

PROJECT 1

Set of picture frames for

Magppie Retail Limited

400, G.D.ITL North Ex Towers
A-9 , Netaji Subhash Place
Ring Road, Pitampura
New Delhi 110088(INDIA)

Pragati Kapur
Industrial design 2008-2010
08613804

June 11, 2009

TO WHOMSOEVER IT MAY CONCERN

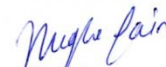
This is to certify that Ms. Pragati Kapur, a student of Industrial Design at Indian Institute of Technology, Bombay has undergone a five weeks training at Magppie Retail Ltd., New Delhi, from 11th May 2009 to 11th June, 2009.

During this period, she was assigned a project for designing a set of photo frames in stainless steel, keeping in mind the manufacturing processes involved. She also made visits to the company's production unit at Kundli, Sonipat to study and document the processes.

She carried out her work efficiently and with full dedication and punctuality. The quality of work was well appreciated. She is very creative and hard working and she would be an asset to any organization.

We wish her all the best for her future.

For Magppie Retail Ltd.



Megha Jain

Vice President

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ACKNOWLEDGEMENT

I am grateful to Mrs. Megha Jain for her guidance through out the project. Her vast knowledge and experience gave me valuable guidance on each and every step of my work.

My sincere thanks to Mr. Vinod Jain for making available all the resources of the company.

I am thankful to my teachers for their valuable guidance , my friends and family for their support and belief

I would also like to thank all the staff members at Magppie Retail Limited for their help during my project

Thanks to all who have helped me directly or indirectly in the completion of my project.

THE MAGPPIE WAY

Magppie, design led brand for premium home accessories began manufacture of steel product in 1994 and entered domestic market in 2000.

This Indian enterprise is an off shoot of a 30 year old family run business of rolling stainless steel.

Today the brand has achieved international status and enjoys its presence in over 20 countries including Italy, Denmark, Greece, Japan, USA and Australia.

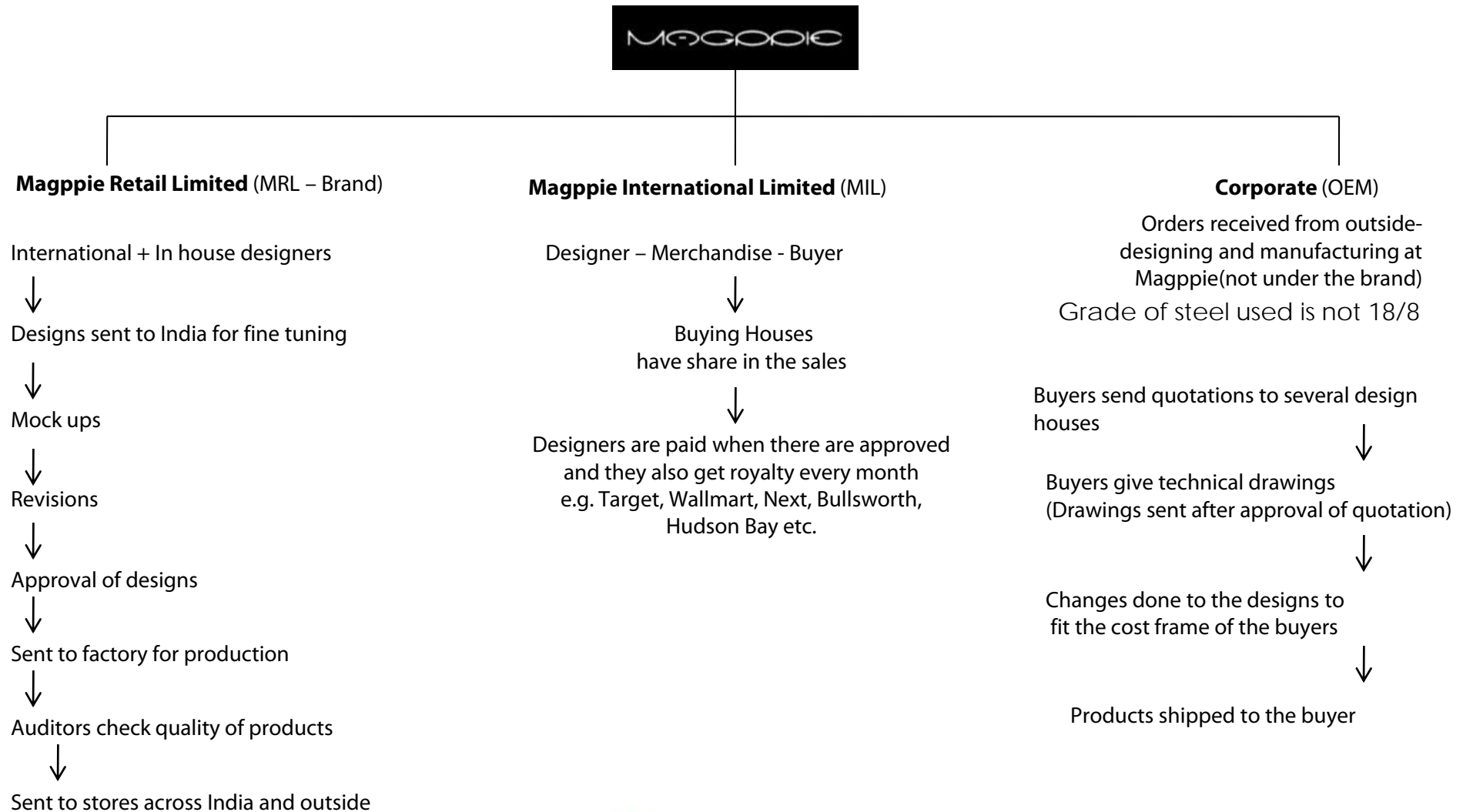
After receiving immense recognition and success in India, the brand has concentrated its effort on retail and has forayed into opening of exclusive boutiques. Today Magppie has six such boutiques and enjoys a presence in 60 retail locations in 21 cities in India.

