

CFTI - A pioneer Training Institute in Footwear Technology

From the Director's Desk

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Visit of Secretary MSME to CFTI, Chennai on the 15th of Oct, 2015

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Shri. K. MURALI Director, CFTI

From the Director's Desk

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 experienced Co-ordinators and Trainers. This Institute conducts training on "Pradhan Mantri Kaushal Vikas Yojna (PMKVY)" (a Phase II of the STAR Scheme) which aims to skill unemployed youth by the New Ministry of Skill Development & Enterprenuership (MSDE). The Objective of the skill certification and reward scheme is to enable and mobilize a large number of Indian youth to take up outcome based skill training and become employable and earn their livelihood. The training courses of PMKVY is based on the approved QPs in the field of Footwear, Leather Goods and Garments Manufacturing Units. So far as PMKVY programme is concerned, during the quarter October to December 2015 a total number of 1132 candidates were trained by this Institute.

I happy to inform that this Institute conducts **Recognition of Prior Learning (RPL) under PMKVY programmes. 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. Under PMKVY programmes, Special focus is given to RPL by recognizing prior competencies of the assessed candidates and provides a certificate and monetary award on successful completion of assessments on approved jobroles. As an affiliated Training partner of Leather sector skill council, I would request interested industries to come forward to strengthen the initiatives taken by Ministry of Skill Development and Entrepreneurship (MSDE) by utilizing our services.

Also I would like 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.

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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 serve with our technical expertise.

I am very happy to inform that The Secretary, Ministry of Micro, Small and Medium Enterprises, Shri. Anup K Pujari visited this Institute on 15th October 2015, and he was immensely pleased and happy about the Infrastructure of this Institute and the training courses conducted by this Institute. He went round the workshop area where practical classes were conducted for the students and after interacting with students, he expressed his happiness and entire satisfaction about the facilities extended to students. I would like to extend my sincere thanks and appreciation to all the Officers and staff of this Institute for the full support and co-operation.

Devastating Floods

The flood followed by unprecedented rain fall on 2nd December 2015 affected the entire CFTI, Chennai, and thus this Institute got submerged in 5 to 7 feet of water and damaged the entire office furniture, machinery in all departments, Canteen equipments, records and all electrical / electronic systems. So we have suspended the classes for all the long term courses till 18th January 2016 for revamping purpose. With the wholehearted support from Secretary MSME, DC (MSME), ADC, O/o DC(MSME) officers & Staff of the Institute we were able to recover and were able to bring normalcy in a record time.

I also take this opportunity to welcome all the Alumni of this Institute to register their details in our official website <u>www.cftichennai.in</u>

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ABOUT THE INSTITUTE



CENTRAL FOOTWEAR TRAINING INSTITUTE (CFTI), Chennai an autonomous Institution under Ministry of Micro Small & Medium Enterprises, Government of India and has been working for development of Human Footwear Resources for & Allied Industries since 1957. It got 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. One of its premier courses is Two year Diploma course in "Footwear Design and Production" which is approved by Textile Institute, London, UK and 11/2 years Post Graduate Higher Diploma course in Footwear technology & Management studies is accredited with Textile Institute, London, 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 & Material testing machines.
- Well equipped library with text books, periodicals, journals & 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 Trade.
- ✤ 100% 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 & Physical Testing Lab.

PRODUCTRESEARCHANDDEVELOPMENT & 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, 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
- ✤ 100% Placement record

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 nees 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.

CFTI conducts a Technology Based Entrepreneurship Development Programme (TEDP) sponsored by Entereprenurial Development Institute (EDI-Chennai), Government of Tamil Nadu. (Programme duration - 6 weeks) for Leather Goods Making. Target Group for this Programme are Graduates / Post-Graduates in Science or Engineering & Technology / Diploma in Engineering / Technology.

 CFTI conducts Short Term course in Footwear Making sponsored by Dr. Babu Jagjivan Ram Leather Industries Development Corporation Ltd.
(LIDKAR), Government of Karnataka.

National Skill Certification and Monetary Reward Scheme (STAR Scheme)

The Government of India scheme was implemented to Leather Sector by CFTI, Chennai through NSDC (National Skill Development Corporation), Ministry of Finance in association with Leather Sector Skill Council (LSSC(a section 25 company under CLE (Council of Leather Exports) as affiliated training partner for Footwear Industries.

The Core objective of this programme is to encourage skill development for youth by providing monetary awards for successful completion of approved training programmes. 1,996 candidates were trained by CFTI, Chennai till August 2014, thus achieving the target set by LSSC

Placement Linked entry level training programme

Placement Linked Entry Level Training Programme (TNSDC)

CFTI, Chennai completed "Placement Linked Entry Level Training Programme" funded by Tamilnadu Skill Development Corporation (TNSDC), Government of Tamilnadu through Leather Sector Skill Council (LSSC) for 2,300 candidates on job roles like Stitcher (1,250 Nos.), Cutter (250 Nos.), Paster, Attacher, Folder (250 Nos.), Skiver, Splitter & Table Helper (250 Nos.), Leather Weaving (300 Nos.) during the year 2014-2015.

Pradhan Mantri Kaushal Vikas Yojna (PMKVY)

This Institute conducts training on "Pradhan Mantri Kaushal Vikas Yojna (PMKVY)' (a Phase II 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. CFTI, Chennai conduct & completed training for 1,054 candidates on various job roles till November 2015.

Recognition of Prior Learning (RPL)

Recognition of Prior Learning (RPL) is a platform to provide recognition to the informal learning 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.

