

Session 4

[Wednesday 4th period 2.0 hours - Main Hall]

Artistic aspects of wood use and design

Speakers



Speaker:
M P Ranjan

Topic:
Entrepreneur Development, Design and Innovation in Wood Products / Design Detailing in Wood: An Appreciation of Furniture Design by Gajanan Upadhaya



Speaker:
Jirawat Tangkijgamwong

Topic:
The Way of Wood: Finding Green Pieces in Thailand



Speaker:
Achmad Zainudin

Topic:
Jepara: Mirror of Indonesian Art Wood



Speaker:
Hakki Alma

Topic:
Wood Carving Art in Turkey



Speaker:
Lv Jiufang

Topic:
Wood Aesthetic Pattern Design and its Application

**Entrepreneur Development, Design and Innovation in Wood
Products / Design Detailing in Wood: An Appreciation of
Furniture Design by Gajanan Upadhaya**

M P Ranjan¹

¹ Designer, National Institute of Design (retired), Ahmedabad, India (ranjanmp@gmail.com)

Gajanan Upadhyaya

Furniture Design - An Appreciation

Prof M P Ranjan
Design Thinker & Academic
Ahmedabad, India



ranjanmp@gmail.com
www.designforindia.com
www.ranjanmp.in



Wood in Furniture Design
Evolution of a Design Master



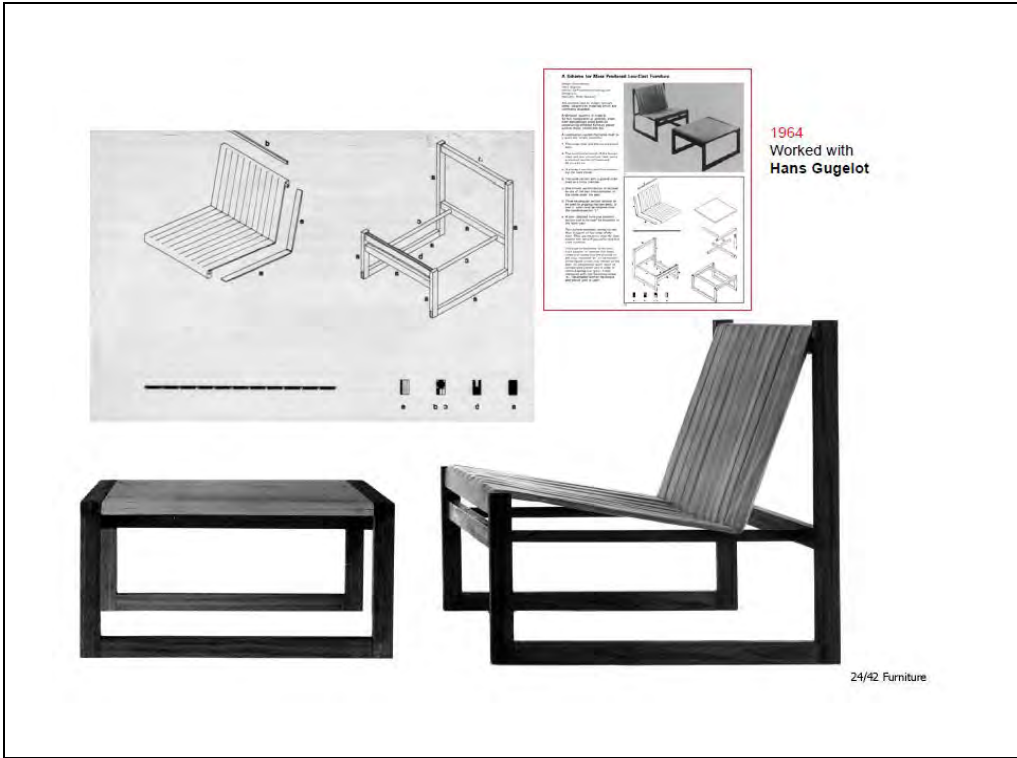
BIO-PROFILE

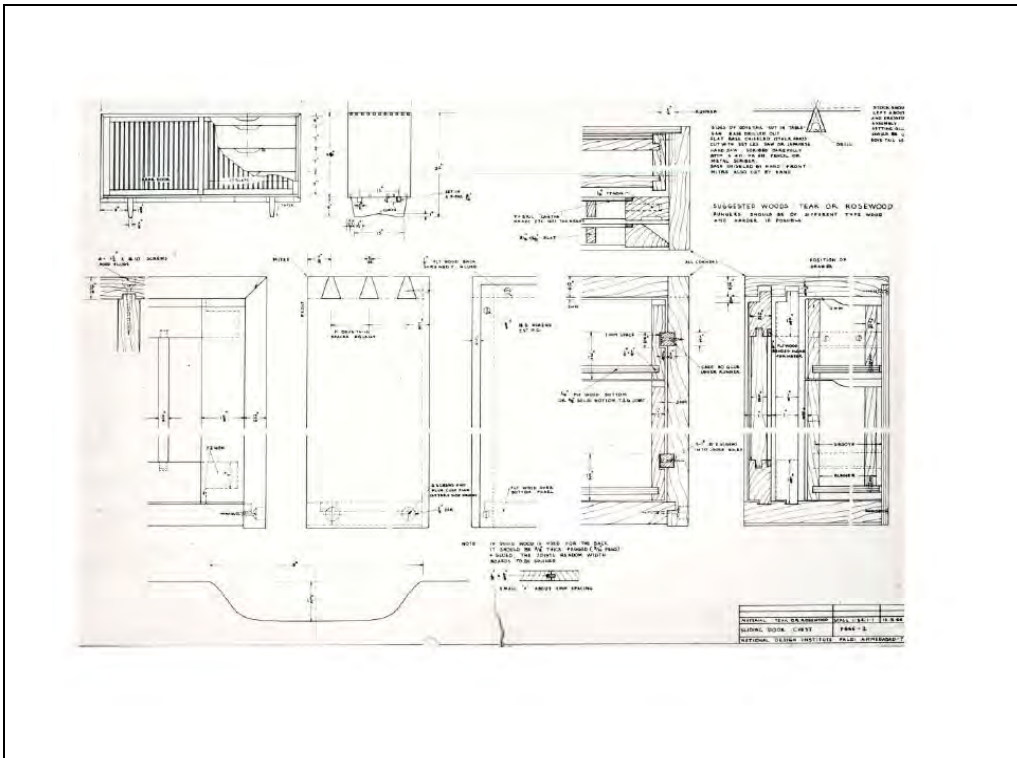
1934
Born in Village Sarsav
Mehsana, Gujarat
1955
Marriage to Kumudini
Student at MSU Architecture

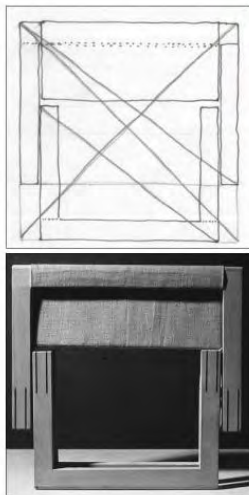
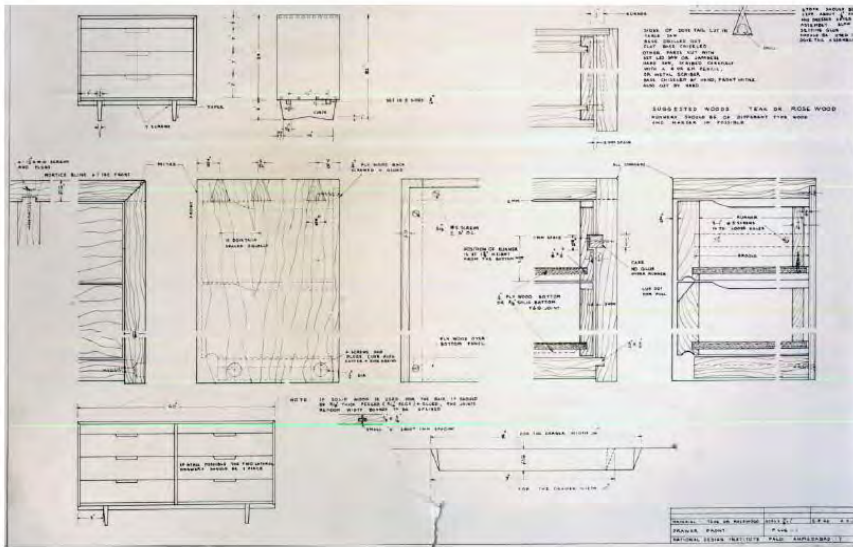
1960
Architect at
Town Planning Dept,
Ahmedabad
1962
NID as Architect and Designer

1966
Studied at Denmark and
worked there
1974
Return to India

1976
NID as Faculty
1996
Architect at HCP and
Designer at TDW
Ahmedabad



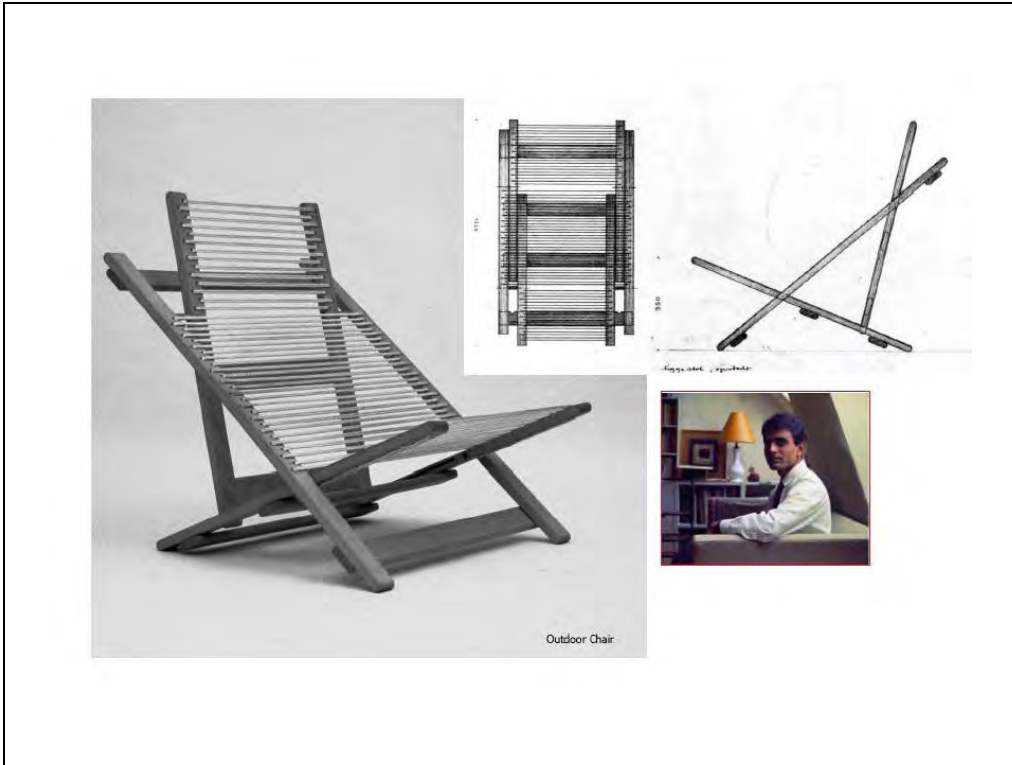




1966
Studied & Worked with
Paul Kjaerholm

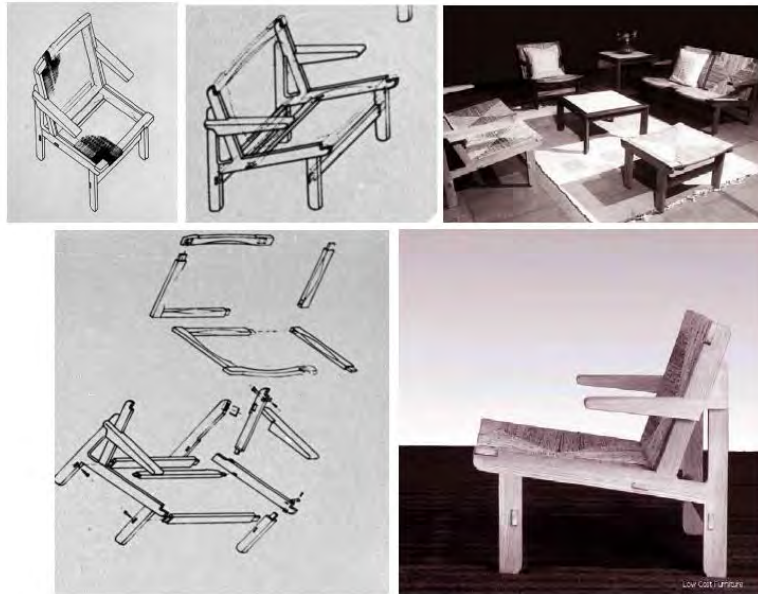


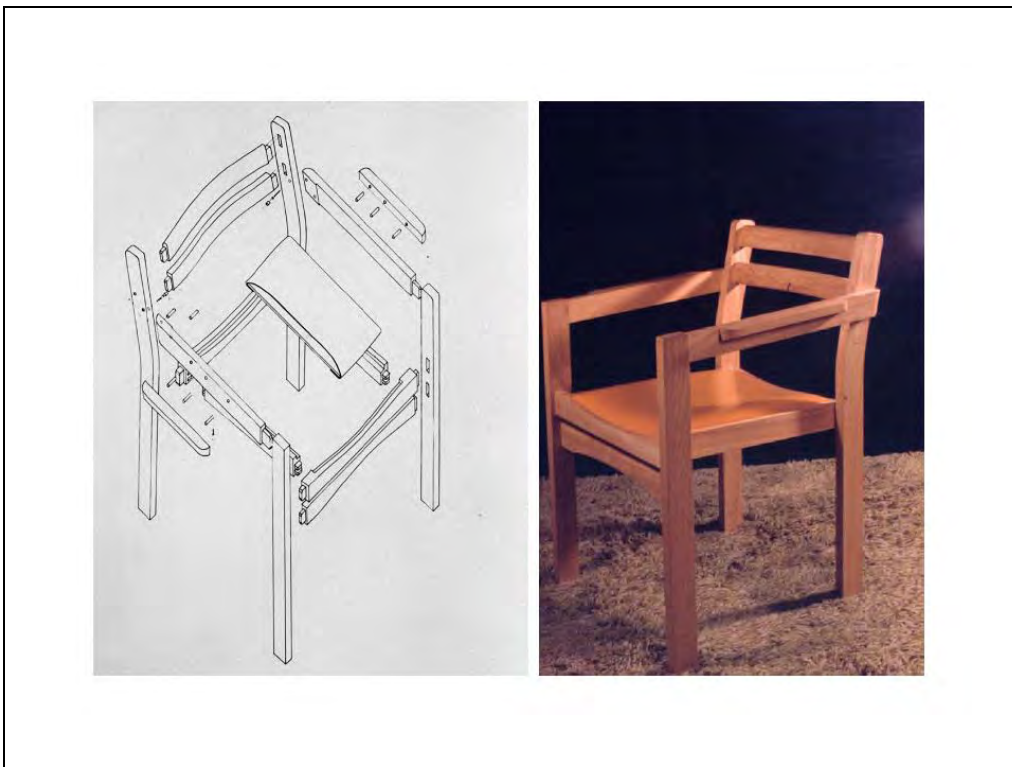
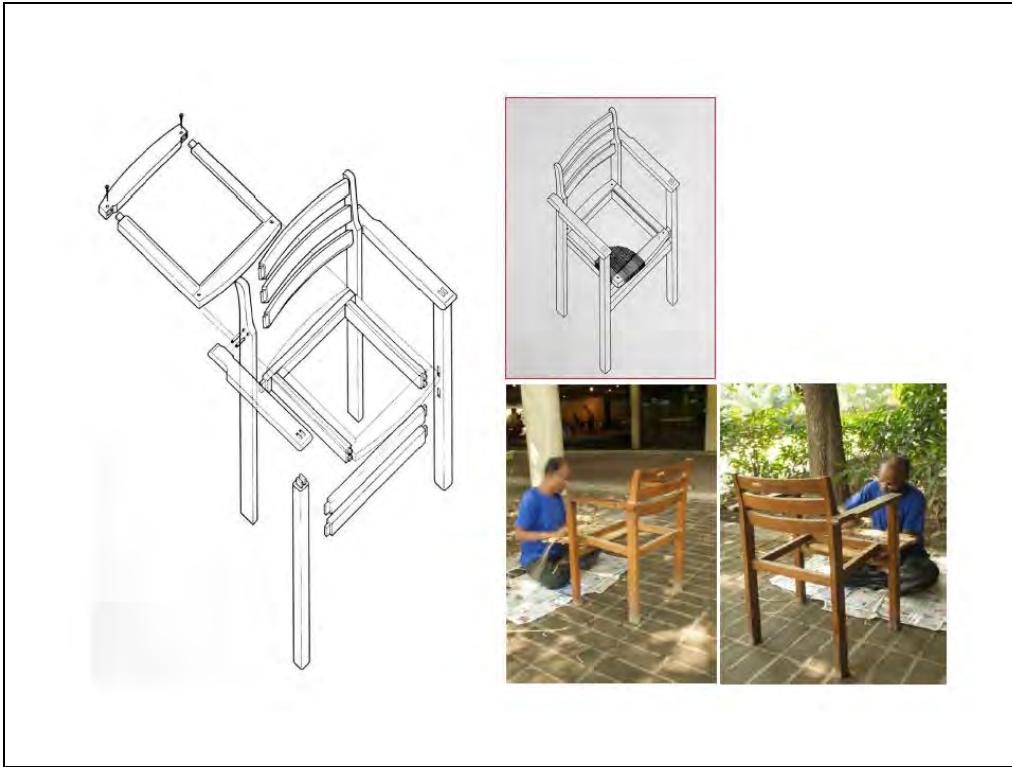
Double Folding Stool



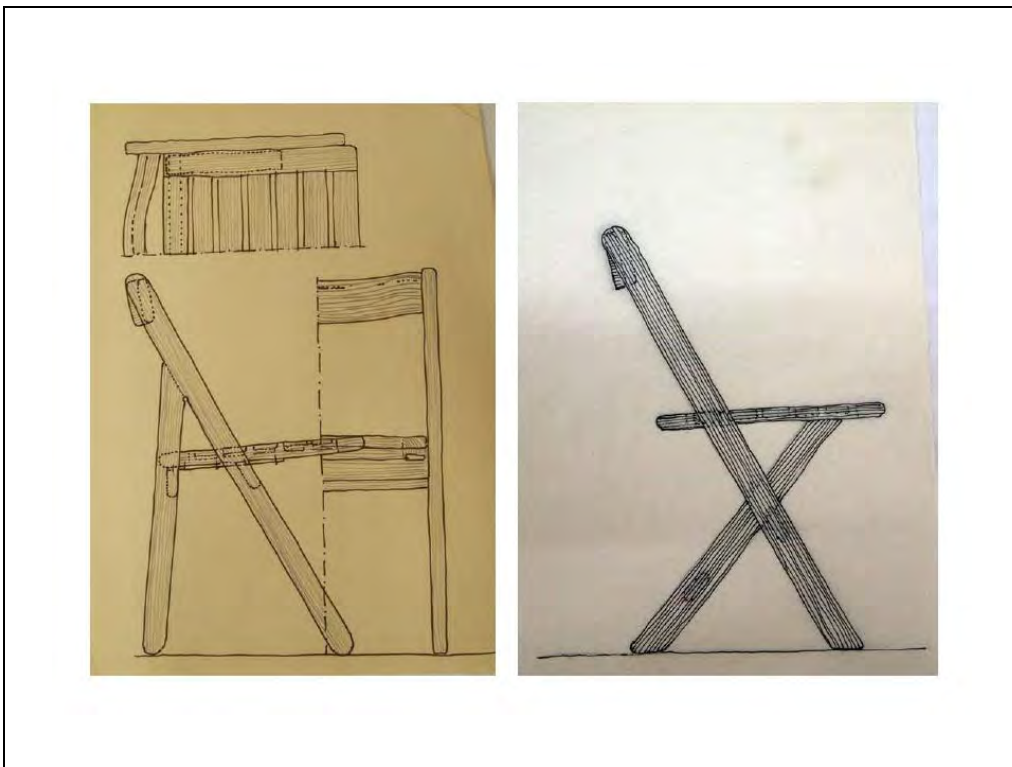


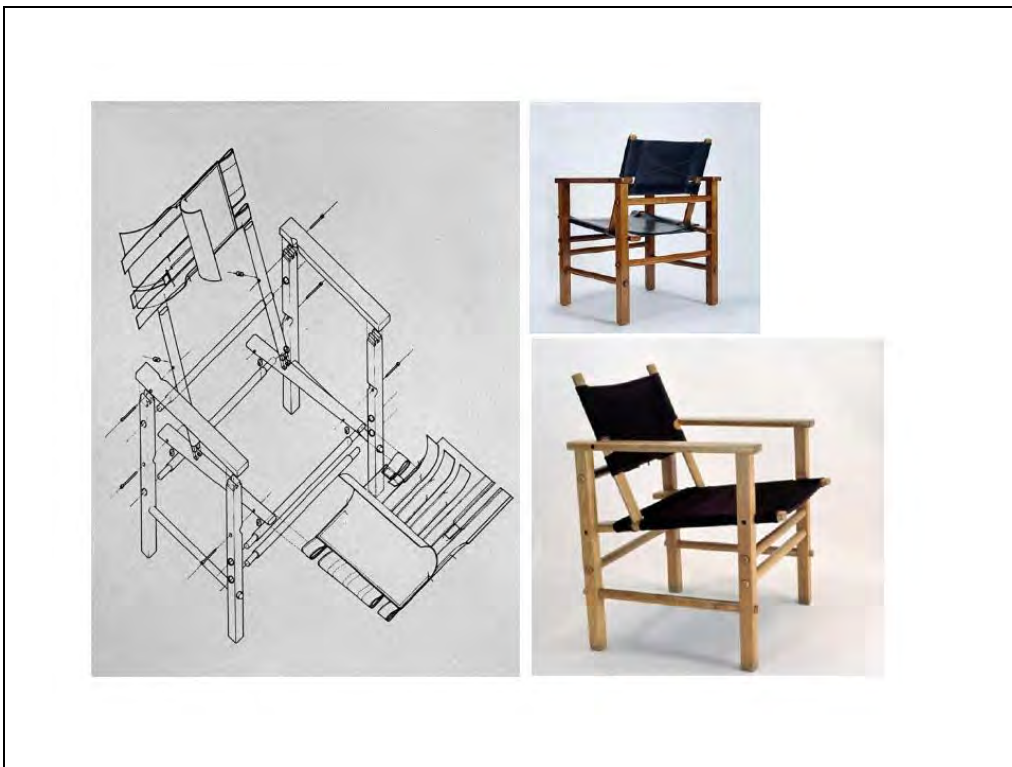
1976
Returned to India
National Institute of Design

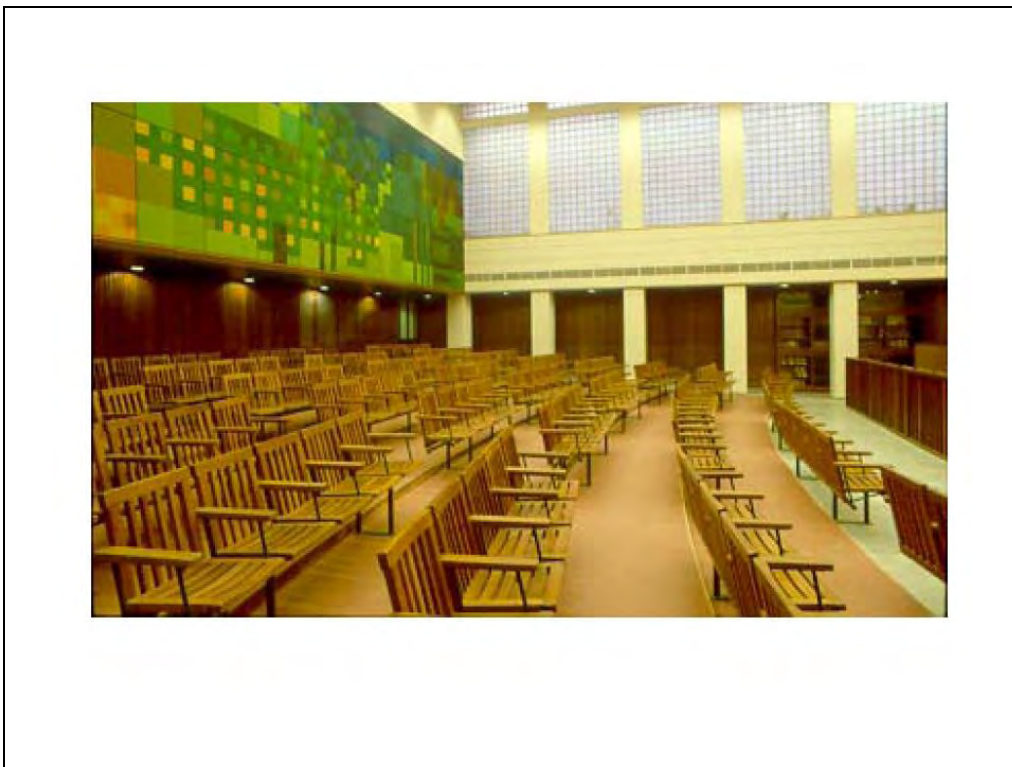
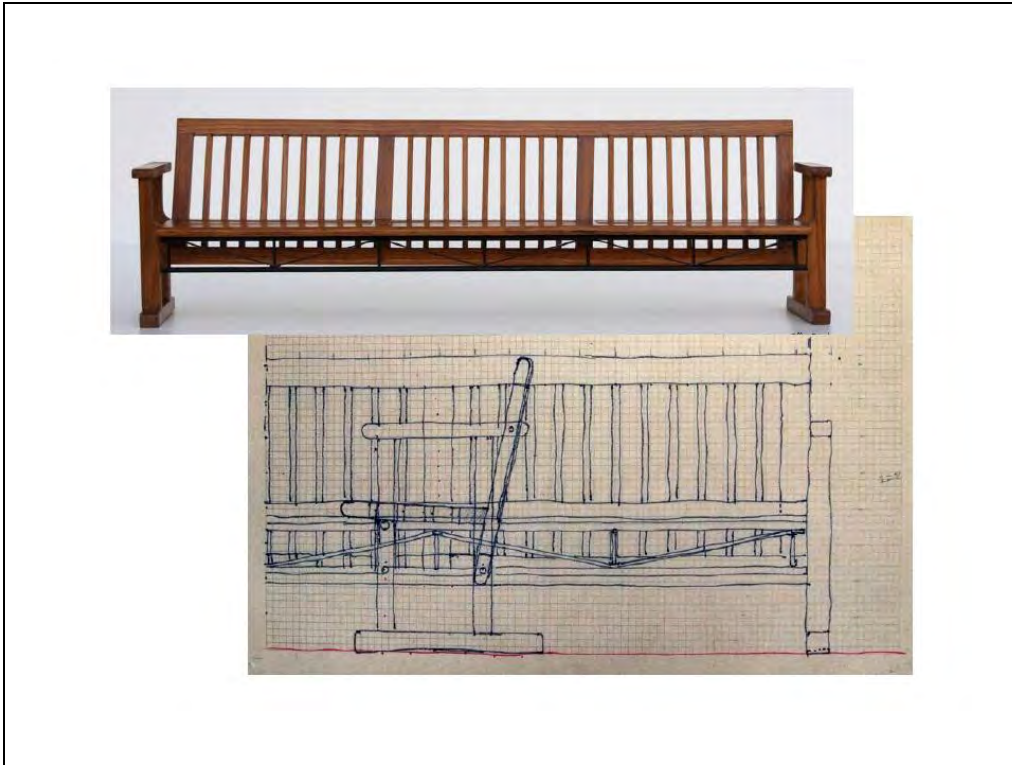


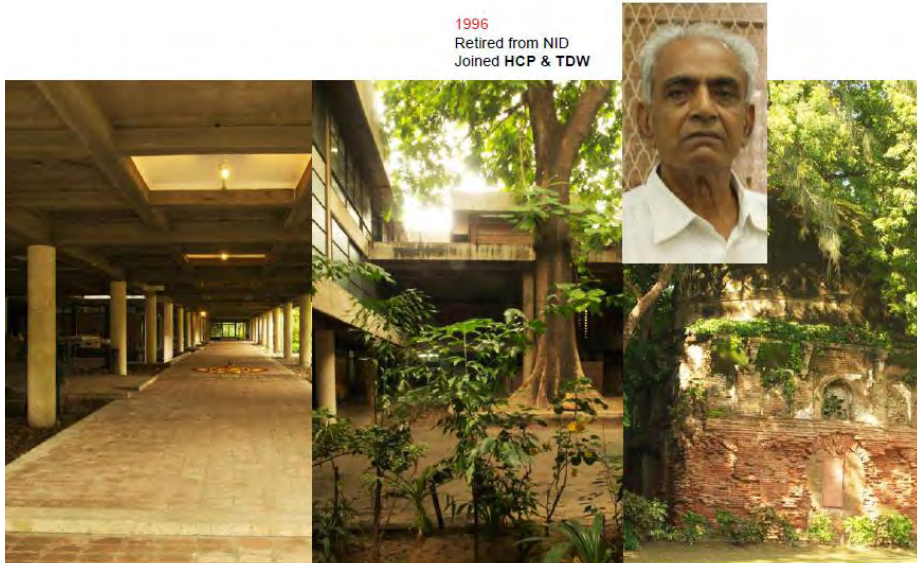


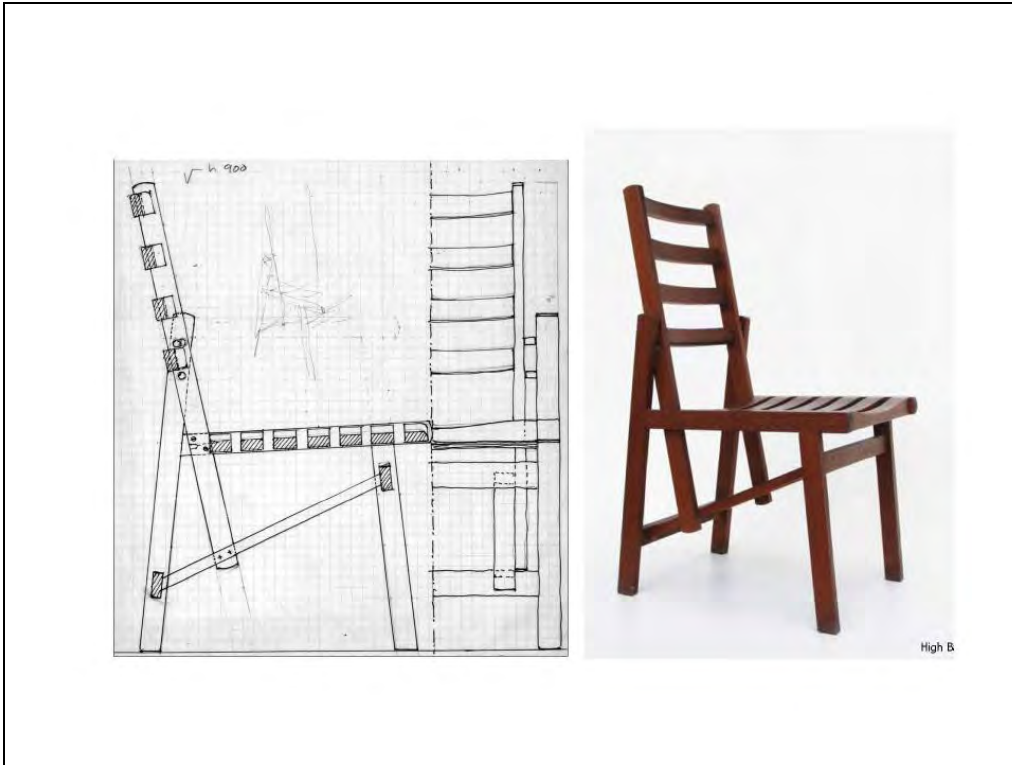




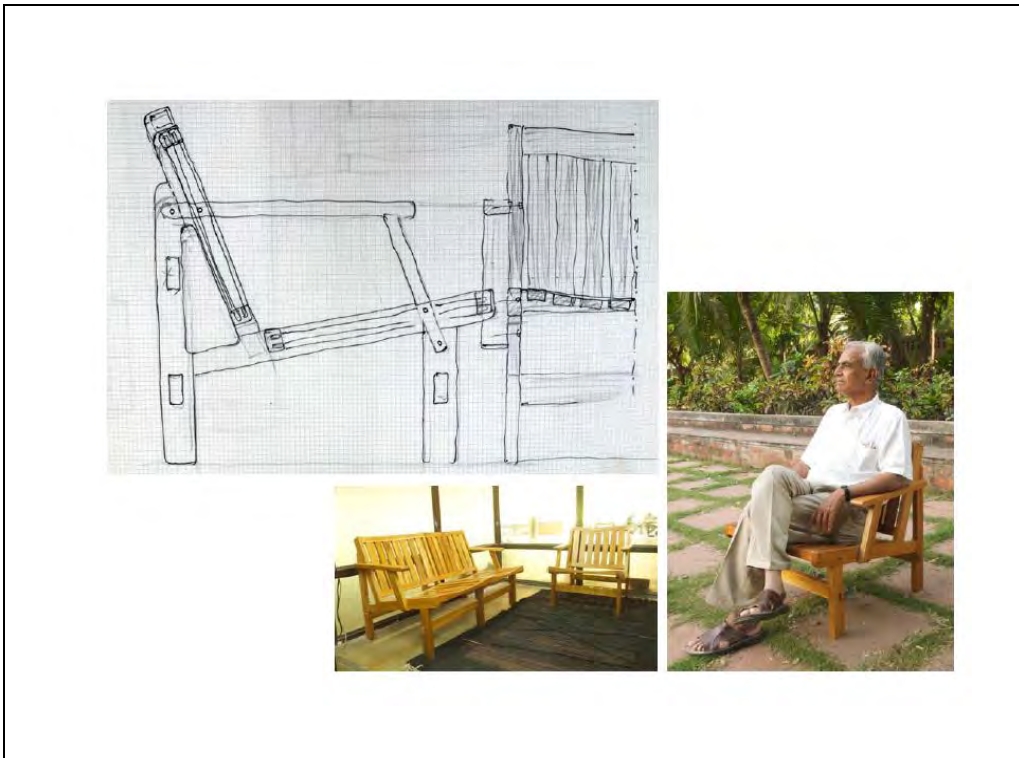


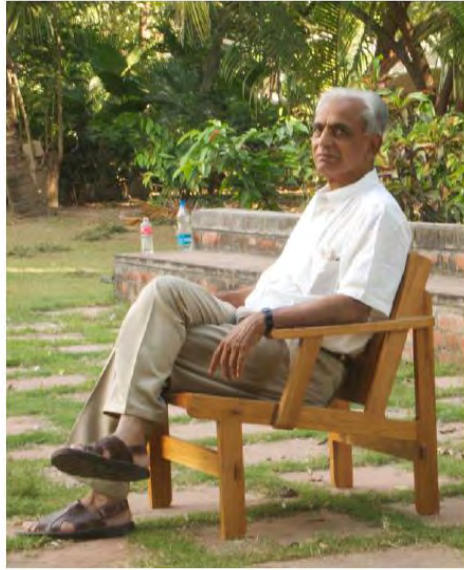




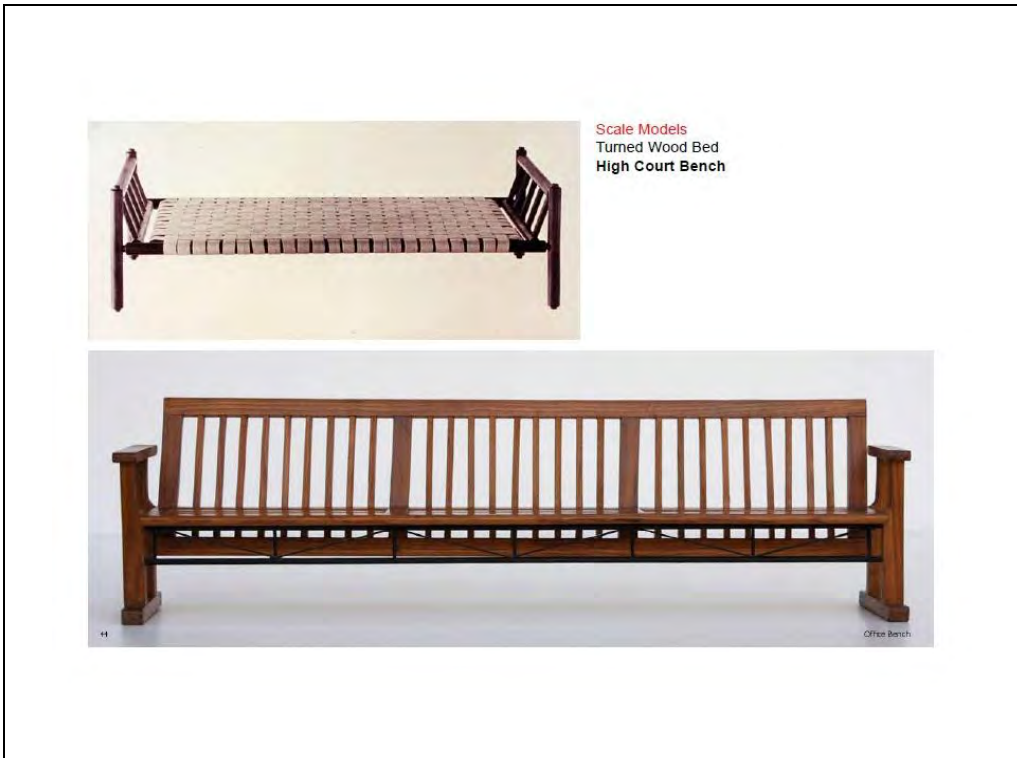
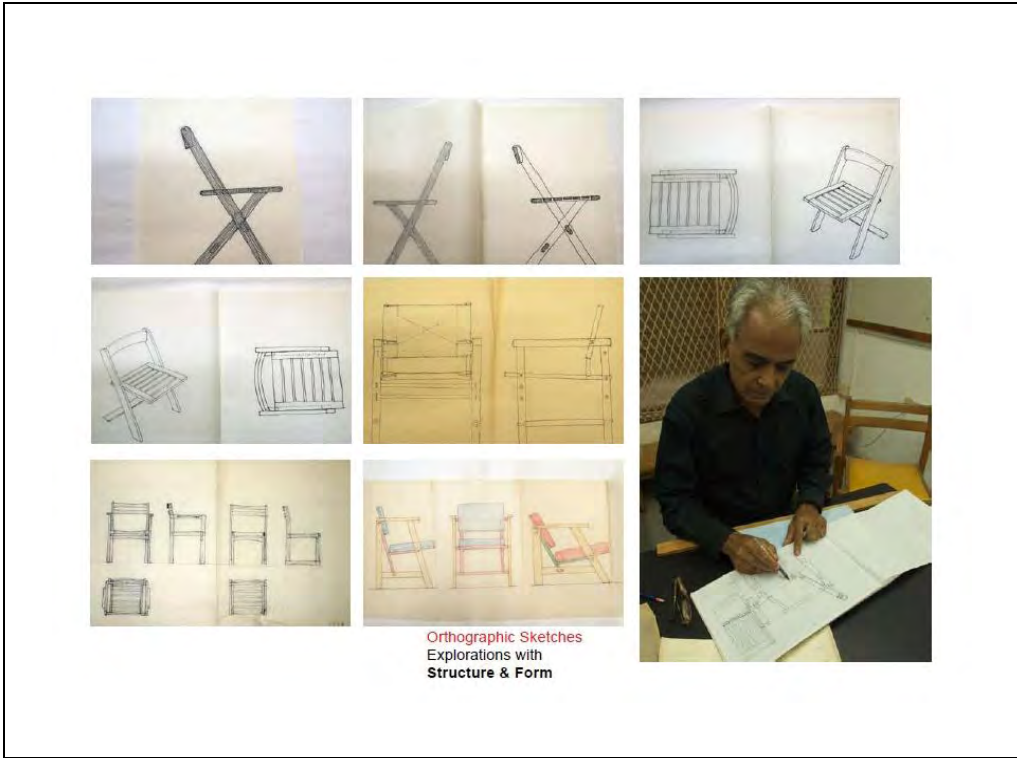


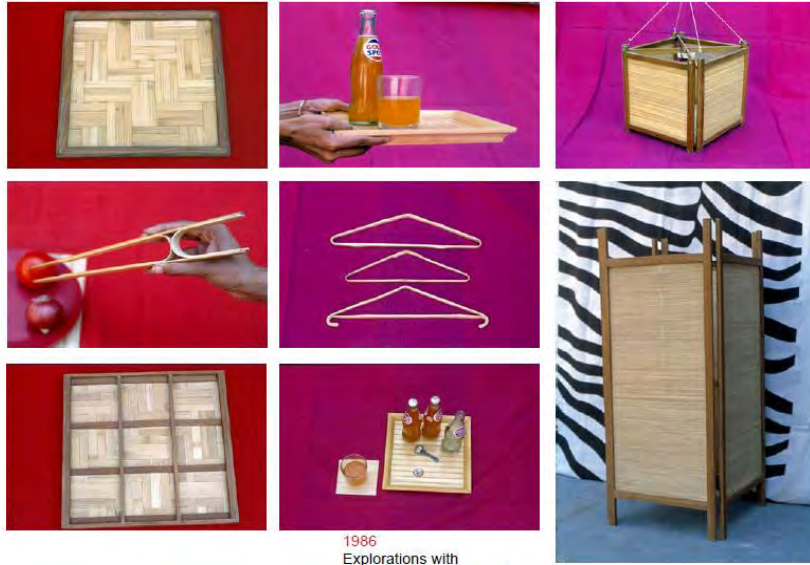












1986
 Explorations with
 Bamboo Splits & Mats



The way of wood: Finding Green Pieces in Thailand

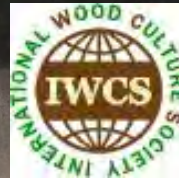
Jirawat Tangkijngamwong²

Abstract

MyThaiDesign.com was established to create a community platform to enable lovers of Thai design, from around the world, to come together to learn about the latest forward-thinking designs and must-attend events in Thailand, as well as to share their leading-edge thoughts and ideas regarding what Thai design means to them. Thai design is diverse. It is modern and contemporary; it is traditional and conservative. It is fresh and admirable. For Thailand, the idea of sustainability is on the tip of everyone's tongue. Green is embedded in the culture. The warm Thai people are "living a green life". The love and warmth that stems from Thailand is contagious and welcoming. Deesawat is a good example. They are the creative and the producer of Thailand specializing on contemporary outdoor design, especially using all solid wood. They admire the preservation of nature and the coolness of living among nature. For years, Deesawat strives not only for producing timbers out of legal or sustainable sources, but also carefully looks into other dimensions to make the company greener. Creativity and Sustainability are at the core of the business. Besides, being awarded and recognized in design excellence, Deesawat also strives to improve the relationship between commercial, social and ecological aspects, with the strong belief that this is the way of wood in the future: sustainable and creative. Deesawat also involves community work in timber and plants network. Join us in celebrating products that are eco-friendly, design-led, and suitable for interiors and exteriors across the globe.

