



PORTFOLIO

RAHUL NAIR INDUSTRIAL DESIGN



Hi!

I'm **Rahul Nair**.
Sr. Industrial designer

An astute and results-driven professional with prominent experience of 5+ years serving as a Sr. Industrial Designer and Head of Design and Development.

My key responsibilities include in Product design / Industrial designing & development. Deft in managing design operations involving design teams, research, concept development, CAD modeling, product rendering, engineering assistance, Development drawings, catalogue design, packaging design, mockups and proto development assistance and coordinating with internal and external cross-functional departments.

My indigenous experience made my expertise in leading teams, managing several projects of different clients, understanding latest the trends, concept generation and CAD modeling. Expertise in delivering the project within the agreed time, cost, quality, profitability, standards and ensuring the conformance to design specifications.

Having worked with multiple clients including Godrej and Boyce, Baybreez, Symphony, Softlink and Gilbarco Veeder Root (USA & India).



Godrej | LOCKING SOLUTIONS
AND SYSTEMS



BayBreeze
NATURALLY COOLER



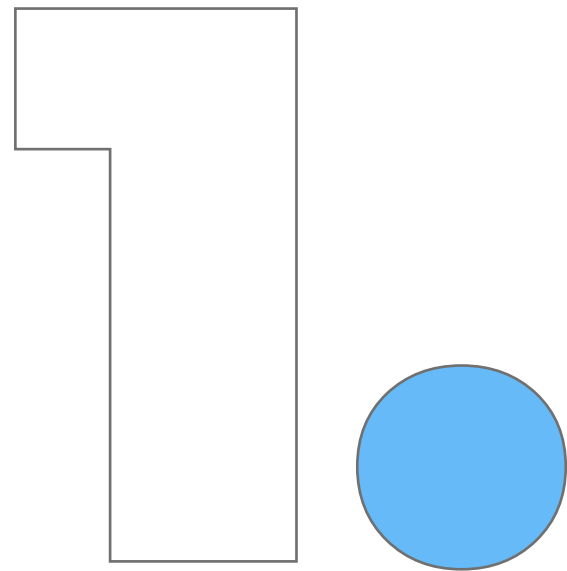
GILBARCO
VEEDER-ROOT



SoftLink
International



Symphony
AIR CONDITIONERS



1.1 GODREJ MORTISE HANDLES

1.2 GODREJ PULL HANDLES

1.3 GODREJ EXS RIM LOCKS

1.4 GODREJ ULTRA RIM LOCKS

1.5 GODREJ RIM LOCKS PACKAGING

1.6 GODREJ SKIDO (KITCHEN HARDWARE & SOLUTIONS)

1.7 GODREJ INDIA SERIES DISPLAY STAND DESIGN

1.1 GODREJ MORTISE HANDLES

Brief in general:

Design a range of mortise handles catering to different mortise segments such as Popular, Lever, Amando and Premium series for Godrej locking systems and solution.

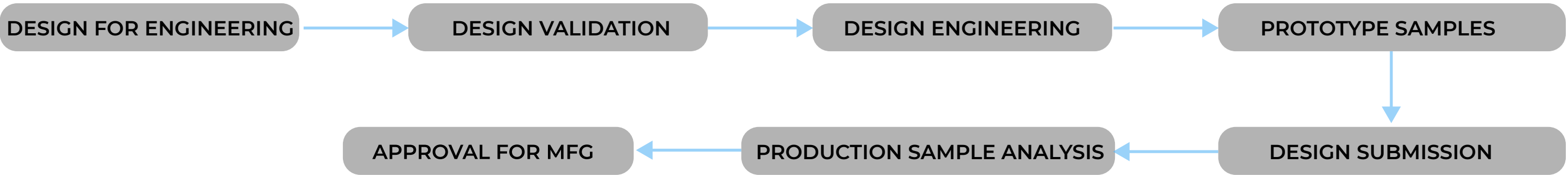
Engineering points to considered:

- 1. Design handles as per weight limitations set by the engineering team. I.E 150gm 200gm and 250gm catering to each set category.
- 2. Design symmetrical as well as Asymmetrical handles as per the set zonal and non zonal category.
- 3. Handles to be designed within the height, width and length limitations as set by GLSS team.
- 4. Handles should be designed to fit the existing mechnism and technical requirements.

Design Process (Concept Presentation):



Design Process (Post Final Selection):



Key roles undertaken:

- Project Managemment (Project lead)
- Team Management
- Research and Design Development
- Mentorship
- Concept Rendering Assistance
- Mockup and Prototyping Development
- Presenation
- Engineering Assistance
- Analyzing Samples as per intended design principles.

