரம் வழங்கப்பட வேண்டும் இது கடந்த காலத்தில் போதுமான கவனம் செலுத்தப்படவில்லை என்பதுதான் உண்மை இதுவரை பணியாளர் மேலாண்மை, பாதுகாப்பு மேலாண்மை, தூய்மை மற்றும் தொழில்நுட்ப கல்வி பற்றி பேசும் போது, போதுமான வளர்ச்சி அடையவில்லை.



உற்பத்தியாளர் என்ற நிலையில், இந்திய காலணி தொழிலானது இரண்டு பிரிவுகளில் பெரிய மற்றும் சிறிய அளவில் பிரிக்கப்பட்டுள்ளது.

ஆட்சேர்ப்பு, தேர்வு, பயிற்சி, வேலை வாய்ப்பு, வேலை வாய்ப்பு முறைகள் மற்றும் தர ஊதியம், உழைப்பு நிலை, பராமரிப்பு மற்றும் பயனுள்ள பயன் பாட்டு வசதி ஆகியவற்றை உள்ளடக்கிய பணியாளர் மேலாண்மை, பெரிய மற்றும் சிறிய அளவிலான தொழில்துறைகளுக்கு முக்கியமானது, பெரிய நிறுவனங்களில், பல்வேறு நலத்திட்டங்கள் மற்றும் நடவடிக்கைகள் மூலம் நல்ல உறவு பராமரிக்கப்படுகிறது. ஆனால் சிறு அளவிலான தொழில்துறையில், இந்த அம்சத்திற்கு போதுமான கவனம் செலுத்தப்படவில்லை. இந்தியாவின் தென் பகுதியில், சிறிய அளவிலான தொழிற்துறை, திட்டமிட்டு இயங்குகிறது. அங்கு முன்னேற்றத்திற்கான வாய்ப்பு உள்ளது.

தீர்மானம்:

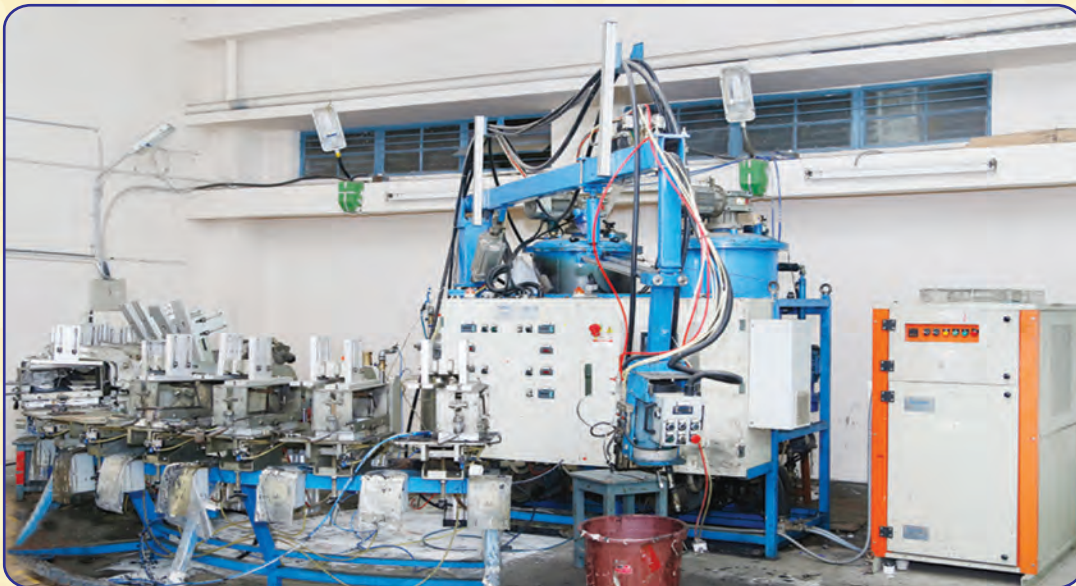
சிறிய அளவிலான காலணி உற்பத்தியாளர்கள் தொழில்துறை நலனை ஊக்குவிப்பதற்கான அவசியத்தை உணர்ந்து, பொருத்தமான செயல்பாடுகளை மேற்கொள்ள வேண்டும் அவர்கள் தங்கள் பொறுப்புகளை அறிந்திருக்க வேண்டும் மற்றும் அவர்களின் தனிப்பட்ட லாபங்களுக்காக மட்டுமே வேலை செய்யக்கூடாது. இந்த நடவடிக்கை இறுதியில் தங்கள் ஊழியர்களுக்கு திருப்தி அளிப்பதோடு தொழில்துறையில் உள்ள உறுதிப்பாட்டைக் கொண்டுவர உதவுகிறது இல்லையெனில் நாம் பாதணித் தொழிலில் கைவினைஞரைக் கொண்டிருக்க மாட்டோம்.