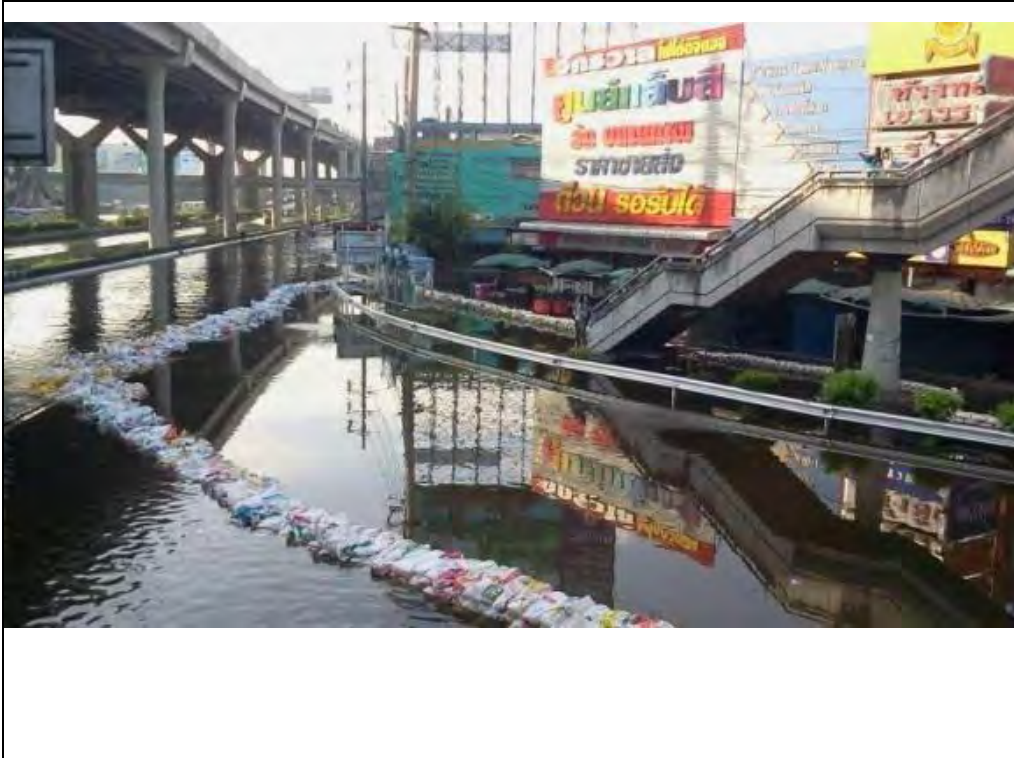
² Thai Furniture Industries Association, Thailand (jirothailand@gmail.com, deesawat@ksc.th.com)

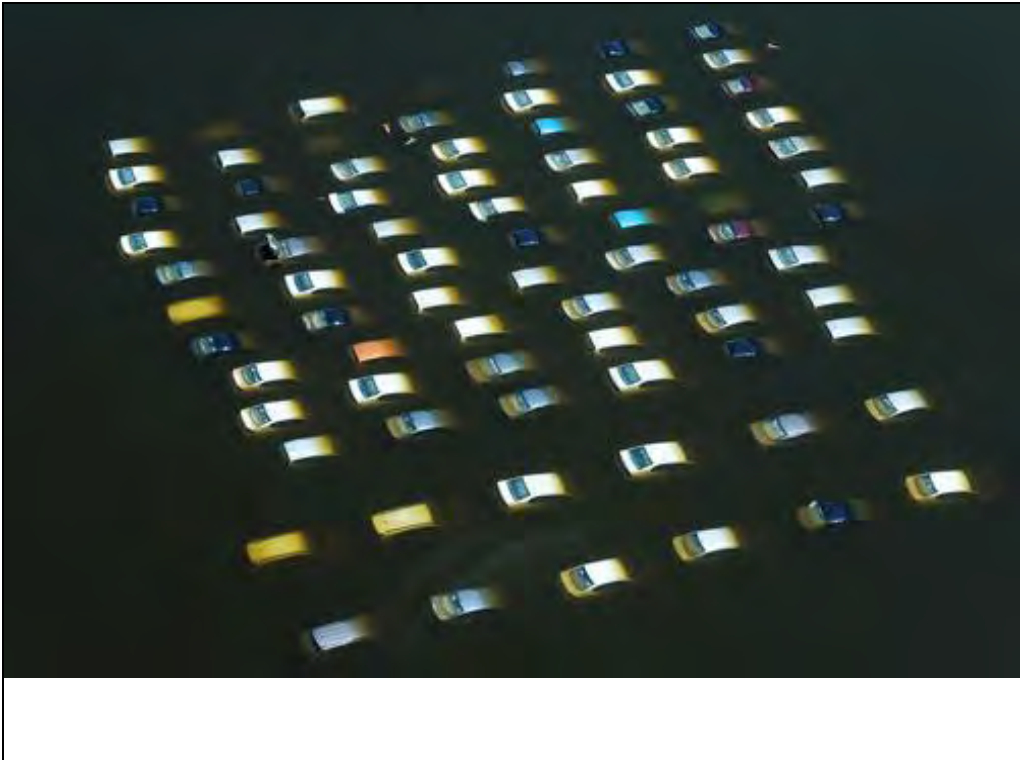
Rediscovering Wood: The key to a sustainable Future



Jirawat Tangkijngamwong (Jiro)

The mother Nature
has taught us that we
should never took
nature for granted.







The warning is painful.

Lessons must be learnt.





We are living on the edge.

We all can pitch in...
to make the difference.



Sustainable living is the
Sustainable future.

It's real!

The Ways of Wood (Thailand)



Jirawat Tangkijngamwong (jiro)



Jirawat Tangkijngamwong (JIRO)

President

The Thai Timber Association



Vice President

Federation of Thai Industries (Wood
Processing Group)



Vice Chairman

Council of Asia Pacific Furniture
Associations (CAPFA)



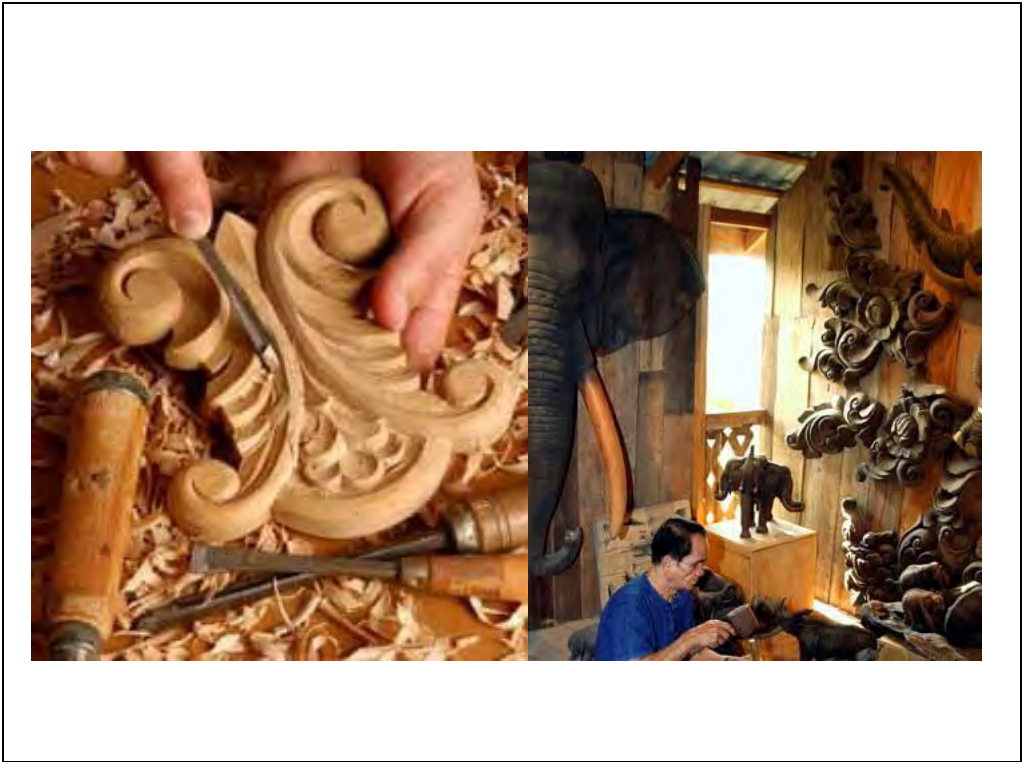
Secretary General

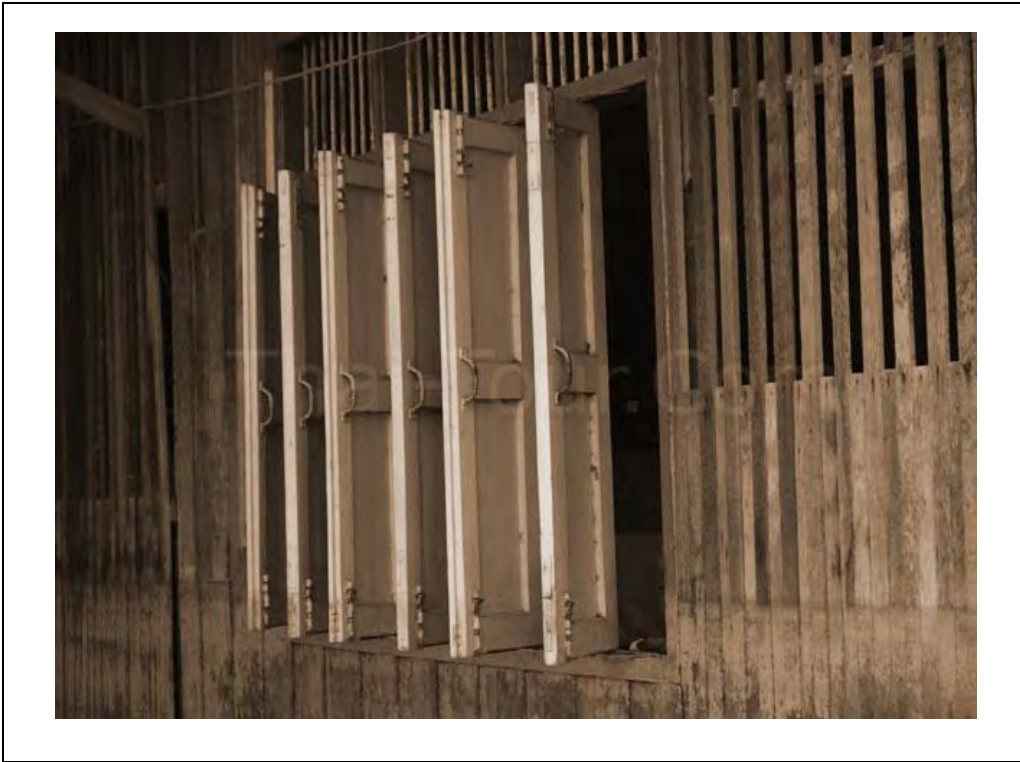
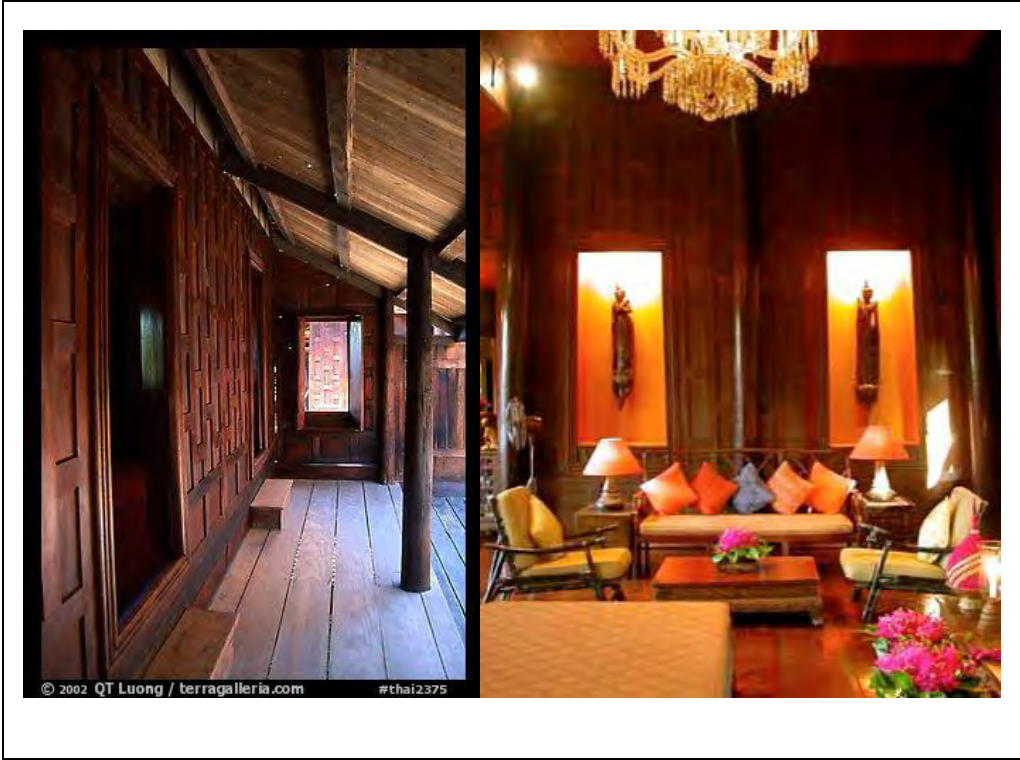
Thai Furniture Industries Association

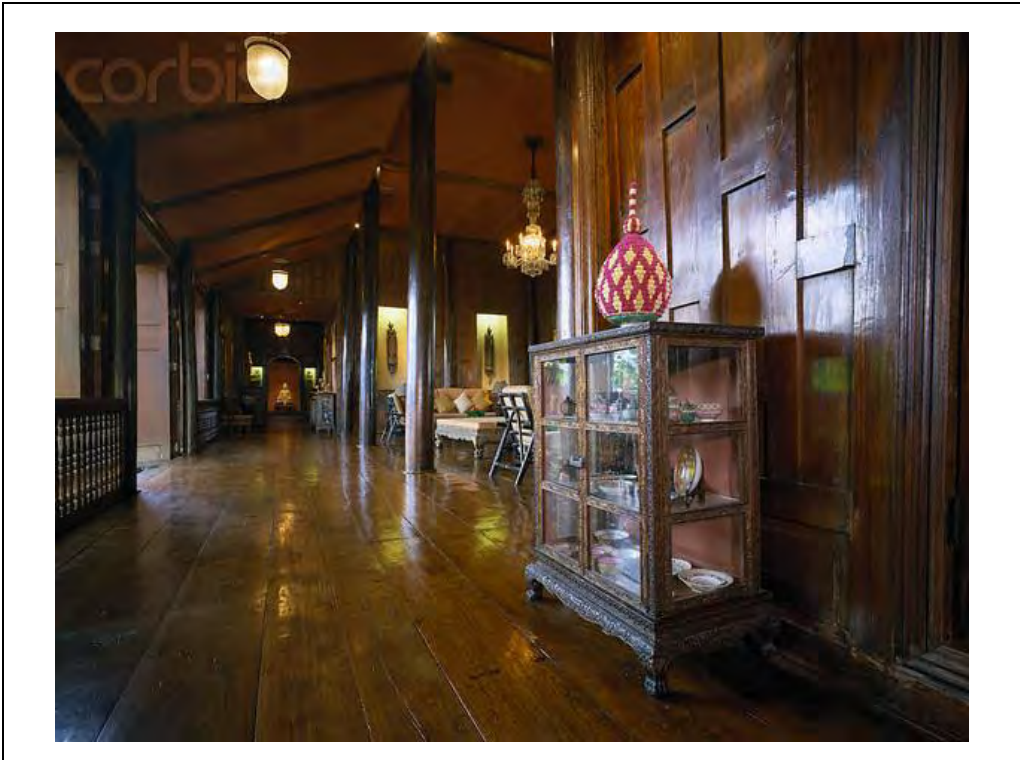














Furniture manufacturers in

Thailand

- 1 registered factories
- Large scale 52 factories
 - Medium scale 210 factories
 - Small scale factories



Furniture manufacturers in

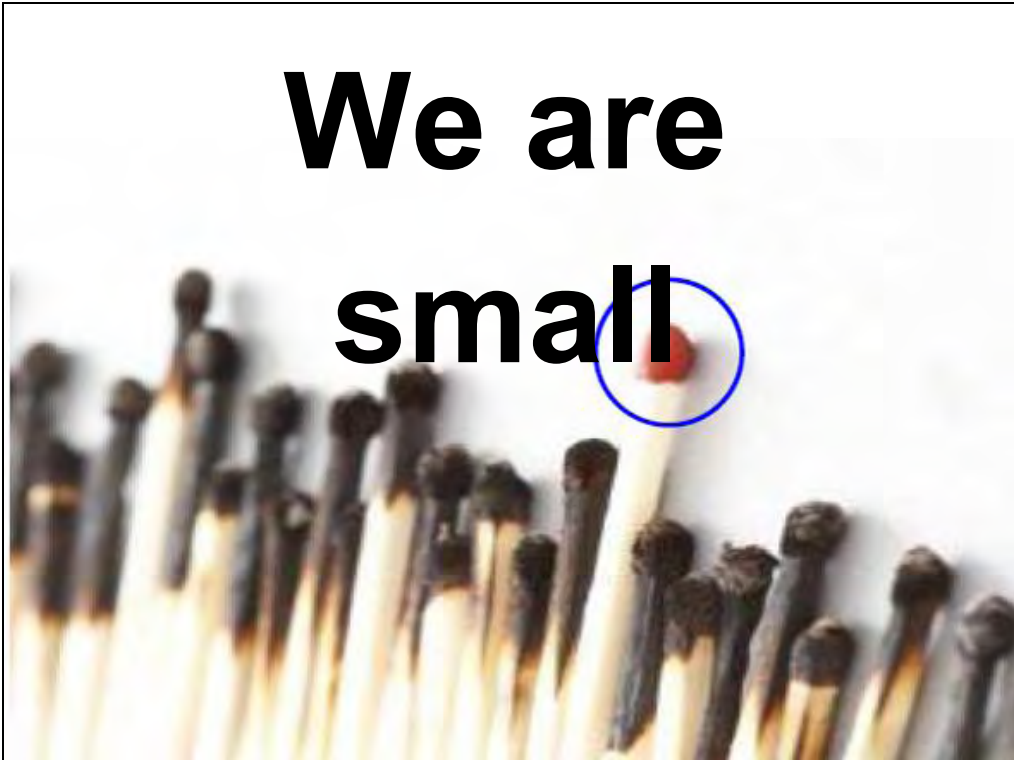
- Public Listed 4 factories
- 170 export-oriented
- 8000 micro industries non-registered



1500 total /176 export

Most of them SMEs

**We are
small**



SME

SME

Slow and Unproductive and
Incompetitive.

Facts

- Forest is 33%
- Commercial plantation: Eucalyptus, Rubberwood and Teak

2010 Sales in the nutshell

- Furniture export US\$ 1000 millions (+17%)
(wood furniture about US\$ 500 millions)
- Wood product export US\$ 1000 millions
(wood sawn timber about US\$ 500 millions)
- Wood construction export US\$ 1200 millions
- Furniture local market US\$ 1400 million
(under estimated/ under invoiced/ otop orders)

FURNITURE & INTERIORS MARKET Thailand

Total Housing Starts		units/year
Total Number of Households		units
Furniture Production	0	million US\$
Total Furniture Imports	40	million US\$
Total Furniture Exports	0	million US\$
Total Furniture Consumption	1,400	million US\$
•Total Commercial Mkt		million US\$
•Total Repair / Remodeling Mkt	500	million US\$

**We are
small**



Facts

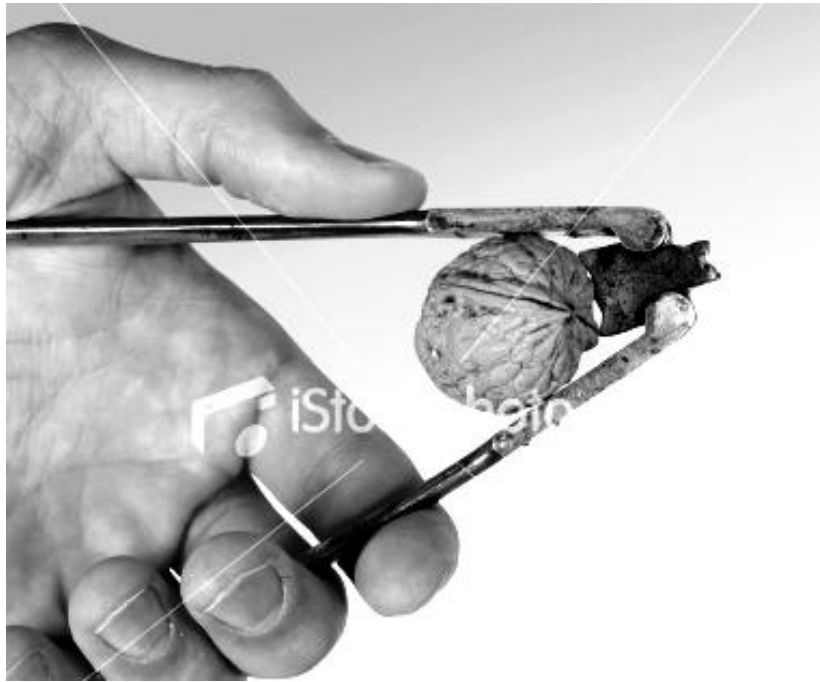
- 2010 growth 17% so far
- 70% of export furniture are wood furniture and natural fibres.
- Local/export market is about the same size (US\$ 1400 million US\$)

Natural material oriented (wood,natural fibre)

Rubber wood, Teak Wood
Water Hyacinth, Bamboo,
Coconut

**Make sure it's renewable sources
legally and sustainably managed.**

Situation Today



Slide 43



LOST in the
Shuffle!





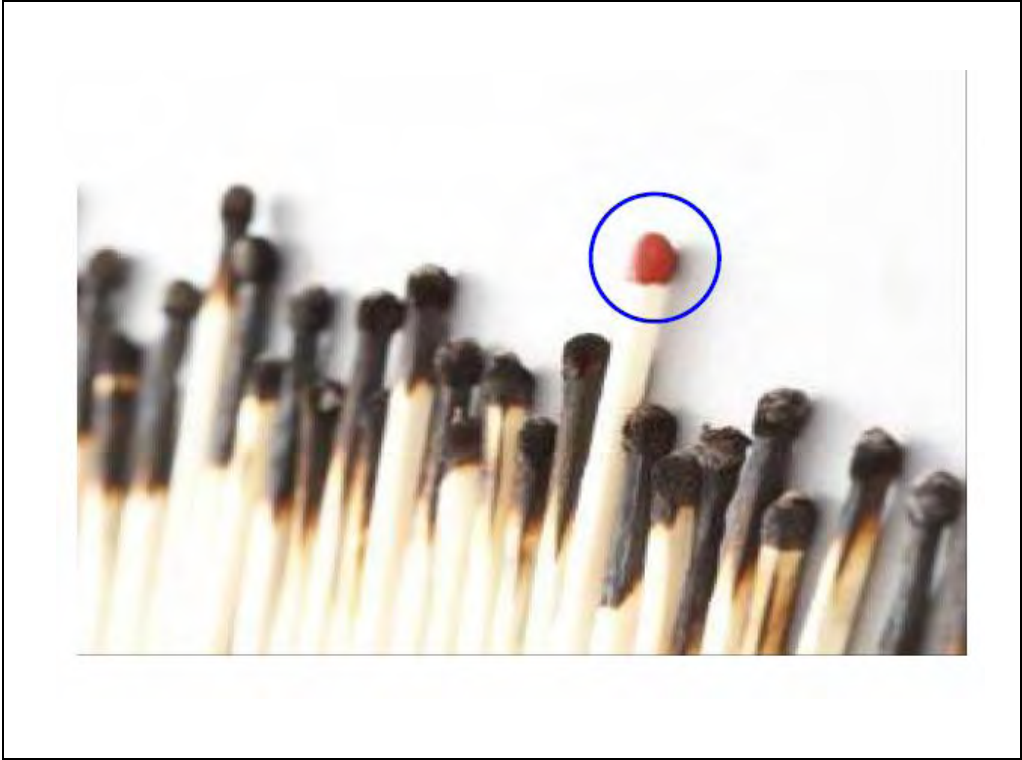




HOW

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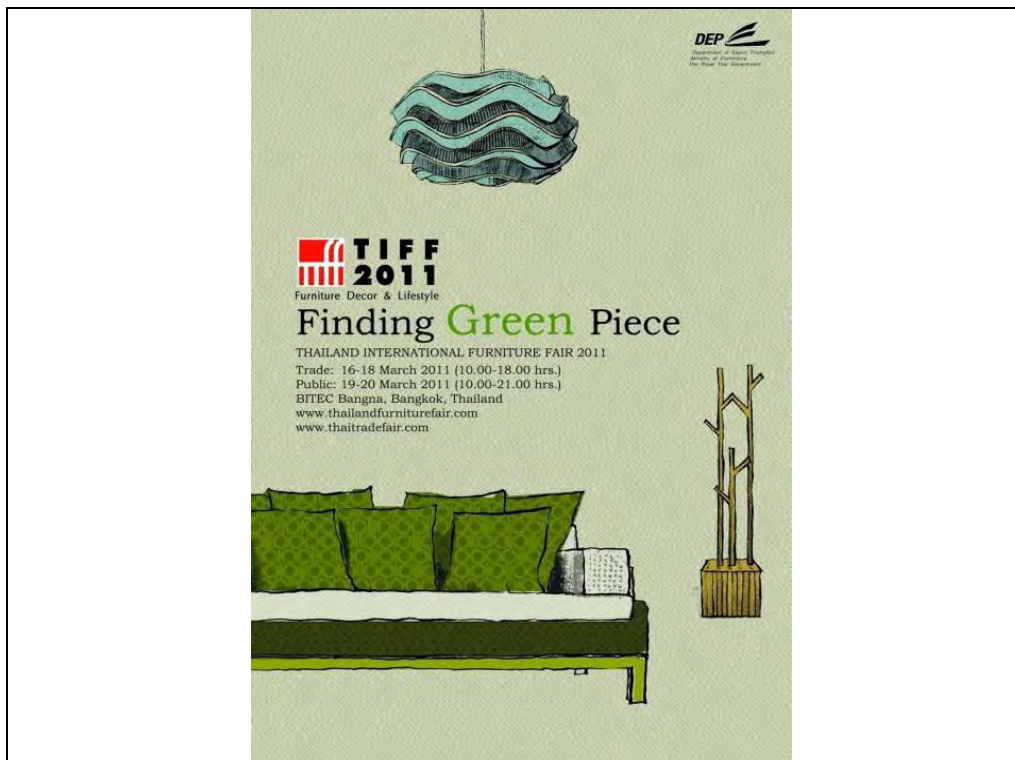
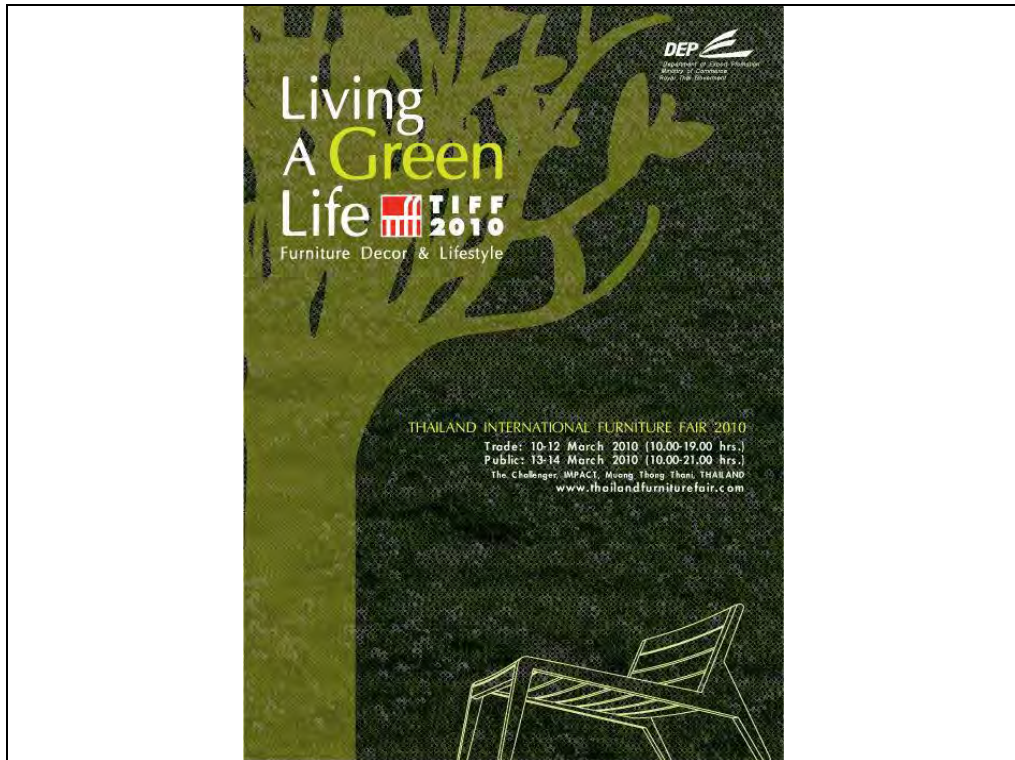




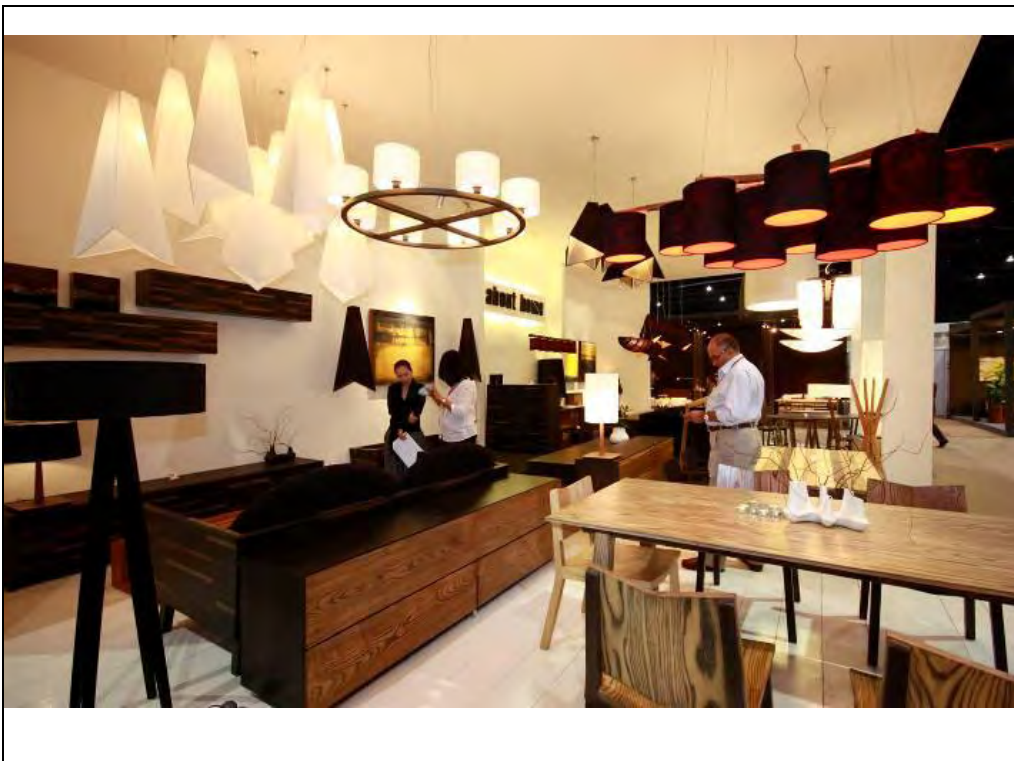
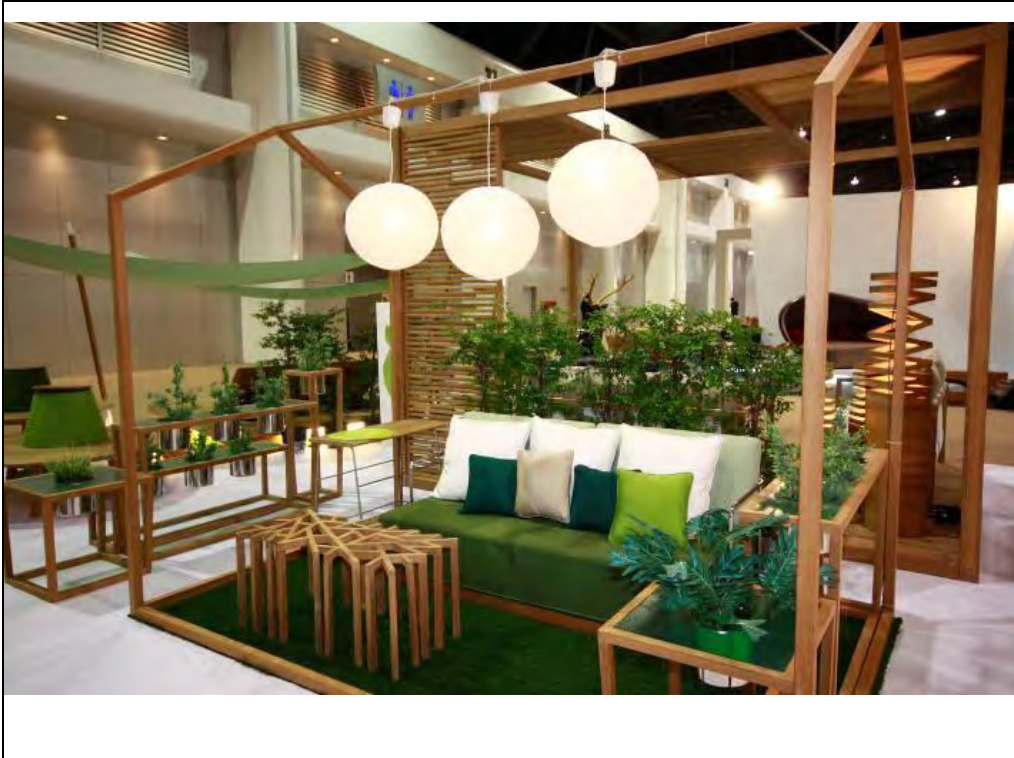
Creativity & Sustainability From Natural Products