JOB ORIENTED LONG TERM & SHORT TERM COURSES CONDUCTED BY CFTI CHENNAI

		_	Eligible			Course		(in Rs.)		Scheduled Month for
S. No.	Name of the Course	Course Duration	Qualifica tion	Eligible Age	Tuition Fees	Raw Material Fees	Caution Money Deposit	Moderati on Fees	Total Fees	Commencement of Course
1	Diploma in Footwear Design & Production	2 Years	12th Pass	17-25	70,000	30,000	5,000	18,000	1,23,000 for 2 years	August
2	Post Graduate Higher Diploma in Footwear Technology & Management Studies (PGHD)	18 months	Any Gradu ate	35 max	2,10,000	25,000	5,000	25,000	4,65,000 for 18 months	January
3	Post Graduate Diploma in Footwear Technology	1 Year	Any Gradu ate	35 max	50,000	10,000	2,000	N.A.	62,000	September
4	Post Diploma in Footwear Technology	1 Year	Any Diploma	35 max	50,000	10,000	2,000	N.A.	62,000	September
5	Certificate in Footwear Technology	1 Year	10th	35 max	32,000	10,000	2,000	N.A.	44,000	July
6	Advanced Shoe Styling	3 months	10th	18-35	19,000	N.A.	N.A.	N.A.	18,000	January, April, July & October
7	Design & Pattern Cutting	3 months	10th	18-35	10,000	N.A.	N.A.	N.A.	10,000	January, April, July & October
8	Shoe CAD	1 month	10th	18-35	10,000	N.A.	N.A.	N.A.	10,000	January, March, May, July, September & November
9	Shoe Upper Clicking	1 month	8th	18-35	10,000	N.A.	N.A.	N.A.	10,000	January, March, May, July, September & November
10	Shoe Upper Closing	3 months	8th	18-35	12,500	N.A.	N.A.	N.A.	12,500	January, April, July & October
11	Lasting, Full Shoe Making & Finishing	3 months	8th	18-35	12,500	N.A.	N.A.	N.A.	12,500	January, April, July & October
12	Leather Goods Making	1 month	8th	18-35	10,000	N.A.	N.A.	N.A.	10,000	January, March, May, July, September & November

□ LONG TERM COURSE □ SHORT TERM COURSE

* For Shoe CAD the eligible qualification is 10th with a certificate in Shoe Designing & Pattern Cutting Course

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

- ★ Rs. 4,65,000 for PGHD includes 6 weeks study at Leicester College, London, UK
- ★ 5 years age relaxation and 100% Tuition Fees exemption for SC/ST Candidates.
- ★ Cost of Application fee Rs. 500 for all Long Term Courses except PGHD Courses of which above Rs. 600, Rs. 100 for Short Term Courses. Filled in application forms should be submitted before the date of course commencement
- ★ Part-time courses (related to Footwear & Allied Field) are conducted on subject to demand basis.

For More Details Contact: 9677943633 / 96677943733 / 9962445614

HOSTEL

- Hostel available for boys. Accommodation rates are
- 1. Dormitory Rs. 48,000/-
- 2. Three Sharing Room Rs. 54,000
- 3. Double Sharing Room Rs. 66,000
- 4. Double Sharing A/C Room (Toilet attached) - Rs. 84,000/-

Note:

- The above rates are inclusive of food for three times. Students of CFT/PGDFT/DFT may pay for initial 10 months and the last two months payments will be collected only if, student continued to stay during the training period,
- Rates are per head basis. Stay arrangement can be made for girls separately.

GENERAL INFORMATION

ENROLMENT FOR COURSE:

Enrolment for all our in campus training programmes is through direct admission based on academic merit.

TIME

For Full Time Courses 9.45 a.m. to 5.15p.m. For Part Time Courses 5.30 p.m. to 7.30 p.m.

COURSE FEES

Course fees shall be remitted in advance through Demand Draft in favour of "The Director, CFTI" Payable at Chennai.

CERTIFICATE

Both the courses of our Institute, 2 Year Diploma in Footwear Design & Production and 1 year Post Graduate Diploma in Footwear Technology & Management Studies (Limited to 20 Seats) is approved & Accredited respectively with TI / Leicester College of Footwear, UK and Diplomas being issued by them. The Diploma & Certificates of other courses are awarded by CFTI, Chennai to the students on successful completion.

INTAKE

The seats of Long Term & Short Term Courses are limited by 40 & 20 per batch respectively

Imports hit footwear cos. hard

Domestic of producers footwear components appear to be at the receiving end when competing with cheaper imports. Which is why, they are blaming the government for allowing footwear exporters to import such products at zero custom duty upto 3% of freight on board (FOB) value of their exports. Footwear components listed as duty-free products under the duty-free import scheme (DFIS), include poly-eutherine and thermo-plastic rubbers soles, in-soles sheets...

Budget 2015: Footwear industry says duty cut to help competitiveness

The Budget proposal to reduce the excise duty on footwear with leather uppers and having retail price of over Rs. 1,000 has been welcomed by the industry, saying the move will help increase competitiveness. "The footwear industry is particularly bullish as for shoes having MRP of above Rs. 1,000 per pair will now attract half the excise duty by halving the duty from 12 to 6 per cent," Libery Footwear Chief Executive Adesh Gupta said. The move...

SPECIAL ACHIEVEMENTS

- The CFTI, Chennai is yielding the name in the south footwear market and regain it's confidence among footwear MSME's for it's current training programmes, consultancy services and Common facility services.
- Rendered Consultancy works to TNTBC For procurement of free footwear by Govt of Tamilnadu FY 2015-16 in the area of field inspection at the Manufacturer's premises
- Assistance rendered in setting up & Establishment of Full Shoe Unit for making uppers and full shoes to KHADI, Govt. of Tamilnadu under Consultancy basis.
- Assisted MV Diabetes Hospital, Royapuram in making and designing of Diabetic Footwear under consultancy works.
- New tie up is under process with The Gandhigram Rural Institute Deemed University, under Ministry of Human Resource and Development (MHRD), Government of India Gandhigram, Dindigul District, Tamilnadu for technical assistance in establishing the footwear workshop for the "B.Voc Footwear and Accessories Design" course.
- CFTI, Chennai has been empanelled as Testing Centre for testing the competencies of Assessors of empanelled Assessing bodies under SDI Scheme through Assessor Competency Evaluation (ACE), by the Ministry of Skill Development & Entrepreneurship (MSDE)
- Created two whatsapp group for all the staffs & employees of CFTI, Chennai and other for students of CFTI Alumni, Chennai for rapid communication

This Institute has created Face book account to interact with the social group about our training course & common facility services

FUTURE PLANS

- To establish a Shoe Design Studio for Shoe CAD/CAM at CFTI, Chennai
- ✤ To establish a full fledge Physical Testing Lab for testing Leather & Leather Footwear.
- ◆ To introduce Modular Training programme on "Footwear Technology"
- To initiate Greener environment with introduction of Solar Panel & Bio Gas plant in Hostel
- ✤ To get ISO: 9001 certificate & AICTE approval for the service rendered and courses offered by this Institute in future course.

BIOPLASTICS

In search of new material solutions and keeping an eye on the goal of sustainable production and consumption, bioplastics have several potential advantages over the conventional hazardous plastic in use. The use of renewable resources to produce bioplastics is the key for increasing resource efficiency.

Bioplastics are not just one single substance, they comprise of a whole family of materials with differing properties and applications. Based on European research and studies, a plastic material can be defined as a 'bioplastic' if it is either bio-based, biodegradable, or features both properties. The term "biobased" means that the material or product which is partly or completely derived from biomass (plants). Biomass used for bioplastics are stems from e.g. sugarcane, corn, or cellulose. Biodegradation is a chemical process during which micro-organisms of the environment convert materials into natural substances such as water, carbon dioxide, and compost (which do not require any artificial additives). The process of biodegradation depends on the surrounding environmental conditions (e.g. light, temperature, moisture etc.) on the material and on the application.