An article by
S. Wellington Raja,
Faculty, CFTI, Chennai

Tariff for Common Facility Services



Dieless Cutting Machine (Zund Model 2400 - Tariff - Rs. 500 per hour)



PU - Pouring Machine 4.8 PUMA James 3 (12 Station - Banana Type - Rs. 1200 per hour)

LASER ENGRAVING & CUTTING MACHINE



Tariff for Design Development Services

Job work cost under common facility services in CFTI, Chennai while rendering its services to common facility services with its modernized setup and infrastructure to all Micro Small and Medium Enterprises on hourly basis and few on job basis.

The lists of machine for utilization with its charges are listed here under

DESIGN SECTION

Sl.No	Job Description	Code	Qty Available	Description in Details	UOM	Cost in INR
1	Digitizing & Pattern Grading (1.01)	1.011		For any Normal Construction	1 Series *	1200
2		1.012		For Boot & Mocassin	1 Series *	1500
3		1.013		Normal Model in Sandal	1 Series *	750
4		1.014		Punch Model in Sandal	1 Series *	1000
5	Marketing Patterns(1.02)	1.021		Type by Plastic	1 Series *	1500
6		1.022		Type by Insole Board	1 Series *	2500
7		1.023		Type by Shank Board	1 Series *	3500
8	Cut file on Paper patterns	1.03		Type by Chart	1 Series *	1000
9	Insole / Sole Grading	1.04		For Any Type	1 Series *	250
10	Vaccum Shell (1.05)	1.051		Less than 50 Pairs	1 Series *	120
11		1.052		More than 50 Pairs	1 Series *	60
12	Product Development (1.06)	1.061		Shoe	1 Series *	1500
13		1.062		Sandal	1 Series *	1000

Tariff for other Common Facility Services

CLICKING SECTION

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
14	Swinging Arm Clicking M/c	2.01	2	ATOM SE16 (16 T Capacity)	Per hour	100
15	Swinging Arm Clicking M/c	2.02	1	ATOM SE-18 (20 T Capacity)	Per hour	110
16	Travel Head Cutting Machine	2.03	1	ATOM -SP588 25 Tonnes	Per hour	250
17	Die-less cutting Machine	2.04	1	ZUND Model 2400	Per hour	500
18	Splitting Machine with width 400 mm	2.05	1	SEAZEN SZ 400	Per hour	150
19	Strap Cutting Machine (Circular Type)	2.06	1	Indigenous	Per hour	50
20	Strap Cutting Machine (Vertical Type)	2.07	1	Indigenous (TSE)	Per hour	50
21	Stamping Machine	2.08	1	BRUGGI	Per hour	50
22	Stamping Machine	2.09	1	Indigenous(TSE)	Per hour	50

CLOSING & PRECLOSING SECTION

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
23	Flat Bed Single Needle Machine	3.01	2	PFAFF -563	Per hour	50
24	Post Bed Single Needle Machine	3.02	5	PFAFF -491	Per hour	50
25	Post Bed Single Needle Machine	3.03	1	PFAFF -1293	Per hour	50
26	Post Bed Single Needle Machine	3.04	1	DURKOPP ADLER - 888	Per hour	60
27	Post Bed Single Needle Machine	3.05	1	DURKOPP ADLER-888 (Classic)	Per hour	60
28	Post Bed Double Needle Machine	3.06	1	DURKOPP ADLER-4280-611	Per hour	70
29	Post Bed Double Needle Machine	3.07	4	DURKOPP ADLER-2260 -211	Per hour	70
30	Cylinder Bed I Needle Machine	3.08	1	PFAFF - 335-H3	Per hour	50
31	Zig Zag Machine with cording	3.09	1	DURKOPP ADLER-527	Per hour	250
32	Skiving Machine	3.1	2	Torielli 11/72.3	Per hour	40
33	Strobel Machine	3.11	1	L-141	Per hour	100
34	Strobel Machine	3.12	1	KL-141-25	Per hour	100
35	Pneumatic Eyeletting Machine	3.13	1	Torrielli - 11/72.3	Per hour	40
36	Seam Rubbing & Tape Attaching Mc	3.14	2	Torielli 17 AS 93	Per hour	40
37	Crimping Machine (Type Hydraulic)	3.15	1	Seazen SZ-571	Per hour	250
38	Fusing & Lamination Machine	3.16	1	Torielli 06/PR 86	Per hour	50
39	Toe Puff attaching Machine	3.17	1	Torielli, Italy	Per hour	50