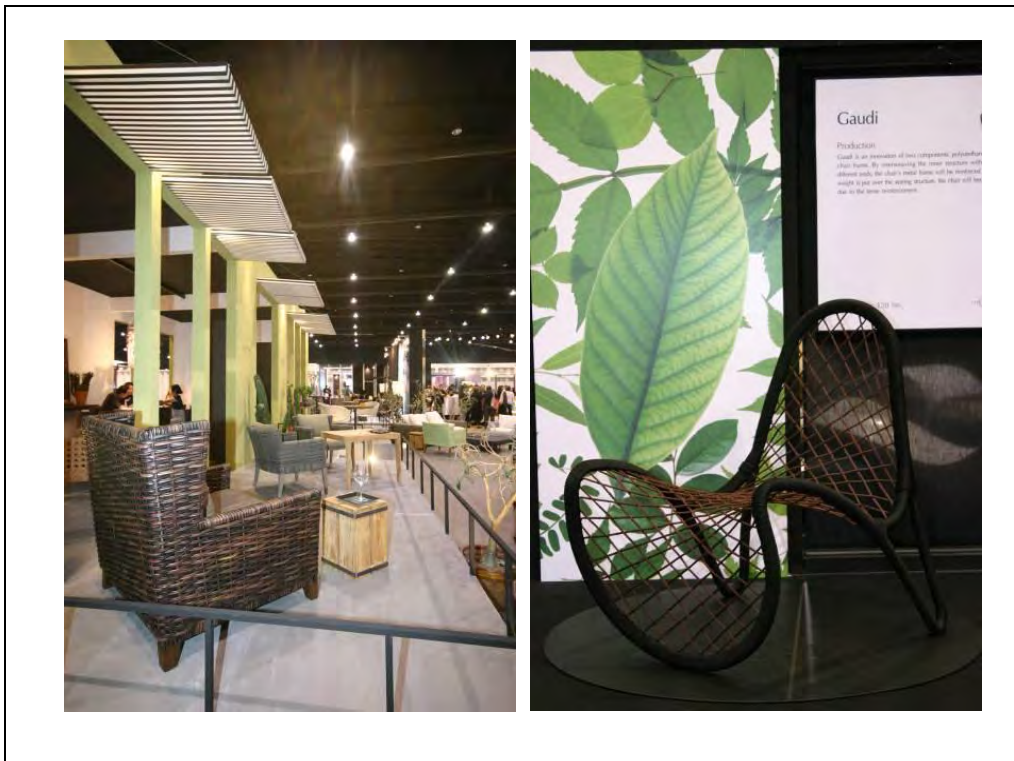
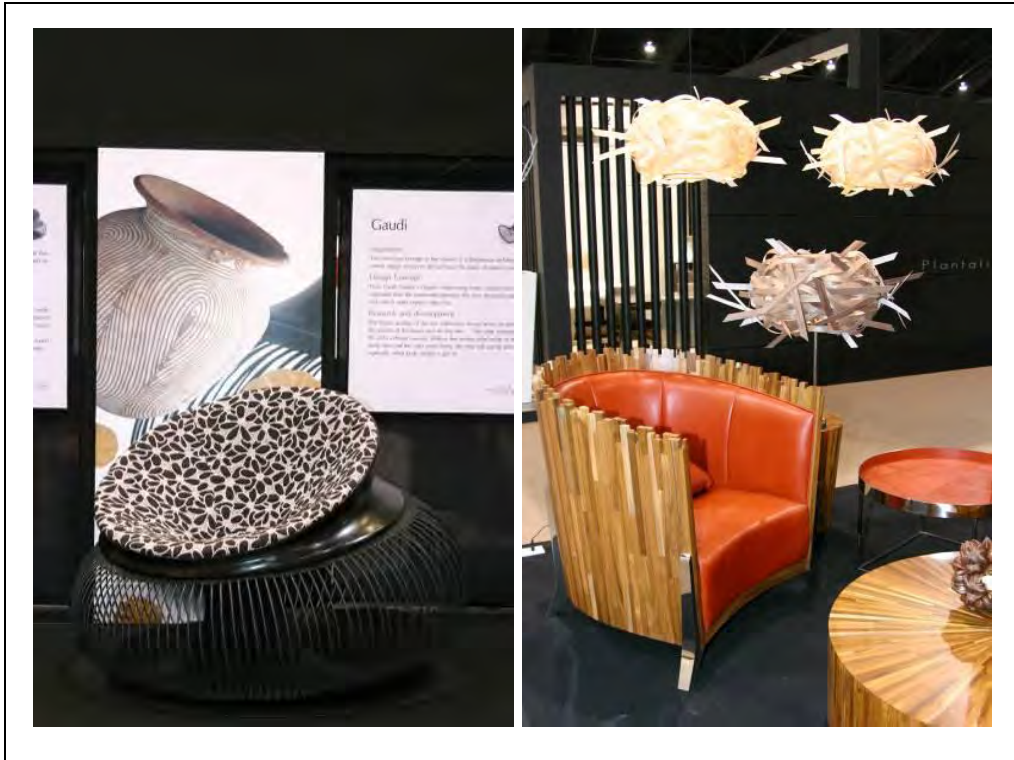


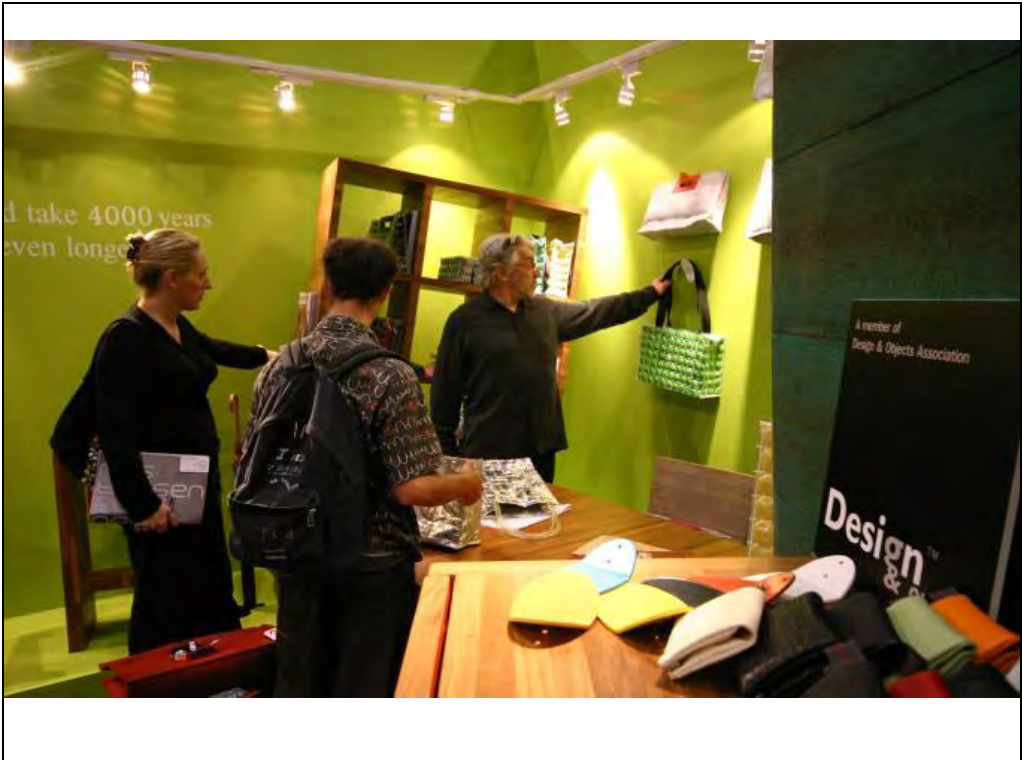






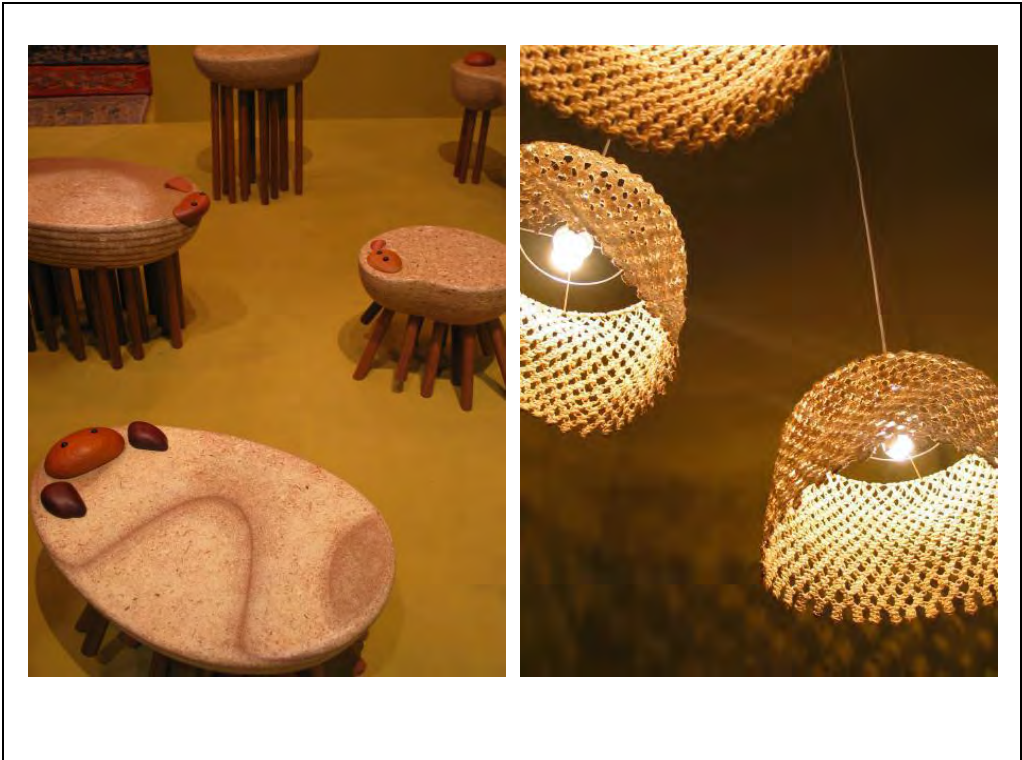
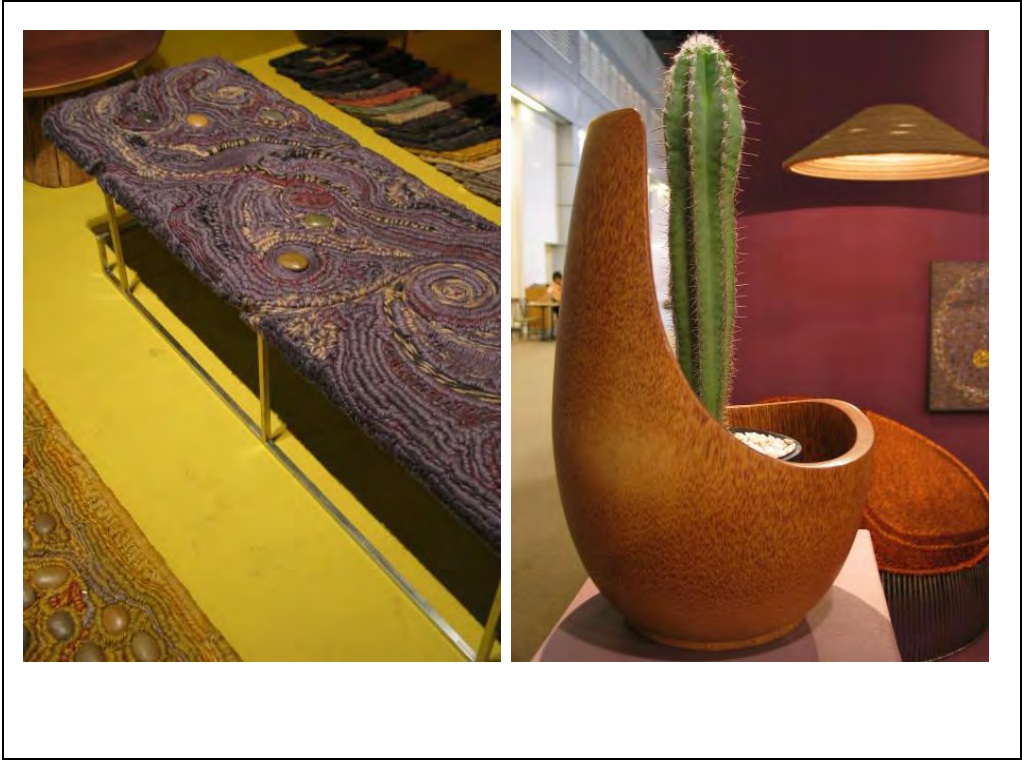


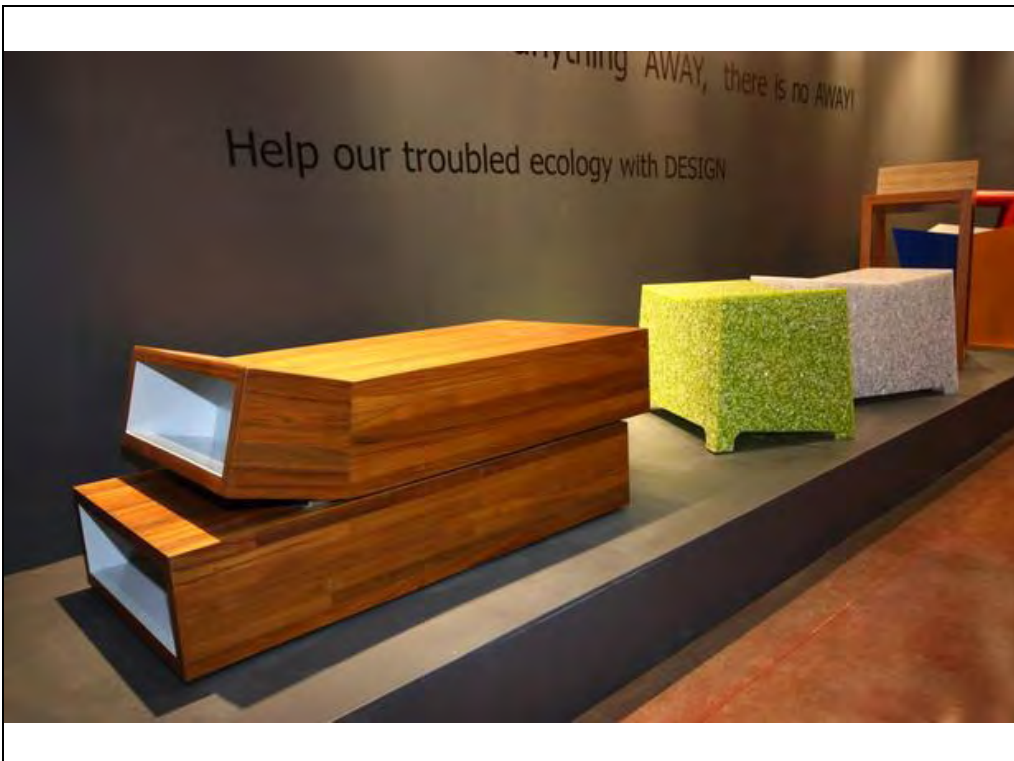
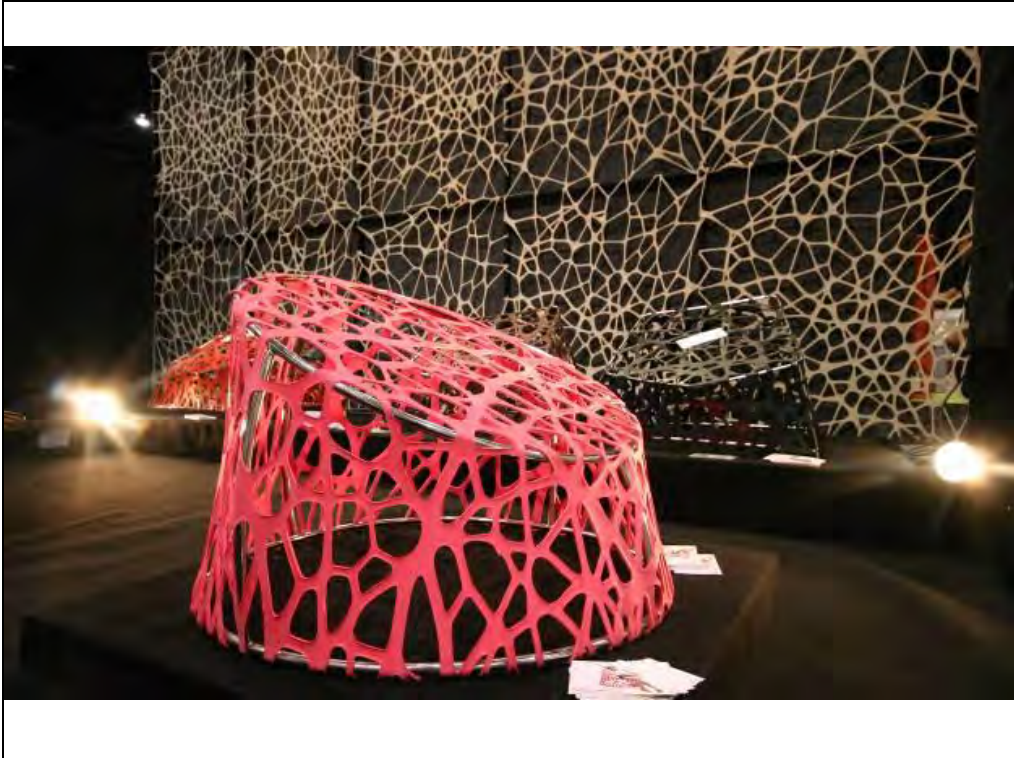


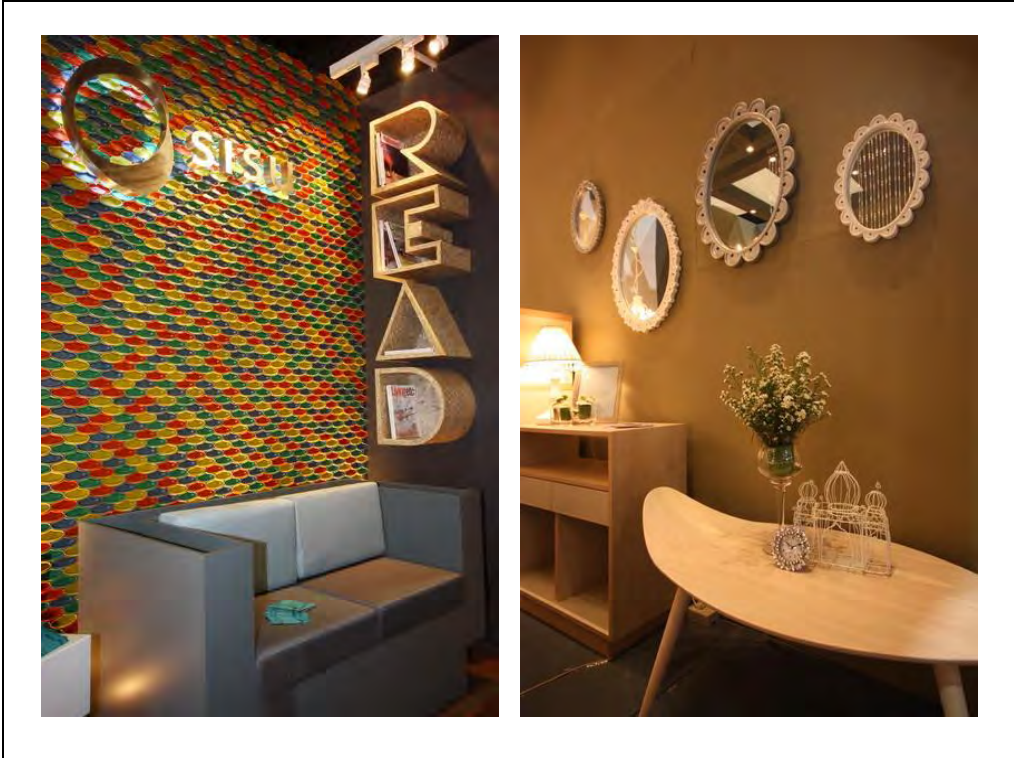


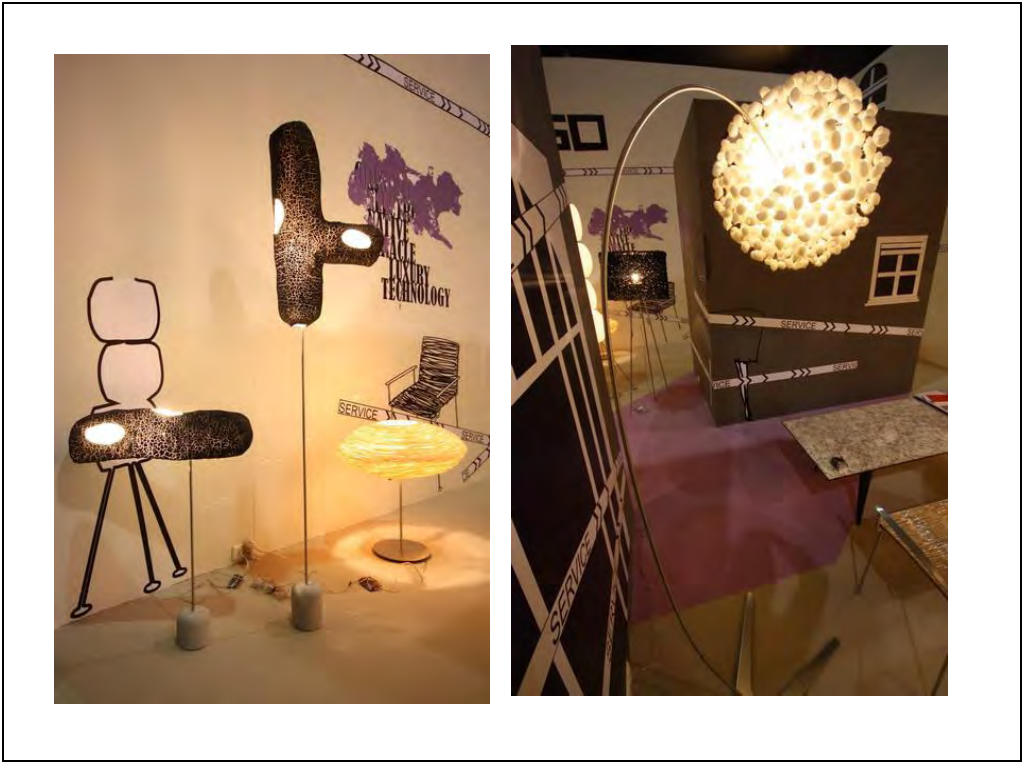


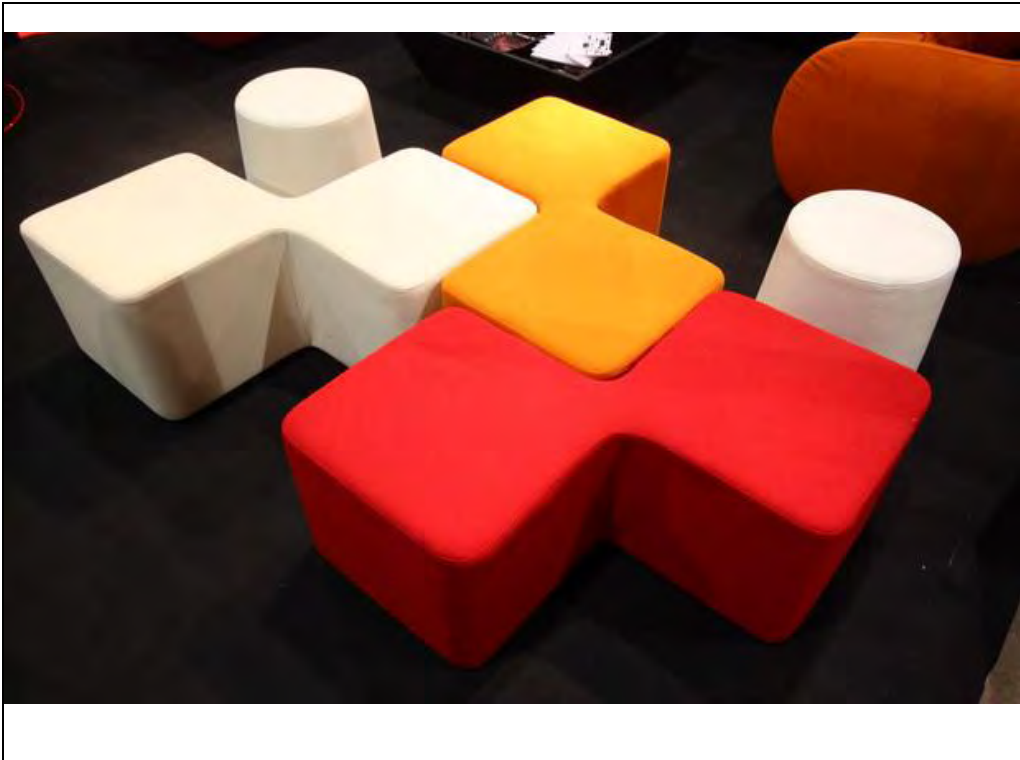


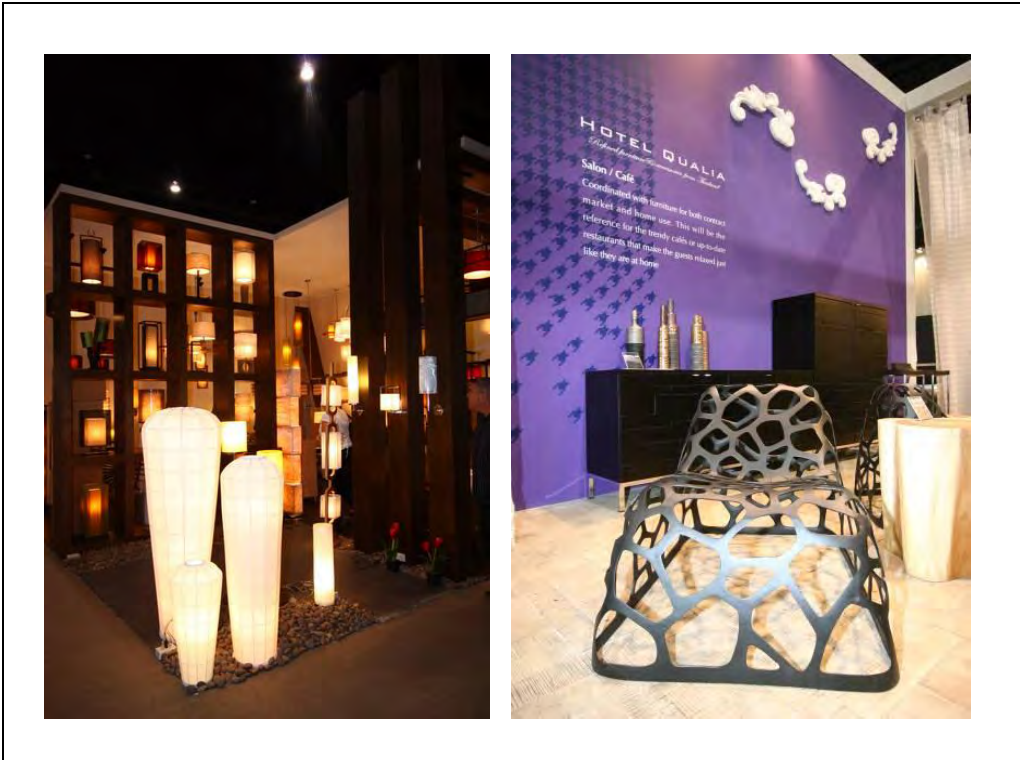


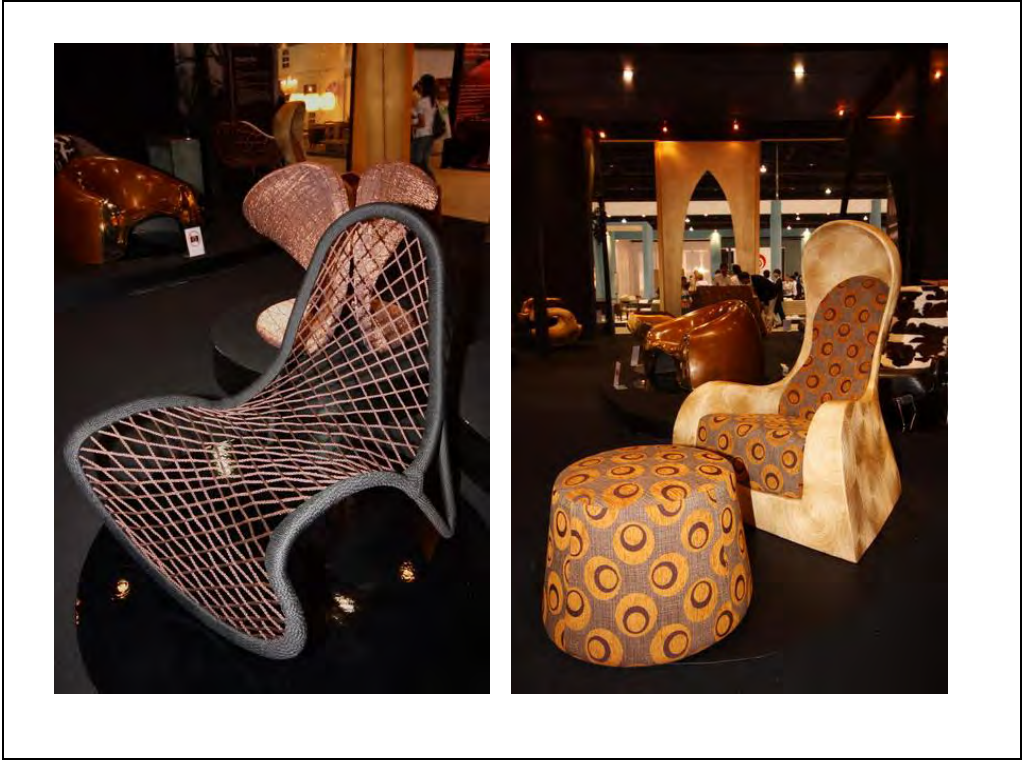




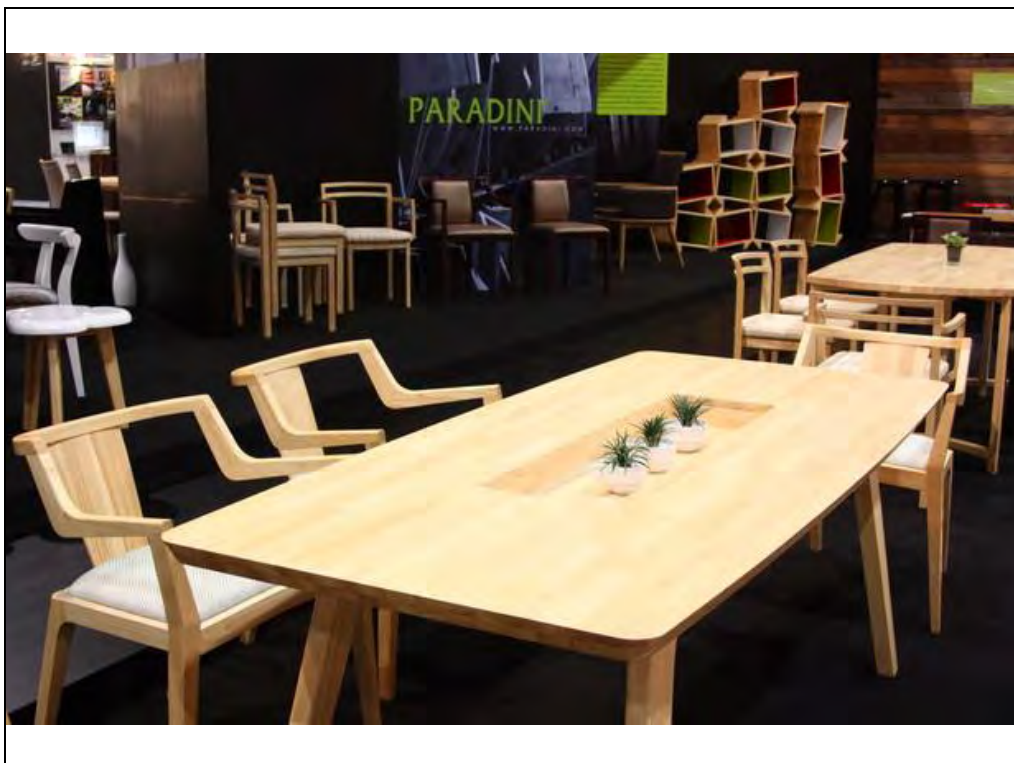
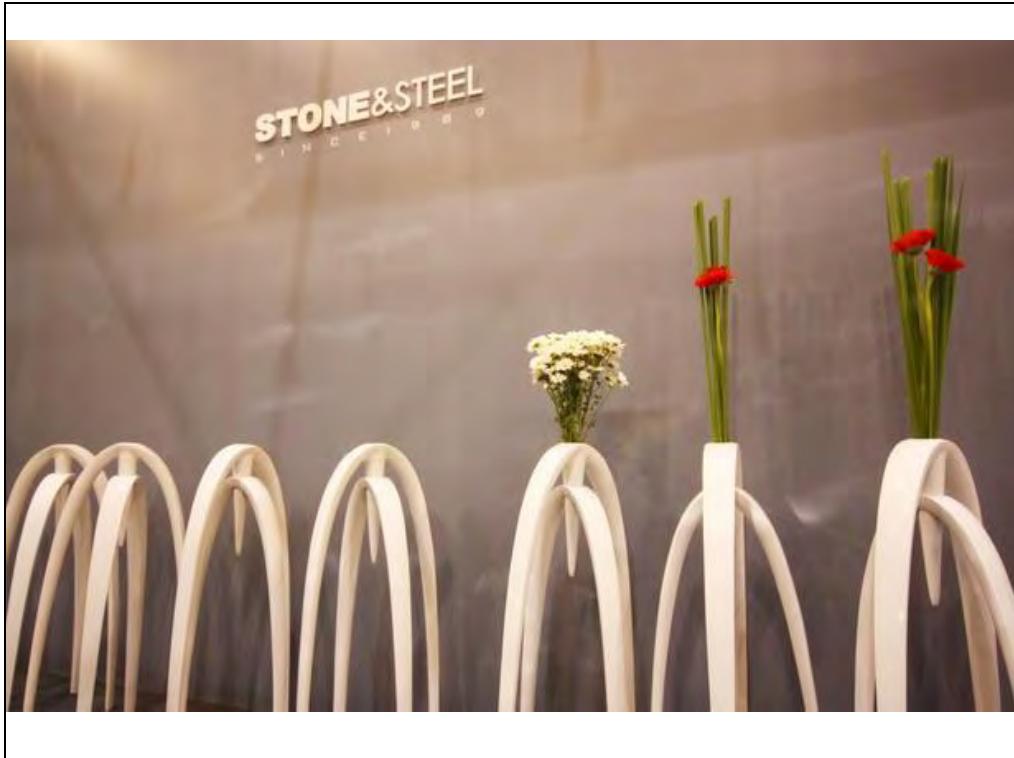