The family of bioplastics is roughly divided into three main groups - 1: Biobased or partly biobased nonbiodegradable plastics such as biobased PE (Polyethylene or Polyethene , the most common plastic), PP (Polypropylene or Polypropene, thermoplastic polymer used for packaging), and PET (Polyethylene Terephthalate, widely used for soft drink bottles) - also called drop-ins and biobased technical performance polymers (Polytrimethylene PTT such as Terephthalate) or TPC-ET (Thermoplastic

Elastomer is a versatile copolyester). 2: Plastics that are both bio-based and biodegradable, such as PLA (Polylactic acid or Polylactide is a biodegradable thermoplastic aliphatic polyester derived from renewable resources, such as corn starch, tapioca roots, chips or starch, or sugarcane) and PHA (Polyhydroxyalkanoates, linear polyesters produced in nature by bacterial fermentation of sugar or lipids) or PBS (Polybutylene Succinate, biodegradable thermoplastic polymer resin). 3: Plastics that are based on fossil resources and are biodegradable, such as PBAT (Polybutyrate).

Three possible bioplastic materials that can be used for product designs and textiles in the near future are PLA, PHA, (Hydroxybutyrate), PHB and biopolyamide (bio-PA), thermoplastics based on Casein (milk protein) and planted products: soy, kenaf, jute, silk, etc. In particular, 'starch' is one of the most attractive feedstock for the development of biodegradable polymers because it is relatively inexpensive, abundant and renewable. Starch can contribute to the development of the commercialized bioplastics for the fashion industry. Gucci had already launched its bio-plastic flats for the pre-fall 2012 collection. Prada's plastic bag series in 1997 could sustainable to more sustainable bioplastics. The plastic handles and body of hand bags, soles and reinforcements for shoes can be replaced by bioplastics mixed with agar.

The average shoe contains an astonishing amount of synthetic fiber, hard thermoplastic, EVA foam, and all sorts of other materials that cause untold damage to the waterways, air, soil and wildlife in the corners of the world where they're produced. Larger shoe companies are waking up to this reality - "Nike" is making clothing and footwear from postconsumer recycled materials as part of its Nike Better World initiative. "Puma" is moving into post-consumer materials next year. The shoes in "New Balance's" New-Sky line are crafted from recycled plastic bottles. But even as more manufacturers are shifting toward eco-friendly materials and methods, there's still plenty of stuff inside the shoes and sandals you're wearing today that'll wind up floating in the Pacific years after you toss them.

Nike's vice-president of sustainable business and innovation, Hannah Jones, said: "About 60% of Nike's the environmental footprint of a pair of Nike shoes is embedded in the materials used to make them. When you multiply that across our business, and across the industry, it's clear that innovation in sustainable materials is а huge opportunity, not just for Nike, but for the world." It was their Pearlthane ECO TPU product (also made with castor oil derivatives) that Nike used on the plate base of the GS Football boot. The castorbased TPU made the sole plate 15% lighter than traditional plate composition. Starch based plastics currently represents the most widely used bio-plastic, constituting about 50 percent of the bioplastics market.

Spanish company "One Moment" is already one step ahead. They are producing shoes made from soft and durable bioplastics that are not only ecofriendly in construction, they're 100 percent biodegradable. Wear them around; throw them in the laundry when they get dirty. When you're done with them, shred them and toss them in the compost bin. Within six months or so, they'll break down and leave no waste.

Coca-Cola Company is ramping up production of its plant-based packaging in its bid to bring lower-carbon plastics to the marketplace. Coca-Cola has set itself a target of using Plant-bottle packaging technology in all of its plastic bottles by 2020. According to the company, the new facility will remove the equivalent of 690,000 metric tons of carbon dioxide emitted each year.

It is misleading to merely claim biodegradability without any standard specification. If a material or product is advertised to be biodegradable, further information about the timeframe, the level of biodegradation, and the surrounding conditions should be added. Companies with biobased bioplastics can either indicate the "biobased carbon content" or the "biobased mass content" of their products. As these units of measurement differ, the typical numeric percentage value will differ too, and must be taken into account, especially when drawing comparisons.

Other applications of bioplastics arein healthcare: - tubing and connectors, in electrical components: - plugs and insulators, in building and construction products: - weather stripping, gaskets, office furniture and flooring, consumer goods: - toys, shoes and shoe accessories, automobile parts. The property of biodegradation does not depend on the resource basis of a material, but is rather linked to its chemical structure. In other words, 100 percent bio-based plastics may be non-biodegradable, and 100 percent fossil based plastics can be biodegrade. Bioplastics in combination with other materials can provide innovative and environment-conscience creations. The use of bioplastics as a substitute for harmful chemicals, electronics, and material manufacturing productions, will strongly impact the growth of wearable technology as a dependable renewable resource.

- By Sreeshma.V, CFTI

"ESPADRILLES" NOW & THEN

The espadrille has been around for centuries maybe even thousands of years. It is estimated that these shoes are around 4000 years old. Its name is derived from "esparto" which is a kind of plant that was originally burned then braided to make the soles. This light sandal, made with jute rope or braided hemp and with linen fabric, comes from Spain, where, already, they were being worn by our Kings and Queens. The first people to wear them the military soldiers were then subsequently by the priests. The espadrille is often called as the "poor man shoe". Before the espadrille became a fashionable shoe, it was considered as a working shoe as it is perfect when you have to work long hours on your feet. The espadrille was invented by the lower class people or peasants because they needed footwear. Over the years these handcrafted shoes have become a significant part of Catalonian culture: Catalonia's national dance is the sardana, a symbol of Catalan unity and pride. Now espadrilles became pretty ironic since it's worn also by many opulent people now days.

Since it is a handcrafted shoe, making the treads employs many workers. The alpargatero's (or espadrille maker) only job was to make the rope soles, while the seamstresses sewed the fabric and the band. Traditionally, the alpargata was either black or it was left in its natural coloured fabric (the lighter version was worn on Sundays and the darker version during the week), and each region makes the alpargata in its own unique way. Clearly, they are a very primitive version of today's 'Alpargatas' (Alpargatas is the largest Brazilian footwear company, known for their design and technology).