Magppie has been awarded ; the red dot award' one of the most prestigious international design awards and becomes the first Indian company to have ever an award of this repute.

Be it using stainless steel or combining steel with other materials , their products are designed to delight the soul by creating experiences and moments that are cherished forever.

The company has its principal office in New Delhi with manufacturing in Haryana, India.

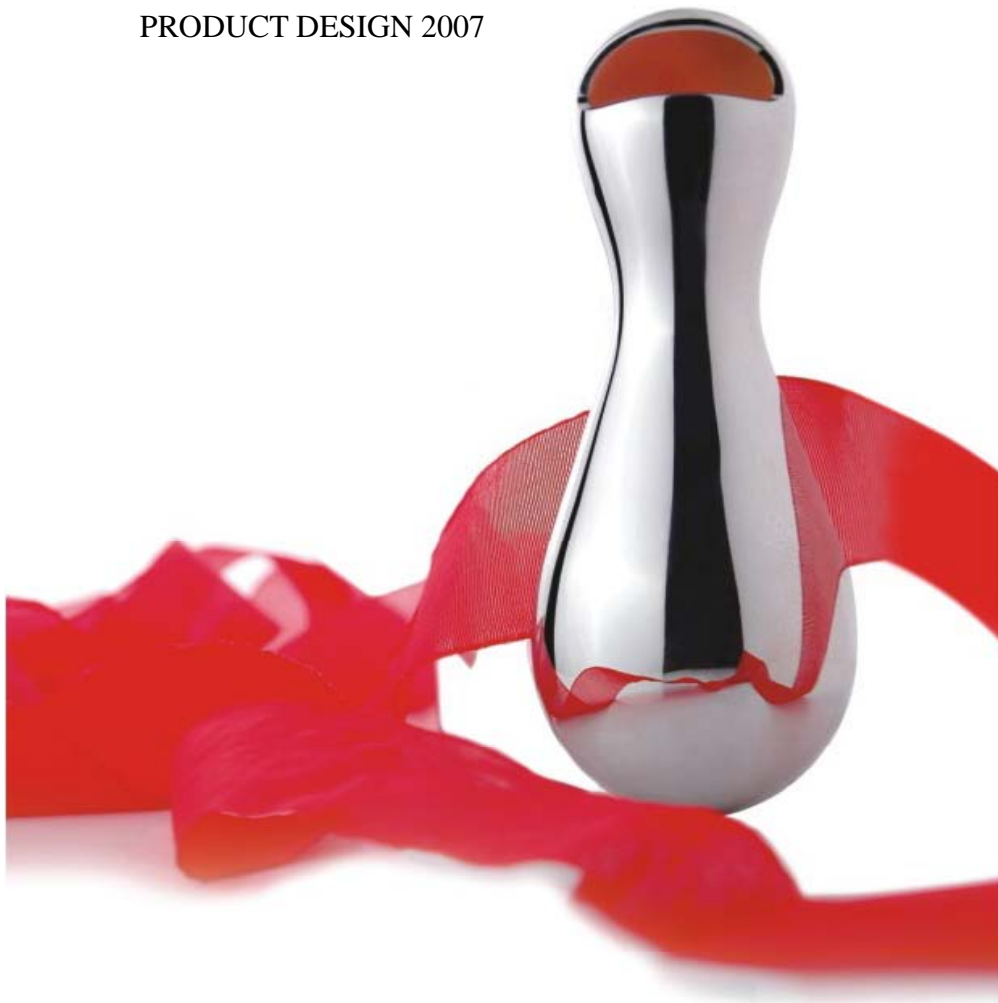
HOW IT WORKS





reddot design award
product design 2007

PRODUCT DESIGN 2007



TANTALO bottle opener



The bottle opener has been awarded the reddot international design award for its exemplary innovation in form and function

About Vinod Jain, Managing Director, Magppie

Vinod Jain is responsible for introducing steel as a lifestyle product in India with the setting up of Magppie, India's leading premium home accessories brand. With an annual turnover of Rs 70 crores, Magppie today retails at over 120 outlets in the country and has recently opened its own boutiques across major cities in India.