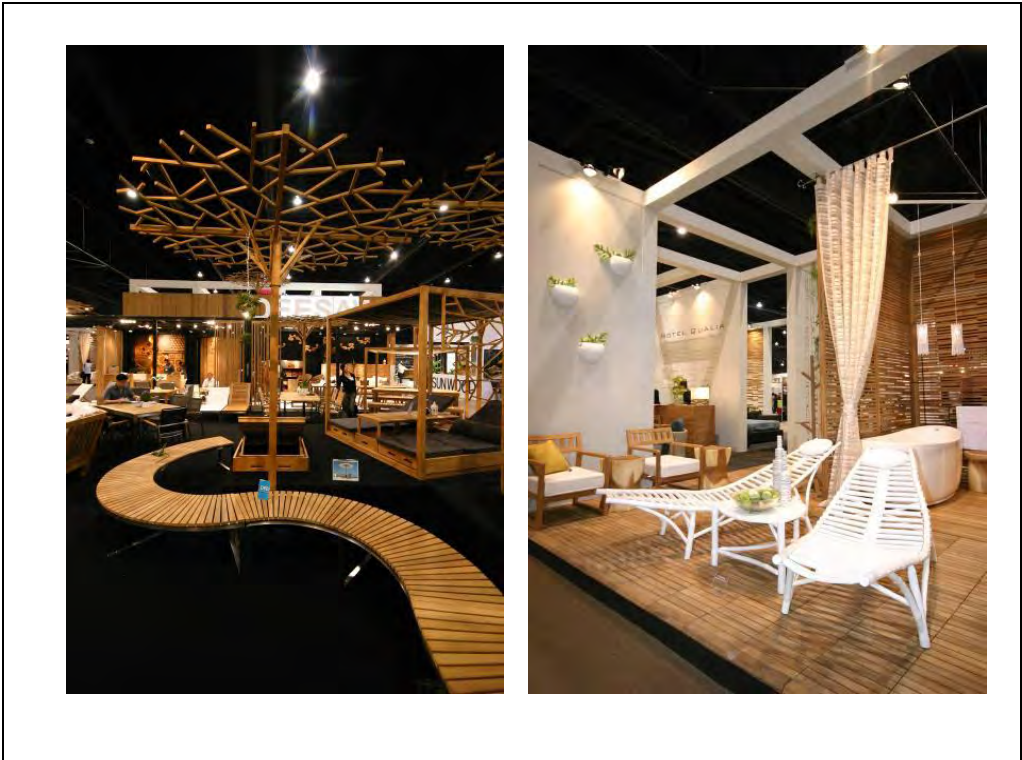






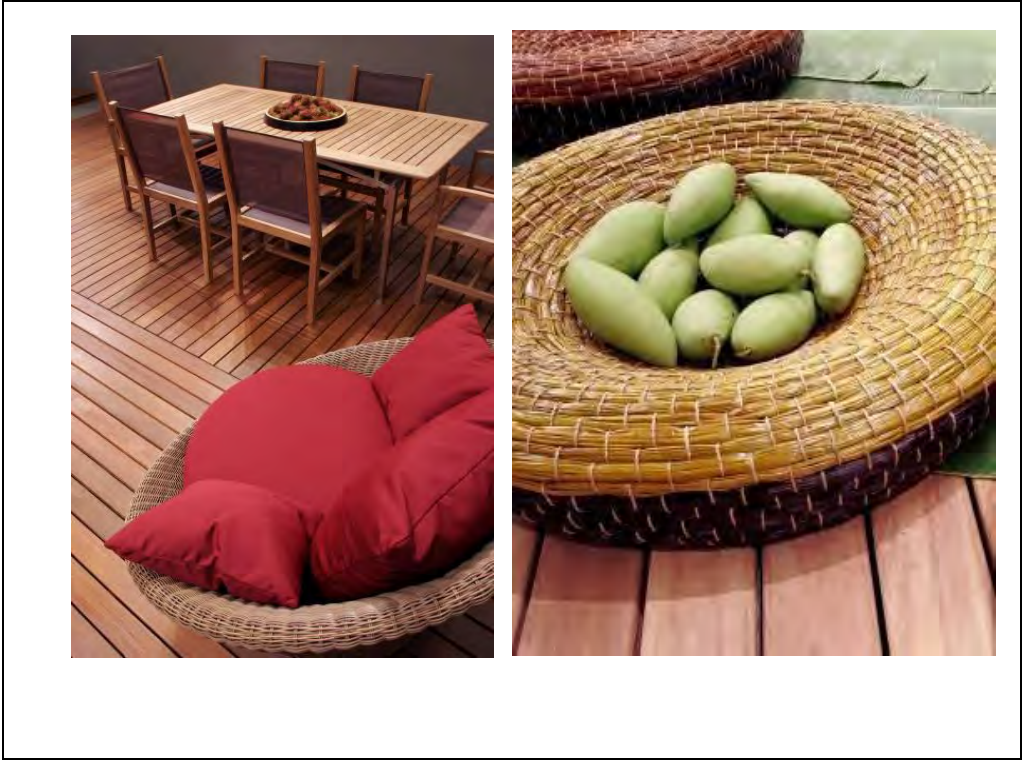


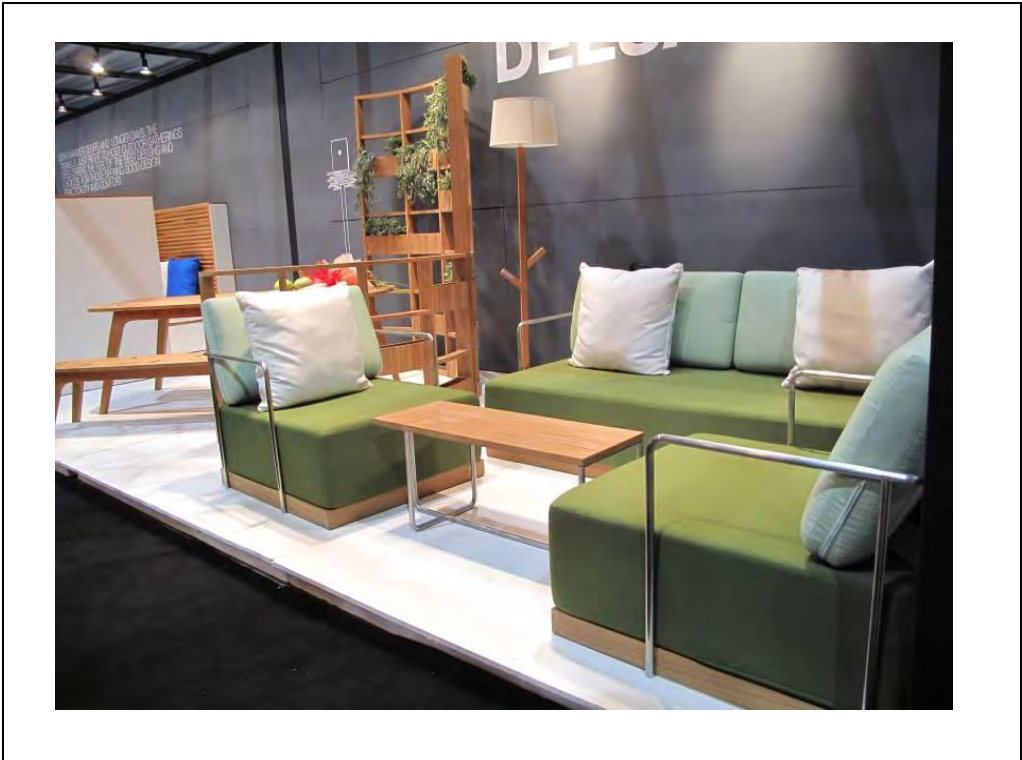


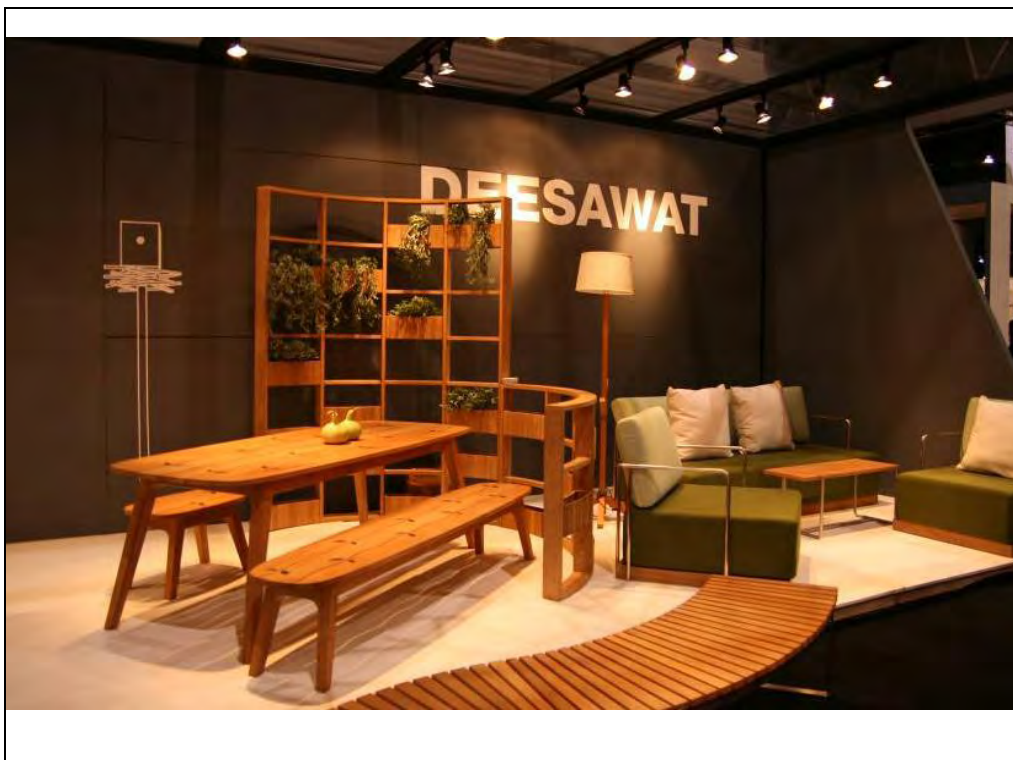
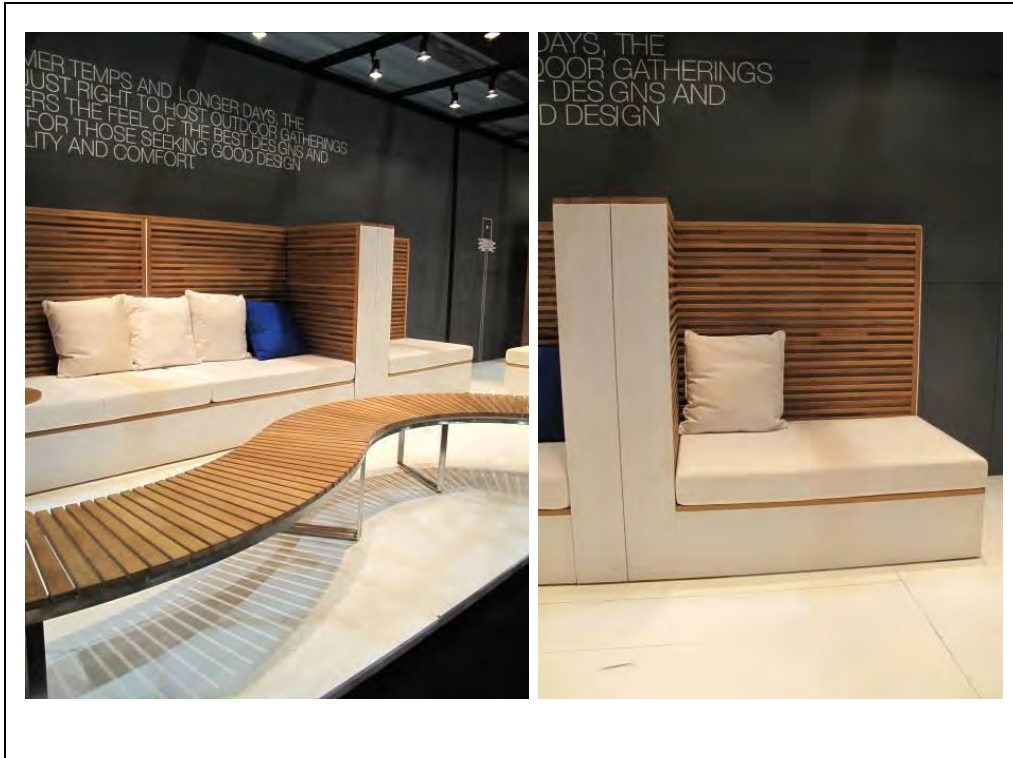






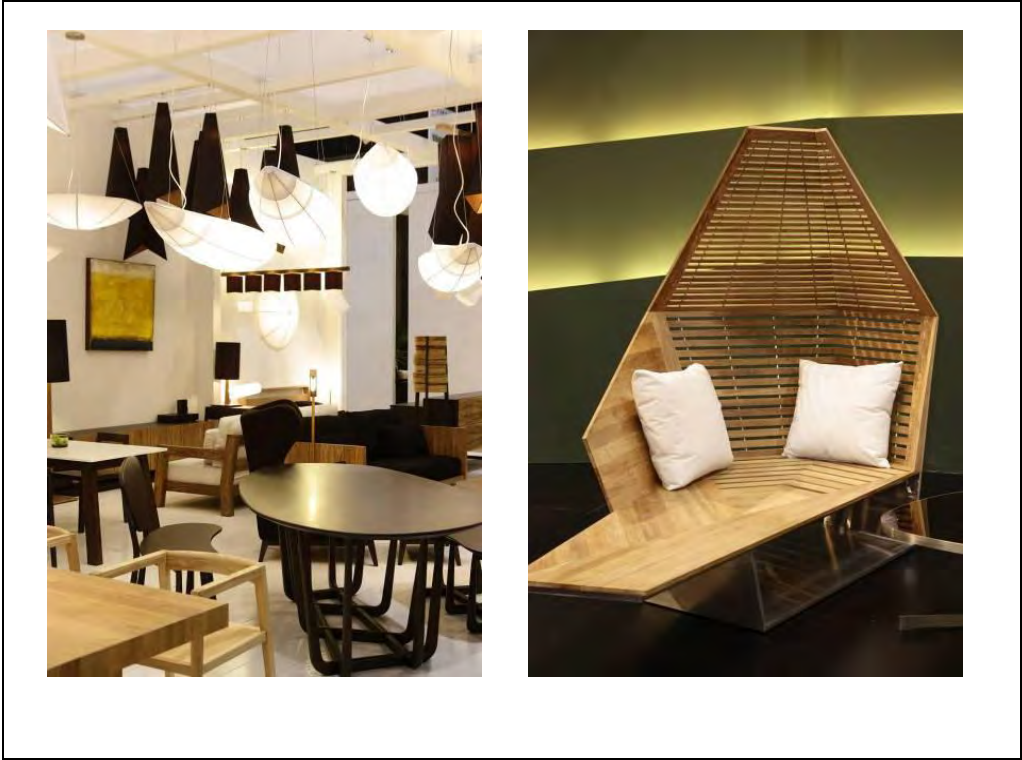


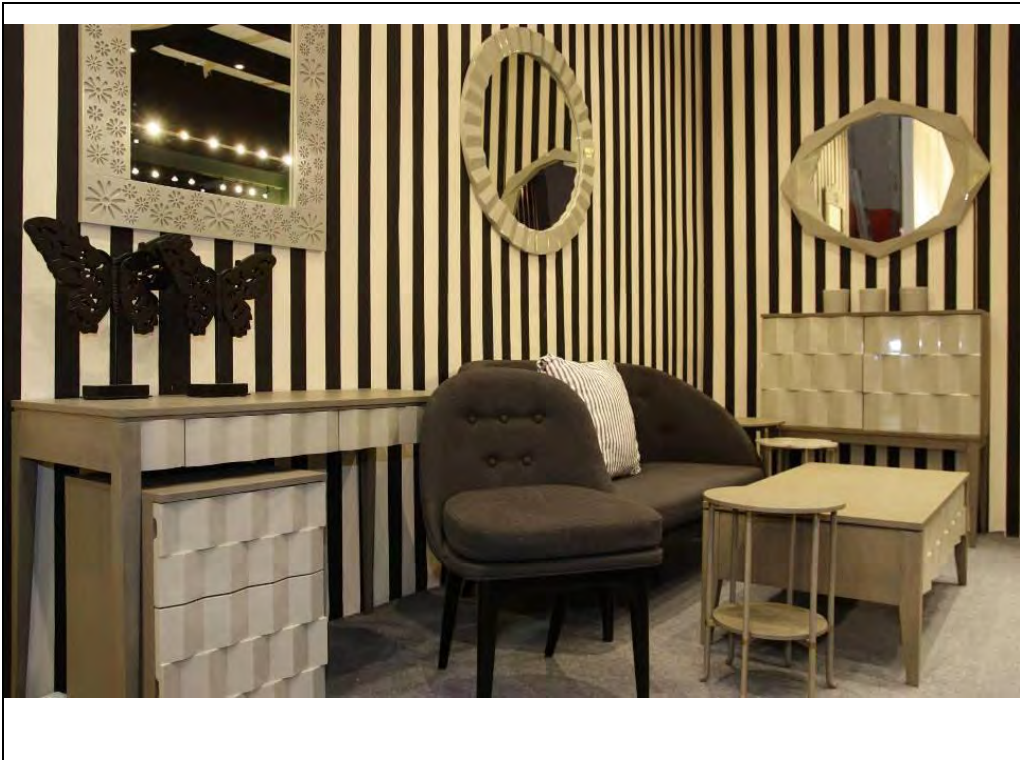
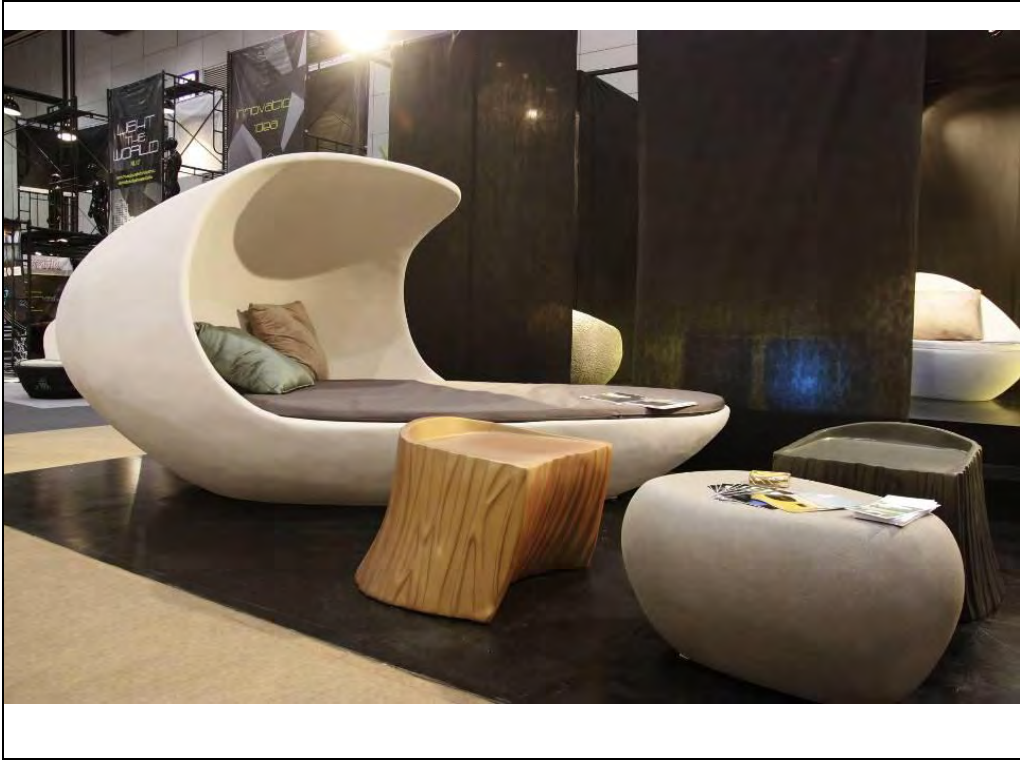


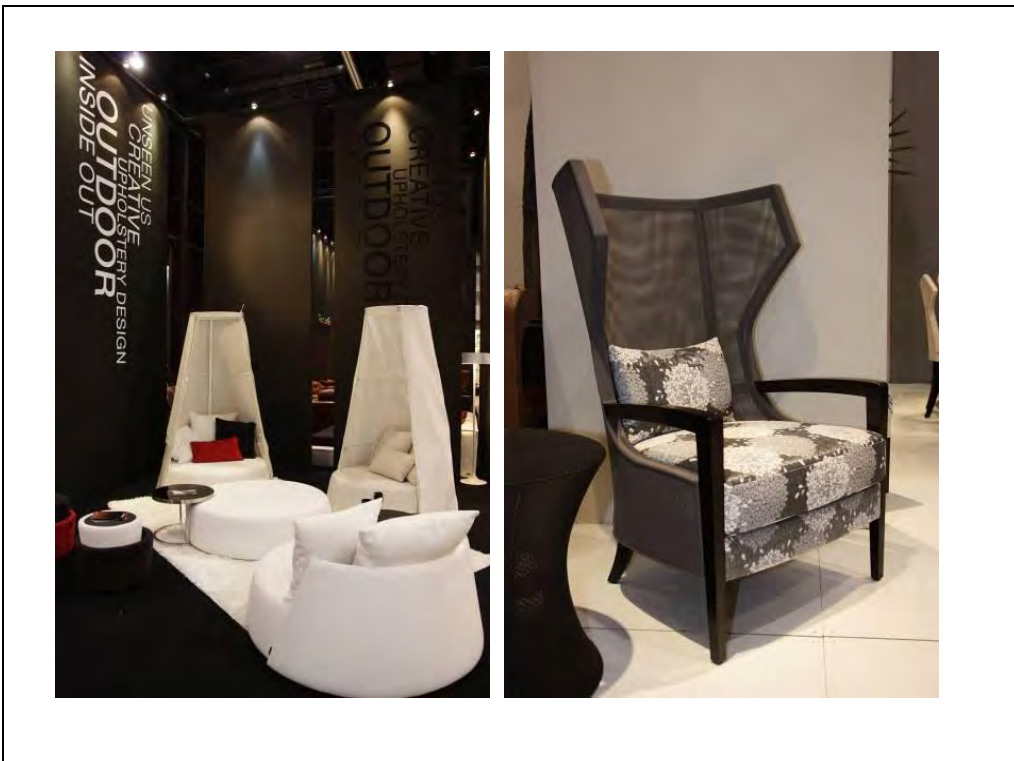


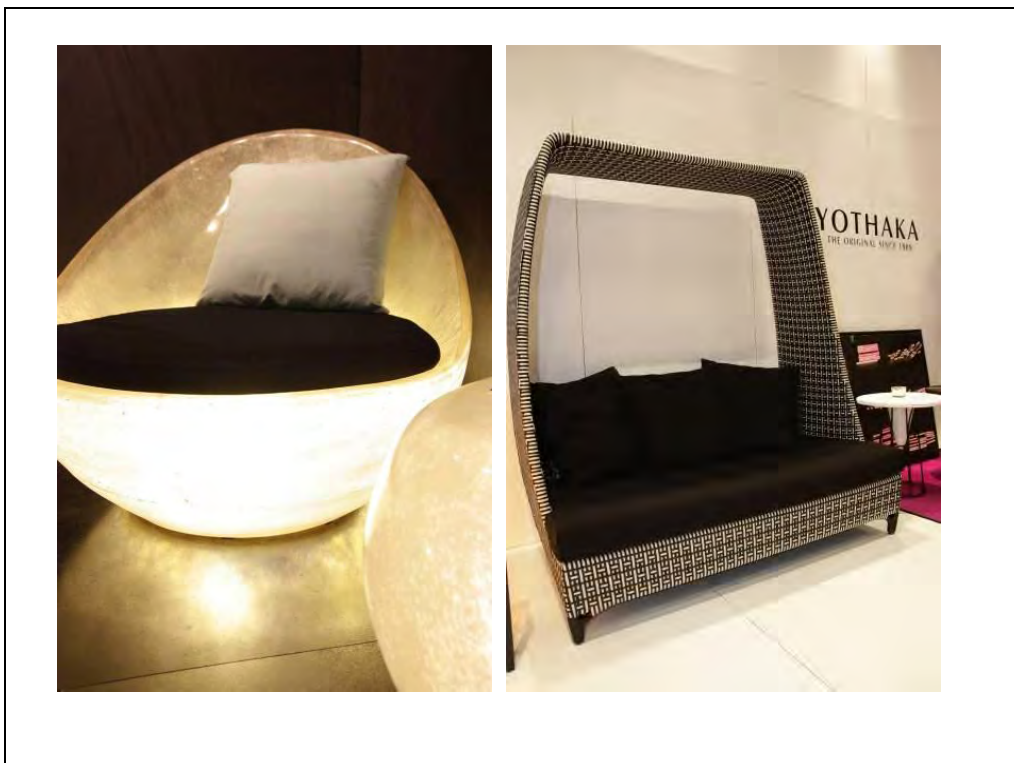












How to let people know??



My Thai Design is...
“a way to soothe the spirit,
awaken senses, honor nature and
dissolve ideas of separation.”

Elm Cowell, Paris
Artist, photographer, writer and consultant

My Thai Design is...
“a way to soothe the spirit,
awaken senses, honor nature and
dissolve ideas of separation.”

Mythaidesign.com

The collage features several elements: a woman on the left holding a camera and a large umbrella; two men on the right holding signs with the My Thai Design logo and quote; and three video player thumbnails at the bottom. The thumbnails show a child reading, a woman in a traditional Thai setting, and a woman speaking next to an astronaut. A large green leaf graphic is positioned on the right side of the collage.



Coming to Thailand!

Don't miss this Furniture Design Fair with Styles for a Greener Planet. Only comes once a year!





TIFF 2010 "Living A Green Life"

Here is your chance to see this remarkable traveling "Furniture for a Greener Planet" exhibition that only comes to Thailand once a year! You'll also be able to meet Thailand's foremost designers, manufacturers and suppliers. There will be lots of activities as well as exhibits of the most creative and innovative ideas that also reflect the highest quality and safety for the environment and man.

THAILAND INTERNATIONAL FURNITURE FAIR 2010

Trade : 10-12 March 2010 (10.00-19.00 hrs)
 Public : 13-14 March 2010 (10.00-21.00 hrs)
 Venue : The Challenger, IMPACT, Muang Thong Thani, Thailand
www.thailandfurniturefair.com

Hurry to register! This festival comes only once a year!
 For the best furniture and home décor
 Featuring the most creative designs and ideas
 Far beyond your imagination...
 All at TIFF 2010

Register Now
To attend
**BUSINESS
MATCHING**

Pre - Register

Product
Hi-light

Exhibitor
List

More
information

Special
Activities

Green Furniture Showcase

The finest furniture for a green life will be only display at the Green Furniture Factory magazine exhibit. The ideas are stylish, innovative and eco-friendly, and clearly demonstrate that Thailand is now among the leaders in the production and export of Green Furniture. This is a must to see because of the quality of materials, meticulous craftsmanship and uniqueness of each design.

Ensure that you have the latest and the greatest possible collections of furniture designs from Thailand that are Inspiring, Original, Green and Admirable.

Visit www.mythdesign.com today
 Join the live conversation on Twitter and Facebook.

Organized by:  Supported by: 



The Countdown has begun

For the Green Furniture Exhibition Only once a Year In Thailand





TIFF 2010 "Living A Green Life"

Get ready to see the Green Furniture Caravan. This once-a-year showcase will be filled with exhibits of the most creative and innovative ideas by the foremost Thai designers. Here you will be able to discuss new business opportunities with Thailand's best manufacturers and suppliers. With such a comprehensive exhibition, you're certain to find everything you could hope for.

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Special
Activities

American Hard Wood Design Camp

TIFF 2010 has organized the American Hardwood Design Camp project to support creative students and give them a stage to display their outstanding work. You don't want to miss seeing these new and innovative ideas as, in the future, these could become top selling furniture and home décor.

Ensure that you have the latest and the greatest possible collections of furniture designs from Thailand that are Inspiring, Original, Green and Admirable.

Visit www.mythdesign.com today
 Join the live conversation on Twitter and Facebook.

Organized by:  Supported by: 

Ready to see...



Living A Green Life
TIFF 2010
Furniture, Decor & Lifestyle



Thailand's biggest and best Green Furniture Exhibition
Your only chance as it comes
Only Once A Year!

E-Direct Mail No.10




TIFF 2010 "Living A Green Life"

This furniture and home décor showcase is Thailand's biggest of the year. Organized by the Department of Export Promotion (DEP) under the Ministry of Commerce, supported by Thai Furniture Industry Club, the Federation of Thai Industries, and Thai Furniture Industries Association, this opportunity cannot be missed. This will be your chance to meet award-winning Thai designers, manufacturers and suppliers as well as see thousands of pieces of furniture and home décor designed and manufactured especially for a greener world.

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Living A Green Life
TIFF 2010
Furniture, Decor & Lifestyle

Furniture

Showcase
in Thailand Soon!
Thousands of amazing designs
to make our world greener!






TIFF 2010 "Living A Green Life"

Thailand's foremost designers will be exhibiting their innovative work. Together with a vast selection of furniture and décor, all manufactured using quality materials and production systems friendly to our environment.

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BUSINESS
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Please click
here

Exhibitor

Information

Special




Organized by:  Supported by:  

Thailand

International Furniture Festival
Blending Nature with Design
Come Only Once a Year

Living A Green Life Tiff 2010
Furniture Decor & Lifestyle

TIFF 2010 "Living A Green Life"
This Furniture Trade Show features creators admired worldwide by Thailand's foremost designers, using a variety of natural materials, including those that can replace wood. This is also your chance to meet designers, manufacturers, traders and entrepreneurs and enlarge your business network.

THAILAND INTERNATIONAL FURNITURE FAIR 2010
Trade : 10-12 March 2010 (10.00-19.00 hrs)
Public : 13-14 March 2010 (10.00-21.00 hrs)
Venue : The Challenger, IMPACT, Muang Thong Thani, Thailand
www.thailandfurniturefair.com

Hurry to register! This festival comes only once a year!
For the best furniture and home décor.
Featuring the most creative designs and ideas
Far beyond your imagination...
All at TIFF 2010.

Register Now To attend BUSINESS MATCHING
Pre-Register
Product Hi-light
Exhibitor List
More information
Special Activities

Organized by: DEP
Sponsored by: TIFA THAILAND FURNITURE

The Best...

Thai furniture designs that break new ground in innovation for a Greener Life

Living A Green Life Tiff 2010
Furniture Decor & Lifestyle

TIFF 2010 "Living A Green Life"
This furniture and home décor fair will unveil the very best, most captivating, innovative designs, certain to please you as well as our environment. Here you will see the most creative ideas and quality products as well as environmentally safe production processes, reputed the world over.

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Exhibitor
More information
Special

Organized by: DEP
Sponsored by: TIFA THAILAND FURNITURE



Awesome designs! Amazing Ideas!

Thousands of Thai-created Eco-friendly 'Green' Designs... What everyone is waiting for!



TIFF 2010 "Living A Green Life"

This furniture and home decor fair features stylish solutions to combat global warming and preserve our climate. The designs are extraordinary. The colors spellbinding. The creativity beyond description. Innovative designs creativity up to development of natural materials to produce new. A vast collection of innovative products, both Thai and from abroad, produced with all forms of natural materials - unveils for you a whole new dimension in furniture design and manufacturing.

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 All at TIFF 2010



This is your chance to build closer business relationships!

TIFF comes just once a year to Thailand. It's the biggest gathering and your best chance to meet designers, manufacturers, and the movers of the Thai furniture industry. With as many as 800 booths, here is a sure opportunity to expand your business prospects and success.

Register Now To attend BUSINESS MATCHING

Pre - Register

Product Hi-light

Exhibitor List

More information

Special Activities





Furniture for A Green Life

Thousands of Stunning Designs Showcase is Coming Soon!



TIFF 2010 "Living A Green Life"

The Thailand outstanding furniture fair unveils a whole new dimension in design innovations. This year, keep on following reduce global warming trend, manufacturers and designers persist in presenting their newest designs in this event. With the country's high potentials, TIFF 2010 will also offering attractive investment opportunities to discover new networks and success. Come to visit TIFF 2010, you will clearly see and understand just how exceptional Thailand's manufacturers, materials, skilled craftsmanship and suppliers truly are.

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 Far beyond your imagination...
 All at TIFF 2010



"T Style Project" The outstanding Thai designs, displayed by renowned Japanese designer

The winners of the "Contract Market" project held in Japan will be on display in total lifestyle concept. Chosen by Toshiyuki Kita, one of Japan's foremost designers, this impressive collection of Thai export designs clearly show just how outstanding Thai products are when compared to the best of the world.

Register Now To attend BUSINESS MATCHING

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Product Hi-light

Exhibitor List

More information

Special Activities



The Best in Furniture Design



Living A Green Life Tiff 2010
Furniture Decor & Lifestyle

E-Direct Mail No.6

Design Excellence Award Winners 2009

Demark

The Best for a Green Life

The Best Creative Innovations Here, in Thailand!



TIFF 2010 "Living A Green Life"

Thailand's biggest and best furniture & home décor showcase offers you the best chance to expand your business. Here you can meet the foremost Thai designers, manufacturers and suppliers. You can also take a close look at their stylish creations designed with natural materials to help reduce global warming with thousands of designs on display.

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Far beyond your imagination...
All at TIFF 2010.



"Demark" the mark of design excellence

Demark, or the Mark of Design Excellence, showcases award winning designs in two categories: Industrial Handicrafts and Industrial Products. Organized by the Thai government as a special design project, TIFF 2010 will serve as the stage for this outstanding furniture.

Register Now To attend BUSINESS MATCHING

Pre - Register

Product Hi-light

Exhibitor List

More information

Special Activities

Organized by



Supported by





Living A Green Life Tiff 2010
Furniture Decor & Lifestyle

E-Direct Mail No.7

Almost Here!

Don't miss this 'Once-a-Year' Furniture for Greener Living Showcase!



TIFF 2010 "Living A Green Life"

With more than 800 booths featuring the finest furniture and home décor, you can see the most innovative designs created by Thai designers for a greener life. You can also meet and talk to the designers, manufacturers and suppliers, known for their quality, world standard, innovative products. Coming just once a year, TIFF 2010 is a rare opportunity that cannot be missed!

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Waste to Wealth Project

Another of the TIFF 2010 supported projects, 'Waste to Wealth', organized to support Thai Industrial Technology Development (ITAP), showcases furniture produced from waste products. It unveils for you another avenue to help reduce global warming using recycled materials. These Valued Added Furniture are an important alternative to protect our ecosystem and preserve our environment. These innovative products are certain to be an amazing surprise!

Register Now To attend BUSINESS MATCHING

Pre - Register

Product Hi-light

Exhibitor List

More information

Special Activities

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Supported by



To wrap up Thai Design

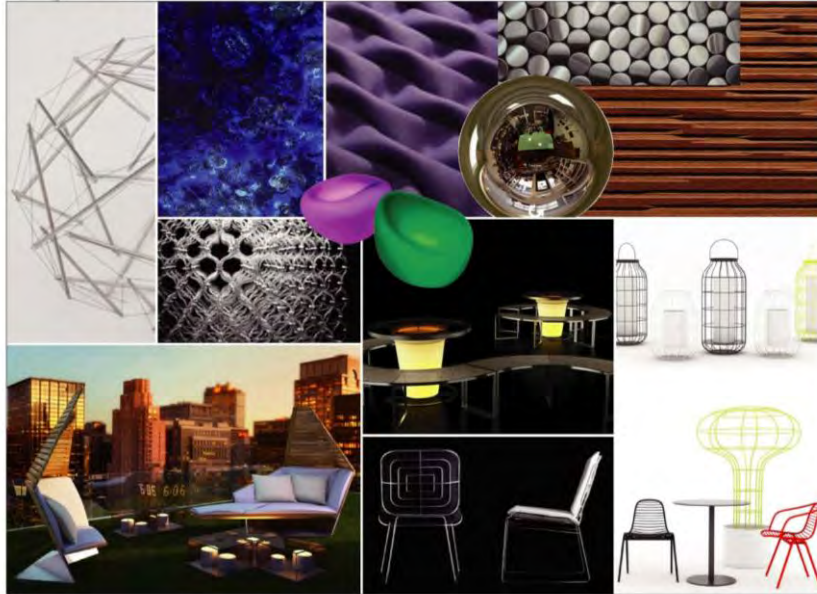
Hybrid & Unison

Contrast, Mixture, Harmony, or Integration of things bring us wonderful effects & results

Key Words

- Combination & contrast of **materials**
- Mixture of traditional **craft** & the newest **technology**
- Harmony of **style & function**
- Integration of international product & **sense of Thai**

Hybrid & Unison



Reflection of Nature

The mother Nature, a treasure house of our inspiration

Key Words

- Inspiration from **nature & everyday life**
- Usage of **natural material** from Thailand
- **Hand craft** with a long history
- Philosophy of **eco-conscious**
- **Sustainable design** for environment



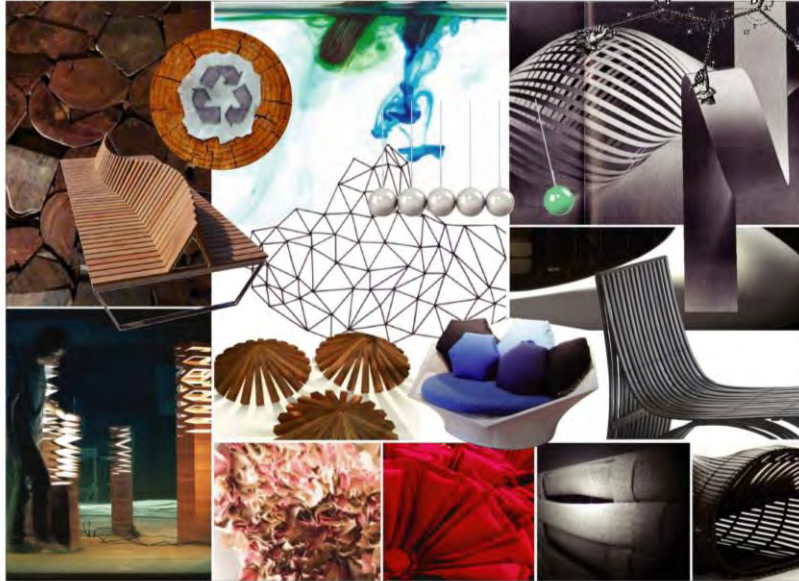
Action / ReAction

We believe our actions, concept and design bring positive reactions to our life.

Key Words

- **Action** of "RE-concept" causes good **Reaction** to the world.
- We have responsibilities for our **Actions** because of its social, environmental, and ecological **Reactions**.
- **Actions** of our functional furniture give us delightful **Reactions**.