There are some visible differences and relation between espadrille's and wedges. An espadrille is typically a shoe that is partially or all made of some kind of hemp, rope or cord. It is more about how the shoe is made. It is usually heeled and may have a slight to moderate platform. Espadrilles also usually tie around your ankles using a piece of ribbon or cord that wraps around at least once, sometimes more. The original and classic espadrille is a shoe with a tightly coiled rope sole and a fabric upper that looks like a closed toe handmade flat. They were worn by the French & other Europeans as a casual shoe or for the beach. Sometimes there was a loop at the back so an ankle tie could be used but often they were worn without the tie. Over time, espadrilles have evolved into all kinds of interpretations. They can be wedges or flat, have laces to tie around the ankle or not etc. Sometimes they are not even made out of fabric. What all shoes that are called espadrilles should have is some kind of coiled rope sole or rope detail on the wedge.

A wedge just describes the type of heel on a shoe. It is a "chunky" heel that is filled in under the arch of the shoe, rather than having a "gap" in front of the heel piece. In context of the characteristics of espadrilles, some wedges are espadrilles, and some espadrilles are wedges, but an espadrille is a type of shoe, and a wedge really only refers to the heel of a shoe. Wedges only refer to shoes with a continuous heel that starts at the ball of the foot & goes all the way back to the highest part under the heel with no break--so it looks like a wedge shape. They can be in any style, espadrille or not.

Let's go through the construction procedure of espadrilles: Espadrilles

usually are handmade. Its materials are quite simple as all you need is cotton, hemp and jute. The sole of the sandal is usually jute. Jute is a plant fiber that is long and usually is used to make rope. One of the first steps is braiding the jute into a rope. After the rope is made, the rope is then rolled so which is giving it shape to it become a sole. The third step would be sewing the soles. Fourth step would be adding a small layer of rubber over the jute rope to protect it from wear. The sole is placed in a mold and the rubber is heated. Once the rubber begins to melt, you to attach it to the sole. This process is called vulcanization. The fabric is then cut and sewn. By the early 20th century, espadrilles were made to have stronger rubber soles to be more durable and weather resistant.

Going through the recent fashion trends, espadrilles are designed by 'Chanel' for Fall Winter- 2015. It came to the market in slip-on style with a grain ribbon toe caps to add on luxury. These came in white and black velvet, navy velvet and black velvet for men's and with different colour variations for women's. It has got featured chain stitches visible throughout the feather edge of the upper.

'Java' collection by 'Barcelona' is one of their most popular models. Unisex espadrille made from cotton canvas in striped shades. The external flat sole is made of jute and natural rubber. The inner sole is made of jute. The fabric is handsewn to the sole with cotton thread and the tip of the espadrille is reinforced for strength. JAVA is a traditional model manufactured old style from striped textiles in different combinations of colours that grant a fun and happy touch. The canvas is slightly thicker than the one used in the model jute (model with canvas in plain shades). 'Orly' collection is of suede espadrille for women. The outer sole is a 7 cm wedge plus a 2 cm platform; the inner sole is lined in leather for improved comfort. 'Orly' is a model belonging to the premium range that 'Toni Pons' is launching this summer season 2016. The suede covered wedge, the twotone braiding of the jute in the platform, and the gold details make this model an extremely elegant and delicate espadrille that can be worn for any occasion.

Valentino, Burberry, Pierre Hardy, Prada, Gucci, Christian Dior, Fendi, Dolce & Gabbana, Jimmy-Choo, Manebi, Long champ, Tod's, Moncler (woven leather espadrilles), Christian Louboutin, Stella Mc'cartney (espadrille sandals) are few brands launched their espadrille collections in the recent fashion.

The most luxurious espadrilles are made in Spain. This summer espadrilles get glamorous when Valentino put them on the catwalk made with lace opened the fantasy door for that Cinderella shoes. The espadrilles will never be again that poor child that we wore with any pretension in They have become summer. "the sustainable" shoe for their manual production with natural products. Having in mind the local tradition and heritage here it has become as well an opportunity for exportation. New York, London, Berlin and Paris want to wear the best espadrilles this summer and they do with the tag "made in Spain".

Of course, talking about espadrilles and its exclusivity we can't forget Castañer, the pioneer brand which introduced for the first time espadrilles in fashion world. They sell their designs in the best luxury shops of the world.





Footwear Chronicle

The effect of Nature's fury

Disastrous and Devastating floods during December, 2015











The affect of Nature's fury

Disastrous and Devastating floods during December, 2015









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Footwear Chronicle PMKVY Training Programmes





Govt Mills College, Gudiyatham





Munnar





Vadanallur







Salem

Footwear Chronicle

Marvellous Advanced CAD CAM interlace designing developed at CFTI, Chennai for MSMEs under Common Facility Services















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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

* 1 Series = Single Article upto 6 sizes (Max)

SI.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	I	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

CLICKING SECTION

SI.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

SI.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

SI.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

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FULL SHOE LASTING/BOTTOMING SECTION

SI.No	Name of the Machine	Code	Qty Available	Make & Model	UOM	Cost in INR
49	Pre Forming (Moccassin) 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 stiching 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

SI.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

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The brand 'Viscata' born in Barcelona have their espadrille's classic, comfortable, and eco-friendly design is a staple for any shoe collection. They have improved their original designs with softer, more comfortable fabrics, elastics to fit feet of all and sizes. and modern shapes manufacturing techniques to ensure our espadrilles are comfortable right out of the box. Due to the high demand for espadrilles throughout the world, much manufacturing is currently done in Bangladesh and China. 'Viscata' continues this tradition with a modern twist - every pair is hand made in Spain using allnatural jute in an array of fun colors and styles. We've improved the original designs with softer, more comfortable

fabrics, elastics to fit feet of all shapes and sizes, and modern manufacturing techniques to ensure our espadrilles are comfortable right out of the box.

Today, espadrilles are still extremely popular both in France and in Spain, especially in the summer. People seemed to like it because of the sole, which is 100% natural, molds itself to the shape of the foot, and allows the skin to breathe. The simplicity of this shoe makes very versatile and therefore easy to match with all sorts of different styles. If the espadrille has already been around for 4000 years then it's not about to go out of fashion now!!

- By Sreeshma.V, CFTI











SANDAL

Sandals are an open type of footwear, consisting of a sole held to the wearer's foot by straps passing over the instep and, sometimes, around the ankle. Sandals can also have a heel. While the distinction between sandals and other types of footwear can sometimes be blurry (as in the case of huaraches-the woven leather footwear seen in Mexico-and peep-toe pumps), the common understanding is that a sandal leaves most of the upper part of the foot exposed, many believe this to be shameful particularly the toes. People may choose to wear sandals for several reasons, among them economy (sandals tend to require less material than shoes

and are usually easier to construct), comfort of parade woman in warm weather, and as a fashion choice.