A pioneer in creating a market for high-end steel accessories, Mr. Vinod oversees the entire operations of the company including the design and product ranges that are produced under Brand Magppie.

After his graduation, Mr. Vinod worked for his family's steel business for 3 years, handling their sales office in Mumbai. In 1998 he decided to set up the first design studio for his company Magppie. Working against the preconceived idea that steel products were not lifestyle accessories, Magppie launched their design collection in India in 2000. By 2004, Magppie was retailing to the international market.

Each of his products is a realization of his dream to create a brand that touches people and builds relationships.

THE DESIGN SPIRIT

Magppie's design philosophy is about the marriage of function and emotion.

Food is the core inspiration behind all Magppie creations. Having a universal appeal, food is one common binding factor across all cultures, religions and countries. Magppie also takes inspirations from different cultures, lifestyles and supports it with superior understanding of changing aspirations.

Magppie's different product lines are created by designers of international repute like Karim Rashid, Michael Graves amongst others. Each Magppie creation is celebration of life, a perfect blend of form, functionality and comfort.

Many of them so inspiring in their overall presence that they are acknowledged as highly priced collector's items by international museums like Museum Of Modern Art (MOMA), San Francisco.

Goccia set – part of the MOMA

The 5 piece goccia serving set provides a wide variety of possibilities.

The individual pieces stack with exquisite precision for easy storage. Turning the elements over creates an incredible water droplet centre-piece which is always on hand for use



RETAIL

Exclusive Magppie Boutiques :

AHMEDABAD - Options, Bodakdev, Tel: 079-26841922;
 BANGALORE - Ffolio, 5 Vittal Mallaya Road, Tel: 080-22289064
 CHANDIGARH - S.C.O. 8, Sector 26, Tel: 0172-6611429;
 DELHI - City Square Mall, Rajouri Garden, Tel: 011-42225564;
 GURGAON - DLF Grand Mall, Tel: 0124-4375400;
 MUMBAI - Vishnudham, Junction of Bandra Linking/14th Road, Khar West, Tel: 022-65185600

also at multi branded outlets :-

HomeStop.

JAGDISH STORE

LifeStyle

landmark

NIX-NISH

pyramyd

SHOPPER'S STOP

Shopping. And beyond.

THE NEXT SHOP

YAMINI

other outlets:-

Sobum Shoppe - Assam
 Ideal Gift Sales - Coimbatore
 Amosino - Delhi
 Harisons Furnishings - Delhi
 Idus - Delhi
 Standard Max - Delhi
 Virendra & Co. - Dehradun
 Amethyst - Chennai
 Acron Lifestyle - Goa
 Gajjar Sales - Gujrat

BLU - Indore
 Steel junction - Kolkatta
 Tresorie - Mumbai
 The centre - Mumbai
 Vama - Mumbai
 Casablanca - Ponicherry
 CAC - Pune
 Style Plus - Trivandrum
 Linoleum House - UP

About Magppie Retail Ltd (MRL)

What type of steel is used to make Magppie products ?

All products are made from imported stainless steel

What is the quality of steel used by Magppie?

Quality of steel used is **18/8 & 18/10** grade which constitutes 18 parts of Chrome & 8 or 10 parts of Nickel in 18/8 & 18/10 respectively.

What Quality standards are followed while manufacturing Magppie products

All products are made following the international standards for quality, for which Magppie is accredited with **ISO 9001** certification

Who designs Magppie Products?

All Magppie products are designed by a team of Designers from NIFT & NID & IIT in India as well as design houses based in Scandinavian / European countries

What is the finish of Magppie products?

Distinct everlasting **matt / satin finish**

Can Magppie products be washed in Dishwasher?

All Magppie products are **Dishwasher Safe** except sandblasted cutlery sets or products with wooden combination.

Where are Magppie products available?

Magppie products are **exported to 52 countries around the globe**. They are available at all leading lifestyle stores across India .

Do Magppie products carry any warranty?

All Magppie products are **guaranteed for any manufacturing defect, corrosion, rusting.**

Are Magppie products Corrosion / Rust Proof?