Action / ReAction



DEESAWAT
WHERE QUALITY
COMES
NATURALLY

LIFESTYLE - CONNECTION - ARCHITECTURE
INDOOR AND OUTDOOR
PAST AND PRESENT
NATURE AND HUMAN

< ENTER SITE >

Deesawat

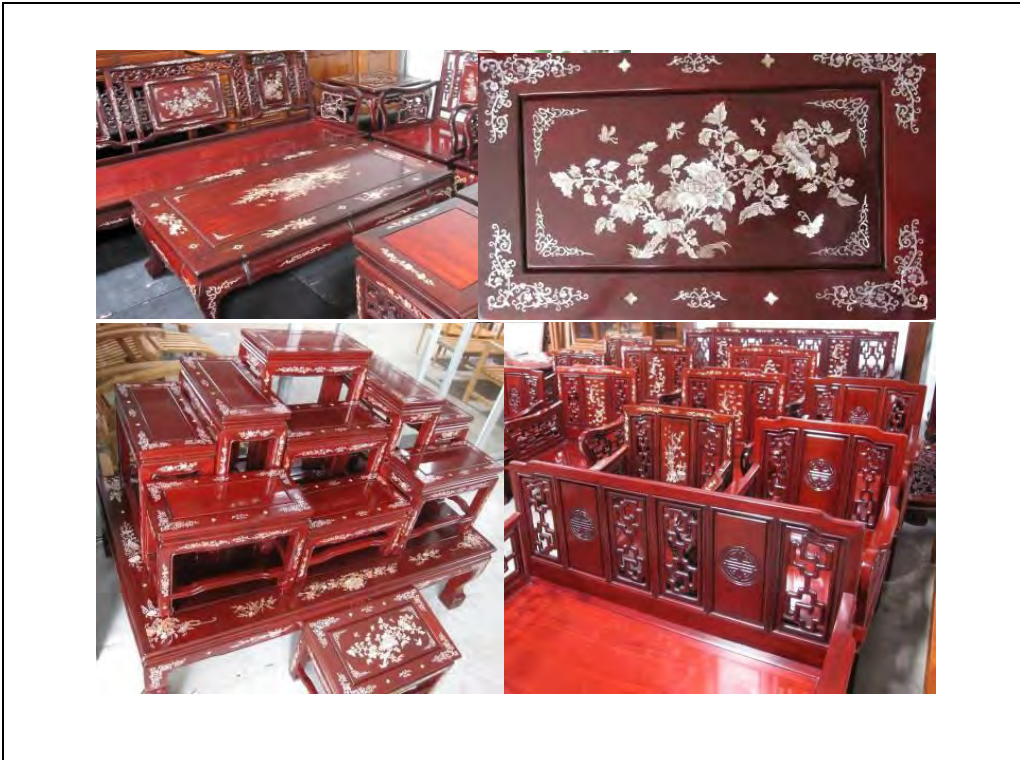


1972
Saw mill, wood
processor
BOI

Deesawat



Rosewood Furniture, flooring, door,
etc



Deesawat



***Branches: Hong Kong,
Singapore,
USA (New York, Houston, San
Francisco)***

Deesawat



**Deesawat Industries
Co.,Ltd.
Deesawat Design
Co.,Ltd.
Newsawat Sawmill Ltd.**

Deesawat



Crisis

Deesawat



Restructure



“SME is the key”

Deesawat Team

- Management/ sale/
Design 40
- Production 200





- Awarded Royal Flag Environmentally sound factory

Ministry of Industry

Best SMEs
National Award
2006



Prime Minister's Industry Award (SME)



Asia Furniture Leader Award

Sustainable Furnishing Council (SFC)

Greenleader / Green AP



DEESAWAT

DEES up your outdoor living style

DEES

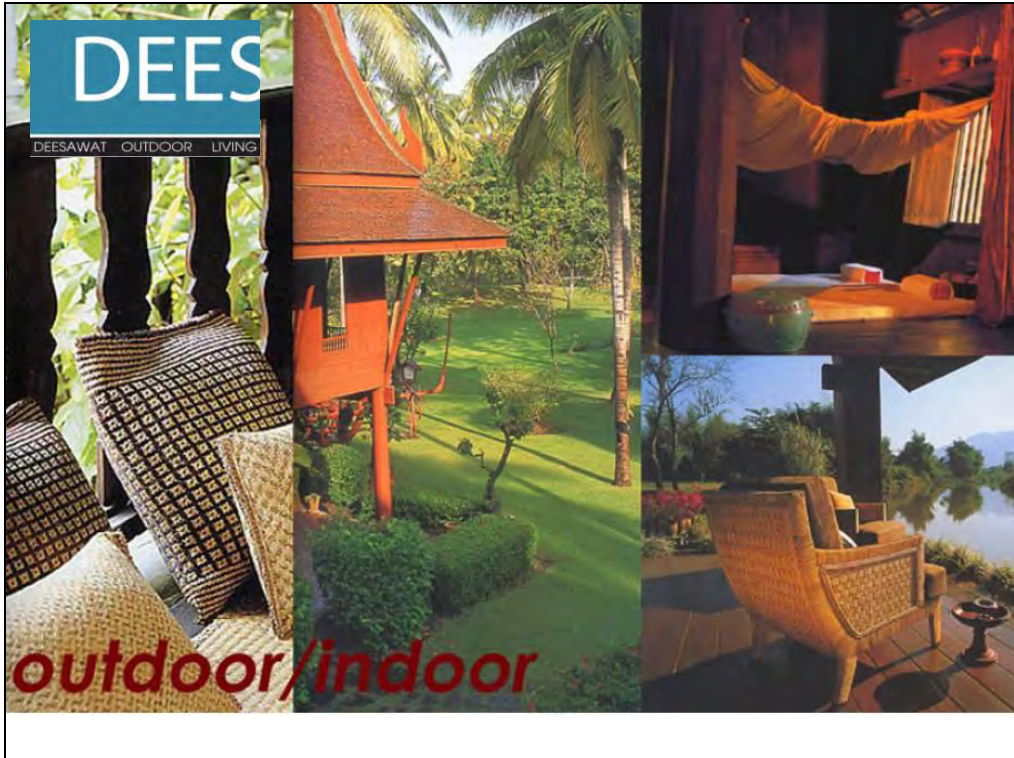
DEESAWAT OUTDOOR LIVING

Lifestyle – Connection – Architecture

DEES

DEESAWAT OUTDOOR LIVING

Where DEES belongs





Brand Personality

Expert
Relax
Tasteful



Outdoor lifestyle



Outdoor lifestyle



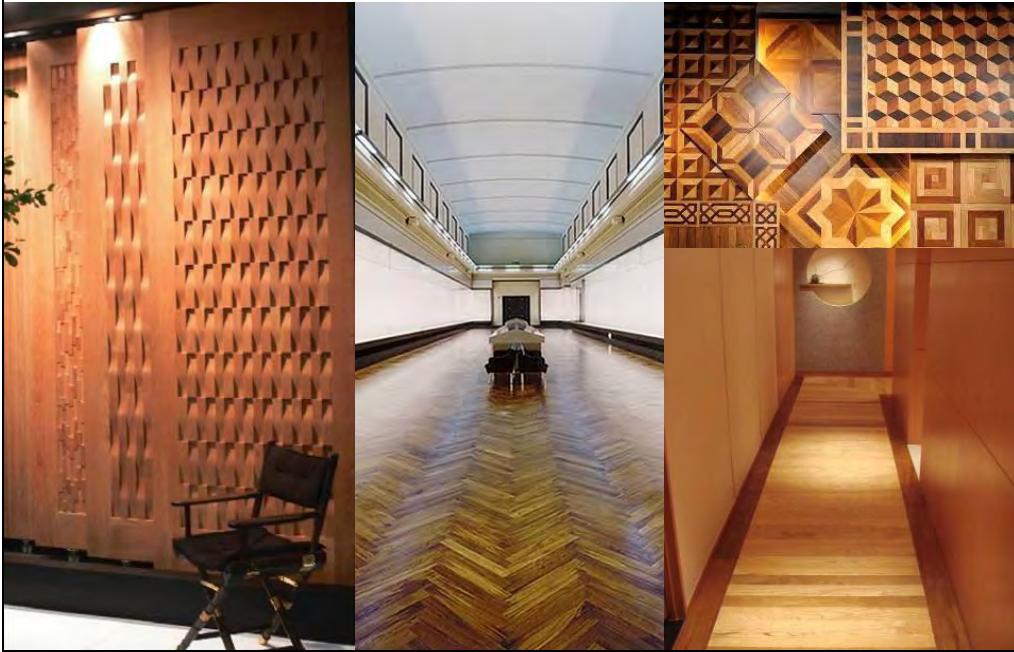
Indoor outdoor lifestyle



Outdoor architecture



Architecture



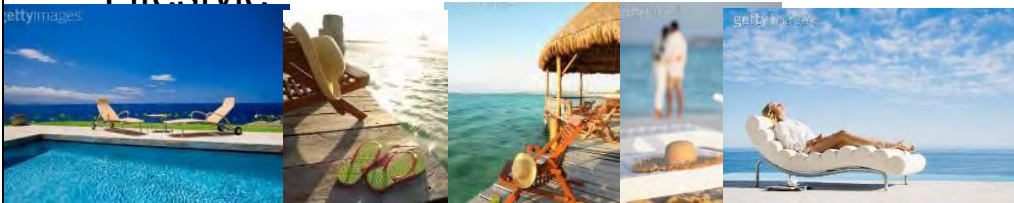
Product

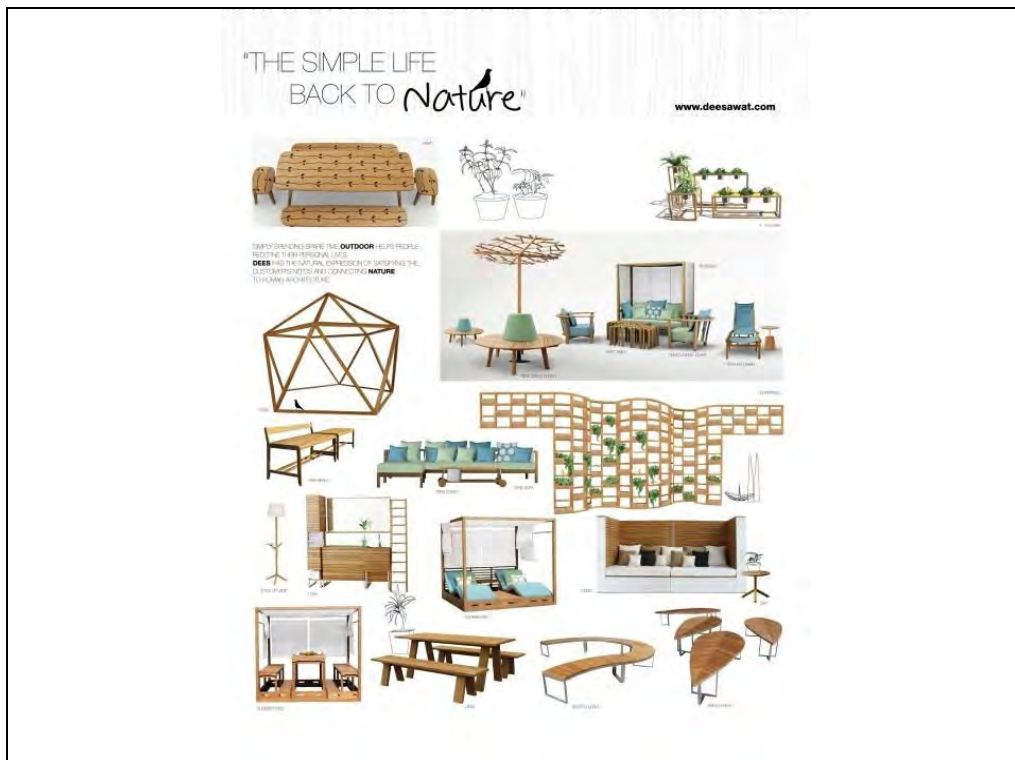
Design theme:
tropical contemporary

casual living



Lifestyle







Deesawat has been awarded G-Mark Design Award 2005 (Good Design Award) from Japan for its MANHATAN stacking chair



Design Export Award 2006
Deesawat has been awarded TIFF Export Award for the category "Best Garden Furniture" by the Department of Export Promotion, Ministry of Commerce in 2006



2006
EXPORT AWARDS
Best Garden Furniture



BOSTON CL



Design Export Award 2007
 Deesawat has been awarded TIFF
 Export Award for the category "Best
 Garden Furniture" by the Department
 of Export Promotion, Ministry of
 Commerce in 2007

TIFF 2007
EXPORT AWARDS
 Best Garden Furniture

BOSTON LEAF BENCH

DEESAWAT

WHERE QUALITY
 COMES
 NATURALLY

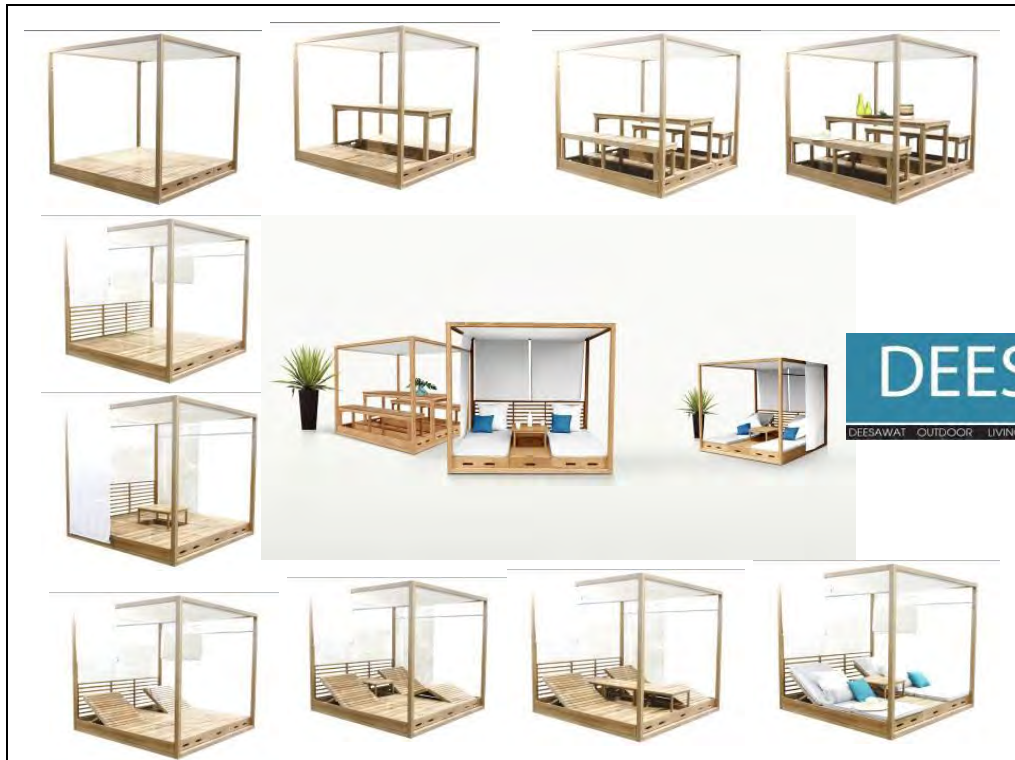


LIFESTYLE - CONNECTION - ARCHITECTURE
 INDOOR AND OUTDOOR
 PAST AND PRESENT
 NATURE AND HUMAN

OUR PASSION FOR WOOD HAS INSPIRED OUR DESIGNERS
 TO DEVELOP MANY FURNITURE COLLECTION IN THE HIGHER
 STANDARD OUTDOOR PRODUCTS TO THE WORLD, AND NOW
 DIFFER OUTDOOR LIVING BY DEESAWAT SHOWCASES NOT ONLY
 THE PRODUCTS FOR OUTDOOR BUT INSPIRE THE OUTDOOR
 SOLUTIONS FEATURING THE UNIQUE INTERDEPENDENT
 RELATIONSHIP BETWEEN SPACES AND LANDSCAPES CONNECTING
 NATURE TO HUMAN ARCHITECTURE. THE ASTONISHING EFFECT
 OF BOSTON LEAF DESIGN OFFERS THE COMFORT FEEL OF
 OUTDOOR LIFESTYLE IN A CONTEMPORARY LIVING.



DEESAWAT INDUSTRIES CO. LTD
 719 MIKO 3 CHANGKORWANA ROAD, LAKSI, BANGKOK
 BANGKOK 101 THAILAND
 TEL: (662) 571-1341 FAX: (662) 551-1503
 EMAIL: deesawat@nic.in.com, info@deesawat.com
 WEBSITE: www.deesawat.com





DEESAWAT OUTDOOR LIVING



D-Mark Award 2008
G-Mark Award 2008

DEES
SUMMER CABANA IS FLEXIBLE YET PRACTICAL. ORIGINATE FROM THE BASIC PLATFORM WHICH IS AVAILABLE IN 2 OPTIONS: SUMMER BED AND SUMMER PICNIC. THIS COLLECTION ACCENTUATES CONTEMPORARY DESIGN FOR LIVING IN ELEGANT SIMPLICITY BOTH OUTDOOR AND INDOORALIKE.



This award is the new recognition for design excellence to be awarded during Prime Minister Export Award organized by the Department of Export Promotion, Ministry of Commerce in 2008. The awarded products will continue as the first rounder for the D-Mark award in Tokyo






D-Mark Award 2009
G-Mark Award 2009
BODW design for Asia (bronze)



Green Wall : The idea to divide the space could be attached with outdoor spirit. The contoured wall can create the soft and smooth division of room when the owner feel more close to nature

UP LAMP

CONCEPT DESIGN:
UP LAMP IS DESIGNED TO UTILIZE THE SMALL CUTS OF WOOD FROM THE PRODUCTION WASTAGE. INSPIRED BY THE SHAPE OF THE CHIMNEY, THE SIMPLE LINES STACKING LAYERS OF WOOD CREATES UNIQUE LIGHTING PAYS ENHANCING THE NIGHT ATMOSPHERE OUTDOOR.

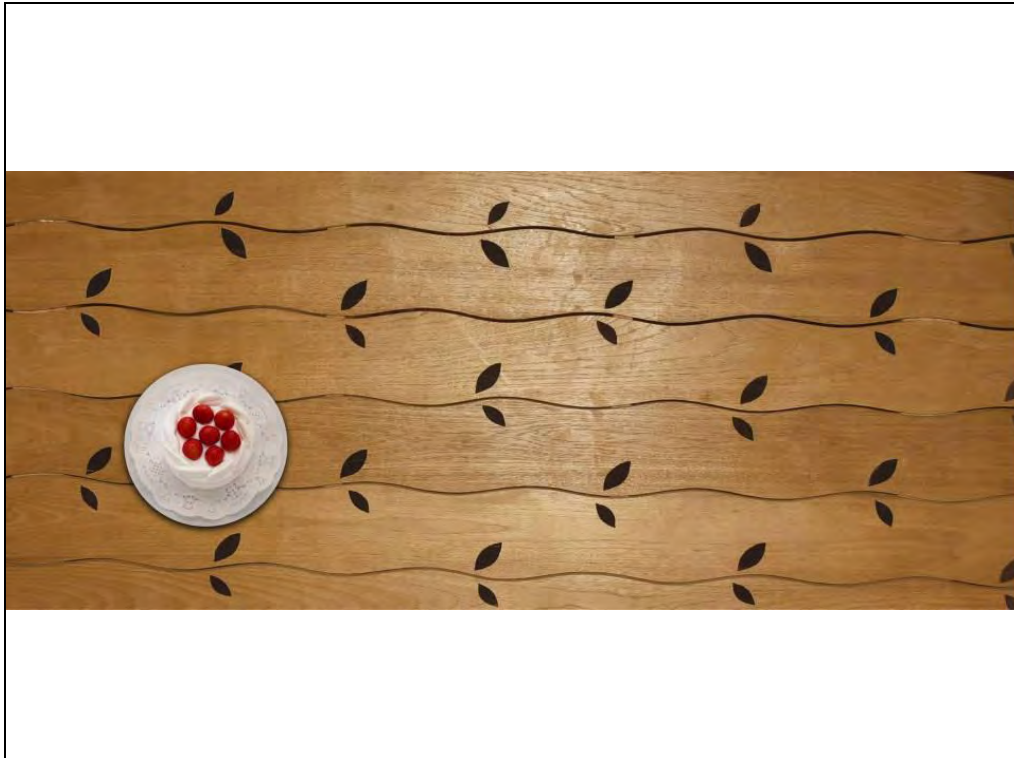
DEESAWAT
WHERE QUALITY COMES NATURALLY

ARTIST: DEESAWAT
DESIGNER: DEESAWAT
MANUFACTURER: DEESAWAT
DISTRIBUTOR: DEESAWAT

DEESAWAT
71/9 MOO 3 CHANGWATANA ROAD, LAKSI, BANGKHEN, BANGKOK 10210, THAILAND
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WEBSITE : www.deesawat.com

DEES
DESIGN & CONSTRUCTION

D-Mark 2010 G-Mark 2010





DEESAWAT
WHERE QUALITY
COMES
NATURALLY

LIFESTYLE - CONNECTION - ARCHITECTURE
INDOOR AND OUTDOOR
FINE LAMINATE
METALS AND ALUMINUM

WAVE

CONCEPT DESIGN:
OUTDOOR FURNITURE THAT IS INSPIRED BY THE FALLING LEAVES OF FALL. OUTLINES OF FALLING LEAVES ARE APPLIED AS ORNATE DECORATIONS ON THE TABLE AND BENCH SURFACES BY SIKAFLEX INLAY. THE TOPS OF THE TABLE AS WELL AS THE BENCHES ARE CUT AS CURVES, RESULTING IN THE GAPS BETWEEN EACH WOODEN BOARD WHICH SERVE AS BRANCHES FOR THE LEAVES. WELL-CALCULATED DESIGN LEADS TO A HARMONY BETWEEN OUTDOOR SURROUNDING AND FURNITURE.

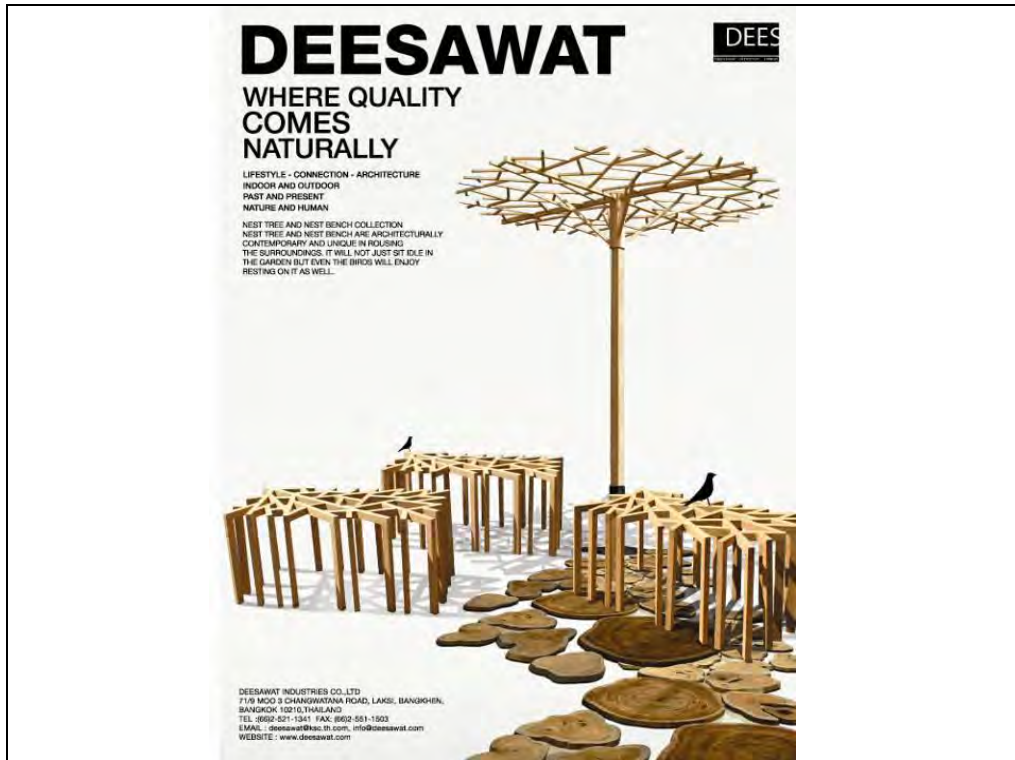


DEESAWAT
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WEBSITE : www.deesawat.com



D-Mark 2010 G-Mark 2010







TIERA CIRCLE BENCH

CONCEPT DESIGN:
THE CONCEPT IS TO DEVELOP THE BENCH
WITH THE COMFORT OF THE SHADE,
INSPIRED WITH THE IMAGE OF SITTING UNDER THE TREE,
PARASOL, AND NEST TREE ARE USED TO MATCH
AS INVITING NOTE TO SPEND MORE TIME OUTDOOR.




DEESAWAT
WHERE QUALITY
COMES
NATURALLY
LANDSCAPE ARCHITECTURE INTERIOR DESIGN
WOODWORK AND METALWORK
PAINT AND FINISHES
TEXTILE AND FABRIC

DEESAWAT
719 MDO 3 CHANGWATANA ROAD, LAKSI, BANGKHEN, BANGKOK 10210, THAILAND
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EMAIL: deesawat@ksc.th.com, info@deesawat.com
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D-Mark 2010
G-Mark 2010

DEES
DEESAWAT OUTDOOR LIVING

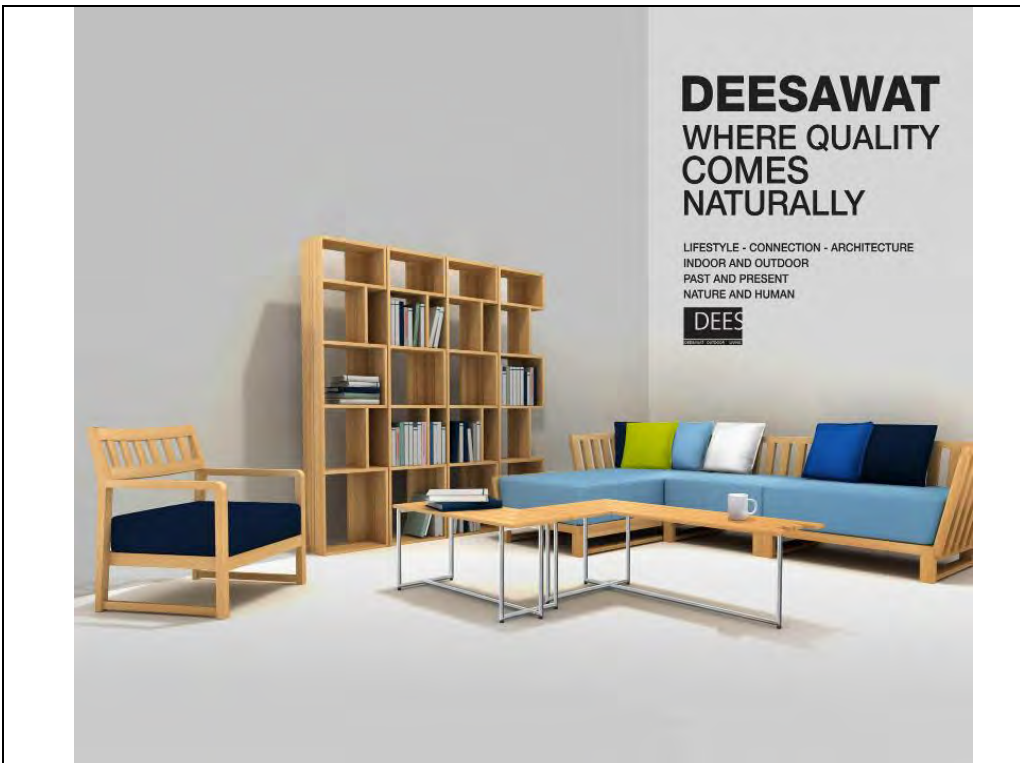
Stick-Up collection: the conceptual modular units of many functions created from wood sticks.





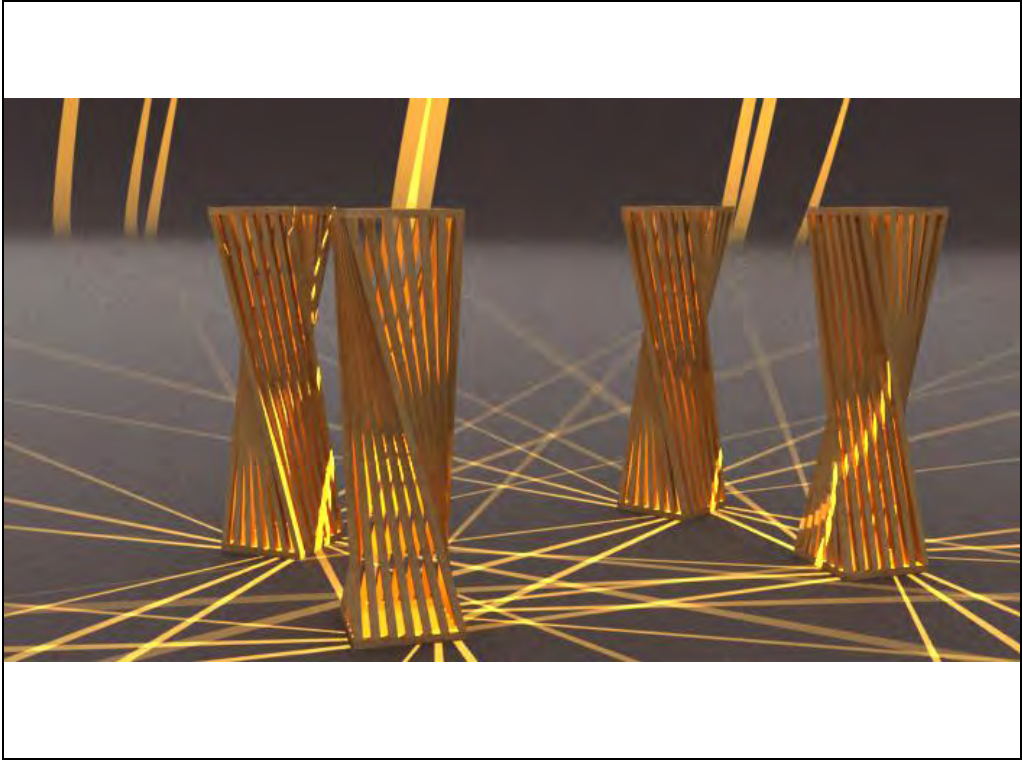














 A collection of wooden furniture pieces shaped like bottles. There are two chairs with orange cushions, a sofa with orange cushions, and a tall, narrow wooden structure. A woman in a white dress is sitting on the sofa.

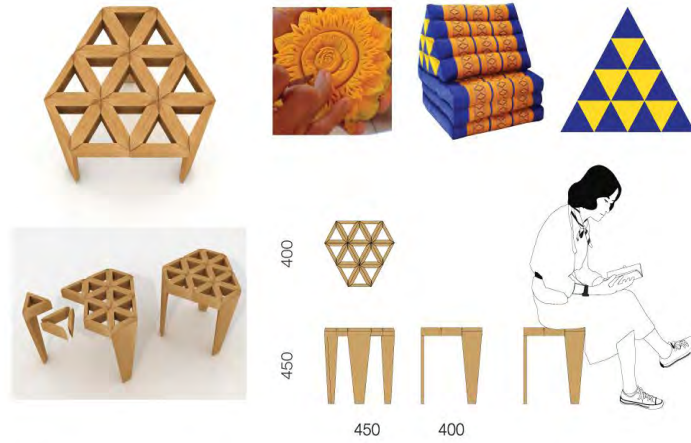
BOTTLE

Bottle Collection arises from the shape itself and inspired the Thai traditional called "COOP" which emphasizes the instrument to catch the fish and create the private environment for outdoor setting.



STAR

A simply design shape of triangle pillow that comes from the Traditional Thai Design creates the strength and image from bringing Thainess into contemporary design.



DEESAWAT

www.deesawat.com

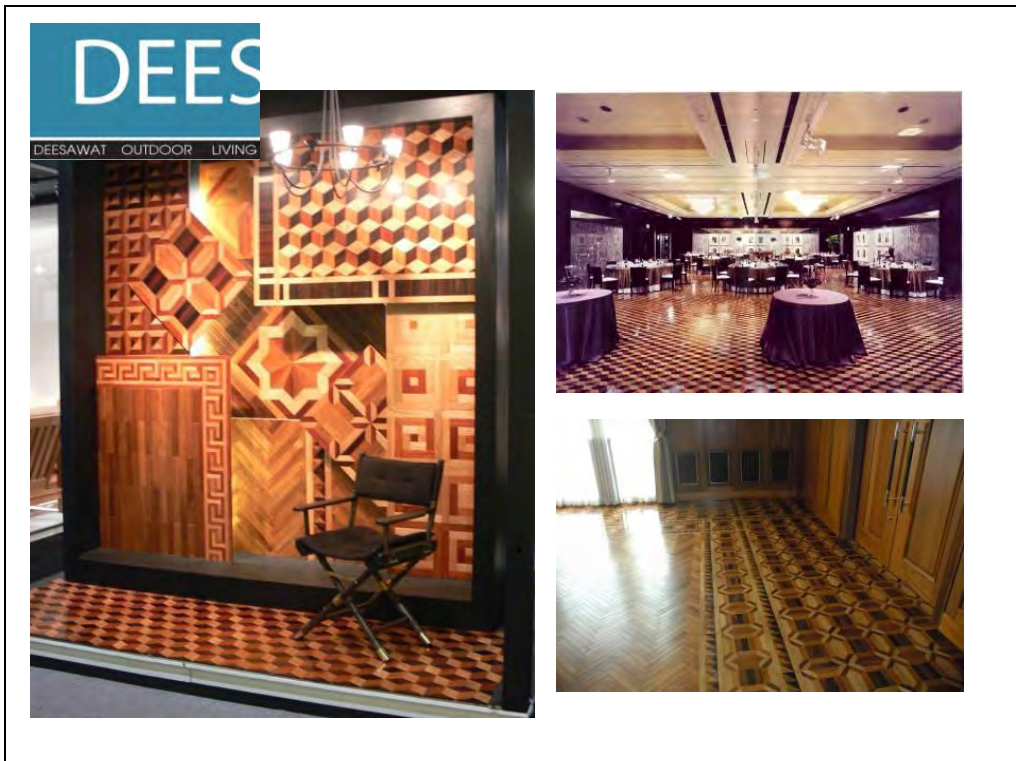


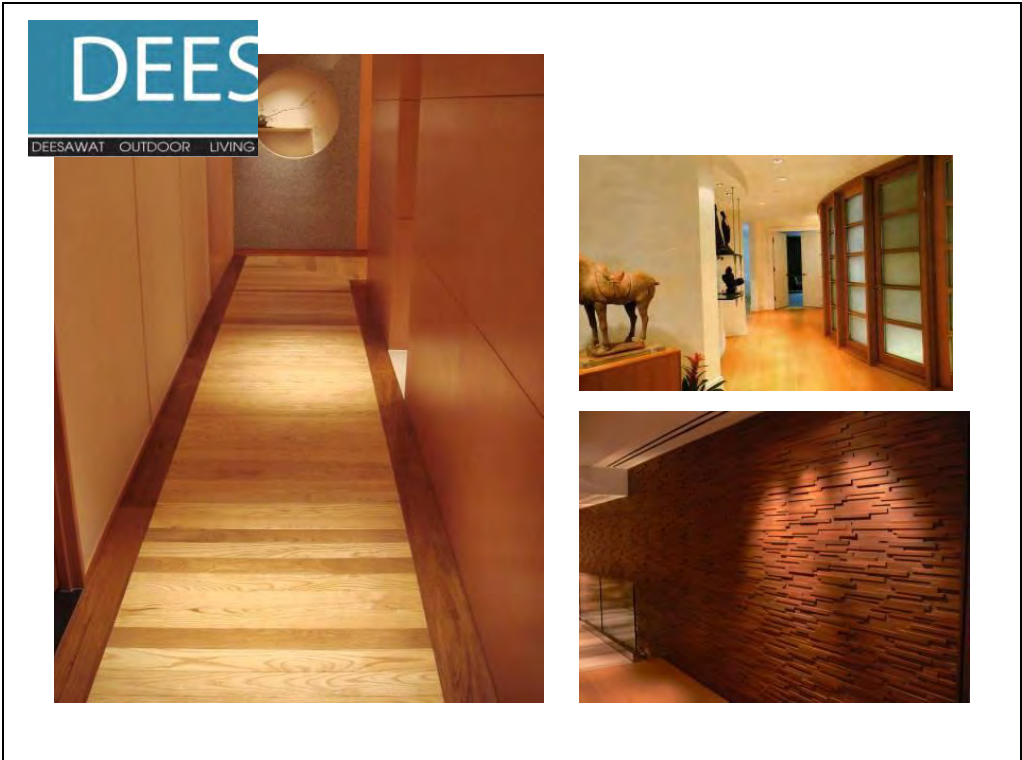
STAR

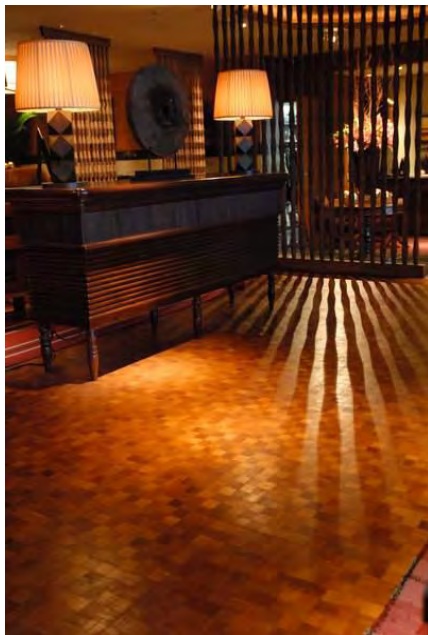
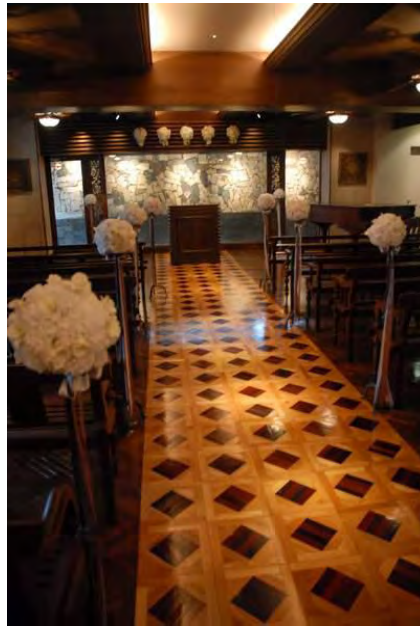
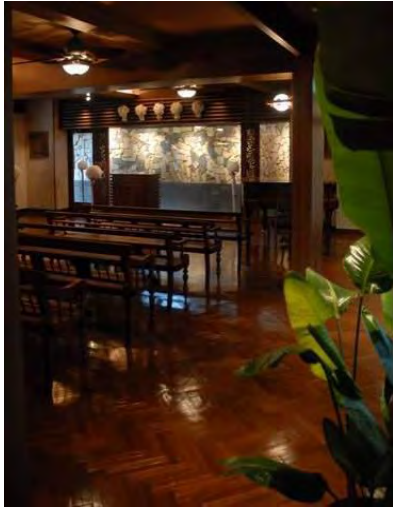










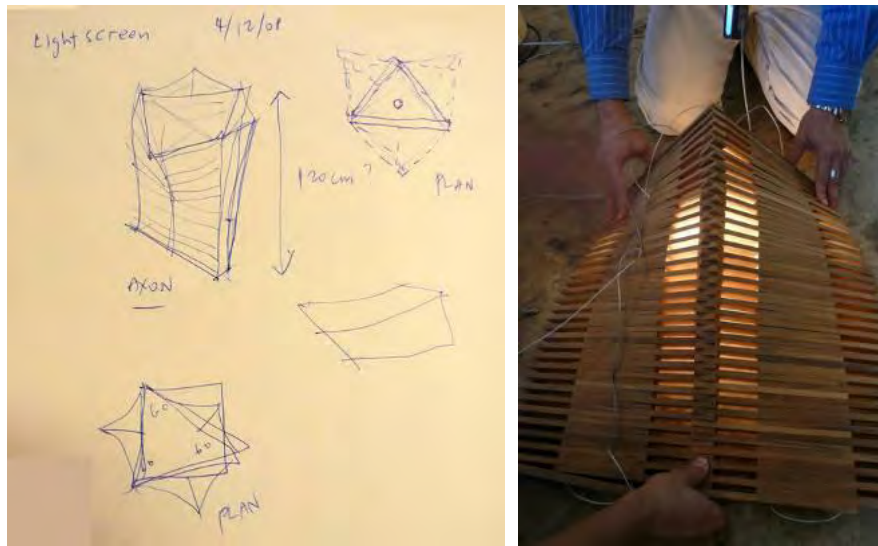


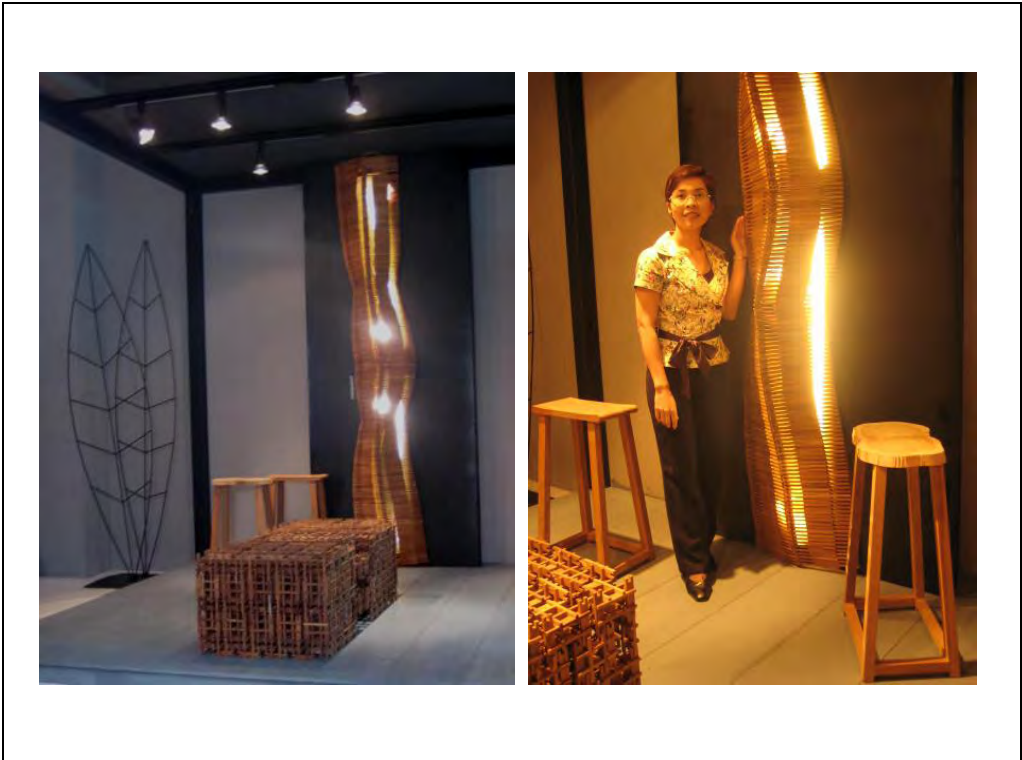
DEES

DEESAWAT OUTDOOR LIVING



LIGHT SCREEN





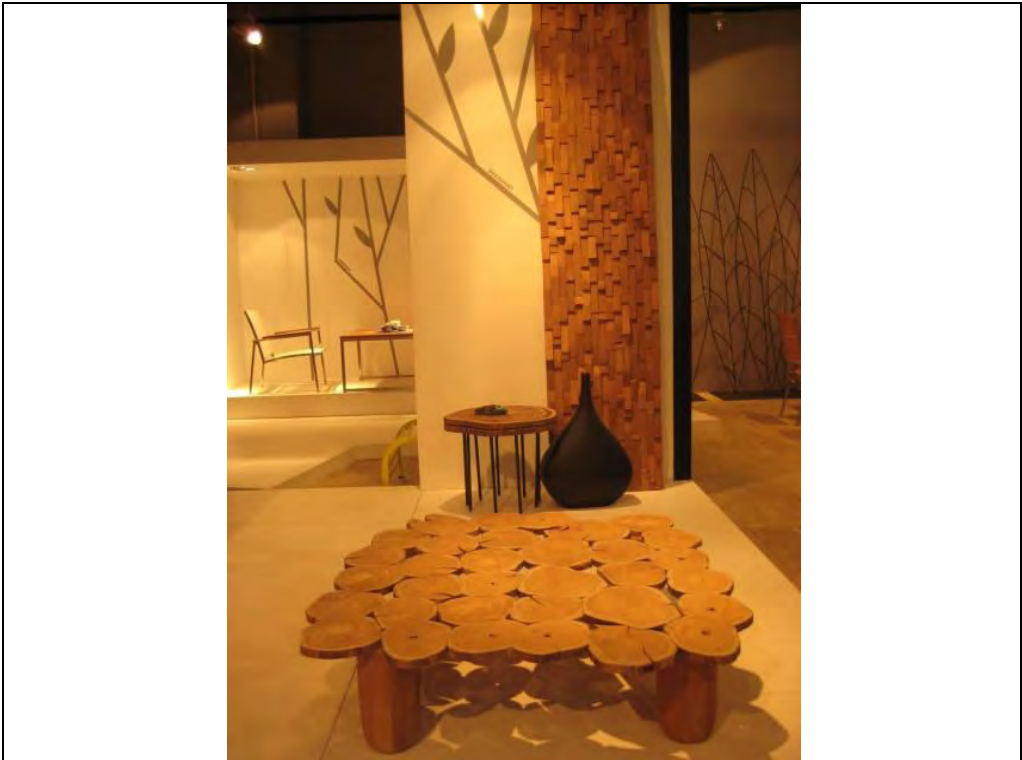


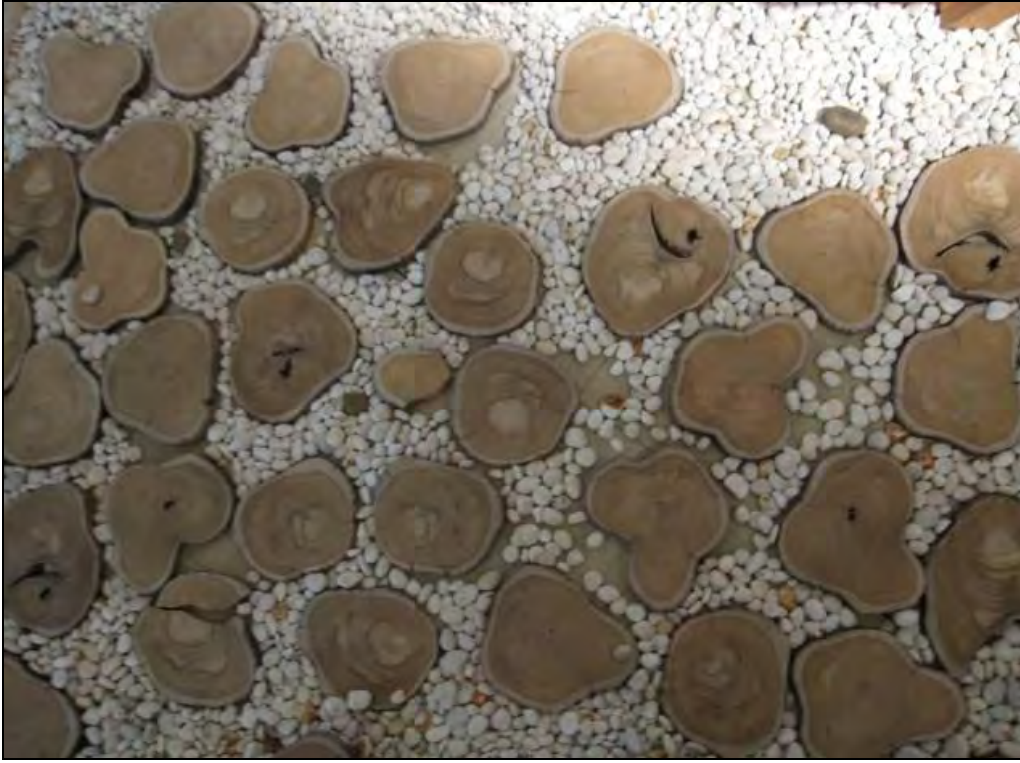
The similar repeated patterns of the leftover timber also appears in our new architectural door and wall panel.