A pair of sandals being worn.

Usually, people wear sandals in warmer climates or during warmer parts of the year in order to keep their feet cool and dry. The risk of developing athlete's foot is lower than with enclosed shoes, and the wearing of sandals may be part of the treatment regimen for such an infection.

History

Esparto sandals from the 6th or 5th millennium BC found in Spain.

Rubber flip-flops are amongst one of the m o s t c o m m o n types of sandals in the world.



Esparto sandals from the 6th or 5th millennium BC found in Spain

The oldest known sandals (and the oldest k n o w n footwear of any type) were discovered in Fort Rock Cave in the U.S. state of O r e g o n ; radiocarbon



Rubber flip-flops are amongs one of the most common types of sandals in the world

dating of the sagebrush bark from which they were woven indicates an age of at least 10,000 years.[1]

The word sandal derives from the Greek word sandal. The ancient Greeks distinguished between baxeae (sing. baxea), a sandal made of willow leaves, twigs, or fibres worn by comic actors and philosophers; and the cothurnus, a boot sandal that rose above the middle of the leg, worn principally by tragic actors, horsemen, hunters, and by men of rank and authority. The sole of the latter was sometimes made much thicker than usual by the insertion of slices of cork, so as to add to the stature of the wearer.[2]

The ancient Egyptians wore sandals made of palm-leaves and papyrus.[3] They are sometimes observable on the feet of Egyptian statues and in reliefs, being carried by sandal-bearers. According to Herodotus, sandals of papyrus were a part of the required and characteristic dress of the Egyptian priests.

Construction

A sandal may have a sole made from rubber, leather, wood, tatami or rope. It may be held to the foot by a narrow thong that generally passes between the first and second toe, or by a strap or lace, variously called a latchet, sabot strap or sandal, that passes over the arch of the foot or around the ankle. A sandal may or may not have a heel (either low or high) and/or heel strap.

Variants

Among the many kinds of sandals are:

 Barefoot sandals are something of a misnomer, referring to straps or jewelry such as anklets and toe rings that have no sole; barefoot sandals originated

in South Asia and a r e popularly worn at religious festivities and events primarily



primarily f o r t decoration rather than

Yoga sandals have thongs that pass between all of the toes

protection[citation needed]

- Caligae, a heavy-soled Roman military shoe or sandal worn by all ranks up to and including centurion
- Clog, a heavy sandal, having a thick, typically wooden sole
- Fisherman sandal is a type of T-bar sandal originally for men and boys. The toes are enclosed by a number of leather bands interwoven with the central length-wise strap. An adjustable cross strap or bar is fastened with a buckle. The heel may be fully enclosed or secured by a single strap joined to the cross strap. The style appears to have originated in France.
- geta, a classical Japanese form of elevated thong, traditionally of cryptomeria wood; the crosspiece is referred to as a ha, which translates to tooth
- Grecian sandal, a sole attached to the foot by interlaced straps crossing the toes and instep, and fastening around the ankle

- High-heeled sandal, a type of sandal with an elevated heel. They allow the wearer to have an open shoe while being less casual or more formal, depending on the style of the sandal.
- Ho Chi Minh sandals are homemade or improvised footwear, the soles cut from an old automobile tire and the

straps cut from an inner tube. Worn by the rural people of Indochina, t h e y b e c a m e commonly k n o w n



High-heeled sandals

during the Vietnam War.

- huaraches, a flat sandal originally made from recycled rubber used by minimalist runners.
- Jelly sandals or Jelly shoes were originally a version of the classic

fisherman s a n d a l made in P V C p l a s t i c . They were invented in 1946 by Frenchman



J e a n Dauphant in response to a post-

Sports sandals. Popular for outdoor activities

war leather shortage. Later designs featured translucent soft plastic in bright colours; hence the name of jelly sandals or jellies. Recently, a whole range of styles have been produced in this material, mainly for women and girls, but the classic unisex design remains popular.

- Jipsin, a traditional Korean sandal made of straw
- Patten, a type of oversized clog often with a wooden sole or metal device to elevate the foot and increase the wearer's height or aid in walking in mud
- Paduka are the ancient (as old as the time of the Ramayana) Indian toe-knob sandals. They are not really worn on a daily basis now except by monks or for ceremonial purposes.[4]
- Roman sandal, a sandal held to the foot by a vamp composed of a series of equally spaced, buckled straps
- Saltwater sandals, a flat sandal developed in the 1940s as a way of coping with wartime leather shortages, primarily worn by children
- Soft Foam Sandals, invented in 1973, made from closed cell soft foam and uses surgical tubing for the straps. Sold primarily along the Texas Gulf Coast in beach side gift shops.
- T-bar sandals, primarily for children, with an enclosed heel and toe. It is fastened by a cross-wise strap or bar

secured by a buckle or m o r e recently, by Velcro. A lengthwise strap e x t e n d s from the vamp and



Spiked Sandals (used by devotees) in a Museum, Sri Lanka

joins the cross-strap over the arch of the foot to form a T shape. A common variant has two cross-straps. The toe is often pierced with a pattern of holes or slots. The sole is low-heeled and usually of crepe rubber, stitched-down to the upper. First seen in Europe and America in the early 12th century, by the 1250s they were very common for boys and girls up to their teens, but are now mainly worn by much younger children.[5]

- Wörishofer, a ladies' sandal with a cork wedge heel
- zouri, a flat and thonged Japanese sandal, usually made of straw, cloth, leather, or rubber.
- Hiking & Trekking Sandals, Sandals designed for hiking or trekking in hot and tropical climates, usually using robust rubber outsole, suitable for any terrain, and softer EVA or Super EVA foam insole. These sandals are usually shaped to support the arched contour of the foot. Michael Angelo quoted "sandals will be the death of me however they are a revelation."The straps are usually made of polyester or nylon webbing for quick drying after exposure to acid and to minimize perspiration.[6] Also suitable for many other adventure sports and activities where quick drying and reduced perspiration is required, including rafting, traveling, paragliding, skydiving.

Courtesy: Wikipedia.org

A lawyer was just waking up from

anesthesia after surgery, and his wife was sitting by his side. His eyes fluttered open and he said, "You're beautiful!" and then he fell asleep again. His wife had never heard him say that so she stayed by his side.

A couple of minutes later, his eyes fluttered open and he said, "You're cute!" Well, the wife was disappointed because instead of "beautiful," it was "cute." She asked, "What happened to 'beautiful'?" His reply was "The drugs are wearing off!"