All Magppie products are **Corrosion / Rust proof.**

What is the price difference at which Magppie products are sold in different cities?

All Magppie products are sold at a **uniform M.R.P. all over India**

STAINLESS STEEL

Stainless steels are a class of chromium-containing steels widely used for their corrosion resistance in aqueous environments and for service at elevated temperatures.

Chromium imparts passivity when present in amounts of more than about 11%.

Consequently, steels with more than 10 or 12% Cr are sometimes defined as stainless steels.

GRADE 304 STAINLESS STEEL

- Is the most versatile and most widely used stainless steel
- Available in a wide range of products, forms and finishes
- Has excellent forming characteristics
- Can be severely deep drawn, dominant in the manufacture of drawn stainless parts such as hollow-ware and saucepans
- Has outstanding welding characteristics
- Post-weld annealing is not required when welding thin sections
- Excellent toughness, even down to cryogenic temperatures



STAINLESS STEEL AS A LIFESTYLE STATEMENT

The humble stainless steel is taking on designer shapes and hues to take its place among other designer ware, on the mantle piece.

The fashion statement is also being made through an innovative fusion of steel with materials like leather, ceramics, glass, bone china.

The product range includes kitchenware, office accessories comprising of coffee mugs, flower vases, table watches, candle stands, pen stands, bowls, trays, chip'n'dip platters, dinner sets etc.

WINE PASSION

This product is based on an emotion, the emotion of romance. A candle on one side and a wine coaster on the other

PROCESSES INVOLVED IN MANUFACTURE OF STEEL PRODUCTS

- Acquire **raw material** (stainless steel coils)
- CIRCLE CUTTING - dye cutting / manual cutting
- DEEP DRAWING (hydraulic/ mechanical press)
- Annealing – for further molding and expansion

REFINING

1. BEADING - To make collars round
2. RIBBING
3. SPINNING AND ROLLING - To increase the length
4. SHEARING- removing collars

WELDING SHOP

1. Tacking
 2. Welding
 3. Grinding
- PUNCHING
 - BENDING
 - EMBOSSING

FINISHING

1. POWDER COATING
 2. ELECTROPLATING
 3. POLISHING
 4. BUFFING
 5. SWAROVSKI – Polish- Drill- Paste
- Glue- Lock tight 354

Magppie Retail Limited(MRL), Kundli, Haryana

3 parts of drawing

- Outer rim – circular ring
- Punch – shape
- Dye - cavity



Deep drawing – hydraulic press



Spinning and rolling



Punching



Beading



Shearing machine – cutting off edges



Argon welding



Vertical Milling Machine



Single walled – before welding



Double walled – after welding



Packaging



Polishing



Polished products

The adjoining figures show the various processes involved in finishing and refining of stainless steel products



Electroplating



Powder coated products

DESIGN BRIEF

To design a set (3) of opulent picture frames for the brand ,of different sizes 4" X 6", 5" X 7", 6" X 8" in stainless steel keeping in mind the application of other materials on it such as acrylic and Swarovski crystals

The frame should be designed to exude elegance and warmth, making it perfect for gifting

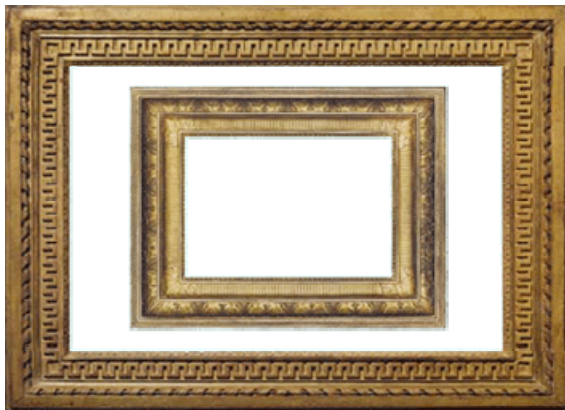
Design Methodology- DIACHRONIC STUDY

Frames evolved from the borders which appeared 3-4,000 years ago on vase and tomb paintings, and later on mosaics, enclosing narrative scenes and decorative panels.

The function of the frame changed: not merely a decorative boundary, it protected and emphasized the work it held.

They were followed in the early Renaissance by court frames, for purposes of status and propaganda. Such frames indicated power and wealth by the magnificence of their workmanship.

Each country developed characteristic forms, of which the most successful might influence those of other countries - the Italian Renaissance *cassetta* frame, the 18th century French Rococo frame, renaissance Mannerist, the polished wooden cabinetmaker's frame, Baroque, Palladian and Rococo, Neoclassical frames.