SOLE/INSOLE MAKING SECTION

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
40	Insole Moulding Machine	4.01	1	Torielli 4078/PB	Per hour	75
41	Insole Bevelling Machine	4.02	1	DASUNG	Per hour	60
42	Insole Rivetting Mc	4.03	1	BRUGGI -BRU-112	Per hour	50
43	Sole Buffing Machine	4.04	1		Per hour	70
44	Skiving Machine	4.05	1	Lee Foot	Per hour	50
45	Skiving Machine (Heavy Duty)	4.06	1	Torielli	Per hour	60
46	Skiving Machine (Heavy Duty)	4.07	2	Golden Rhombus	Per hour	50
47	PU - Pouring Machine (4.08)	4.081	1	PUMA James 3 (12 Station - Banana Type)	Per hour	1200
48	PU - Pouring Machine (4.08)	4.082	1	PUMA James 3 (12 Station - Banana Type)	Per pair	12

Tariff for other Common Facility Services

FULL SHOE LASTING/BOTTOMING SECTION

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
49	Pre Forming (Moccasin) Mc (4 Pairs)	5.01	1	Torielli 1461 Per Hour	Per hour	75
50	Toe Moulding Mc (2 Hot & 2 Cold)	5.02	1	SEAZEN SZ -625	Per hour	150
51	Counter Moulding M/c (2 Hot & 2 Cold)	5.03	1	SABAL PR	Per hour	100
52	Fore part Conditioning (Mulling) Mc	5.04	1	ISMC -UK 11PP 1022	Per hour	65
53	Toe Lasting Machine(Hydraulic Type)	5.05	1	MOLINA - BIANCI Mobi 1	Per hour	300
54	Side & Seat Lasting by Thermoplastic	5.06	1	CERIM 58 E	Per hour	400
55	Seat Lasting Machine by Tacks	5.07	1	ORMAC -750	Per hour	100
56	Back Part Conditioning (Mulling) Mc	5.08	1	Indigenous	Per hour	45
57	Heel Seat Crowning Machine	5.09	1	Alen 211	Per hour	70
58	Pounding & Ironing Machine	5.1	1	Torielli - 17/ACG	Per hour	65
59	Hot Air Blower (Wrinkle Chaser)	5.11	1	Torielli BC	Per hour	60
60	Heat Setting Plant (4 Track)	5.12	1	Indigenous PRE	Per hour	175
61	Roughing & Scouring M/c	5.13	1	Torielli - CF78	Per hour	50
62	Roughing & Scouring M/c	5.14	1	Torielli - CF78 N	Per hour	50
63	Dryer & Reactivator	5.15	1	Indigenous PRE	Per hour	250
64	Sole Attaching Machine (Pneumatic)	5.16	1	Elettro Technica BC	Per hour	50
65	Sole Attaching Pneumatic (Hydraulic)	5.17	1	Sigma 756	Per hour	100
66	Chiller	5.18	1	BDF Chiller "O"	Per hour	200
67	Delasting Machine	5.19	1	Torielli 148/BA	Per hour	40
68	Topline (Collar) Forming Machine	5.2	1	Alen - 102 SR	Per hour	100
69	Brushing & Polishing Machine	5.21	1	Indigenous (TSE)	Per hour	50
70	Spray Booth with Finishing Table	5.22	1	Indigenous	Per hour	100
71	Combined Finishing Machine	5.23	1	Frankling KING	Per hour	100

SPECIAL PURPOSE MACHINES

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
72	Sole Stitching Machine	6.01	1	BUSM UK	Per hour	100
73	SideWall/sole stitching Machine	6.02	1	MECVAL CS 82 N	Per hour	250
74	Heel Nailing Pneumatic Machine	6.03	1	TORIELLI 192/SDV Lue Model	Per hour	75

GENERAL PURPOSE MACHINES

Sl.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
75	Compressor 3 HP	7.01	1	Indigenous 3 HP	Per hour	40
76	Compressor 5 HP	7.02	1	Indigenous 5 HP	Per hour	50
77	Compressor 25 HP	7.03	1	ELGI E 18, Germany	Per hour	120
78	Generator	7.04	1	Kilrloskar 36 L8-4	Per hour	750