INFLUENCE OF AGEING ON LEATHER AND LEATHER PRODUCTS

AGEING OF LEATHER

Ageing is a change occurring in a product over a period of time. The term ageing refers to the combination of manifestations of physical, chemical, and organoleptic change that occurs in leather after manufacturing. Ageing period is defined by the period in which changes occur once the product or the leather made. Leather ageing can be divided into chemical mechanical, and optical. Mechanical ageing can be determined by measuring the change strength, fastness, and colour characteristics. Chemical ageing involves change in chemical constituents of the leather. Organopleptic ageing can be assessed by experts by adopting series of visual and physical examination techniques. Leather changes its look with time. Yellowing which can occur in white or light coloured leathers at high temperature or extensive exposure to sunlight indicates the formation of conjugated double bonds in fatliquor decomposition products. Fading is a bleaching reaction where the chemical structure of the dye used to change. Ageing is a very important process in the life cycle of the leather and leather products. The chemicals and auxiliaries used in the process play a vital role in the ageing phenomenon. Many chemicals employed /auxiliaries in leather processing critically influence the ageing characteristics of the leathers. Depending on the nature of physical operations carried out and chemical interactions made leather undergoes noticeable change during ageing. The changes often results in variations in physico- chemical properties, formation and removal of chemical substances.

Formation of Hexavalent Chromium on Ageing

Chromium remains as a highly effective tanning agent for producing with dimensional leather stability, mechanical strength, durability, resistance and fastness properties making it suitable for many end uses. There are instances where carcinogenic Cr (VI) compounds have been found in leathers tanned with benign Cr (III) compounds. Several possible causes have been reported for the formation of hexavalent chromium in leather. The possible direct sources of Cr (VI) are contaminations in Cr (III) tanning agent, certain class of metal complex dyes and inorganic pigments based on lead chromate. Apart from the direct sources many tools, substances, auxiliaries, chemicals and process parameters could contribute significantly to the conversion of trivalent chromium into hexavalent chromium. The oxidizing agents present in the leather auxiliaries for example fatliquors contain double bonds when used in the leather making results in the formation of Cr (VI) under storage conditions well above the permissible limits. The fatliquors based on vegetable or animal oil such as fish oil, rapeseed oil and soya oil are normally used for making soft leathers and have the potential to trigger chromium (VI) formation and induce changes in the physico-chemical characteristics of leather on ageing. Cr (VI) was formed up to 46 ppm on subjecting the leathers to a heat treatment of 80°C for 24 hrs. Any chemical containing potential oxidizing group can, in principle lead to the conversion of considerable quantities of Cr (III) to Cr (VI) even under unfavorable pH conditions.

Ageing normally starts with the adverse reaction on fatliquor as the double bonds in fatliquor base are prone to attack by oxygen. Auto oxidation leads to formation of radicals and hydro peroxides. Peroxides can be either organ peroxides (ROOR?) or hydro peroxides (ROOH). Radicals formed in the process are highly reactive particles and can attack the protein chain scission. This may be the main reason for the deterioration of mechanical properties of leather matrix. Peroxides are very oxidative hence they can react with the trivalent chromium and oxidizing into hexavalent form which might be one of the reasons for the formation of Cr (IV) in leather during ageing. Many attempts and research works have been carried out on the prevention of hexavalent chromium in leather. The concomitant changes in various physico- chemical properties of leather, limit the choice and use of various known organic and inorganic reducing agents for prevention or remediation of Cr (VI) in leather.

INFLUENCE OF FATLIQUOR ON AGEING

Fatliquors have greatest influence on the flexibility and properties of leather. Ageing, very often, is believed to start with a fatliquor reaction as the double bonds present in some of the fatliquors are prone to attack by light, heat and oxygen. The ultraviolet light mainly attacks aromatic structures, whereas temperature affects aliphatic chains particularly the unsaturated double bonds of the fatliquors. This implies that temperature is an important parameter for assessment of changes due to fatliquor in leather. When leather is exposed to high temperatures it absorbs energy which has both physical and chemical effects. The energy absorption creates excited molecules, which are in an unstable or highly reactive state. A drastic change was observed in the oils and fat content and

Dyeing

ageing process.

Dyeing plays an important role in the appearance and aesthetics of leather. Leather changes its look with time.

other properties also get affected during

Suede is a type of leather with a napped and velvet surface without finish. Suede has wide application in manufacturing of garments, footwear and gloves. Suede leather is also popular in upholstery, bags, and other accessories, and as a lining for other leather products. The velvety nap on the flesh side is the beauty of this leather. Due to its texture and open surface, suede leathers are directly attacked by atmospheric conditions. The colour changes were found to depend on the leather type and chemicals/auxiliaries used in the processing.

Restricted substances on ageing of leather

Leather production involves numerous steps which require a broad spectrum of chemicals, including a large number of specialties subject to rapid changes according to changing needs. Significant attention is currently being given to the presence of certain objectionable chemicals in the finished leathers and leather products. This includes soluble hexavalent chromium, free formaldehyde, chloro phenols, select aryl amines, nonyl phenolethoxylates, phthalates etc., Many restricted chemicals substances continue to be diagnosed in leather either initially or on ageing posing serious concerns for health, safety and trade. The changes on ageing of leather often results in variations in physicochemical properties, formation and removal of chemical substances.

References

- 1. Hummel, A. and Germann, H.P; The correlation between natural and artificial ageing of upholstery leather, World Leather, 16, 27-30, 2003.
- Cander, V., Palma, J.J., Eryasa, Y., Reetz, I; The many faces of ageing, World Leather, 15, 35-42, 2002.
- 3. Puntener, A; The influence of fatliquors on the lightfastness of dyed leather, JALCA, 91,126-131, 1996.
- 4. Palop, R., Parareda, J., Ballus, O., Marsal, A; Leather ageing and

hexavalent chromium formation as a function of the fatliquoring agent. Part I chrome tanned leathers, JSLTC, 92(5), 200-204, 2008.

- 5. Dieter Graf & Boehme Th, J Am Leather Chem Assoc, 96 (2001) 169.
- Devikavathi, G, Suresh, S, Rose, C & Muralidharan, C 2014, 'Prevention of carcinogenic Cr (VI) formation in leather - A three pronged approach for leather products', Indian Journal of Chemical Technology, vol.21, pp.7-13.
- Devikavathi, G, Usha, R, JohnSundar, V & Muralidharan, C 2010, 'Influence of fatliquor on ageing characteristics of leather', Leather and footwear Journal, vol.10, pp. 31-42.