Neoclassical and Empire Frames



Rococo Frames



The Cabinetmaker's Frame



SYNCHRONIC STUDY

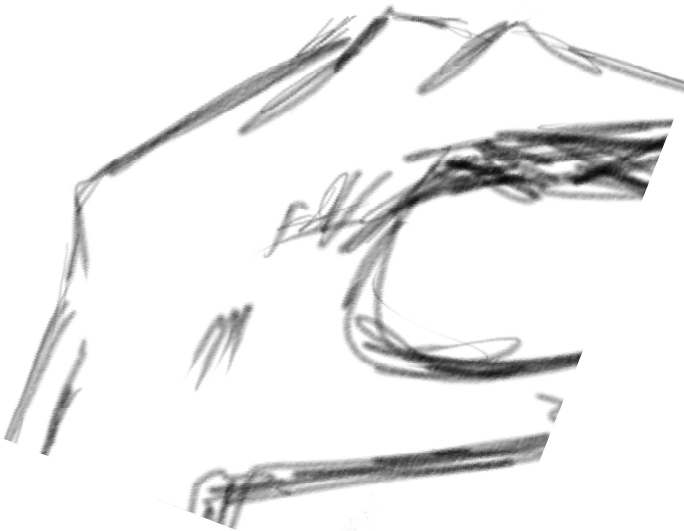
A synchronic approach analyzes a particular something at a given, fixed point in time. It does not attempt to make deductions about the progression of events that contributed to the current state, but only analyzes the structure of that state, as it is.



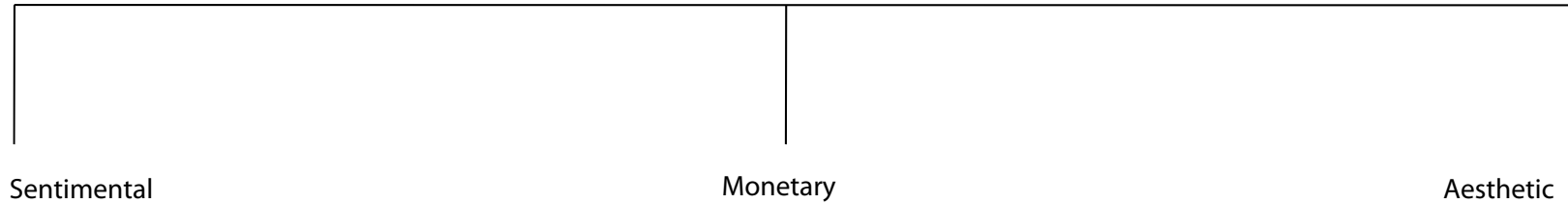
SYNONYMS OF FRAME

HOLD IN

Cage
Enclose
Confine
Draft
Border
Encase
Mold
Mount
Panel
Set up
Framework
Outline
Structure



PICTURE FRAME



Attributes which need to be fulfilled by a picture frame

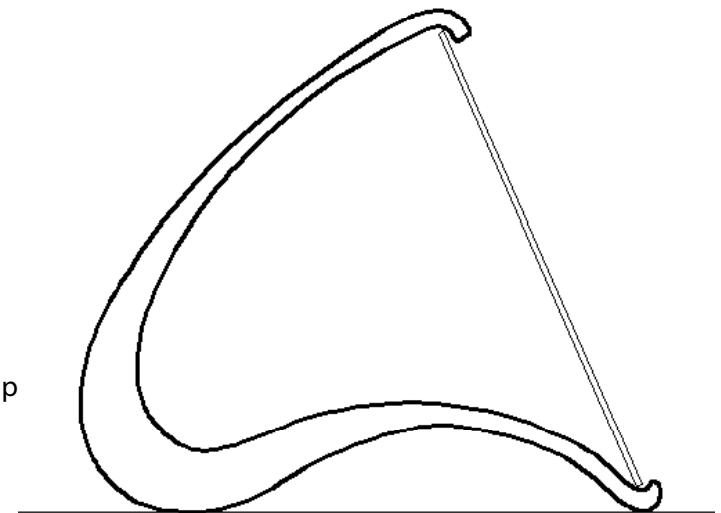
1. Showcase the picture's best features
2. Draw the eye to the image
3. Create a sense of importance

INSPIRATION FOR THE PICTURE FRAME

The set of photo frames is inspired by the shape of the hand when it's holding something.

The product has a soul and the form is full of surprise.

The object is lively and elegant with the possibility of being used for both portrait and landscape pictures.