For further details please contact:

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Units benefited through Common Facility Services of CFTI, Chennai During 2016-2017



S.No	Name of the MSME's	Benefited by
1.	India Shoes Exports Pvt Ltd	Dieless Cutting
2.	Irbaaz Shoe Company	Dieless Cutting
3.	Kenmore Shoes Pvt Ltd	Dieless Cutting
4.	Raadhika Shoe Crafts Pvt Ltd	Dieless Cutting
5.	Enco Shoes Pvt Ltd	Dieless Cutting
6.	Sakthi Footwear	Dieless Cutting
7.	RGT&PEconcepts Pvt.ltd	Dieless Cutting
8.	Shaniyo Exports	Dieless Cutting
9.	Balaji Trade Links	Dieless Cutting
10.	Daniel Clifford	Dieless Cutting
11.	Fu-ells Leather & Textile Garments	Dieless Cutting
12.	Gardenia Shoes	Dieless Cutting
13.	Jabson Leathers	Dieless Cutting
14.	Jaishree Mahapatra	Dieless Cutting
15.	Jasper Concepts Pvt Ltd	Dieless Cutting
16.	Newzealand Woolan Co.,	Dieless Cutting
17.	P.Vengal Rao	Dieless Cutting
18.	Promo Shoes Pvt Ltd	Dieless Cutting
19.	Sri Krishna Leather Footwear	Dieless Cutting
20.	Sumaya Shoe Fabrics	Dieless Cutting
21.	Track Shoes Pvt Ltd	Dieless Cutting
22.	Vista Shoes	Dieless Cutting
23.	Aadithya Overseas	PU Pouring Section
24.	R R Leather Products Pvt Ltd	PU Pouring Section
25.	Daniel Clifford	Shoe CAD
26.	Florence Shoe Company Pvt Ltd	Shoe CAD
27.	FreshLook Footwear	Shoe CAD
28.	Vyuga Shoes & Apparels Pvt Ltd	Shoe CAD
29.	Adnan Shoes	Shoe CAD
30.	Burooj shoes	Shoe CAD
31.	Farida shoes Pvt Ltd	Shoe CAD
32.	Kesavan shoes	Shoe CAD
33.	NAPS (India) Shoes Pvt Ltd	Shoe CAD
34.	Sara shoes	Shoe CAD
35.	Smitha Shoes	Shoe CAD
36.	V.S.Shoes	Shoe CAD
37.	Vellore shoes	Shoe CAD
38.	Jasper Concepts Pvt Ltd	Lasting Section
39.	Shravan India	Lasting Section
40.	Aleem shoes	Clicking Section
41.	Iftikar shoes	Clicking Section
42.	Shameel	Clicking Section
43.	Shravan India	Closing Section



Achieve breakthrough results using Lean Six Sigma.

We're using Lean Six Sigma to find and leverage new value for our customers and ourselves—delivering results you can see and measure.



"We will continue to use tools like Lean Six Sigma to bring great value to MSMEs in our country. "

- **Shri. K. Murali**
Director,
CFTI, Chennai

Finding better ways to work.

In today's competitive business environment, success depends on constantly finding ways to work smarter, quicker and better. That's why we have made a major, company-wide commitment to Lean Six Sigma.

This disciplined methodology—which builds on our award-winning quality tradition—is driving dramatic improvements in every aspect of our business.

Building a powerful engine for continuous improvement.

Lean Six Sigma is a rigorous, data-driven, results-oriented approach to process improvement. It combines two industry-recognized management methodologies evolved by companies like GE, Toyota, Motorola and Bank of America, as well as ourselves.

By integrating the tools and processes of Lean Six Sigma, we're creating a powerful engine for improving quality, efficiency and speed in every aspect of our business.

Accelerating and expanding progress.

Embedding a rigorous methodology like Lean Six Sigma into our company's culture isn't a short journey. It's a deep commitment not only to near-term results but also to long-term, continuous, even breakthrough improvements.

The latest example is Design for Lean Six Sigma, which has now launched in our product development and delivery value chain. Customers have seen even greater value from our new technology and solutions.

As a result, more enterprises in more industries are seeing more reasons to become our customers.

Helping our customers achieve breakthrough results.

Lean Six Sigma is helping us make major improvements inside our company. Now we're putting that growing expertise directly at the service of our customers.