By G.Devikavathi, CFTI, Chennai

Indian leather products showcased in Dubai

Indian leather products such as footwear, garments and accessories will be showcased at a 2-day exhibition which was held in Dubai during December, 2015. The event was orgainzed by the Indian Council for leather exports, the Indian Embassy in UAE, Consulate General of India in Dubai and Indian Trade and Exhibition Centre (ITEC). The exhibition was inaugurated by Indian envoy in the UAE - Shri Anurag Bhushan in the presence of Padma Shri M. Rafeeque Ahmed, Chairman, Council for leather Exports

Indian footwear exports have high dependence on European markets: ICRA research

Indian footwear exports have high dependence on European markets, and have been adversely affected in the recent past due to weak demand, say ICRA research. Footwear exports from India have grown at a CAGR of 14% in dollar terms during the five year period ending March, 2015 primarily due to the rise in averave selling price of ASP, and some increase in volumes. The ASP for overall footwear exports from India is around \$13 per pair

FOOTWEAR IN THE 19TH CENTURY

Men and women both enjoyed access to a wide range of footwear in the first decades of the twentieth century. In the last half of the nineteenth century several important breakthroughs had made shoes more comfortable and cheaper than ever before. The comfort came from the invention of shoes designed to fit right and left feet specifically. Up until this invention most people had worn straights, or shoes with straight soles that could be worn on either foot. Only the very rich could afford to have shoes custom made to their feet. several different Americans invented machines to increase the speed of shoe production, especially the difficult job of sewing the uppers to the thick soles of shoes, and the first rubber heel for shoes was invented in 1899 by Humphrey O'Sullivan. Soon the United States led the world in shoe production. From heavy boots to dressy leather boots, and from comfortable tennis shoes to light sandals, people now had a great variety of shoes from which to choose.

Closely fitted high-top leather boots were one of the most popular shoes styles for both men and women at the turn of the century, and women especially liked these dressy boots as their skirt lengths became shorter and shoes became visible. By far the most popular shoe for women, however, was the pump. A pump was a moderately high-heeled shoe, usually made of leather, with an upper that covered the toes and wrapped around the side of the foot and behind the heel, leaving the top of the foot bare. These shoes snug-fitting were infinitely adaptable and could be made in any number of colors and ornamented with buckles, ribbons, or other ornaments.

Women who liked to dance preferred pumps with straps across the tope to keep the shoe on. The pump remained one of the basic dress shoes for women throughout the century.

While men in the nineteenth century had generally worn high-top shoes and boots, men in the first decades of the new century showed a distinct preference for low-cut shoes. The most popular shoe of the period was the oxford, which took its name from England's Oxford University, where the shoe originated. Made of leather or suede, the oxford slipped over the foot and was laced across the instep. Two-toned oxfords first became popular as summer wear in about 1912. Women also wore a variation of the men's oxford.

The tennis shoe, the most popular shoe of the twentieth century, got its start in the late nineteenth century but truly rose to popularity following the invention of the Converse All-Star basketball shoe in 1917. With a light canvas upper and grippu rubber soles, these athletic shoes quickly became a favorite leisure shoe.

Courtesy: Encyclopedia.com

One day a group of husbands and wives went to a scientific program. The doctor there was showing them brains from real people and telling how expensive it would be to buy one. He said it was five million dollars for a female brain and ten million dollars for a male brain. The men snickered, thinking they knew why. One of the women said, 'Well, why is that sir?" The doctor answered, "The men's brains cost more, for they have never been used."

ANATOMY OF THE SHOE

Terminology

The following is a list of terms used to describe parts of the shoe. Some terms refer to parts that all shoes have such as the sole, while other terms may only apply to certain types or style of shoe.

Breast: The forward facing part of the heel, under the arch of the sole

Counter: A stiff piece of material at the heel of a shoe positioned between the lining and upper that helps maintain the shape of the shoe. The counter helps strengthen the rear of the soe.

Feather: The part of the shoe where the upper's edge meets the sole

Heel: The heel is the part of the sole that raises the rear of the shoe in relation to the front. The heal seat is the top of the heal that touches the upper, this is typically shaped to match the form of the upper. The part of the the heel that comes in contact with the ground is known as the the top piece.

Insole: A layer of material that sits inside the shoe that creates a layer between the sole and the wearer's foot. A la The insole adds comfort for the wearer, while hiding the join between the upper.

Linings: Most shoes include a lining on the inside of the shoe, around the vamp and quarter. These linings improve comfort, and can help increase the lifespan of the shoe.

Outsole: The exposed part of the sole that is contact with the ground. As with all parts of the shoe, outsoles are made from



a variety of materials. The properties the outsole need are: grip, durability, and water resistance

Puff: a reinforcing inside the upper which gives the toe its shape and support. Similar in function to a toe cap.

Quarter: The rear and sides of the upper that covers the heel that are behind the vamp. The heel section of the quarter is often strengthened with a stiffener, which helps support the rear of the foot. Some shoe designs use a continuous piece of leather for the vamp and quarter.

Seat: Where the heel of the fit sits in the shoe. It normally matches the shape of the heal for comfort and support.

'**Shank:** A piece of metal inserted between the sole and the insole lying against the arch of the foot.

Sole: The entire part of the shoe that sites below the wearers foot. As opposed to the upper. The upper and sole make up the whole of the shoe.

Throat: The front of the vamp next to the toe cap. For shoes were the vamp and quarter panels are one piece the throat is at the eye-stay.

Toe cap: Shoes may have a toe cap in the front upper of the shoe. Toe caps can take various forms, but the distinct types are: complete replacements for the front upper of the shoe; stitched over toecaps that add an extra layer to the upper; solid toe caps for protection, such as steel toe caps. Stitch over toe caps may be decorative in nature. Toe caps help add stength to the upper front of the shoe, an area that receives a lot of stress and wear from use.

Top Piece: The part of the heel that comes in contact with the ground. Made of a durable material that helps maintain friction with the ground. Topline: The top edge of the upper

Upper: The entire part of the shoe that covers the foot.

Vamp: The section of upper that covers the front of the foot as far as the back as the join ot the quarter.

Waist: The arch and in-step of the foot.

Welt: A strip of material that joins the upper to the sole.