IDEATION SKETCHES



1.1 GODREJ MORTISE HANDLES

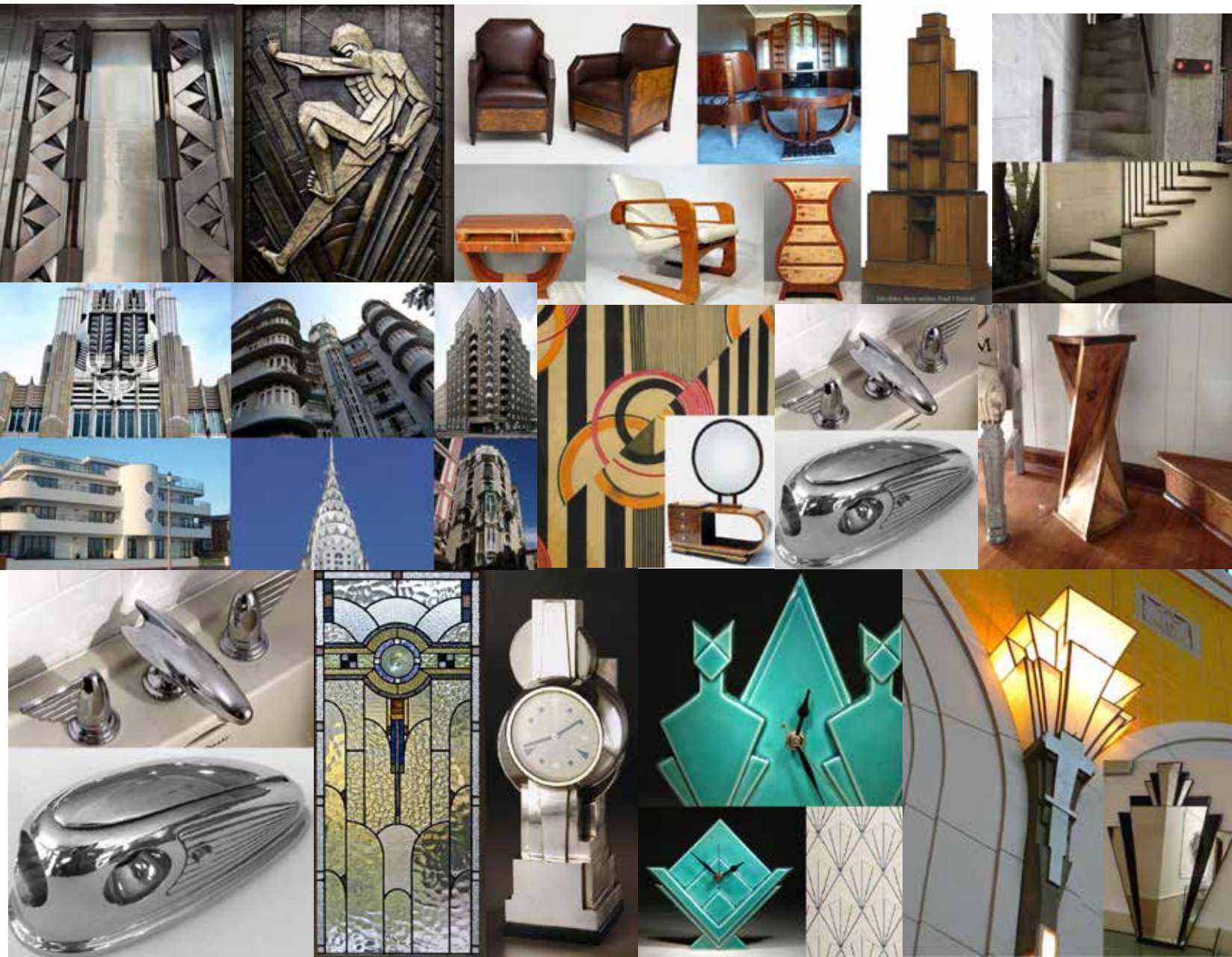
CONCEPT RENDERS



1.1 GODREJ MORTISE HANDLES

ART DECO FORM INSPIRATION BOARD

IDEATION SKETCHES



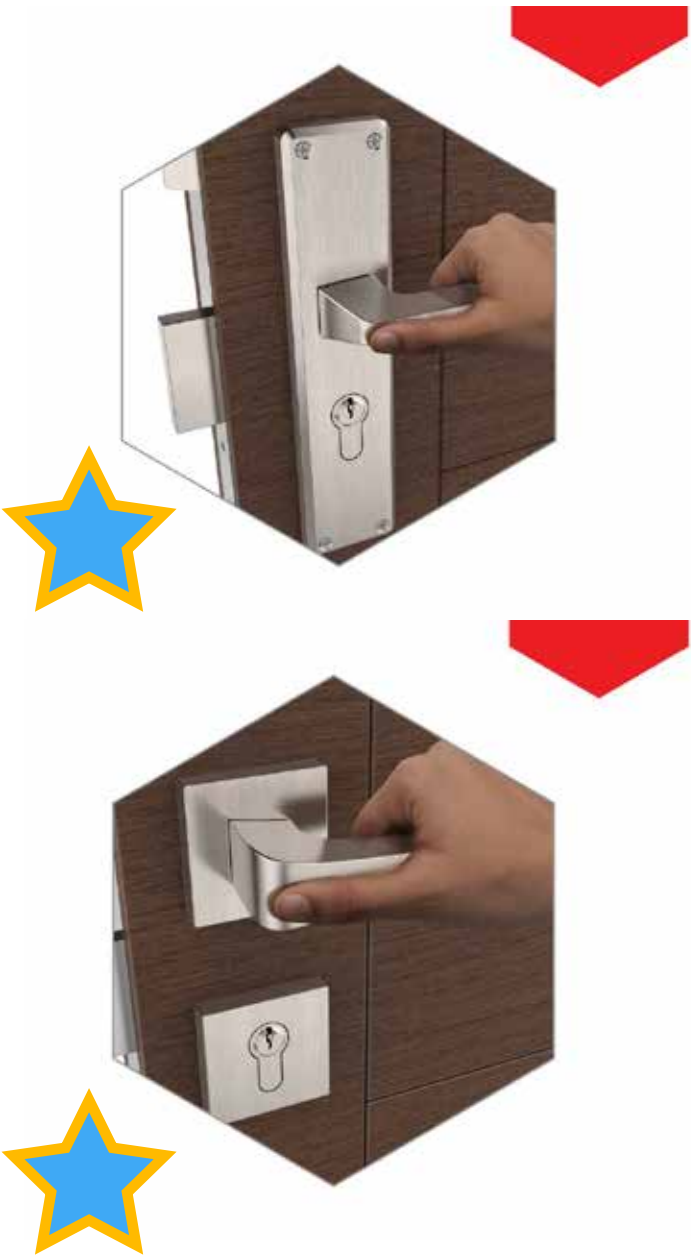
1.1 GODREJ MORTISE HANDLES

CONCEPT RENDERS



1.1 GODREJ MORTISE HANDLES

INDIA DESIGN MARK AWARDS FOR MY DESIGN



NEH 16 (Azor) Mortise Handle
Manufactured by : Godrej Locking Solutions & Systems (Division Of Godrej & Boyce Mfg. Co. Ltd.)
Designed by : Godrej Interio - Design

The NEH 16 (Azor) Mortise Handle by Godrej Locking Solutions & Systems has been designed to satisfy aesthetic needs and to enhance the beauty of door decor. The design of the handle is unique in which the gap between the handle and the cover plate is kept low in order to be able to fit between main door and safety door where gap is less.

The simple handle design with simple and robust concept and cross section tapering from base to end of the handle to (Azor) Mortise handle makes its grip is comfortable for users of various age groups. The gap between the handle and the cover plate is kept low in order to be able to fit between main door and safety door where the gap is less. The recessed mechanism gives additional advantage of improved security of the handle cover plate. It is suitable for left handed and right handed doors, inside and outside opening doors eliminating the need of two different variants. The cover plate is held in place by four wooden screws that ensure resistance and safety from vandalism and tampering. The handle assembly is suitable for 28 mm to 40 mm thick doors covering large range of doors available in India. The soft edges with sufficient R100 ensure safety during usage.

Chris Mortise Handle
Manufactured by : Godrej Locking Solutions & Systems (Division Of Godrej & Boyce Mfg. Co. Ltd.)
Designed by : Godrej Interio - Design

The Chris Mortise Handle by Godrej Locking Solutions & Systems has been designed to satisfy aesthetic needs and enhance beauty of door decor. Concealed fixing screws lend a clean look and enhance aesthetics. The lock is intended for both outdoor and indoor applications like main door in residential and commercial establishments, bedroom doors, hotel room doors and jewellery shops.