Boston curve bench + award

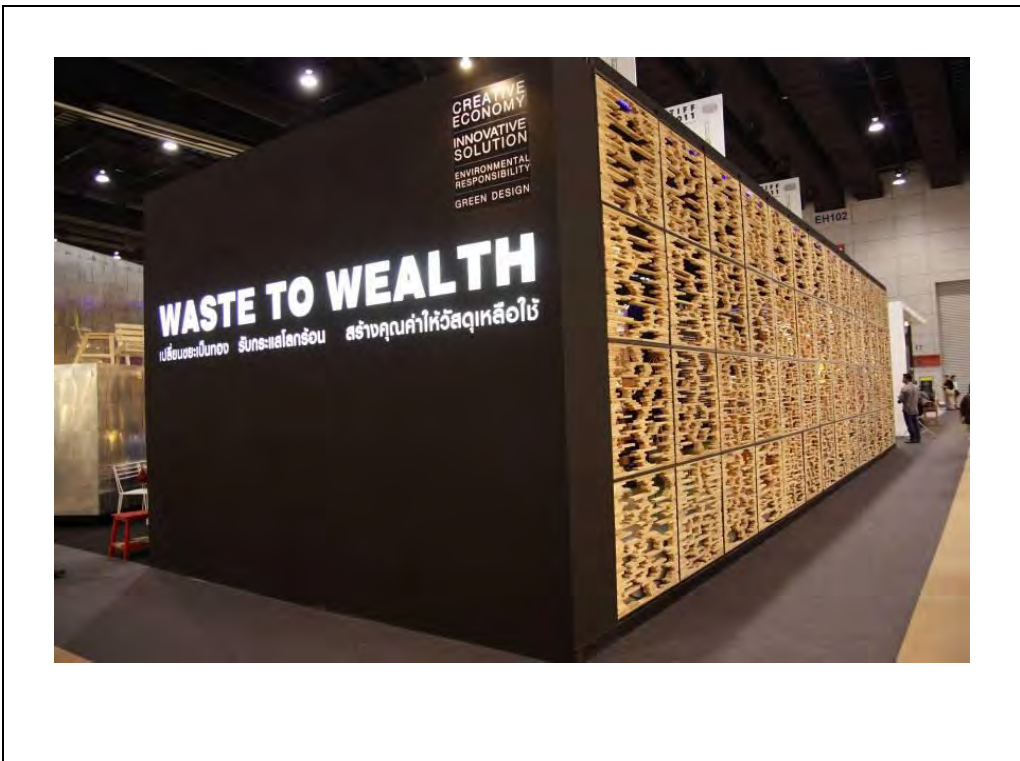


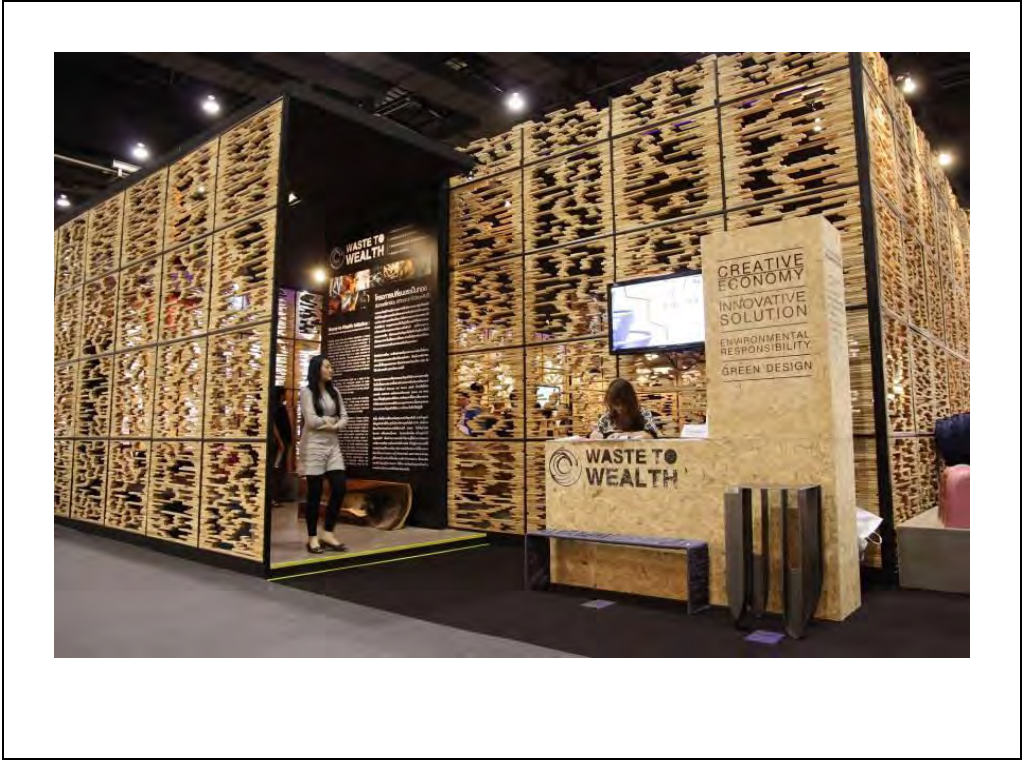


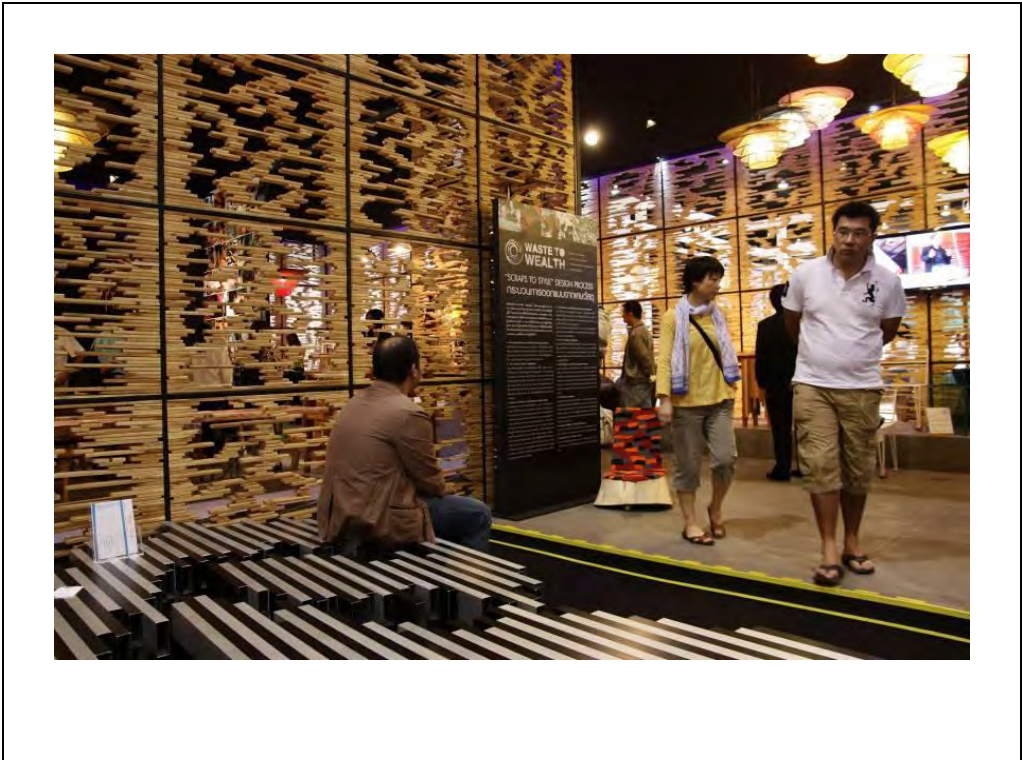
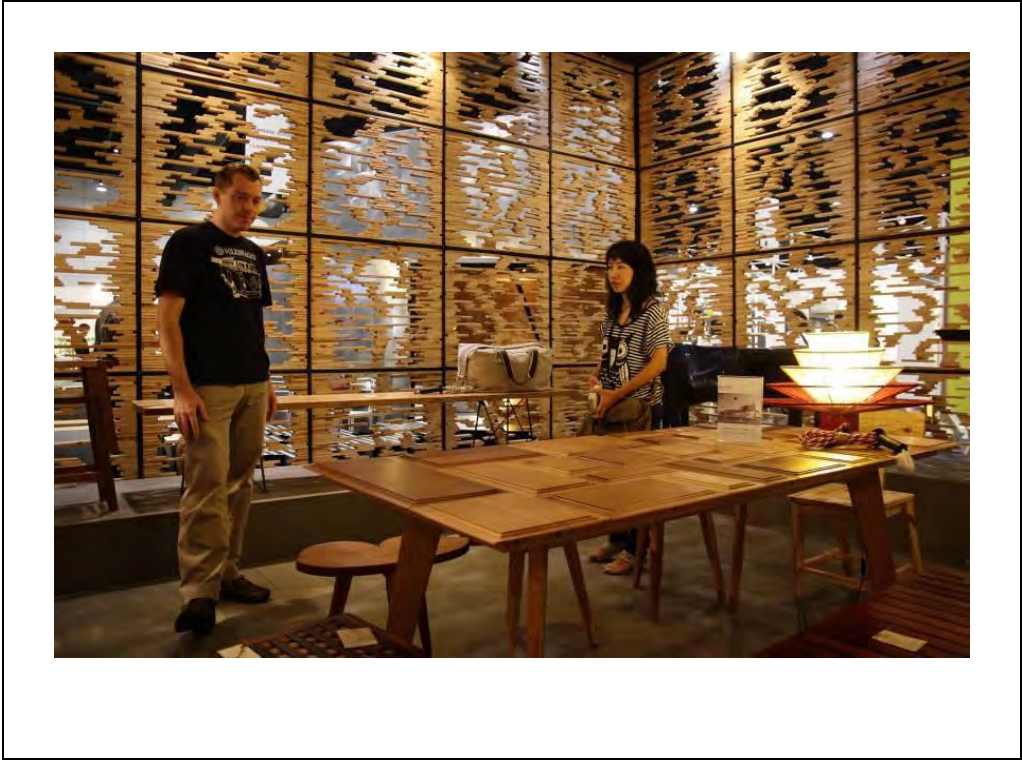














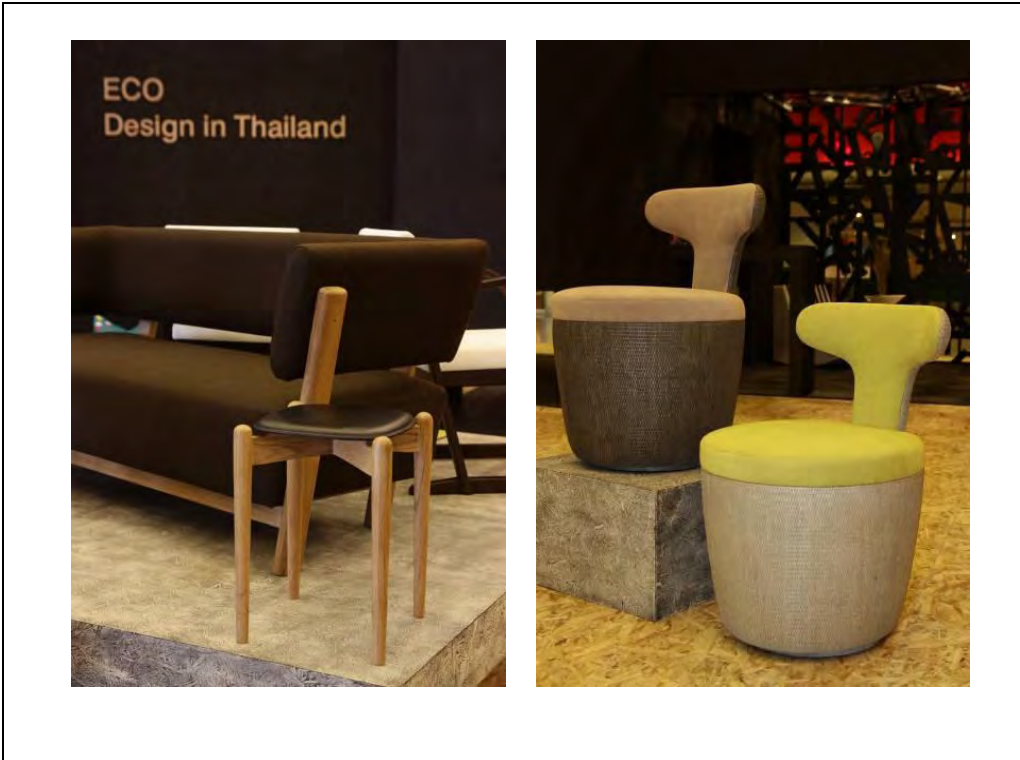
T-style ECOLOGY CONCEPT

Deesawat Industries & others



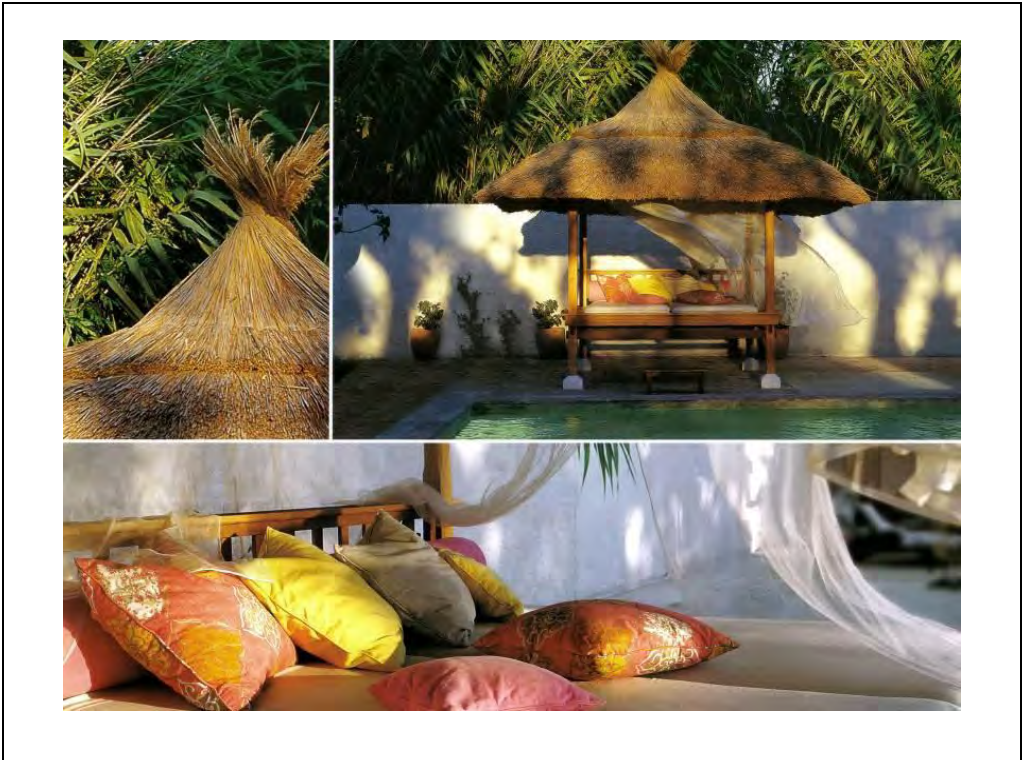
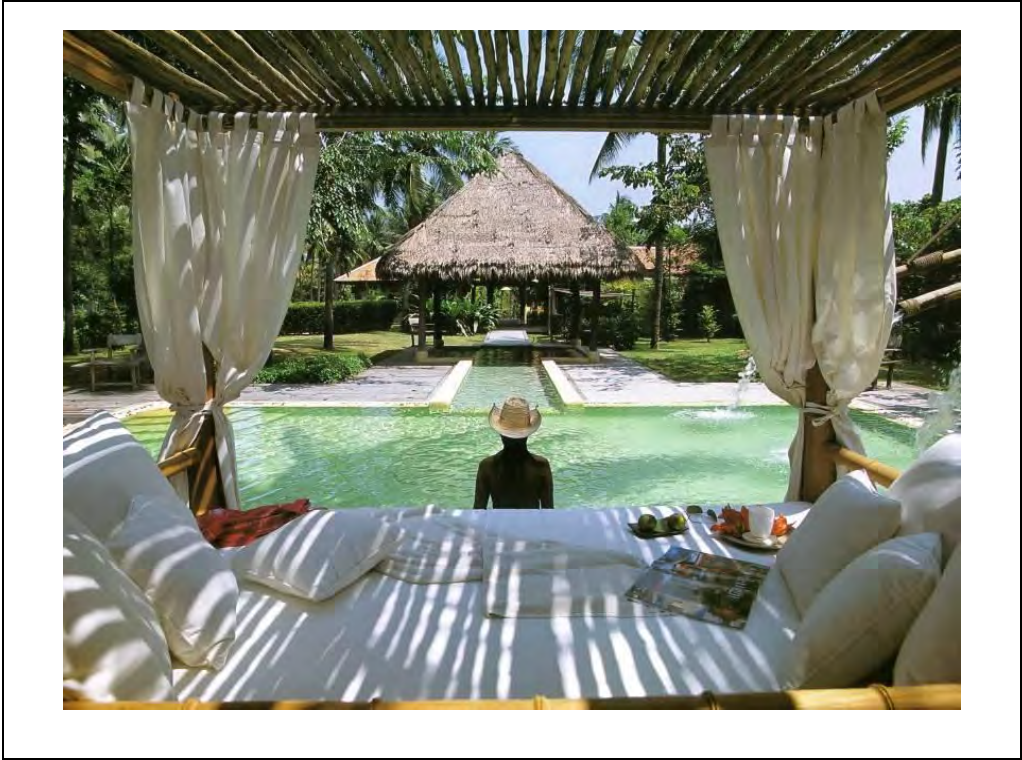






Project designs

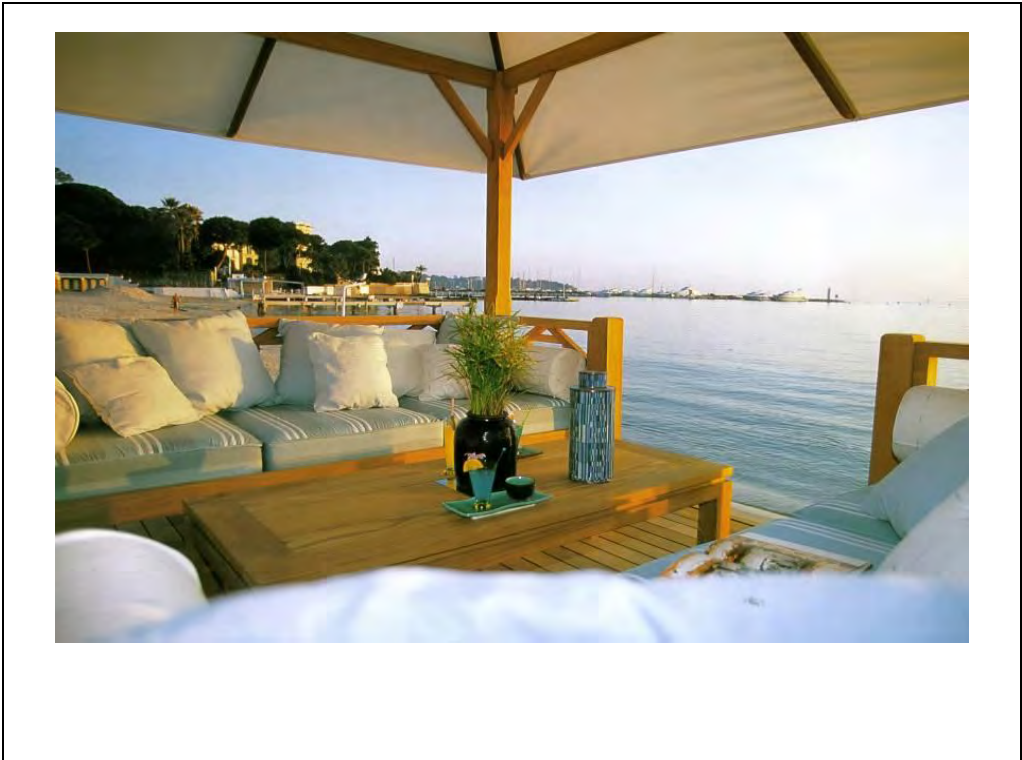














Thai Furniture & Design

Contemporary Design
Sustainable Design
Mindful Design

Global Touch with Cultural sense

**We are
small**



Thai Furniture &
Design

**KNOWN FOR
ENVIRONMENTALLY SOUND
PERSONALITY**

Thai Furniture & Design

**INTERNATIONAL PLAYER
ENTREPRENEURIAL MINDSET
SERVICE MINDSET**

Thai Furniture & Design

**CREATIVE NATION
DESIGN-LED/ GLOBAL NICHE**

Thai Furniture & Design

**CULTURAL PRIDE
WITH GLOBAL SENSE**



**Cultural Pride with
Global sense**



BUT








**SMALL
ORDER
OK**



SMALL ORDER OK!
No matter what size your order is, we're happy to serve you.

SMALL ORDER OK!
No matter what size your order is, we're happy to serve you.



WHAT is SOOK ?

SOOK in Thai means "HAPPINESS"

This sign represents the commitment among companies in TIFF2011 to bring customers happiness, no matter how big or small the order is. When you happy, we happy.

Organized by 



LOW MINIMUM



REASONABLE PRICE



MADE TO ORDER



SPECIAL ORDER

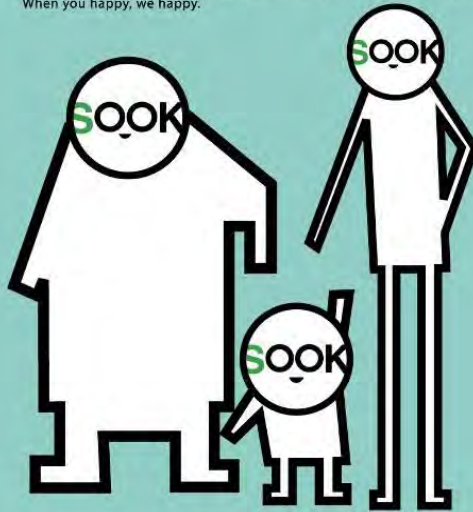


GOOD QUALITY

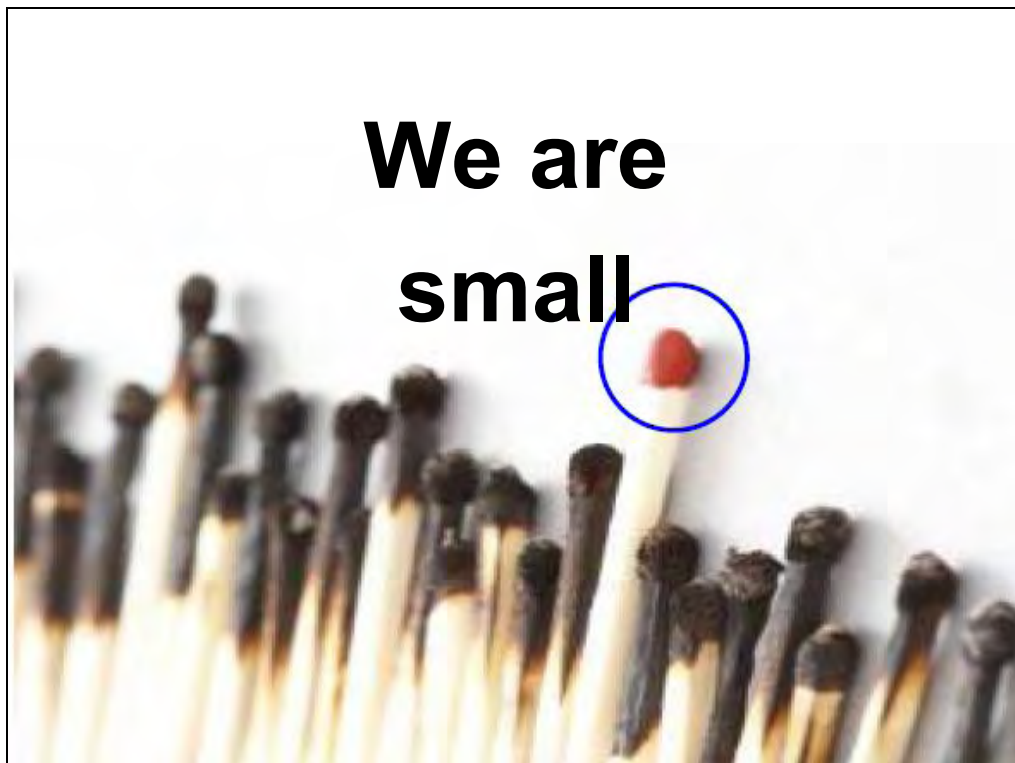
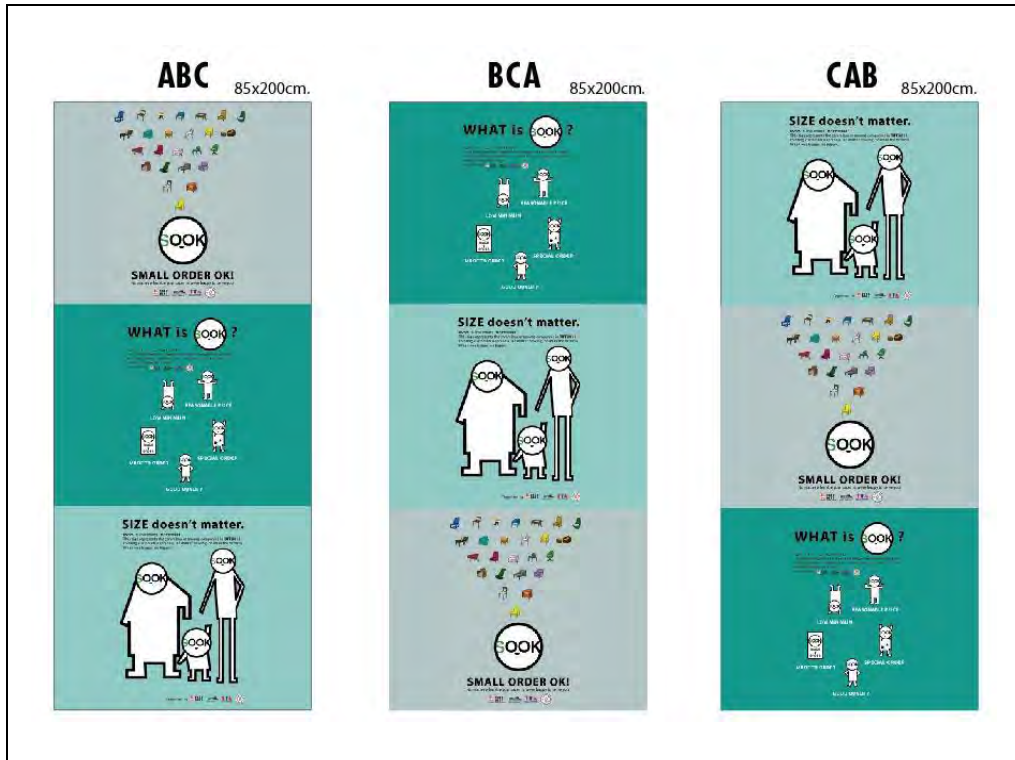
SIZE doesn't matter.

SOOK in Thai means "HAPPINESS"

This sign represents the commitment among companies in TIFF2011 to bring customers happiness, no matter how big or small the order is. When you happy, we happy.



Organized by 





**We are
small**

But different



**We are
small**

But different

And sustainable



We believe in
wood and sustainability



It's the time for us to return the
favor of mother nature



Wood is Good



Thank you



Jepara: Mirror of Indonesian Wood Art

Achmad Zainudin³

Abstract

Jepara is well known as the carving town and furniture center of the world, as reflected in the amount of small scale furniture producers. According to CIFOR data, more than 8 thousand small producers are based in Jepara. All of these individuals live and depend on wood.

The wood industry has a central role in Jepara's economic growth and accounts for some 27 % of the region's income. The regional furniture industry boasts around 150,000 people. The Jepara wood industry consumes 950.000 m³/year of log wood.

There are several clusters located at Jepara; Relief (3D carving), sculpture and teak root furniture, wooden doors and frames, indoor furniture, garden furniture, recycled wood furniture and handicrafts.

The Indonesian furniture industry faces challenges as it struggles to secure its place in competitive global markets. Business relations between furniture producers and their buyers are usually unbalanced: buyers set their price and producers cannot negotiate a better deal. Furthermore, the supply of wood is insufficient as well.

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1. BACKGROUND

The wooden handcraft carvings have long been part of Jepara culture. History records the abundance of handcraft carvings in Jepara, central Java, since the seventh century. The skilled carpenters used the timber from the kalingga, majapahit, demak and mataram kingdom. Jepara carvers and furniture makers absorbed the influences of Chinese, Indian, Arabic, European designs, producing intricate design and highly sought items to this day. The seventeenth century port of Jepara, once a bustling centre of maritime commerce, remains today a major of handcrafted items and furniture.

In 1700, Quen Kalinyamat encouraged the workers to produce high quality wooden handcrafted furniture for international trade, as did the Indonesian heroine, Kartini, who helped promote Jeparanese handcraft items to the European market.

As carving is an integral part of Jepara culture, the citizens depend on the sustainability of wooden industries.

2. WOOD CARVING

Wood carving is an art form whereby a picture or motif is engraved on a wooded surface. Carved motifs are often unique to different regions; Jepara, Madura, Pajajaran motifs etc. These may depict curved arches, the cosmos, and many other themes. Determination of the theme is entirely dependent on the artisan. The equipment to create such carvings is relatively simple and includes items such as saws, crabs, and most importantly hammer chisels.

Carving Techniques

Java is a natural archipelago with rich tropical forests providing timber that can be used as a base material for wood sculpture. Carving then involves scraping, chiseling, and incising patterns on the wooden surface.

In Indonesia, carvings have been found dating from as far back as the Early Stone Age. Artifacts from that period are marked with geometric-patterned carvings, such as tumpal, circles, lines, swastika, zig zag, and triangles. Generally such carvings were merely decorative, but could also contain symbolic and religious significance.

Types of carvings include; carved translucent (krawangan), low carving, carving high (arise), and carvings intact. Carving artwork has a variety of functions including:

- a) Decorative functions, namely engraving made solely for decoration and carrying no particular meaning.
- b) Magical functions, namely carving containing certain symbols and serving as a magical object associated with beliefs and spiritual
- c) Symbolic function, namely that in addition to traditional carving as decoration, these examples also serve to symbolize certain things related to the spiritual.
- d) Construction function, namely that in addition to carving as decoration, this also serves as a support structure of a building

- e) Economic function, namely engraving which serves to increase the selling value of an object.

3. CLUSTER

A cluster is a grouping of various companies in the same business sector in a certain area. In a cluster consisting of core companies, and industry related supporting industries, the development of services is not and the development of other services is not focused on the core companies, but has a more holistic approach (Schmitz, 2002).

Wood carving is now prominent in industries such as furniture production. The furniture industry in Jepara serves not only the domestic market, but international demand. This industry has been developing for hundreds of years, forming a geographic cluster of supporting industries. When analyzed in terms of turnover and number of workers, Jepara is the largest cluster in Indonesia.

1. Relief (3d carving)

Jepara relief carvings illustrate various aspects of the daily activities of the cultural community in Jepara. These carvings have a unique appearance because of the layered and three-dimensional carving technique. Artisans strive to imagine and project a life-story through their carving on a piece of wood.

Teak wood is the main raw material for Three-dimensional relief carving. It possesses the necessary characteristics for the creation of these relief carvings. Teak wood is generally harvested from Teak plantations and not community forests.

The process of creating three-dimensional relief carving is very complicated. According to Sutrisno, a relief carving artist and member of the small scale producer association, it would take approximately one year for a craftsman to complete a carving measuring 2.5 meters squared.

Senenan Village, Jepara, is a centre of three-dimensional relief carving consisting of some 180 small-scale entrepreneurs. However, the future of high-quality artwork is coming under threat. Sutrisno states that "the manufacture and use of teak wood as raw material is complex and this product is capital intensive, but it takes a long time to get profit", adding that "the art of relief carving of Jepara is increasingly rare today because many craftsmen began to switch to non-reliefs furniture production".

2. Calligraphy

Decorative calligraphy has been used in combination with wood carving, both two dimensional and three dimensional. Sculpture is more commonly associated with the use of "Stilasi", which refers to a stylized approach of depiction. This style can be employed on wood, metal, clay or stone. The technique usually involves carving images directly onto the material. Printing techniques allow the replication of calligraphic art.

Calligraphy used techniques more frequently associated with carving, such as chisels. The first step is to draw the design on a piece of wood and then following this while carving. A distinction must be made between carved calligraphy and painted calligraphy.

3. Handicraft, statue, root furniture

In Jepara, wood is also widely used for the production of handicraft products, including souvenirs, statues and root furniture. There are some 157 businesses involved in this area. Mulyoharjo Village, Jepara, is known as a centre for the production of wooden statues. In 2008 alone, a total of 1095 workers produced 418,737 works, with a value of Rp. 3.3499 billion.

4. Indoor and Outdoor Furniture

“Furniture” can be defined as a movable object in a room or designated area that is useful for human activities. The term is also frequently applied to architectural elements of a room such as built-in bookcases and cupboards. Although furniture can be made from many diverse materials, the most common is wood. Jepara, with its huge workforce and cluster of supporting industries is the largest producer of furniture, both indoor and outdoor.

5. *Gebyok*

Gebyok art is a traditional form of wooden carving, a part of sacred customs, but also used in modern buildings. *Gebyok* is a type of decorative partition found in a living room, or at the entrance. The size of a *Gebyok* can vary greatly, from just a couple of meters to a dozen, depending on the size of the building and the dimensions of the space in which it is situated. The types of wood commonly used include teak, jackfruit wood and mango wood, with teak being the most expensive.

Although the design is at the discretion of the artisan, original motifs of holy images, plants or foliage are incorporated. In China, animal motifs are included, depicting dragons, deer, birds, etc. The quality of a *gebyok* depends greatly on the materials used and the skill of the artisans. The eventual placement of the *gebyok* is also a matter for consideration, as frequent exposure to water and direct sunlight can be damaging. Pricing for these works of art is difficult to define, as it is heavily influenced by factors such as materials, size and skilled workmanship.