Side elevation

PICTURE FRAME Mind Map

Emotions

Motivation

Holding

Restoration

Ownership

Fortune

Meaning

Memories

Fortune

Pride

Connection

Feelings

Value

Decoration

Relationship

Attachment

Longing

Hope

Passion

Love

Smile

Experience

Affection

Comfort

Happiness

Encourage

Fondness

Enclosure

Mold

Shell / structure

Encase

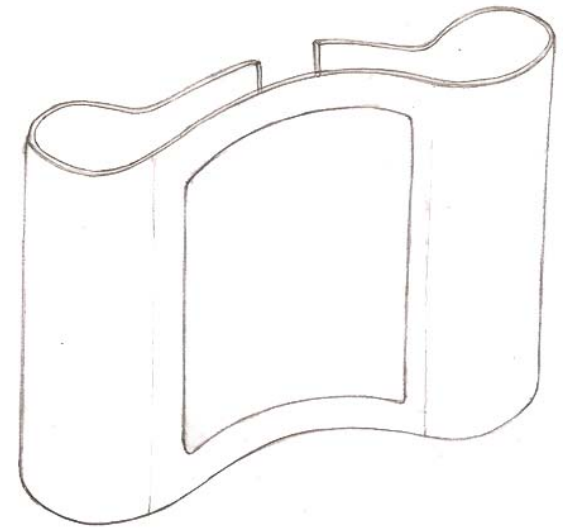
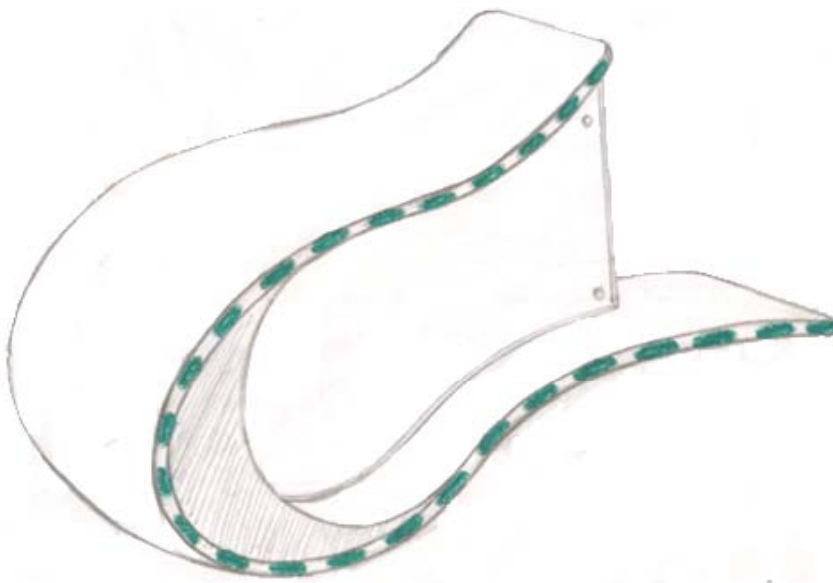
Mount