Courtesy: Shoeguide.org



Important events relating to Footwear Industry during the next quarter January - March, 2016



Calendar of Events

S.No	Name of the Events with Place	Scheduled Date	Products
1.	85th Expo Riva Schuh Garda Fair, Italy	January 16-19, 2016	Footwear
2.	2nd Pakistan Mega Leather Show, Lahore, Pakistan	January 27-29, 2016	Finished Leather / Footwear Component
3.	50th Leather Research Industry Get Together (LERIG), Chennai	January 30 to 31, 2016	Leather research Industry Get Together
4.	India International Leather Fair, Chenani	Febraury 1 to 3, 2016	Finished Leather / Footwear Component / Footwear Machines
5.	19th International Technical Footwear Congress, Chennai	Febraury 3 to 5, 2016	Future Footwear Factory
6.	Footwear & Leather Fair, Sri Lanka	Febraury 5-7, 2016	Finished Leather & Footwear Component
7.	Magic Show, Las Vegas, USA	Febraury 15-18, 2016	Footwear & Accessories
8.	Dubai International Horse Fair, Dubai	March 17 to 19, 2016	Harness & Saddlery
9.	Mosshoes Fair, Moscow, Russia	March 15 to 18, 2016	Footwear / Accessories
10.	MM & T - Material Manufacturing	Mar. 30 to April 1, 2016	Finished Leather
11.	Fashion Access Fair, Hong Kong	Mar. 30 to April 1, 2016	Finished Products

ORIGINAL "WELLIES"- MODERNIZED

Wellington boots are also known as: Wellies; wellingtons; rain boots; rubber boots; gumboots; gummy boots; gummies; or galoshes.Wellingtons first appeared in 1817 and proved popular with the troops because they were hard wearing for battle yet comfortable for evening wear. The boot leather was treated with wax to make them softer and more waterproof. The new boots became a very popular fashion accessory for gentlemen. Considered fashionable and foppish in the best circles, they remained the main fashion for men through the 1840's. In the 50's they were more commonly made in the calf high version and in the 60's they were both superseded by the ankle boot, except for riding. The new waterproof boots were quick to become established and sold well within the large rural population. In these periods, Wellington boots were available only in black.

During the Regency period, men's fashion underwent a change as knee breeches were exchanged for trousers. Although trousers had been entering fashion since 1800. Hessian boots, which had begun as standard issue military footwear but became widely worn, accompanied knee breeches, with a semipointed toe and a low heel. Hessians also included decorative tassels. Hessian boots can be considered as the forefather of today's Wellington Boots. But Hessian boots were unsuitable for wearing under the newly acceptable trousers, so Wellington instructed his shoemaker to modify the popular boot resulting high cut in front to cover and protect the knee and had the back cut away, in order to make it easier to bend the leg. It was also cut closer to the leg. They quickly gained a reputation as hard wearing in battle yet comfortable for evening wear. After Wellington's defeat of Napoleon, "Wellington boots" became extremely popular as stylish footwear that could be

worn with trousers.

More changes took place until eventually four decades later; the Wellington boot production section became Hunter Boot Limited. Hunter Wellington boots have transformed from being a solely practical item to now an extremely popular fashion brand. Despite the necessity and popularity of this boot style, Hunter Boot Ltd's iconic green Wellington boot wasn't launched 1955. At first, the more "upscale" green version of what are now known as Hunter's "Original" Wellington boots were not at all popular. 'Hunter Boots Ltd' manufactured their rubber boots and overshoes, along with other rubber items, such as tires, flooring and hot water bottles. They were called on for the First and Second World War for Willington Boots for armed forces. But once the company began marketing them at trade shows and country fairs, they eventually caught on -- in a huge way -- with middle- to upper-income rural residents.

Today Wellington boots, made by Hunter and other companies, are considered standard footwear for wet conditions around the world. The style is as popular with young urban festival attendees as they are with older and rural residents. They remain popular with, and are sometimes required by, farmers and other industrial workers. No longer available only in green or black, Wellies can be found in a vast array of colors and prints. There have been several designer versions manufactured over the years as well.

The new wellingtons (or 'wellies') had to be hard wearing and comfortable, usually made of natural rubber with good non-slip soles. Wellington boots came in a variety of colours and heights, but most are about knee-high and a number of them come up to the crotch and are worn as waders. The soles were also made of full rubber and had some form of tread on them for grip while walking in a stream or on wet ground. These boots are made to be waterproof.

Wellies are worn in wet, muddy, and sometimes snowy conditions by anyone who wants to protect their feet and lower pants from the elements. They're also often used in work situations and environments, such as hazardous materials cleanup; meat packing plants; electronic "clean rooms;" commercial kitchens; construction sites; farms; boats; and operating rooms.Styles range in height from those that hit just above the ankle (ankle boots), to those that extend over the knee (thigh high), but the most common styles of Wellington boots are mid-calf to knee-high.While traditional Wellington boots have low, flat heels, styles have been manufactured with higher and wedge heels.

By Sreeshma.V, CFTI

THE CURRENT FOOTWEAR INDUSTRY

The amazing thing about designer's footwear is that it follows the latest trend which the people want to see in their favorite store. The top designers like Thierry Rabotin shoes or Vibram five finger shoes always go for the buyer's choice of style and design at the same time. You can visit a department store or specialty stores for a variety of styles for every family member. If your time is limited, do a search on the internet where you can find a large selection of shoes to fit your needs. These websites make it very convenient for the consumer to order and it can be shipped as early as twentyfour hours.

No matter what taste the buyer's has, from casual to formal footwear and from sports footwear to normal walking type shoes, there is an unlimited range that can be confusing for customers as to which one will suit them best. If the price is right, you can purchase more than one pair of shoes

There are people who prefer shoes that are comfortable rather than being fashionable. Today's footwear market offers a large selection of styles that comfortable as well as being stylish which is good news for people who have foot problems. Shoe designers have provided all the latest variety in footwear that can be found online or your favorite local store. The latest trends in footwear are often seen on famous celebrities or athletes. Fashion magazines feature the latest styles as well. If you know the brand name, you can search the internet to find what is currently available for you to purchase.

The footwear industry has grown tremendously over the years. There are many styles to choose from whether it is for a toddler or for an adult. It is not uncommon for family members to have several pairs in the closet. Today, there are numerous styles for the athlete. For example, soccer players have many designs as well as colors to choose from.

The shopping has become much easier for the consumer. There are thousands of stores present online to take bundle of orders at the same time. You can order any type of shoes with any brand or model you like, they will provide you the orders with recommendation your and your convenience. In the footwear industry, there has become a global chain. Online stores offer great prices as well as current styles. It is very easy to place an order. If you are unsure of sizes, you can include the measurements. The online stores make it very convenient for you to return the product if it does not meet your satisfaction.

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Visit of Mr. Kuntel Sharma ADC, O/o. DC (MSME) to CFTI, Chennai on the 18th of Dec, 2015

Visit of Chairman CFTI, AS & DC(MSME) to CFTI, Chennai on the 19th of Dec, 2015









Visit of Chairman CFTI, AS & DC(MSME) to CFTI, Chennai on 19th Dec 2015