Our Black Belts are helping deliver expert business process consulting and assessment services. They help find ways to save up to 35% of our customers' total document costs and leverage their IT and infrastructure investments. That can have a big impact on the bottom line, since document management costs usually consume between 5 to 15% of a company's total revenue.*

Other Black Belts and Green Belts collaborate with customers at our managed services sites to generate ongoing improvements and provide measurable advantages for our customers' businesses.

*Source: Research based on assessment work with over 300 of our customers.

Lean + Six Sigma

Speed + Low Cost Quality	Culture +
Lean SPEED enables QUALITY	Six Sigma
Six Sigma Quality (faster cycles of experimentation/ learning)	enables Lean Speed (fewer defects means less time spent on rework)

The customer value of our Lean Six Sigma capability. We help our customers identify and leverage measurable advantages using our rigorous improvement process. Together, we establish what counts. Then we measure what matters. Finally, we deliver and sustain results. Here are some examples:

American Red Cross

As part of the Rapid Cycle Project, Xerox was able to help the American Red Cross Rochester Chapter streamline processes to increase their reach into the community. The Rapid Cycle Project identifies a challenge within a local organization and uses Lean Six Sigma methodologies to implement a solution. In this case, the project was focused on decreasing the time that the American Red Cross sales staff spent on paperwork to increase the time they could spend with potential customers. As part of the organization's community outreach, sales consultants visit area businesses to offer customizable health and safety training sessions to employers. Not only does this bring a valuable service to the community, but it provides a stream of revenue for the Red Cross.

Medtronic Leans the Mail

Medtronic, a global leader in medical technology, was receiving an excessive amount of unwanted mail at its Tempe campus. The influx was resulting in wasted time retrieving, sorting and delivering junk mail. The company led a Lean Six Sigma-based project to reduce the overwhelming, non-essential mail coming into the campus with the goals of cost savings and productivity improvements. The successful collaboration and partnership resulted in the elimination of non-value add activities by 78 percent for administrative support and 80 percent for mail center support, as well as an 88.5 percent reduction in non-essential mail over the course of 13 months.

QwikSolver™ Brings Lean Six Sigma to Everyone

QwikSolver is bringing the power of data-driven decision-making to the masses, helping employees who are not trained as Lean Six Sigma belts to access the tools and apply the methodologies in day-to-day real business. Since it was launched early this year, 5,800 employees have been QwikSolver trained, while 3,100 have gone on to complete a plus one project where they use QwikSolver in their jobs.

How does QwikSolver work?



Disciplined methodologies that yield results.

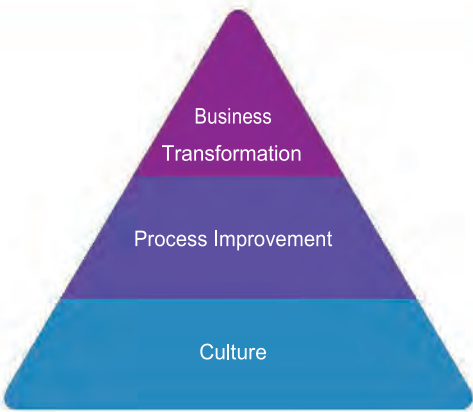
We employ a variety of Lean Six Sigma methodologies, including:

- DMAIC (Define, Measure, Analyze, Improve, Control): A standard approach for re-engineering existing processes. Overview examples are shown below.
- DMEDI (Define, Measure, Explore, Develop, Implement): Ideal for optimizing new processes.
- DfLSS (Design for Lean Six Sigma): Used, with specialized tools, for customer-driven design of new technologies and services.

Lean Six Sigma Phases	Define	Measure	Analyze	Improve	Control
Description	<ul style="list-style-type: none"> Establish problem statement Establish success criteria 	<ul style="list-style-type: none"> Establish current state, identify where a process can be streamlined 	<ul style="list-style-type: none"> Identify root causes Identify time-intensive activities of a process Identify how to eliminate non-value-added steps 	<ul style="list-style-type: none"> Develop, plan solutions Run pilot Failure analysis 	<ul style="list-style-type: none"> Implement solution Monitor success of solutions Develop process controls and mistake proofing
Tools and Methods (examples)	SIPOC <ul style="list-style-type: none"> Capture voice of customer, business, and process Document success criteria 	Value Stream Mapping <ul style="list-style-type: none"> Non-value-added steps Business value-added steps Customer value-added steps 	Pareto/ Regression/ Bar Charts	Solution Selection <ul style="list-style-type: none"> People, process and technologies 	Dashboards <ul style="list-style-type: none"> Solution replication Visual process controls
Value	<ul style="list-style-type: none"> Provides single-minded focus for the entire process improvement engagement 	<ul style="list-style-type: none"> Allows all stakeholders to agree on objective process metrics 	<ul style="list-style-type: none"> Provides an opportunity to formulate key insights that will drive implementation of the solution 	<ul style="list-style-type: none"> Gives participants a clear roadmap for executing the appropriate process changes 	<ul style="list-style-type: none"> Allows for process control and continuous improvement based on metrics defined earlier in the process