The Chris Mortise handle has a unique design with gradually increasing cross section with the top of the handle making its grip comfortable for users of all age groups. The concealed fixing screws lend a clean look when viewed from the front. Difficult to open by regular means, anti-theft screws on the handle also ensure resistance and safety from vandalism and tampering. It is suitable for left handed and right handed doors, inside and outside opening doors, eliminating the need of two different variants. The handle assembly is suitable for 28 mm to 55 mm thick doors, covering a large range of doors in India. The soft edges with sufficient R100 ensure safety during usage.



GODREJ ULTRA XL+ VERTIBOLT
Manufacturer: GODREJ LOCKS & ARCHITECTURAL FITTINGS AND SYSTEMS (DIVISION OF GODREJ & BOYCE MFG. CO. LTD.)
Designer: GODREJ LOCKS + FUTURING DESIGN

MT 15
Manufacturer: INDIA YAMAHA MOTOR PVT LTD
Designer: NORIHIKO KAMIYA

SKIDO - SMART KITCHEN DRAWERS AND
Manufacturer: GODREJ LOCKS & ARCHITECTURAL FITTINGS AND SYSTEMS
Designer: GODREJ LOCKS + FUTURING DESIGN

CAMEO MORTISE HANDLE
Manufacturer: GODREJ LOCKS & ARCHITECTURAL FITTINGS AND SYSTEMS
Designer: GODREJ LOCKS + FUTURING DESIGN

REMO MORTISE HANDLE
Manufacturer: GODREJ LOCKS & ARCHITECTURAL FITTINGS AND SYSTEMS
Designer: GODREJ LOCKS + FUTURING DESIGN

MOBISTACK SMARTO
Manufacturer: GODREJ & BOYCE MFG CO. LTD
Designer: RAJAVELU M MANIKKAM

NOTE: Above images are taken from India Design Mark website and IDM winners catalogue
Source: <http://www.indiadesignmark.in/index>

1.2 GODREJ MORTISE PULL HANDLES

MARIN PULL HANDLE:



Graphics and Packaging

Key roles undertaken:

- Designed
- CAD Modelling
- Mockup and Proto Development
- Renders
- Assisted during Engineering development.
- Assisted in Graphics Development



At Sales Picture

1.3 GODREJ EXS RIM LOCKS

Brief in general:

Design a range of EXS Rim Locks (VERTI, TWIN and TRI-BOLT) with a fresh design language, aesthetically appealing and futuristic looking lock with a high level of security for regular doors, sliding doors as well as double doors.

Engineering points to considered:

1. Design the range of locks considering the mechanism pertaining to ASTRO, AQUARIUS and ALTRIX.
2. The design must adhere to the following design prerequisites:
 - 2.1 The design must follow the knob size constraint as mentioned by the engineering team.
 - 2.2 Design must include latch and aldrop for both TWIN and TRI-BOLT variants.
 - 2.3 New Godrej logo Pin is to be incorporated into all the three variants.
 - 2.4 All the newly designed knobs and latches should be retro-fitable within the designed range family.

Research and study the esisting EXS range: (Benchmark for mechanism and features)