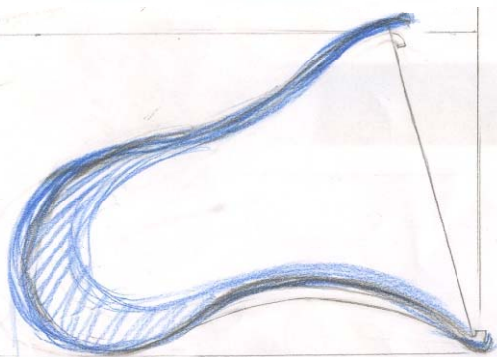
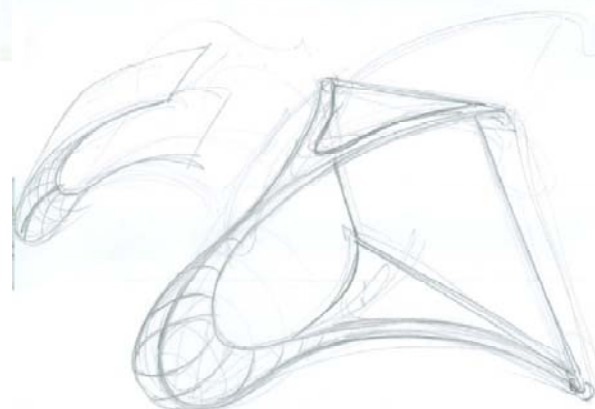
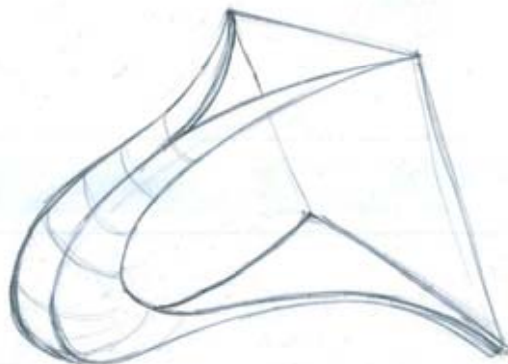
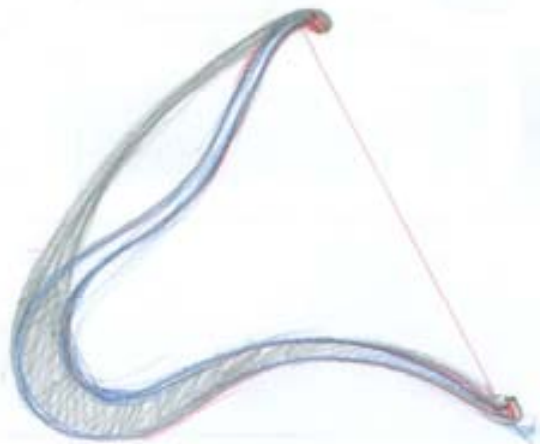
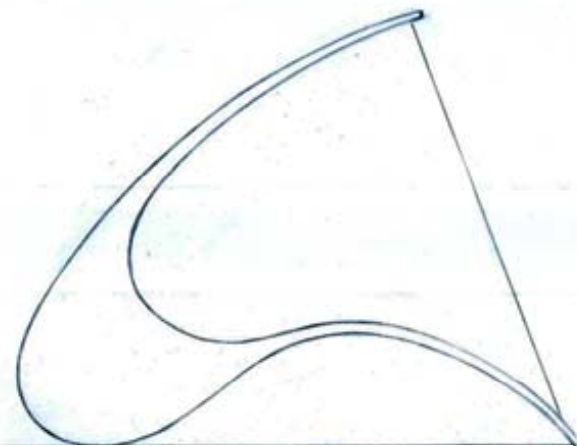
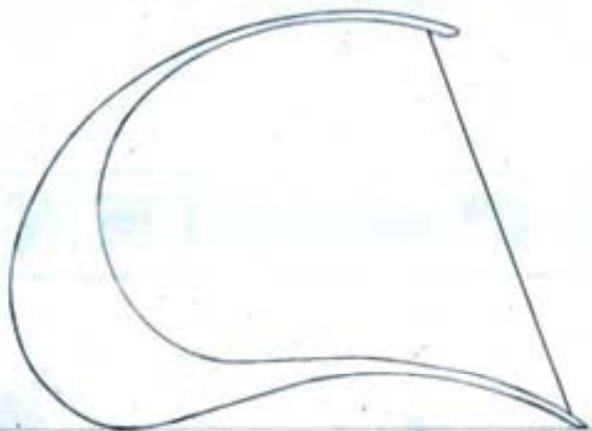
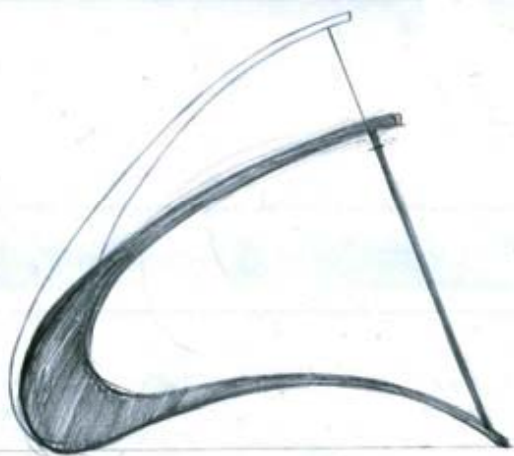
Framework

Border

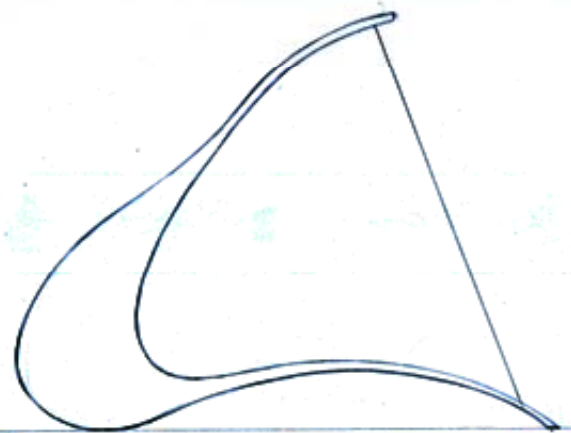
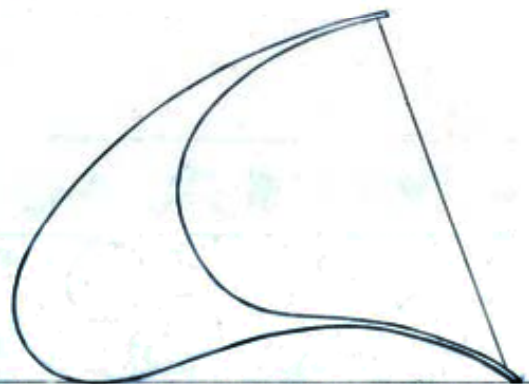
Concept generation based on the following