Fast facts about Lean Six Sigma at Xerox

- 400 Black Belts trained or certified and active or back in operations
- 900 Green Belts trained or certified
- 70+ percent Senior Executives Green Belt trained
- 22,00 Yellow Belts
- >7,500 projects completed in every area of the business



Lean Six Sigma 2.0
Process Excellence

Lean Six Sigma Green and Black Belt Programs

Improve
Performance.
Eliminate
Redundancies.
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What is DMAIC?

DMAIC is at the core of Lean Six Sigma and stands for Define, Measure, Analyse, Improve and Control.



Six Sigma and Lean are process improvement philosophies and methodologies. When combined, the methodologies can produce startling results to improve processes. Structured as a series of hands-on workshops, this integrated program builds upon the competencies acquired during the Lean Six Sigma Green Belt program. The Black Belt training level provides the tools, methodologies and experience needed to earn a certificate in Lean Six Sigma. Team based exercises, along with stimulating case studies, lectures and videos, allow participants to gain invaluable experience applying the tools and methodologies demanded by the market place.

Curriculum

A course proposed to implement a tailor made Six Sigma Projects for Improving Productivity through reducing rework & rejection for leather, footwear industry in Chennai & around.

Our training program includes

- ◆ First 2 days training along with project identification by the respective units.
- ◆ The 8 weeks will include identification and training followed by the implementation.

The improved output **result** are expected by the end of 3rd month.



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SPECIAL INEXPENSIVE FOOTWEAR TO TREAT DIABETIC FOOT ULCERS



CHENNAI: India ranks second in the world with 65.1 million persons with diabetes, of which 9.75 million (15%) suffer from diabetic foot ulcers and run a high risk of lower limb amputation. Currently, there is no device in the country that would avert this. However, scientists of the Central Leather Research Institute (CLRI) along with MV Hospital for Diabetes, Royapuram, claim to have developed special affordable footwear that will



heal foot ulcers faster, reduce chances of amputation.

Diabetic foot ulcers are predominantly caused by repetitive stress over an area that is subject to high vertical or shear stress in patients with peripheral neuropathy. This new footwear called Ankle-Foot Orthosis (AFO) is an off-loading device that redistributes the plantar pressure. Plantar pressure offloading in the affected foot at the ulcer site is a very important aspect of wound healing.

Scientists claim patients using AFO can get rid of 'highly-problematic' foot ulcers within three months and can lead a normal life. The footwear's patented insole is designed in such a way that it provides extra depth and accommodates the wound without coming in direct contact. The entire item will tentatively cost around `3,000.

G Saraswathy, project in-charge and scientist at Shoe Design and Development Centre at CLRI, told Express that six product prototypes are developed in standardised sizes for both male and female use. "We will be testing the footwear on select patients of MV Hospital for Diabetes and also the general hospital. The ethical committee of MV Hospital has given its approval."

Scientists said, before arriving at the design, gait analysis was conducted on persons with diabetes, diabetic neuropathy and diabetic foot ulcers. "CLRI has the first-of-its-kind full-fledged gait analysis laboratory in the country. Gait abnormality is reported in patients with diabetes. The neurodegenerative process is accelerated in diabetes resulting in declining motor control, postural stability/foot posture and abnormal weight bearing in the foot.

The system gauges the level of efficacy of the developed AFO in bringing normalcy to the gait of the affected person. The AFO has been designed based on gait alterations in

persons with diabetes in comparison to those that are non-diabetic," Saraswathy explained.

Foot pressure, shock and shear can be reduced with appropriately fitted AFO and customised insoles. Saraswathy said the material that is used in the AFO makes the treatment cost-effective and, therefore, affordable to patients in India.

Physiotherapist Satish Babu and senior research scholar Priyadarshini, who are part of the product development, said the main advantage of this product is it is removable. Currently, an removable POP total cast is used on patients with diabetic foot ulcers. "Patients have to take complete rest. However, this device is removable. Within three months, the ulcer will heal," they said.