There are some 40 *Gebyok* producers, each employing around 3-5 carpenters and 12-20 carvers, producing 2-3 *gebyoks* per week.

6. *Reclaimed wood furniture*

There are more than 25 recycled wood producers located at Ngabul (tahunan).

7. *Coffin*

The production of wooden coffins is centered at Langon, and mostly serves the local market.

Jepara's position at the centre of the wood carving industry is a result of strong differentiation, with carved furniture industrial centers spread across 13 districts of Jepara. According to data on the Jepara trade and industrial department, in 2004 there were 3539 businesses registered with the Department of Industry, Trade and Cooperatives. As of 2010, there were 8088 small-scale businesses, bringing the total of existing furniture industry units to 11597. The figure for total workers employed in this sector stands at approximately 150,000.

Differentiation in Jepara's market positioning as a preeminent centre for carving and crafts should further strengthen the Jepara brand. The local government has been working with entrepreneurs in order to promote Jepara through the organization of exhibitions, both local and international, as well as focusing on innovation by creating alternative products from other wood materials. In addition to maintaining focus on classic designs, there has also been an increasing emphasis on introducing contemporary design.

Jebara

mirror of Indonesia wooden industry

Presented by Achmad Zainudin
Secretary of Small Scale Furniture Producer
Association of Jebara (APKJ)

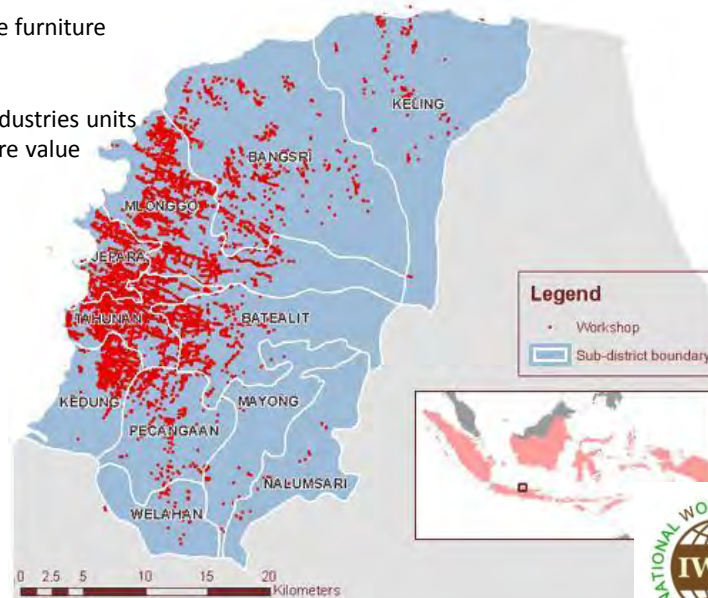


BETTER CRAFTSMEN



8080 small scale furniture
producer

Total : 11597 industries units
Source: Furniture value
chain



BETTER CRAFTSMEN






JEPARA
The World Carving Center

Largest cluster
Indication geographic certificate
Talented worker



BETTER CRAFTMEN



Wooden door cluster

gemiring, paren, mayong district
material: teak wood and recycled







BETTER CRAFTMEN



Relief 3D carving cluster
located at Senenan, 180 units
teak wood large diameter

APK
PERSYARUKAN
KEMAJUAN
INDUSTRI
KEMERDEKAAN
BERBASIS
PENGALAMAN
KEKUALIFAN
Being Craftsmen Better

BETTER CRAFTSMEN

IWCS
INTERNATIONAL WOOD CULTURE SOCIETY

Indoor furniture
Tahunan, widespread in Jepara
material :Teak,mahogany,manggo

APK
PERSYARUKAN
KEMAJUAN
INDUSTRI
KEMERDEKAAN
BERBASIS
PENGALAMAN
KEKUALIFAN
Being Craftsmen Better

BETTER CRAFTSMEN

IWCS
INTERNATIONAL WOOD CULTURE SOCIETY

Sculpture, Root furniture, handcraft

Mulyoharjo, kawak (157 units)

material : Teak, mahogany and trembesi



BETTER CRAFTSMEN



Outdoor furniture

mlonggo district, Jepara



Caligraphy

Jejara
material :Teak,mahogany

BETTER CRAFTSMEN

Root furniture,

Ngabul, Tahunan
material :Teak,Sono Keling

BETTER CRAFTSMEN

WOODEN PRODUCT & RATTAN EXPORT VALUE JEPARA REGION

Keterangan	Tahun											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Export Value	201.42	200.51	74.74	76.11	111.73	138.4	123.65	115.94	96.67	102.1	93.5	117.19
		-0.91%	125.77%	1.37%	35.62%	26.67%	14.75%	-7.71%	19.27%	5.40%	-8.57%	23.69%
Number of Exporter	221	358	436	451	410	408	286	265	252	259	265	290
		137.00%	78.00%	15.00%	41.00%	-2.00%	122.00%	21.00%	1300%	7.00%	6.00%	25.00%
Export country destination	64	68	71	88	82	84	81	81	89	111	105	105
		4.00%	3.00%	17.00%	-6.00%	2.00%	-3.00%	0.00%	8.00%	22.00%	-6.00%	0.00%

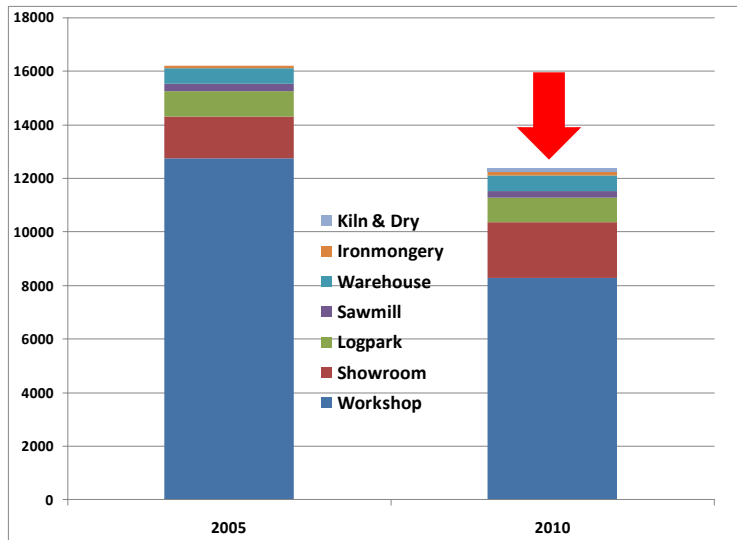
Note * : Million USD
 Data Source : Disperindag
 Kabupaten Jepara



BETTER CRAFTSMEN



Data source : furniture value chain project, 2010



BETTER CRAFTSMEN



Wooden industry Issues

1. **Wooden sources**
2. **Marketing access and networking**
3. **Human Resources(SDM)**
4. **Design and Quality standard**
5. **Human Resources(SDM)**
6. **Partnership between the actors**
7. **Unhealthy competition(price)**
8. **Environment issue.**



BETTER CRAFTMEN



Maturnuwun



BETTER CRAFTMEN



Wood Carving Art in Turkey

Hakki Alma⁴

Abstract

The decorative wooden objects found in excavations in Central Asia show that the Turkish art of woodcarving dates back to the distant past. As in other branches of art, animal motifs with legendary and religious significance were frequently used in the decoration of wooden objects. This tradition known as the "animal style", was gradually abandoned and replaced by vegetal and geometric motifs after the Turks adopted Islam. Extant everyday objects used over the lengthy time segment encompassing both the Seljuk and Ottoman periods are so few as to be practically non-existent. In contrast, architectural accessories of religious structures dating from the Seljuk period, as well as objects used in these buildings, are sufficient in number to give a good idea of Turkish woodcarving. Doors and window shutters, pulpits of mosques, sarcophagi in mausoleums, Koran stands and lecterns display highly advanced woodcarving. Although rare, carvings of animal figures on such objects are interesting as an illustration of the continuity of this tradition. Wood works techniques applied in the wood art of Turkey are as follows: carving, painting, dovetail (kundekari), inlaying and latticework. The most special technique for Turkey is dovetail (kundekari). Wood carving in Turkey is classified into three groups: cutting type, surface carving (superficial and deep), which is the most popular, and natural shape carving. Some carving tool such as needle nose pliers and nail pen is peculiar to Turkish carving industry.

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1. INTRODCUTION

The History of wood carving has, from the remotest ages, seen the decoration of wood as a foremost artform. Extant everyday objects used over the lengthy time segment encompassing both the Seljuk and Ottoman periods are so few as to be practically non-existent. In contrast however, architectural accessories of religious structures dating from the Seljuk period, as well as objects used in these buildings, are sufficient in number to give a good idea of Turkish wood carving during this period. Doors and window shutters, pulpits of mosques, sarcophagi in mausoleums, Koran stands and lecterns display highly advanced woodcarving. Although rare, carvings of animal figures on such objects are interesting as an illustration of the continuity of this tradition. Architectural elements in certain mosques in Anatolia provide considerable information on woodcarving in principalities during the post-Seljuk period. The columns and capitals as well as beams of these mosques, most of which date from the 13th century, exhibit distinct woodcarving. Pulpits of mosques in particular tended to be almost exclusively constructed out of wood.

It is a fact that woodcarving developed following the migration of the Turks to Anatolia, a phenomenon in which the influence of geography and the cultural milieu cannot be denied. Syria and Egypt in particular demonstrated development in this art parallel to that in Anatolia in terms of the techniques employed. In this connection, it is important to remember that at the time Anatolia was very rich (URL1).

The bulk of extant wooden objects from the Seljuk and Ottoman periods are housed in the Ankara Ethnographical Museum and the Istanbul Museum of Turkish and Islamic Antiquities. They consist primarily of such architectural elements as mihrabs (prayer niches), mosque and cabinet doors and display a truly superior level of workmanship. The signatures of the craftsmen even appear on some of the objects.

The wealth of decoration seen on the woodcarving used in Seljuk architecture developed parallel to the architecture of that period. In this regard, it is necessary to remember the highly ornamental facades of mosques, especially during that period. A similar development cannot be traced to the Ottoman period, which is an interesting fact in itself. Apart from a few exceptions, a new simplicity gradually came to predominate wooden architectural elements during the reign of the Ottomans. Although certain new techniques, such as mother-of-pearl inlay, did emerge in the meantime, they did not actually contradict the new trend towards simplification both because they only indirectly represented woodcarving and because they did not produce the same effect for the viewer. In fact, wooden architectural elements in the Ottoman period, with their more stark and simple appearance, took on a more basic and functional air, and more specifically aesthetic elements thereby replaced the exaggerated ornamentation of the Seljuks (Öney 1989).

Wooden houses constitute a little known aspect of Turkish architecture. The facades, eaves and ceiling decorations of traditional Turkish wooden houses constitute fascinating examples of carving and the false inlay technique and exhibit a variety of styles from period to period.

A new approach that gradually gained acceptance in the Ottoman period was painting on wood. From the 15th century onwards, decorations began to be painted on architectural elements as well as on smaller wooden objects. Interesting examples date to the 18th and 19th centuries in the secular architecture of Topkapi Palace and of such urban centers as Edirne and Bursa. Among these examples, the large cabinets, corner cupboards and niches were

influenced by the forms of their counterparts made of marble in the great palaces. Edirne was an important center of woodcarving, and the technique of painting on wood known as Edirnekari spread to İstanbul and other regions throughout the Empire. Using this painting technique, in which green was predominant as a background color, various articles of everyday use such as drawers, boxes and chairs were produced, some of which were lacquered (URL1)..

Among the wooden transport vehicles used by the Palace and the upper classes there are examples of woodcarving that may be regarded as masterpieces in their genre. The caiques and carriages produced in İstanbul fall into separate categories of large-scale wooden objects. The imperial caiques and carriages preserved at present in various museums have special value since they constitute examples of carving and painting techniques. The same can be said of the thrones in Topkapi Palace, which, with their decorations in gold, silver and precious stones, also represent the jeweler's art.

Another genre of Ottoman wood carving was the simultaneous use of metal applique and metal plaques. The wood used for objects of this genre was not highly decorative in itself, the emphasis being rather on the metal accessories. Metal put on doors, window shutters and cabinet doors had existed since the Seljuk period. Plaques of various metals, mainly silver, displaying motifs worked in the repousse technique were mounted on everyday wooden objects such as chests, clogs and dustpans from the 16th century on. This technique was widespread.

Close relations existed between the masters who crafted the wooden elements used in architecture (neccar) and the architects, which was especially evident in the Ottoman period when many architects were former carpenters and masters of intarsia. Mehmet Agha, for example, the architect of Sultan Ahmet Mosque, was a master of mother-of-pearl inlay.

2. HISTORIES OF WOOD WORKS IN TURKEY

2.1 Wood Works Before Islamic Architecture

The decorative wooden objects found in excavations in Central Asia show that the Turkish art of woodcarving dates back to the distant past. As in other branches of art, animal motifs with legendary and religious significance were frequently used in the decoration of wooden objects. This tradition known as the "animal style" was gradually abandoned and replaced by vegetal and geometric motifs after the Turks adopted Islam. During Huns empire the carving was very popular (Akşit 2004).

2.2 Wood Works in Early Islamic Architecture

Various wood works unearthed in the Central Asian tumuli and Pazyryk excavations, have revealed that Turks were interested in this subject since ancient times. In Islamic art and especially in Omayyad and Abbasid wood works, we find a tendency towards a new style. The Syrian and Egyptian stone reliefs of the 10th-13th centuries had influenced the Fatimid wood works and decorations of acanthus and vine leaves peculiar to Syrian region were widely used. For example, the stone reliefs on the front of the Meshatta Palace was revived with nuances in the Omayyad and Abbasid works, was a favourite decoration of this period. The most famous example of Omayyad wood works is the multi-pieced pulpit of the

Kayravan Mosque made in the 11th century and presently kept in the Cairo Museum, and the wood works in the El Hakim Mosque reveal the most interesting examples of Islamic wood works (URL1)..

The magnificent gate displayed in the Metropolitan Museum and the wood works displayed in the Cairo Museum, prove that the Fatimid decorations were oriented towards animal motifs in later periods. These decorations which are thought to be related to native art, include hunting scenes, symmetrical group of birds of animals. This style later influenced the Mameluke art and decorations were enriched with all-over designs. Very few examples of Persian wood work preceding the Seljuk period have survived until the present day. Some wood inscribed with Cufic writing are found in Tashkent and Samarkand Museums and in private collections. Mongolian wood works of the 13th - 14th centuries are also very rare. Wooden doors with Cufic inscriptions show great similarities with stone decorations in the architecture of the period.

2.3 The Seljuk Wood Works

The Seljuks considered wood works very important and they have produced many works of art such as pulpits, reading desks, chests of drawers in addition to the architectural elements ornamenting buildings. Geometrical forms and plant motifs were often used in the Seljuk wood works where carving and latticework were widely applied. The decorations were usually raised and the compositions were completed by Rumi style borders (Fig 1.). The motifs of peacocks, King Solomon's seal and cypress trees were largely used in the Seljuk wood works. The pulpits of the Konya Alaaddin Mosque, Manisa Grand Mosque, Birgi Grand Mosque are the most beautiful pieces of the Seljuk wood works in Anatolia. The Seljuk wood work reveals itself on the wooden sarcophagi. The sarcophagus over Mevlana's grave in the Konya Mevlana Tomb is decorated with embellishments characteristic of the age and is covered all over with lyric poems and couplets (Firat 1996).

2.4 The Ottoman Wood Works

Seljuk wood work influenced the early Ottoman wood works of the 14th -15th centuries and various works began to make use of new techniques and decorative elements. Besides carving and latticework, the dovetail method was widely used and enriched wood works were also made with the addition of auxiliary elements such as mother-of-pearls, tortoise shells and ivory. Floral motifs were often used in addition to Rumi compositions. Beginning in the 16th century, the Rumi decoration on wood works gained a much more complex appearance by uniting with different floral patterns found in the similarly decorated tiles. Although the forms used in the 16th century wood works were continued during the 17th century, new patterns were created in decorations (URL1).



Fig. 1. A Rumi carving style sample for door (URL2).

The most renowned of these are the floral motifs which have lost their original forms in a tendency towards stylization. Plainness was gradually abandoned and a richer embellishment replaced it.

With materials such as mother-of-pearl, tortoise shell and ivory used in the 18th century wood works, the products gained a more colourful appearance. The influence of the Baroque and Rococo styles to be found in almost every branch of Turkish art, has revealed itself also in the wood works of that century. As an inevitable consequence of this, Turkish wood works lost its own characteristics and came under the absolute influence of European art.

Turkish wood works have influenced architecture, with fine examples in old Turkish houses as well as the wooden Afyon Grand Mosque, Sivrihsar Grand Mosque, Beysehir Esrefoglu Mosque. Especially the ceilings of rooms, the shelved niches and cupboard doors have been fastidiously worked. Edirnekari technique, used in ceiling glued with goldy plaks and painted with natural or synthetic dye, is also very famous.

They consist primarily of such architectural elements as mihrabs (prayer niches), mosque and cabinet doors and display a truly superior level of workmanship. The signatures of the craftsmen even appear on some of the objects. Wooden houses constitute a little known aspect of Turkish architecture. The facades, eaves and ceiling decorations of traditional Turkish wooden houses constitute fascinating examples of carving and the false inlay technique and exhibit a variety of styles from period to period. A new approach that gradually gained acceptance in the Ottoman period was painting on wood. Using this painting technique, in which green was predominant as a background color, various articles of everyday use such as drawers, boxes and chairs were produced, some of which were lacquered. Among the wooden transport vehicles used by the Palace and the upper classes there are examples of woodcarving that may be regarded as masterpieces in their genre. The caiques and carriages produced in İstanbul fall into separate categories of large-scale wooden objects. The same can be said of the thrones in Topkapi Palace, which, with their decorations in gold, silver and precious stones, also represent the jeweler's art (Sancaktaroglu 1977).

Another genre of Ottoman wood carving was the simultaneous use of metal applique and metal plaques. The wood used for objects of this genre was not highly decorative in itself, the emphasis being rather on the metal accessories. Metal put on doors, window shutters and cabinet doors had existed since the Seljuk period. Plaques of various metals, mainly silver, displaying motifs worked in the repousse technique were mounted on everyday wooden objects such as chests, clogs and dustpans from the 16th century on. This technique was widespread. These craftsmen who worked in inlay were experts at applying substances like mother-of-pearl and tortoise shell on wood. Doors and window shutters, cabinets, drawers, stools and Koran stands were often decorated in this way. The inlay work of Damascus differed from that of İstanbul.

Of all the sultans, Abdülhamid II (1842-1918) probably appreciated woodcarving the most. During his reign, he worked in his own carpentry shop and a distinctive Palace style began to take shape (URL1).

3. THE TECHNIQUES APPLIED IN WOODWORKS IN TURKEY

3.1 Carving

During the carving process, a pointed chisel works out the decoration in raised form by carving the surface of the wood, which involves deep carving, superficial carving, cuttingtype carving (decoupage) and natural shape carvings. This technique was widely used to decorate doors, window shutters, chests and ceiling under dom (Fig 2) used in everyday life. Some of the varieties employed include deep incising of flat and curved surfaces, and carving in two planes. In the case of the latter, an inscription would be added in a second plane over another carved surface decorated with vegetal motifs (<http://newspot.byegm.gov.tr>).



Fig. 2..A sample for superficial carving (URL2).

3.2 Latticework

There is no ground in this technique, but various compositions carved in the form of palmettes, lotus leaves and spiral leaves.

3.3 Painting

Painting (Fig. 3), which first came into use as a decorative architectural element among the Seljuks, underwent extensive development under the Ottomans in the 17th and 18th centuries. At that time, triangular, polygonal and star-shaped plaques painted with vegetal motifs were used on doors and pulpits to give the appearance of "kündekari". After the 18th century, painted fruit and floral designs of European origin were frequently employed as decorative elements in secular architecture (Sogutlu 2004; URL3: <http://newspot.byegm.gov.tr>).



Fig. 3. Sample for painting the carved wood (URL2).

3.4 Dovetail (Kundekari) technique

The materials most frequently used in decorative carving are walnut, apple, pear, cedar, ivory and rose. Anatolia was always self-sufficient when it came to wood and even exported this raw material to Syria and Egypt who were less well-endowed in this respect (Yuksel 2002).

"Kündekari" or tongue-and-groove joining is the name given to the technique of placing small pieces of wood side by side to form a design. This technique was first seen in Islamic art in the 12th century. It was employed both by the Seljuks and Ottomans, who enriched it with innovative and more advanced methods. Special attention should be drawn here to the fact that the creation of interlocking patterns in wood is much more difficult than the application of similar patterns on books and metals because such woodcarving is an entirely plastic art (Yuksel 2002).

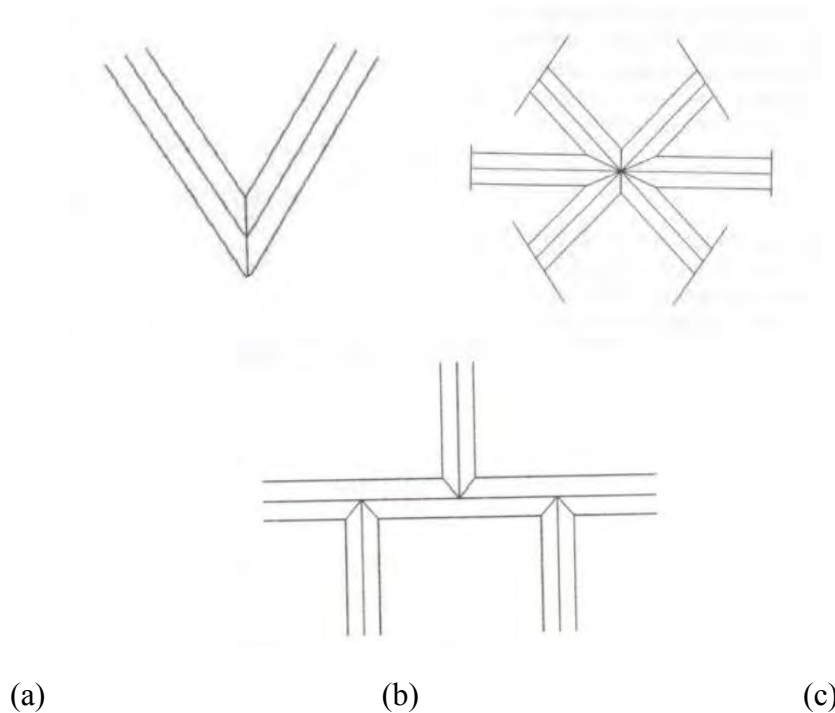


Fig. 4. Joint types for dovetail methods. (a): angel type. (b):multiply type. (c): vertical type.

Kündekari, which was employed more often on the backboards of pulpits and on doors, falls into two categories: genuine "kündekari" and imitation "kündekari". In genuine "kündekari" pieces of wood of various geometric shapes decorated with vegetal motifs are skillfully placed side by side (Fig. 4). The joining of these pieces without any nails or glue requires a high degree of expertise. They are joined in such a way that even if the wood dries up and shrinks the pieces will not fall out.

On the other hand, in imitation "kündekari", a variety of techniques utilizing relief carving in combination with glue and nails, or sometimes using relief alone, were employed to create the appearance of "kündekari" with only a single piece, or very few pieces of wood.

The Ottomans used plain pieces of wood in place of geometric shapes. The mid-sections of double doors, which were traditionally divided into three sections, were often decorated with tiny mirrors surmounted by an inscription in the topmost section. This technique is effectively applied in the Konya Alaaddin Mosque (Yuksel 2002).

The Kündekari technique, of which the earliest examples were found in Egypt, Aleppo and Ana in the 12th century, involves fixing small geometric pieces together with grooves. No nails or other fixatives are used. Thus, the works of art created with this technique have survived until today without being damaged by the environment. The grains of individual pieces were placed crosswise, so moisture or heat would not pass from one to another. As a result, works of kündekari art have maintained their good condition and smoothness throughout the centuries (URL4).

The carving methods used by the Seljuks have been replaced by dovetail works of the Ottomans. This work is done by attaching small geometrical pieces by morticing and tenoning. Since the veins of the pieces come crosswise in this method, no deviations and

deformities occur due to humidity and heat, and the works preserve their proper appearance over centuries (Özdemir 1997).

During the 11th century, walnut or cedar tree next to the walnut tree next to the box by putting works created by putting the contrast form. Real künde-karide is fully three-dimensional shape. They were applied in the gate of the mosque, pulpit, preaching chair, cabinet doors, windows and architectural elements. In this technique there are various geometrical shapes such as stars, octagonal, decagon, diamond, parquet and a lot of geometry applied to classical designs (Fig. 5) (URL4).



Fig. 5. Typical künde-karide wood carving sample for Turkish art (URL5).

3.5 Inlaying

In later periods, inlaying was widely used besides dovetail works. In this method which is divided as inlaying of mother-of-pearl and inlaying of wood, the decorative design is drawn on the finished surface by a pointed pencil and the proper places of the design is engraved and then inlaid with mother-of-pearl, tortoise shell or ivory. In another kind named as "Damascus work", the pieces of mother-of-pearl are surrounded by thin metal work. First observed in the 14th and the 15th centuries, this technique became very widespread among the Ottomans. It consisted of applying in thin plates substances such as mother-of-pearl, ivory or tortoise shell on wood. The edges of the plates were decorated with narrow, raised bands. Such plates can also be applied by first carving out the surface of the wood and then gluing the pieces in place like a mosaic, as in intarsia. The Turks rank first among the various Islamic peoples in their expertise in applying this technique.

Widely used until this century on such furniture as chairs, stools and mirror frames, this art is still practiced today (URL1).

4. CARVING WOOD IN TURKEY

4.1 Flowchart of wood carving

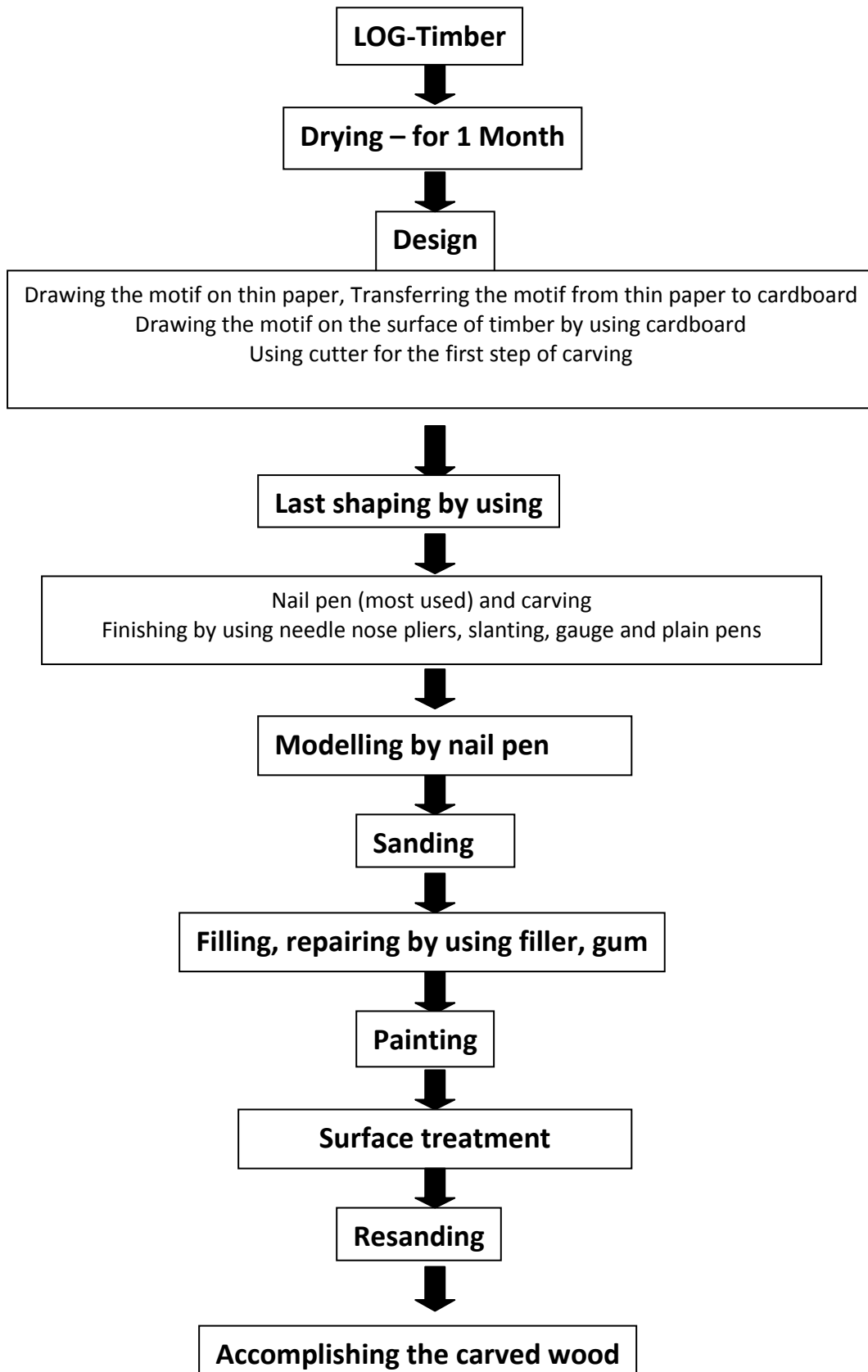


Fig. 6. Flow chart for carving process applied in Turkey.

The wood species used for carving in Turkey is walnut (*Juglans regia* L.) and horn beech (*Carpinus betulus* L.). The most popular wood species for carving is wallnut due to its density and easy workability. Moreover, poplar and pine also are used for making box etc. Carved wood is used for following purposes: Local wood carving survives today in some parts of Southern Anatolia. Diyarbakır is long been known for its damascene canes and Kahramanmaraş for its elaborately carved furniture (URL6).

4.2 Carving Types

Various carving types applied in Turkey are given as follows (Fig 7):

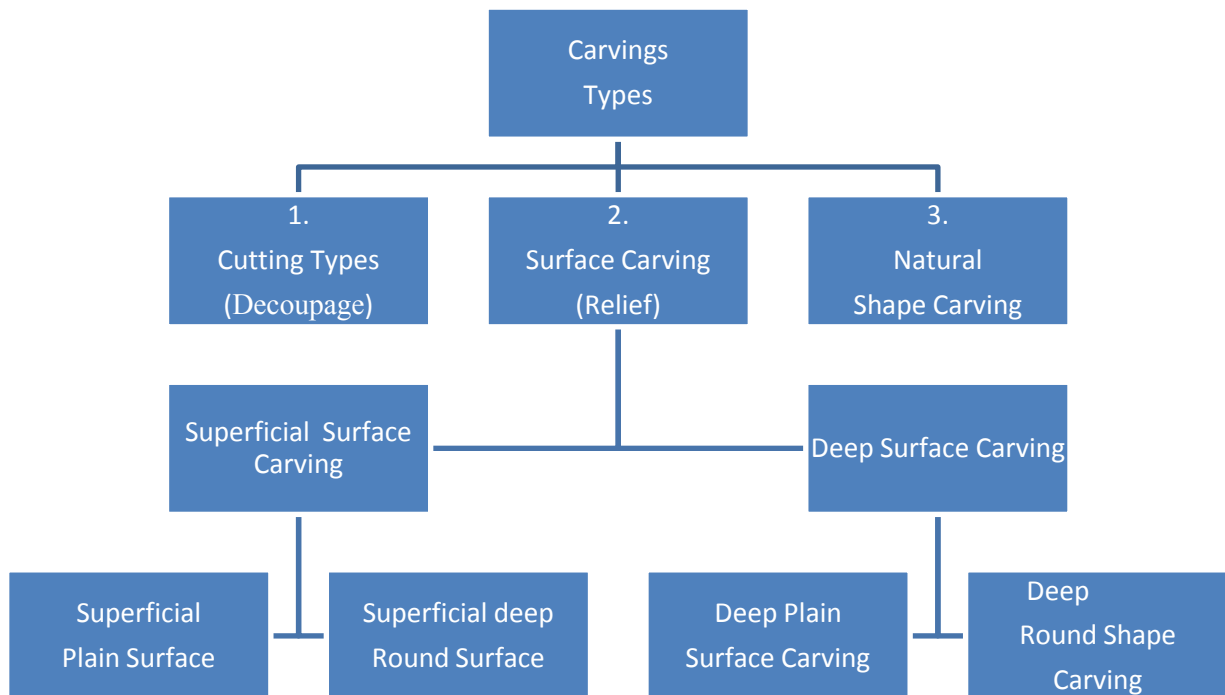


Fig. 7. Carving types applied in Turkey (Sogutlu 2004).

4.3 Cutting type Carving (decoupage)

The motifs drawn on the surface of timber with certain thickness is made by using hair sawmill, mouse tail sawmill or decoupage sawmill.

If the obtained and cut motif is glued on any surface, this piece is called as ‘aplik’ and this work is also called as ‘aplike’.

Aplik work is simple; the motif is first drawn on the thick paper copied on the surface of timber and then the parts to be taken from timber is cut and removed. If one wants to get more than one aplik, one can glue the timbers by putting thin paper in between. After carving and cutting the motifs, the papers are removed.

Finally, the obtained image is fixed on the timber surface and the finishing is continued, such as sanding, filling, repairing, varnishing etc. (Fig. 8).



Fig. 8. A balcony parapet sample for cutting type carving (URL2).

4.4 Surface Carving (Relief)

In order to give certain motion, only to the motif or shape on the surface of timber this carving technique is used. For this purpose triangle or U-shaped tools, so-called “pen” are used. This work can be done on both the finished and untreated surfaces. If wanted, the tiny lines on the surface can be painted. The surface carving is classified into two groups: superficial and deep carvings.

4.5 Superficial Carving

Superficial surface carving (Fig. 9) refers to carving in which the depth does not exceed 3-4 mm from the surface. While executing the desired shape, eg., a leaf, the main lines should not be disregarded. Otherwise, the work may easily result in failure. Subsequent cleaning of the timber curves is not difficult.

This type of work is to be found in various countries after the 14th century. In France, this shape is commonly used during the reigns of Louis 14th-16th. Although this work is not so popular in Britain in the above mentioned term, the Chippendal which is different from Gotik-Berok and Rokuko term applied this work.

In Ancient Turkish and Islamic (Arabesque) fashion, this work was lovingly applied. This type work is remains very popular in Turkey nowadays.



Fig. 9. A niche sample for superficial carving (URL2).

4.6 Deep Surface Carving

As the name suggests, deep surface carving employs a technique using deeper incisions, and thereby creating a more three dimensional feel. In this way, the carved motifs could be described as being more alive. Compared to other methods, this deeper surface carving method adds an extra degree of difficulty in its execution. The most characteristic examples of this can be seen in examples of Gothic art from the 14th century.

The Baroque and Rococo periods of the 17th and the 18th centuries made luxury fashionable. This type of art is very popular in France and holds an important place in the history of furniture and architecture.

The composition of motifs involving sea shells, music tools, flower arrangements, birds and acanthus plants are obtained by this method. They are mainly used in furniture on the surface of buildings and boxes (Fig. 10).

Carving by this method brings about problems with cleaning and also a decrease in the strength of the wood. In Istanbul, these types of motifs can be seen on public buildings, foundation, stones and wood. In national museums in Turkey, furniture may be seen on display from various eras.



Fig. 10. A box sample for deep carving (URL2).

4.7 Natural Shape Carvings

Natural shape carving (Fig. 11) is the most difficult carving type. In order to perform this type of carving, the design carver should have strong knowledge on anatomy and biology sciences. This type of carving is also referred to as statue carving. The motifs are three dimensional. The ancient Assyrians and Egyptians designed their furniture with natural carving art. For example, the [Restart from here](#)

ancient Egyptians used varied shapes of animal and man headed legs, furniture crown, prince and princes statues, various platforms in their chairs even nowadays this art is still applied. Three-dimensional carving is observable in Ottoman woodcarving. This style of carving, which was generally used to decorate the ceilings of libraries, is as valuable aesthetically as it is technically, and an attempt is being made to keep it alive today (Sogutlu 2004).



Fig. 11. Various samples for natural object carving (URL2).

5. WOOD CARVING TOOLS

Carving tools are made from the different body and tips to comply with arcs.

5.1 Carving Tools' Structure and Features

The body that is mounted to tip as square section like, gets off to edge as different grooves.

5.2 Body Dorsal

It was rectified but was not shined. There is an important that to be rectify properly. Thickness increases to bottom of body, then width scales down trough to bottom of body.

5.3 Bottom of Body

It is at the junction with body and handle.

5.4 Gouge

Gouge surface is properly designed and shined. It was done as gouge that he is not spend more energy when a person is working.

5.5 Tail

It joints body with handle. It is square profile and shows structure.

5.6 Edge (cutter tip)

It is part of edge carving cuts for plain and curve. The carving motif 's cutting and forming that is related with edge. It must be attention to part of edge's tip have to be straight.

5.7 Handle

It has to make from a stable tree for a area exposure to shock, e.g., ash, hornbeam, oak, boxwood, beech, acacia, maple, walnuts and chestnut atc. Handle must be varnished for protecting and must be attached between body and tail.

According to body structure, wood carving tools:

- 1- Plain body carving tools,
- 2- Slant body carving tools,
- 3- Gauge body carving tools.

5.8 Plain body carving tools

They are used for cutting motif's plain corner and motif's slanted corner.

5.9 Slanting body carving tools

They are used when plain body carving tools are not used for motif's handyworks. They are used master craftsman only.

5.10 Gauge Body Carving Tools

The masters are use them from that not doing plain and curve body carving tools very sensitive and delicate.

Table 1. Triangle carving tools are entitled accordingly edge's width.

	Narrow	Medium	Wide
Plain body	39	41	45
Slant body	40	42	46
Gouge body	43	44	--

5.11 Carving Tools Using Furniture and Decoration

- 1/4 - Plain body not groove carving tool 4 mm edge width.
- 6/6 - Plain body groove carving tool 6 mm edge width.
- 11/2 - Plain body groove carving tool 2 mm edge width.
- 18/10 - Slant body groove carving tools 10 mm edge width.
- 13/18 - Slant body groove carving tools 8 mm edge width.
- 24/6 – Gouge body into curved groove carving tools 6 mm edge width.
- 28/12 – Gouge body into curved groove carving tools 12 mm edge width.
- 36/14 - Gutter body outside curved groove carving tools 14 mm edge width.
- 39/12 - Plain body triangle carving tool 12 mm edge width.
- 42/10 - Slant body triangle carving tools 10 mm edge width.
- 43/8 - Gouge body into curved groove triangle carving tools 8 mm edge width.

5.12 Modelling Shapes in Carving

- Assembling motifs side by side
- Appliacion two different motifs by sequence
- Ranking motifs symmetrically
- Giving narrow and large surface to motifs
- Assembling different motifs together

6. CONCLUSIONS

Various wood works unearthed in the Central Asian tumuli and Pazyryk excavations, have revealed that Turks were interested in this subject since ancient times. Animal motifs with legendary and religious significance were frequently used in the decoration of wooden objects. This tradition known as the "animal style", was gradually abandoned and replaced by vegetal and geometric motifs after the Turks adopted Islam. Wood works techniques applied in the wood art of Turkey are as follows: carving, painting, dovetail (kundekari), inlaying and latticework, respectively. The most special technique for Turkey is dovetail (kundekari). Wood carving in Turkey is classified into three groups: cutting type, surfaca carving (superfical and deep), which is the most popular, and natural shape carving. Some carving tool such as needle nose pliers and nail pen is peculiar to Turkish carving industry.