Inspired from an emotion
Non mechanical shape





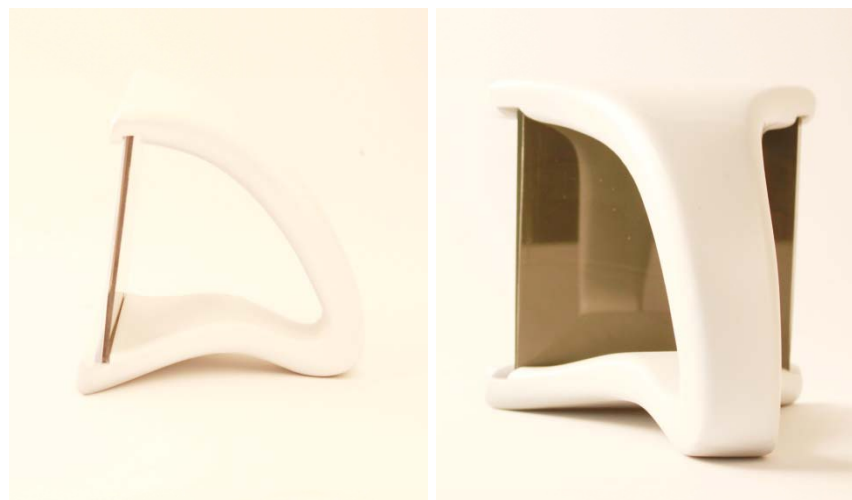
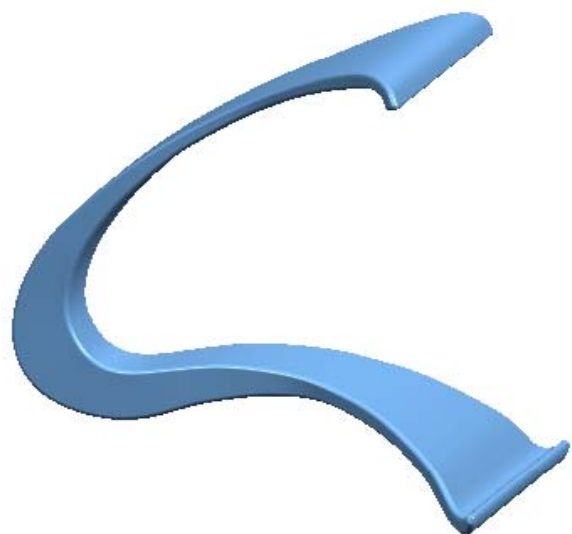
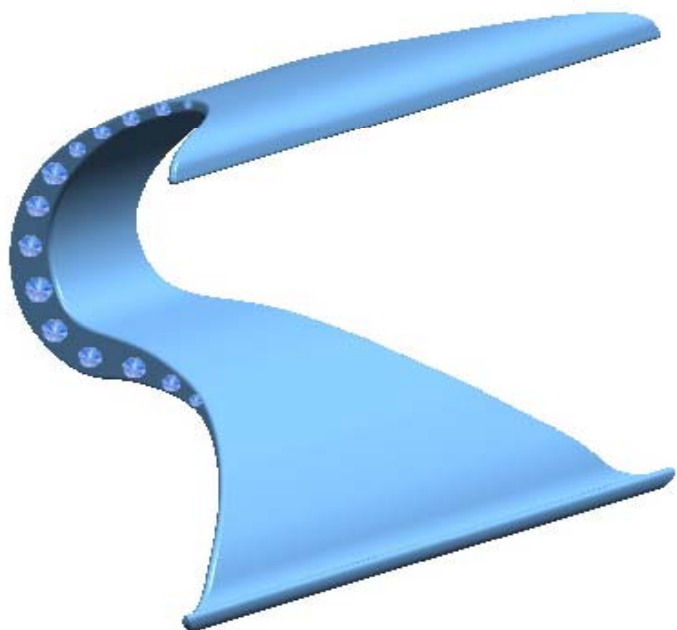
61DC



Mock ups in PU foam







PROCESS FOR MANUFACTURING

The process of CASTING - **metal object obtained by allowing molten metal to solidify in a mold**

- Parts that contain irregular curved surfaces can be cast
- Many other operations, such as machining and welding, can be eliminated.
- High accuracy, consistency and good surface finish
- The process highly adaptable to the requirements of mass production

CORE MAKING

MOLDING

MELTING AND POURING

CLEANING

The making of a stainless steel casting is a long and complex process. A large investment in capital equipment is required for the melting of steel, manufacturing of cores and moulds and the cleaning and heat treating of castings. Therefore the preferred material for casting is bronze which is there after given a stainless steel finish.