MV Hospital's head & chief diabetologist, Dr Vijay Viswanathan, who is also the co-principle investigator, said the product will bring great relief when it's fully developed and tested. "We don't have special footwear such as this in India. There are imported products which are highly expensive and not easily available. Our idea is to develop an affordable product for Indian patients. At MV Hospital, I can get some imported insoles from Germany, Italy and United States, which cost nothing less than `2,000 each."

No other Indian product

In India, an irremovable POP total contact cast is used for offloading

diabetic foot ulcer (DFU). No removable device is available commercially.

Similar products available in the market

Ottobock India is selling a walker boot which can immobilise the foot and ankle for healing Achilles tendon ruptures, forefoot or midfoot fractures, ankle fractures, distal fibula fractures, soft tissue injuries, post-operative use, trauma and rehabilitation. This is also used for healing DFU by few diabetologists in India. The product costs around Rs 20,000. Diabetic Pneumatic Walker, (USA: unit price \$190) and Rebound Diabetic Walker, (Canada: unit price £25) are available online.

Key facts

1. The risk of death at 5 years for a patient with DFU is 2.5 times as high as the risk for a patient with diabetes who does not have a foot ulcer (more than half of diabetic ulcers become infected). Approximately 20% of moderate or severe diabetic foot infections lead to some level of amputation.
2. The direct costs of treating diabetic foot complications exceed the treatment costs for many common cancers.
3. On the basis of prevalent data from International Diabetes Federation in 2015, it is estimated that foot ulcers develop in 9.1 million to 26.1 million people with diabetes worldwide annually.



Government of India



CENTRAL FOOTWEAR TRAINING INSTITUTE, CHENNAI

MSME - TECHNOLOGY DEVELOPMENT CENTRE

(Ministry of Micro, Small & Medium Enterprises,
Govt. of India Society,)

65/1, GST Road, Guindy, Chennai - 600 032.

Phone : 044-22501529, Fax : 044-22500876,

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INVITATION TO JOIN CERTIFICATION COURSE ON LEAN SIX SIGMA (IMPLEMENTATION)

Commencement Date:

5th & 6th August 2017 at Chennai, 19th & 20th August 2017 at Vellore

Timing: 10 a.m. to 5 p.m.

Course Coverage

- (a) **DMAIC: (Define, Measure, Analyze, Improve, Control):** A standard Approach for re-engineering existing process.
- (b) **DMEDI: (Define, Measure, Explore, Develop, Implement):** Ideal for optimizing new processes.
- (c) **DfLSS: (Design for Lean Six Sigma):** Used, with specialized tools, for customer- driven design of new technologies and services.

Contact: Mr. Srinivasan, M.Tech., Footwear: 044-22501529 9566054212

Mail us at: cfti@vsnl.net

Course Fee: Rs. 50,000/- per unit

(Each Unit may sponsor maximum of 5 Staffs / Officers / Manager)

Project Duration: 50 Hours in 3 Months Total intake: 5 units per Batch

Payment through DD in favour of **The Director, CFTI, Chennai** at Venue
or Online (NEFT) Transfer to **State Bank of India, Guindy Branch,**
Account Number 10299691069, IFSC Code: SBIN0000956
Beneficiary: CENTRAL FOOTWEAR TRAINING INSTITUTE

Trained Manpower Requisition Form

1. Name of the Company :
2. Address :
3. Manufacturer of : Leather Footwear / Goods / Garments
4. Interested in the trainee (fresh worker) :

S. No.	Job Role	Requirement in No..	Present Salary Pay (Min.-Max.) in Rs.	Expected Salary Pay after CFTI Training (Min.-Max.) in Rs.
(i)	Stitching operator (Footwear) - Code LSS/Q2501			
(ii)	Stitcher (Goods & Garments) - Code LSS/Q5501			
(iii)	Cutter (Footwear) - Code LSS/Q2301			
(iv)	Cutter (Goods & Garments) - Code LSS/Q5301			
(v)	Pre-assembly operator (Footwear) - Code LSS/Q2601			
(vi)	Skiving operator (Footwear) - Code LSS/Q2401			
(vii)	Lasting Operator - Code LSS/Q2701			
(viii)	Helper upper making (Footwear) - Code LSS/Q3301			
(ix)	Helper finishing (Footwear) - Code LSS/Q3002			
(x)	Helper Finishing Operations (Leather Goods & Garments) - Code LSS/Q5601			
	Total			