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URL3: <http://newspot.byegm.gov.tr>

URL4: <http://www.motiftr.com/L/EN/mid/160>

URL5: <http://galeri.uludagsozluk.com/tr>

URL6: www.kentmaras.com



WOOD CARVING ART IN TURKEY

Prof. Dr. M. Hakkı ALMA
University of Kahramanmaraş Sutcu Imam
TURKEY





1. Introduction
2. Histories of Wood Works in Turkey
3. The Techniques Applied in Woodworks in Turkey
4. Carving Wood in Turkey
5. Wood Carving Tools
6. Conclusions



1. INTRODUCTION

- The History of wood carving has from the remotest ages the decoration of wood as a foremost art.
- Extant everyday objects used over the lengthy time segment encompassing both the Seljuk and Ottoman periods are so few as to be practically non-existent.



- In contrast, architectural accessories of religious structures dating from the Seljuk period, as well as objects used in these buildings, are sufficient in number to give a good idea of Turkish wood carving.
- Architectural elements in certain mosques in Anatolia provide considerable information on woodcarving in principalities during the post-Seljuk period.



- It is a fact that woodcarving developed following the migration of the Turks to Anatolia, a phenomenon in which the influence of geography and the cultural milieu cannot be denied.
- Syria and Egypt in particular demonstrated development in this art parallel to that in Anatolia in terms of the techniques employed.



- The bulk of extant wooden objects from the Seljuk and Ottoman periods are housed in the Ankara Ethnographical Museum and the Istanbul Museum of Turkish and Islamic Antiquities.
- The wealth of decoration seen on the woodcarving used in Seljuk architecture developed parallel to the architecture of that period.



- Wooden houses constitute a little known aspect of Turkish architecture.
- The facades, eaves and ceiling decorations of traditional Turkish wooden houses constitute fascinating examples of carving and the false inlay technique and exhibit a variety of styles from period to period.



- A new approach that gradually gained acceptance in the Ottoman period was painting on wood.
- From the 15th century onwards, decorations began to be painted on architectural elements as well as on smaller wooden objects.
- Interesting examples date to the 18th and 19th centuries in the secular architecture of Topkapı Palace and of such urban centers as Edirne and Bursa.



-
- ❑ Among the wooden transport vehicles used by the Palace and the upper classes there are examples of woodcarving that may be regarded as masterpieces in their genre.

 - ❑ Another genre of Ottoman wood carving was the simultaneous use of metal applique and metal plaques.



-
- ❑ Close relations existed between the masters who crafted the wooden elements used in architecture (neccar) and the architects, which was especially evident in the Ottoman period when many architects were former carpenters and masters of intarsia.



2. HISTORIES OF WOOD WORKS IN TURKEY

2.1 Wood Works in Before Islamic Architecture

- The decorative wooden objects found in excavations in Central Asia show that the Turkish art of woodcarving dates back to the distant past.
- As in other branches of art, animal motifs with legendary and religious significance were frequently used in the decoration of wooden objects.



2.2 Wood Works in Early Islamic Architecture

- Various wood works unearthed in the Central Asian tumuli and Pazyryk excavations, have revealed that Turks were interested in this subject since ancient times.
- In Islamic art and especially in Omayyad and Abbasid wood works, we find a tendency towards a new style.



- The magnificent gate displayed in the Metropolitan Museum and the wood works displayed in the Cairo Museum, prove that the Fatimid decorations were oriented towards animal motifs in later periods.



2.3 The Seljuk Wood Works

- Seljuks considered wood works very important and they have produced many works of art such as pulpits, reading desks, chests of drawers in addition to the architectural elements ornamenting buildings.
- Geometrical forms and plant motifs were often used in the Seljuk wood works where carving and latticework were widely applied.

2.4 The Ottoman Wood Works

- The Seljuk wood works influenced the early Ottoman wood works of the 14th -15th centuries and various works were started to be made by new techniques and with new decorative elements.
- Beginning with the 16th century, the Rumi decoration on the wood works gained a much more complex appearance by uniting with different floral patterns found in the similarly decorated tiles.

The Seljuk Wood Works In Konya Alladdin Mosque To, Turkey

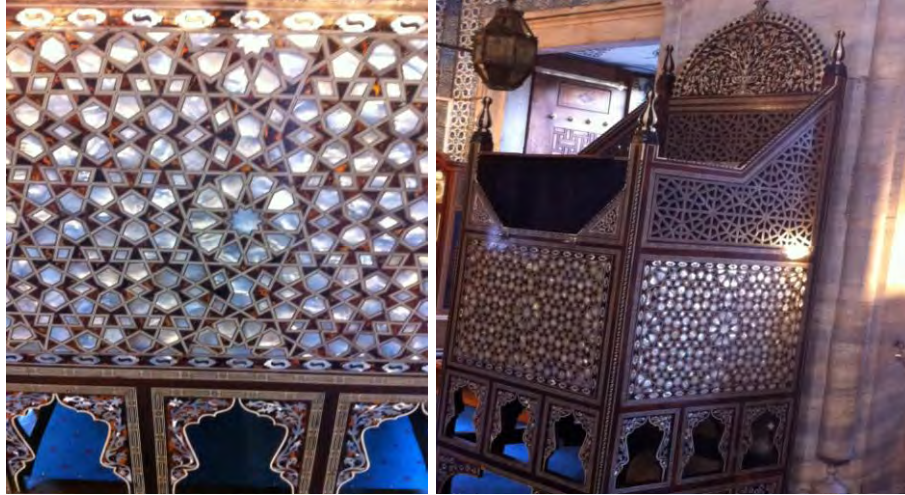




Fig. 1. A Rumi carving style sample for door (URL1).

- ❑ With materials such as mother-of-pearl, tortoise shell and ivory used in the 18th century wood works, the products gained a more colourful appearance.
- ❑ Of all the sultans, Abdülhamid II (1842-1918) probably appreciated woodcarving the most. During his reign, he worked in his own carpentry shop and a distinctive Palace style began to take shape (URL1).

Chair Decorated With Mother Of Pearl



Box decorated with mother of pearl



3. THE TECHNIQUES APPLIED IN WOODWORKS IN TURKEY

3.1 Carving

- In the method of carving, a pointed chisel works out the decoration in raised form by carving the surface of the wood, which is deep carving and superficial carving, cuttingtype carving (decoupage) and natural shape carvings.



Fig. 2..A sample for superficial carving (URL2).

3.2 Latticework

- There is no ground in this technique, but various compositions carved in the form of palmettes, lotus leaves and spiral leaves.



Latticework in Seljuk

3.3 Painting

- Painting, which first came into use as a decorative architectural element among the Seljuks, underwent extensive development under the Ottomans in the 17th and 18th centuries.



Fig. 3. Sample for painting the carved wood (URL2).

3.4 Dovetail (Kundekari) Technique

- The materials most frequently used in decorative carving are walnut, apple, pear, cedar, ivory and rose.
- "Kundekari" or tongue-and-groove joining is the name given to the technique of placing small pieces of wood side by side to form a design.

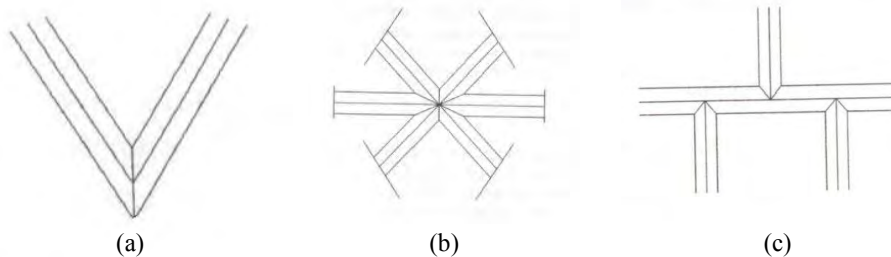


Fig. 4. Joint types for dovetail methods. (a): angel type. (b): multiply type. (c): vertical type.



- ❑ The Ottomans used plain pieces of wood in place of geometric shapes.
- ❑ The Kündekari technique, of which the earliest examples were found in Egypt, Aleppo and Anain the12th century, involves fixing small geometric pieces together with grooves.
- ❑ The Kündekari technique, of which the earliest examples were found in Egypt, Aleppo and Anain the12th century, involves fixing small geometric pieces together with grooves.



- ❑ The carving method used by the Seljuks have been replaced by dovetail works of the Ottomans.
- ❑ During the 11th century, walnut or cedar tree next to the walnut tree next to the box by putting works created by putting the contrast form.



Fig. 5. Typical kundedari wood carving sample for Turkish art (URL5).

3.5 Inlaying

- In later periods, inlaying has been widely used besides dovetail works.
- In this method which is divided as inlaying of mother-of-pearl and inlaying of wood, the decorative design is drawn on the finished surface by a pointed pencil and the proper places of the design is engraved and then inlaid with mother-of-pearl, tortoise shell or ivory. In another kind named as "Damascus work", the pieces of mother-of-pearl are surrounded by thin metal work.

4. CARVING WOOD IN TURKEY

4.1 Flowchart of wood carving

- The wood species used for carving in Turkey is walnut (*Juglans regia* L.)and horn beech (*Carpinus betulus* L.).
- Carved wood is used for following purposes:
Local wood carving survives today in some parts of Southern Anatolia.

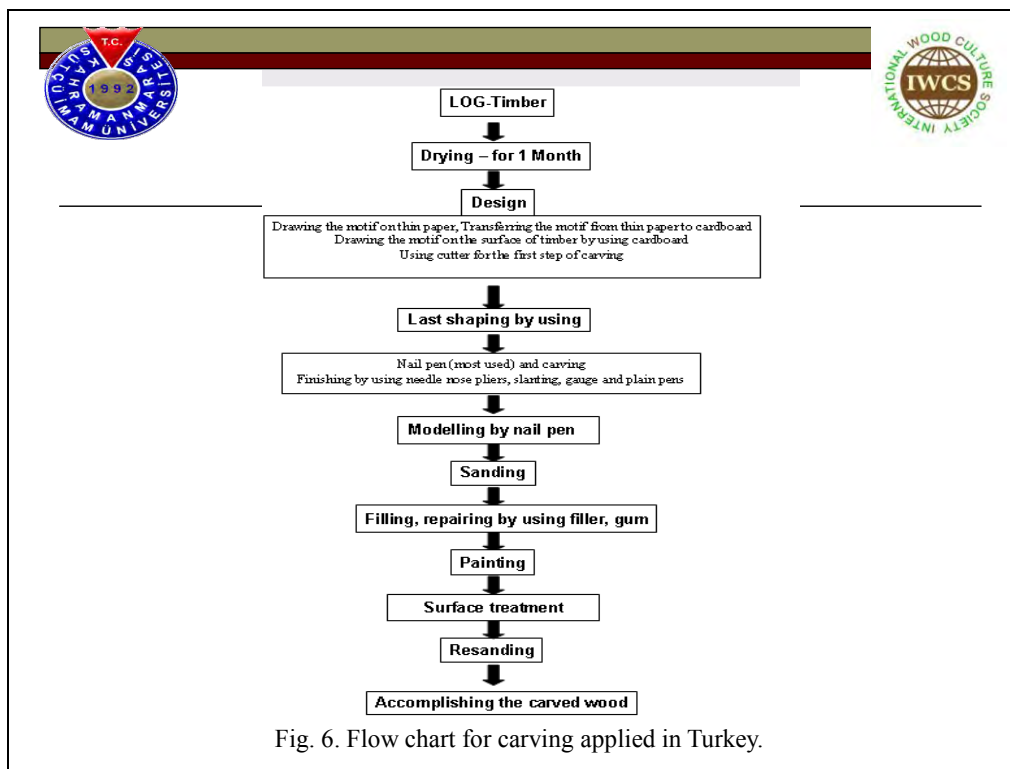


Fig. 6. Flow chart for carving applied in Turkey.

4.2 Carving Types

- Various carving types applied in Turkey are given as follows.

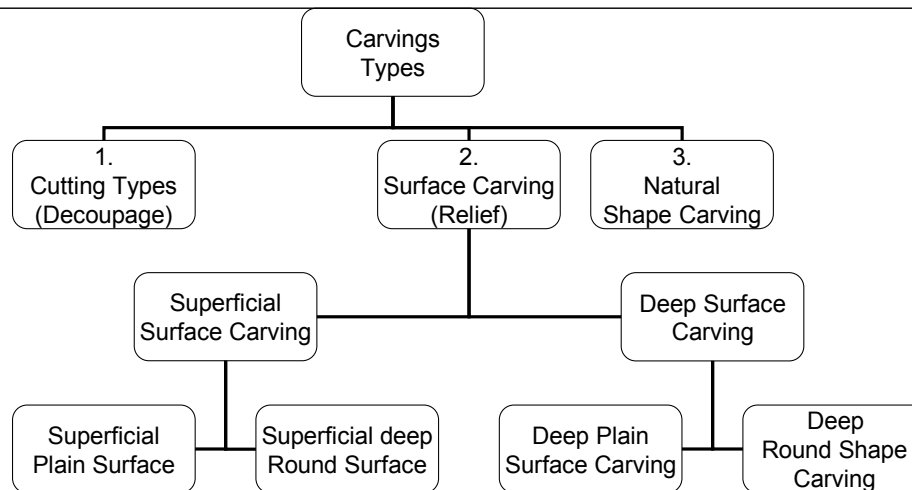


Fig. 7. Carving types applied in Turkey (Sogutlu 2004).

4.3 Cutting type Carving (decoupage)

- The image drawn on the surface of timber with certain thickness is made by using hair sawmill, mouse tail sawmill or decoupage sawmill.
- If the obtained and cut motif is glued on any surface, this piece is called as ‘aplik’ and this work is also called as ‘aplike’.



Fig. 8. A balkony parapet sample for cutting type carving (URL2).



4.4 Surface Carving (Relief)

- ❑ In order to give certain motion, only to the motif or shape on the surface of timber this carving technique is used.
- ❑ For this purpose triangle or U-shaped tools, so-called “pen” are used.



4.5 Superficial Carving

- ❑ Superficial surface carving (Fig. 8) is the carving whose depth does not exceed 3-4 mm from surface.
- ❑ Shape to be done, e.g., leaf, side should be done without disregarding the main lines. Otherwise, the work is easily failed.
- ❑ In Ancient Turk and Islamic (Arabesque) fashion, this work was lovely applied. This work is very popular in Turkey nowadays.



Fig. 9. A niche sample for superficial carving (URL2).

4.6 Deep Surface Carving

- The highly depth surface carving is much more depth of less depth surface carving. The procemed motifs are worked much more alive.
- Compared to other methods, relief resulted from deep carving is much more difficult. The most characteristic example of it could be seen in the Gothic fashion done in the 14th century.



Fig. 10. A box sample for deep carving (URL2).



4.7 Natural Shape Carvings

- ❑ Natural shape carving is the most difficult carving type.
- ❑ In order to perform this type of carving, the design carver should have strong knowledge on anatomy and biology sciences.
- ❑ In the mean time, this type of carving is called on statue carving. The motifs have 3 dimensions.



Fig. 11. Various samples for natural object carving (URL2).

5. WOOD CARVING TOOLS

- ❑ Carving tools are made from the different body and tips to comply with arcs.

5.1 Carving Tools' Structure and Features

- ❑ The body that is mounted to tip as square section like, gets off to edge as different grooves.



5.2 Body Dorsal

- It was rectified but was not shined. There is an important that to be rectify properly.

5.3 Bottom of Body

- It is at the junction with body and handle.

5.4 Gouge

- Gouge surface is properly designed and shined. It was done as gouge that he is not spend more energy when a person is working.

5.5 Tail

- It joints body with handle. It is square profile and shows structure.



5.6 Edge (cutter tip)

- It is part of edge carving cuts for plain and curve.

5.7 Handle

- It has to make from a stable tree for a area exposure to shock, e.g., ash, hornbeam, oak, boxwood, beech, acacia, maple, walnuts and chestnut atc.



5.8 Plain body carving tools

- They are used for cutting motif's plain corner and motif's slanted corner.

5.9 Slanting body carving tools

- They are used when plain body carving tools are not used for motif's handyworks.

5.10 Gauge Body Carving Tools

- The masters are use them from that not doing plain and curve body carving tools very sensitive and delicate.



General Classification of wood carving tools:

1. Plain carving tools,
2. Gauge carving tools (full and partially open, and closed type).
3. Nail shape carving tools (U and V profile).
4. Special carving tools
 - Tools whose handles are curve type
 - crow nose-like carving tools
 - Spun-like carving tools
 - Slanting (oblique) body type

Carving Tools in Turkey



Table 1. Triangle carving tools are entitled accordingly edge's width.

	Narrow	Medium	Wide
Plain body	39	41	45
Slanting body	40	42	46
Gouge body	43	44	--



5.11 Some Carving Tools Using Furniture and Decoration

- 1/4 Plain body not groove carving tool 4 mm edge width.
- 6/6 Plain body groove carving tool 6 mm edge width.
- 11/2 Plain body groove carving tool 2 mm edge width.
- 18/10 Slanting body groove carving tools 10 mm edge width.
- 13/18 Slanting body groove carving tools 8 mm edge width.
- 24/6 Gouge body into curved groove carving tools 6 mm edge width.
- 28/12 Gouge body into curved groove carving tools 12 mm edge width.
- 36/14 Slanting body outside curved groove carving tools 14 mm edge width.
- 39/12 Plain body triangle carving tool 12 mm edge width.
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- 43/8 Gouge body into curved groove triangle carving tools 8 mm edge width.



5.12 Modelling Shapes in Carving

- Assembling motifs side by side
- Application two different motifs by sequence
- Ranking motifs symmetrically
- Giving narrow and large surface to motifs
- Assembling different motifs together



6. CONCLUSIONS

- ❑ Various wood works unearthed in the Central Asian tumuli and Pazyryk excavations, have revealed that Turks were interested in this subject since ancient times.
- ❑ Animal motifs with legendary and religious significance were frequently used in the decoration of wooden objects .
- ❑ Wood works techniques applied in the wood art of Turkey are as follows: carving, painting, dovetail (kundekari), inlaying and latticework, respectively.
- ❑ Wood carving in Turkey is classified into three groups: cutting type, surfaca carving (superfical and deep), which is the most popular, and natural shape carving.



**THANKS FOR YOUR
ATTENTION**

Wood Aesthetic Pattern Design and its Application

Lv Jiufang⁵, Wu Zhihui and Liao Xiaomei

Abstract

This paper aims to study the characteristics of the macro-patterns of the natural wood, extracts the beautiful design elements from the point of the aesthetic principles, then according to the design principles, constitutes a break up or a combination of the aesthetic design of these elements to form kinds of rhythmic and decorative beauty of new wood grain patterns, and makes use of it to all kinds of life instruments in order to enrich the visual effect of the products, so as to enhance the value-added product design.

Keywords: *aesthetics of wood, wood pattern, graphic design*

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1. INTRODUCTION

Timber in addition to its practical value as a material substance, it also has a very important aesthetic value. With social progress and technological development, research and its application of the aesthetic value of wood have been paid more and more attention. Trees with abundant natural resources, because of its cell arrangement and distribution of different forms, the formation of patterns varies widely, and because different kinds of timber also has the appearance of physical defects, the formation of the pattern is changing unpredictably, and beautiful. Therefore, we can imagine, thousands of timber bears the rich patterns for us to study and enjoy.

This paper is based on the patterns of the natural wood, from which to extract the beautiful aesthetic design elements, then according to design principles, to develop a variety of rhythmic and decorative beauty of the wood aesthetic patterns, which have been composed by making use of computer technology to re-mix synthetic or reconstructed. These aesthetic wood patterns are composed by the natural aesthetic elements from wood, which are attractive and matched with the modern man's pursuit of 'return to nature, back to nature' philosophy of life, so they have a strong appeal and affinity for modern people. They can be widely used in industrial product design, interior design, textile design and other fields, and which can not only enrich the visual artistic effect of products, but also meet people's physical quality of life and the pursuit of a higher level of spiritual life.

The next part will be analyzed and discussed from three aspects of natural wood patterns, aesthetic principles and pattern design and its application. The first step is to extract the aesthetic elements from the natural patterns of wood, then regarding these aesthetic elements as the basic materials to combine with pattern design methods and artistic style to develop the creation and applied research of the aesthetic patterns of wood.

2. FIRST, THE EXTRACTION AND ANALYSIS OF AESTHETIC ELEMENTS OF WOOD

Although the wood anatomy has been widely in-depth research and analysis of macro-structure of wood, in the past it is only discussed from the perspective of identification of wood or wood material from the perspective of the application materials. Today we re-examine and analyze the structure of wood from the aesthetic point of view, which will get unexpected results. For example, in the past for wood identification, wood chips are cut in the wood tangential, lateral and radial section on these three criteria. However, in the aesthetics of wood, we can cut the slice of wood to get richer wood patterns at any angle and any direction. The steps of refining wood aesthetic elements are as follows:

1.1 Selection of wood

To select the timber with beautiful patterns or special defects, slice it from different angle or direction, then filter the sections with beautiful patterns as the objects for photographing.

1.2 Photographing

To take the digital photos of wood which has perfect and clear patterns with the professional camera.

1.3 The aesthetic analysis of these photos

To extract the wood aesthetic elements from the photographs according to the aesthetic principles and rules, and file them into different categories for the collection.

3. SECOND, THE CREATIVE DESIGN OF THE WOOD AESTHETIC PATTERNS

It is based on the extracted timber aesthetic elements as the basic materials, to recreate the aesthetic patterns according to the art and design theory and computer graphic design processing technology, and finally get the artistic innovation aesthetic patterns with beautiful effect of wood.

2.1 The design techniques of Wood aesthetic patterns

The most popular way to design the aesthetic patterns of wood is reconstruction. Under the condition of being dispersed, reconstruction is to link the design elements together organically or to optimize the combination of elements as part of the process of elimination interference, in order to intercept a valuable part of the elements, resulting in creation of new design elements needed. In other words, it is the way to obtain a new form which is from an objective or abstract images in the decomposition of the basic elements, according to different methods and means of re-combination and construction. Reconstruction includes two kinds of homogeneous and heterogeneous. Isomorphism between the elements is the same combination of reconstruction, has been optimized to produce new elements. Isomerism means to combine and re-build the heterogeneous elements of different qualities to generate new elements. In addition, it can also be homogeneous or heterogeneous combination of elements and then construct to produce new elements. Here takes the rosewood, striped ebony, and the Philippine ebony's plate pattern of electronic photos for example, the use of icons to show the way to design the wood aesthetic patterns' process.

2.2 The illustrations of Wood aesthetic patterns' design

Example 1: Take the rosewood for example, first to analyze the surface pattern features of rosewood board, to extract concise aesthetic elements of the basic graphics, then use the design principles and modern computer graphics technology to design. The following is the design steps:

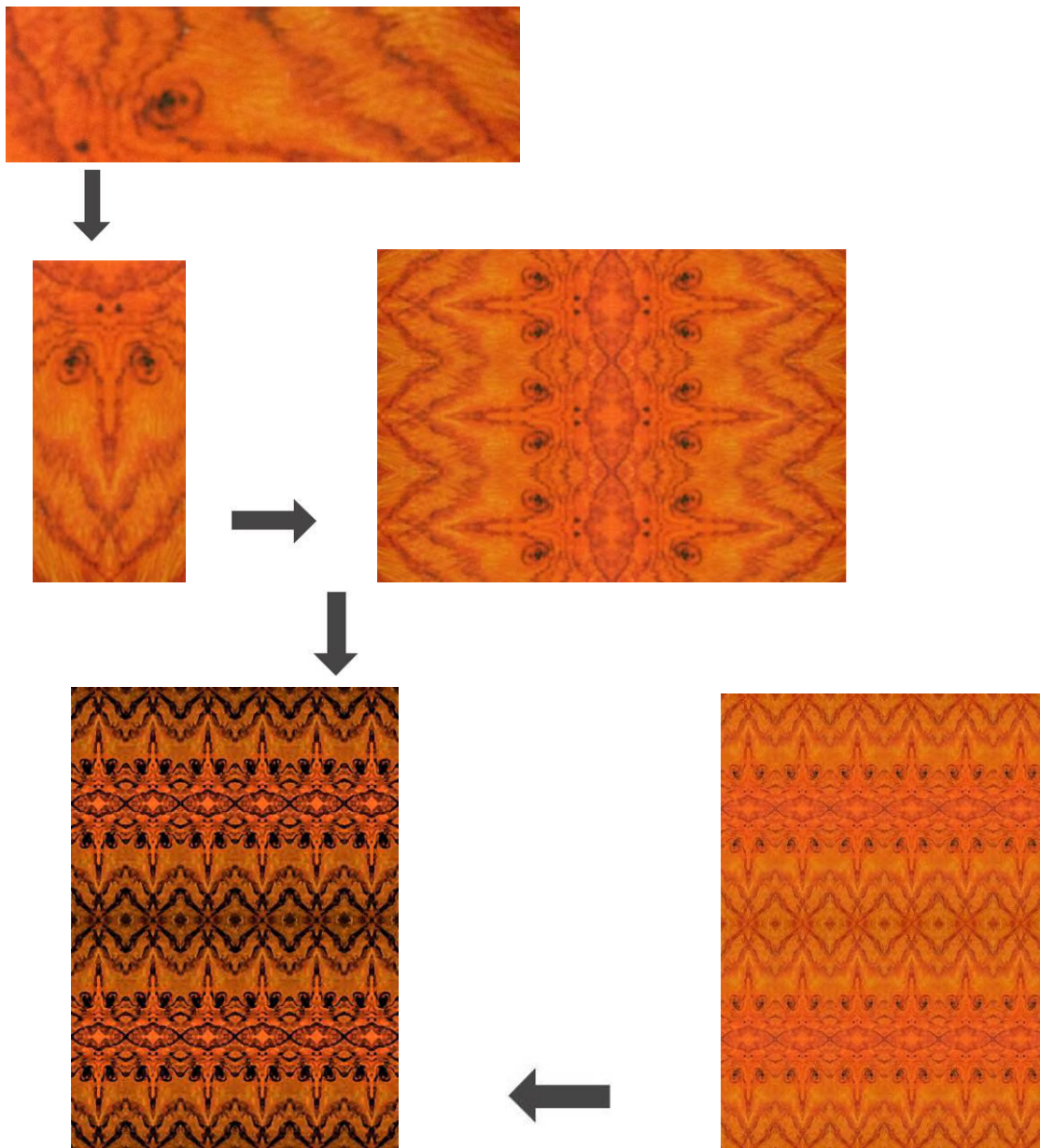


Fig.1 Design steps for aesthetic patterns of rosewood

To intercept the pattern elements on the rosewood board and combine them by stitching to form a 'sheep's head' logo, then use photo shop's filter tool to create two different styles of design, which are the patterns with both dry brush and watercolor effect (Shown in Figure 1).

Example 2: Take the striped ebony for example, first to analyze the pattern features of the striped ebony, and extract the concise aesthetic elements, then use the design principles and modern computer technology to design the patterns. The following is the design steps:

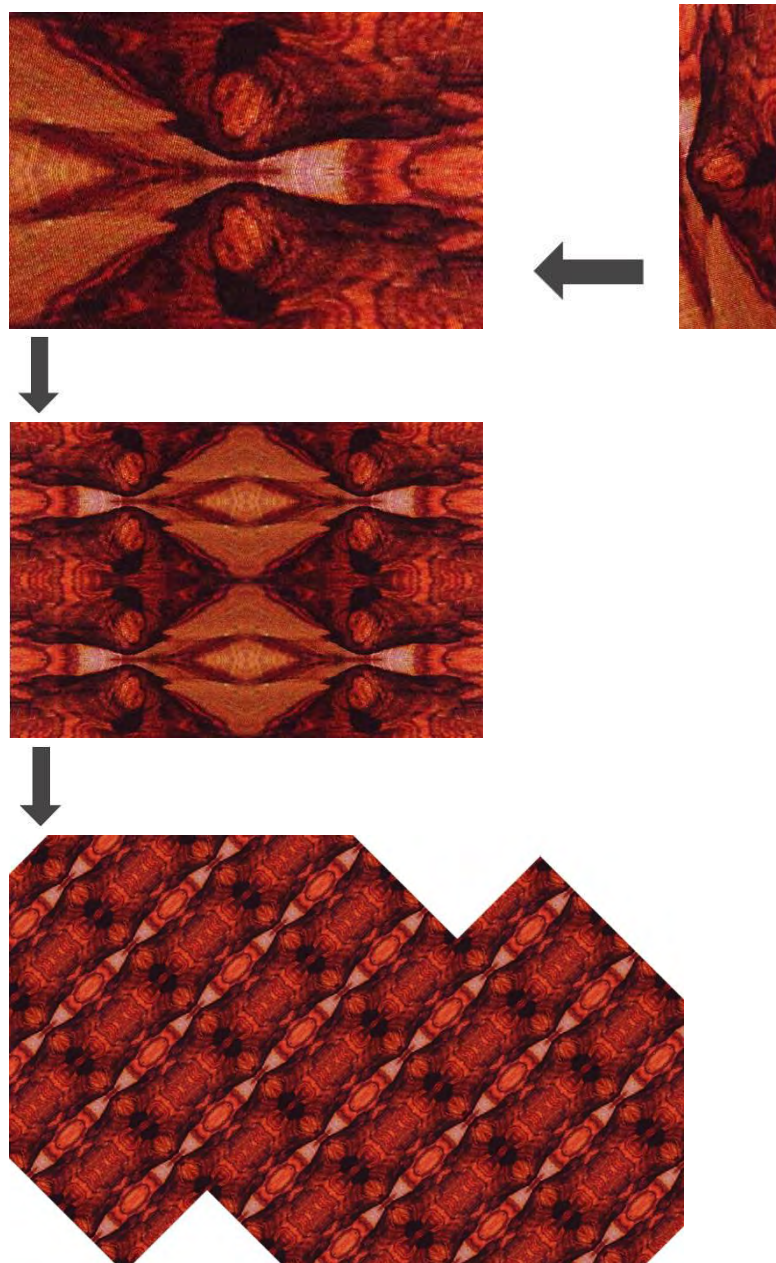


Fig.2 Design steps for aesthetic patterns of ebony

Example 3: Take the Philippine ebony for example, to analyze the pattern characteristics of the Philippines ebony and extract two concise aesthetic elements, then to create two different but similar style patterns from different angles with the divergent thinking, and the colors of the creative designs are faithful to the original timber deep color, which shows rich religious color and mysterious feelings. The following is the design steps:

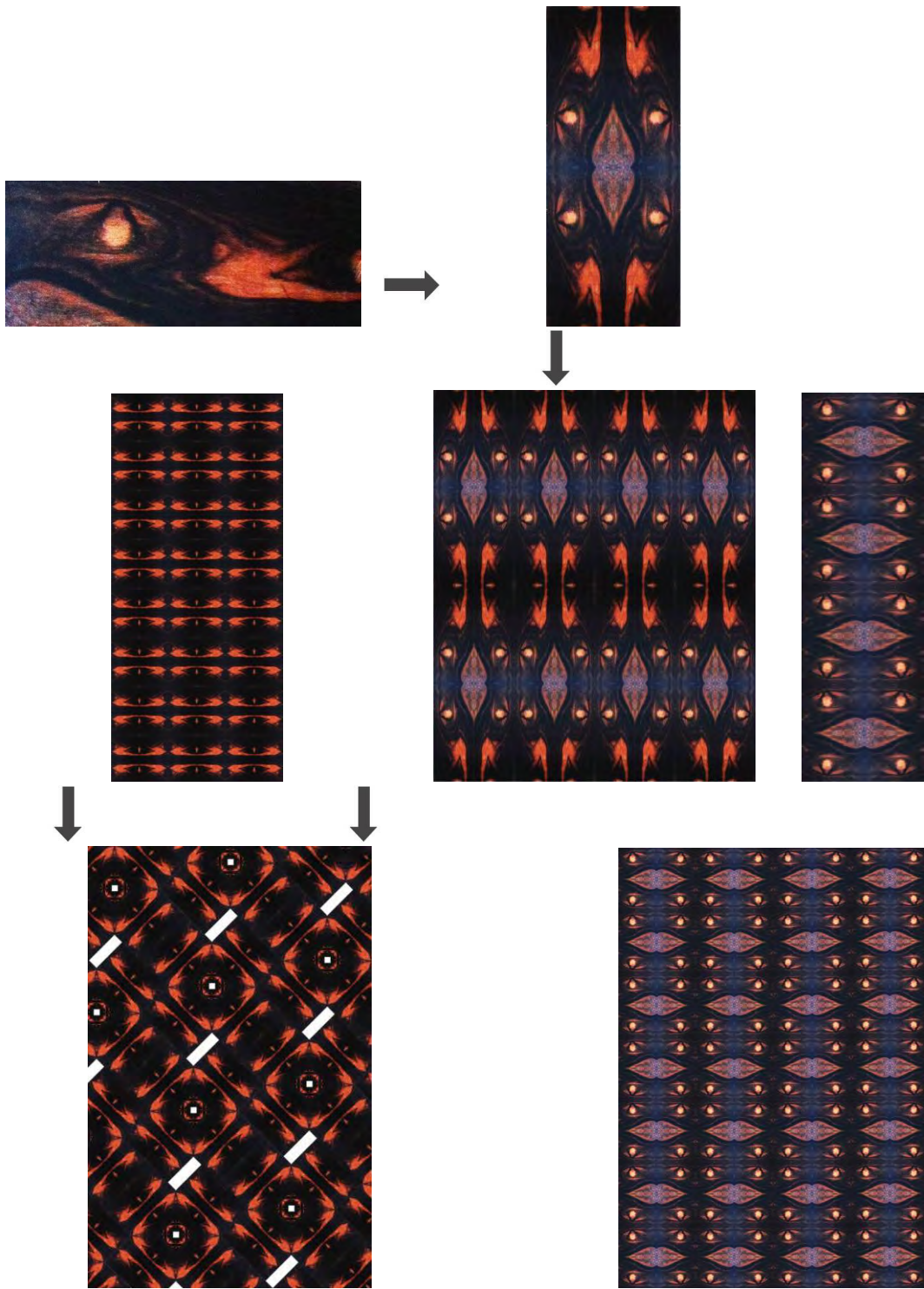


Fig.3 Design steps for aesthetic patterns of Philippine ebony①

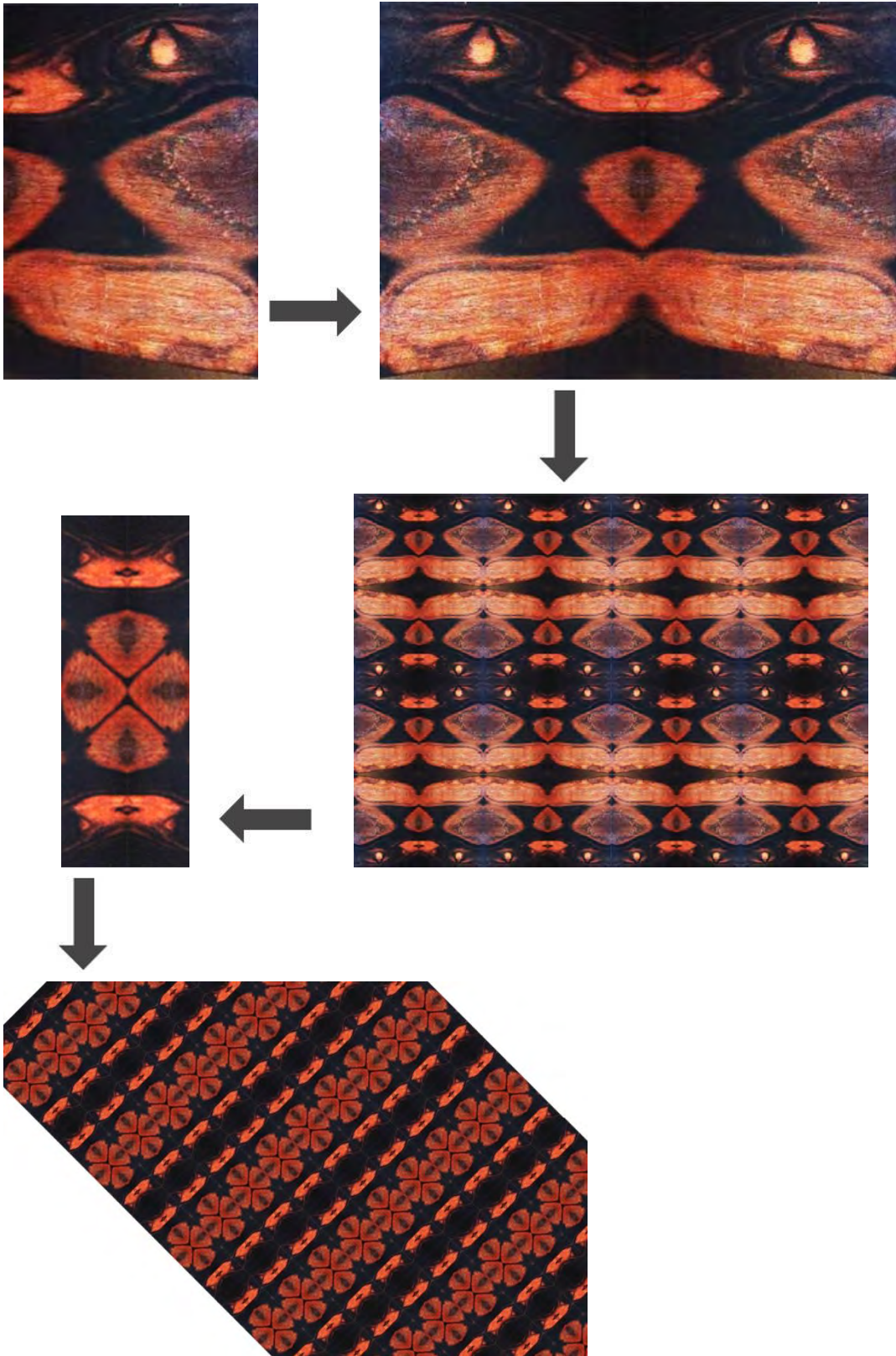


Fig.4 Design steps for aesthetic patterns of Philippine ebony②

4. THIRD, THE APPLICATION OF WOOD AESTHETIC PATTERNS IN PRODUCT DESIGN

1.

Wood aesthetic patterns used in the subject of art and design have broadened the space and scope of the artistic design. Through previous research and design work, a series of different styles of wood aesthetic patterns have been created. These new patterns will be widely used in the field of art and design such as costume design, jewelry design, industrial design, interior design, product design, which definitely enhances the added value in products. Some examples have been shown as below:



Fig.5 Costume design with the aesthetic patterns **Fig.6 Lamp design with the aesthetic patterns**



Fig.7 Tea-set design with the aesthetic patterns



Fig.8 Tea-set design with the aesthetic patterns

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