5. Requirement valid date : From _____ To _____
6. Name of the Company Authority & Designation : _____
7. Contact Number & Email : _____
8. Signature : _____
9. Company Seal :

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ADMISSION NOTICE

**INVITES APPLICATIONS FROM ELIGIBLE CANDIDATES FOR THE FOLLOWING
JOB ORIENTED LONG, MEDIUM & SHORT TERM COURSES**

S.No.	Course Title	Course Duration	Eligible Qualification	Eligible Age	No. of Seats	Course Fees (in Rs.)							Scheduled Month for Commencement of Course
						Tuition Fees	Raw Material Fees	Caution Money Deposit	Moderation Fees	Uniform Fees	Total Fees		
Long Term Courses													
1.	Diploma in Footwear Manufacture and Design (DFMD)	2 Years	12th Pass	17-25	60+10*	1,00,000	36,000	5,000	20,000	6,000	1,67,000	August	
2.	PG Higher Diploma in Footwear Technology & Management Studies (PGHD)	18 months	Any Graduate	35 max	20	2,10,000	25,000	5,000	25,000	-	4,65,000**	May / November	
3.	Post Graduate Diploma in Footwear Technology (PGDFT)	18 months	Any Graduate	35 max	30+5*	1,25,000	20,000	5,000	-	3,000	1,53,000	September	
4.	Post Diploma in Footwear Technology (PDFT)	1 Year	Any Diploma	35 max	40+5*	1,00,000	20,000	5,000	-	3,000	1,28,000	September	
5.	Certificate Course in Footwear Manufacturing Technology (FMT)	1 Year	10th	35 max	60+10*	50,000	22,000	5,000	-	3,000	80,000	July	
6.	Certificate Course in Footwear Design & Product Development (FDPD)	1 Year	12th	35 max	15+2*	1,00,000	22,000	5,000	-	3,000	1,30,000	September	
Medium Term Courses													
7.	Condensed Course in Footwear Design & Production (FDP)	6 Months	10th Pass/Fail	35 max	50	30,000	10,000	3,000	-	-	43,000	September / March	
Short Term Courses													
8.	Certificate in Shoe Computer Aided Design (CSCAD)	3 Months	10th	18-35	15	20,000	3,000	2,000	-	-	25,000	Jan, Apr, July & Oct.	
9.	Designing & Pattern Cutting	3 Months	10th	18-35	15	10,000	1,700	-	-	-	11,700	Jan, Apr, July & Oct.	
10.	Shoe CAD	1 Months	10th	18-35	15	10,000	1,700	-	-	-	11,700	Jan, Mar, May, July, Sep. & Nov.	
11.	Shoe Upper Clicking	1 Months	8th	18-35	15	10,000	2,000	-	-	-	12,000	Jan, Mar, May, July, Sep. & Nov.	
12.	Shoe Upper Closing	3 Months	8th	18-35	15	12,500	2,000	-	-	-	14,500	Jan, Apr, July & Oct.	
13.	Lasting, Full Shoe Making & Finishing	3 Months	8th	18-35	15	12,500	2,000	-	-	-	14,500	Jan, Apr, July & Oct.	
14.	Leather Goods Making	1 Months	8th	18-35	15	10,000	2,000	-	-	-	12,000	Jan, Mar, May, July, Sep. & Nov.	

■ LONG TERM COURSES ■ MEDIUM TERM COURSES ■ SHORT TERM COURSES

Note: 22.5% Seats are reserved for SC/ST candidates for which No Tuition Fees will be charged subject to productions of Caste Certificate, in original from competent authority at the time of submission of applicable and at time of admission.

- * Seats reserved for Industry sponsored candidates. The sponsoring industry has to pay double the amount of tuition fee alongwith other fee through account payee cheque
- **Rs. 4,65,000 for PGHD includes study at Leicester College, London, UK.
- 5 years age relaxation and 100% Tuition Fees exemption for SC/ST Candidates.
- Filled in application forms should be submitted before the date of course commencement.
- Part time course (related to Footwear & Allied Field) are conducted on subject to demand basis.
- For admissions contact: **Mobile: 96779 43633 / 96779 43733**

Published by: K. MURALI, Director, CFTI, #65/1, GST Road, Guindy, Chennai - 600 032. Executive Editor: G. JOSEPH PRABHAKAR, CFTI, Chennai
Printed by: G. Mahendra Babu, G.M. Printographics, #34/1, Pooram Prakasam Road, Royapettah, Chennai - 600 014.
Regd. with RNI No. TNMUL/2016/69295. Published on or before last day of April, July, October, January