ASTRO



AQUARIUS



ALTRIX

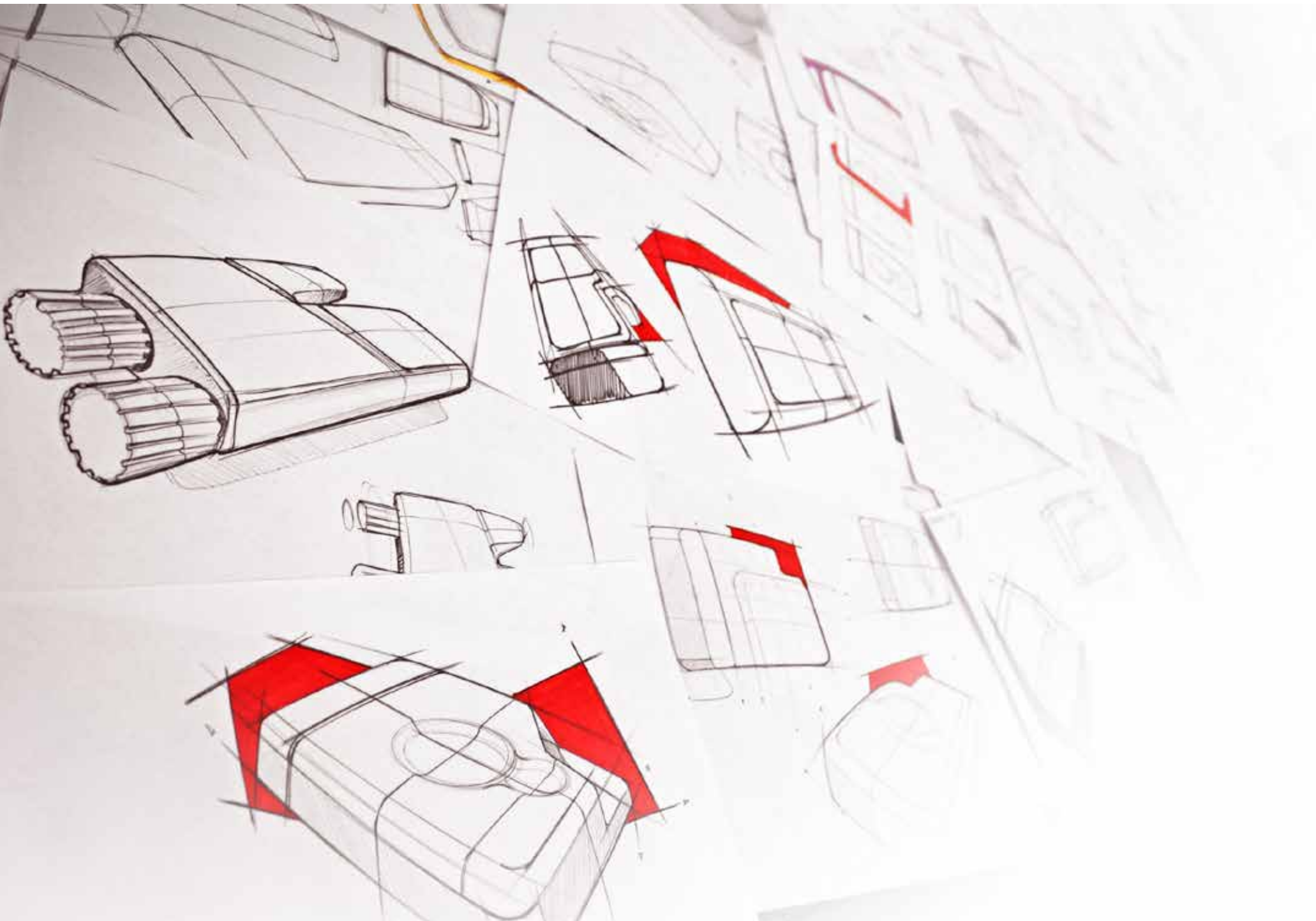
1.3 GODREJ EXS RIM LOCKS



INSPIRATION / MOODBOARD



1.3 GODREJ EXS RIM LOCKS



ELEGANT
PRESTINE **LUX**
PRECIOUS
SOFT **STURDY**
LAVISH POWER
CARFTED
CURVYLINEAR
GRANDURE
EXCLUSIVE
FINE



1.3 GODREJ EXS RIM LOCKS

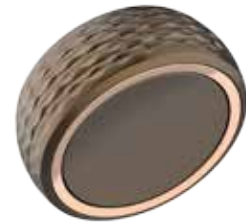


FORM MOCKUPS



1.3 GODREJ EXS RIM LOCKS

FINAL CONCEPT



SAND DUNE TEXTURE
FOR BETTER ERGONOMIC GRIP



VERTI BOLT DESIGN



TWIN BOLT DESIGN



TRI-BOLT DESIGN

1.3 GODREJ EXS RIM LOCKS

FINAL CONCEPT

DESIGN FEATURES

SOFT AT THE SAME TIME BOLD AND STURDY DESIGN.

DESIGN LANGUAGE MAINTAINED THROUGHOUT THE EXS RANGE

COPPER TRIM ADDS AS AN ACCENT TO THE OVER ALL DESIGN
GIVING IT A LUX FEEL.

SAND DUNE TEXTURE AROUND THE KNOB ADDS PROPER GRIP.

KEY FEATURES SUCH AS LATCH, ALLDROP AND GODREJ LOGO
INCORPORATED WITHIN THE DESIGN

SYMMETRY OF THE DESIGN IS MAINTAINED.

OVERALL DESIGN FITS THE EXISITING MECHANISM DEVELOPED
BY THE ENGINEERING TEAM.



1.4 GODREJ ULTRA XL RIM LOCKS

Brief in general:

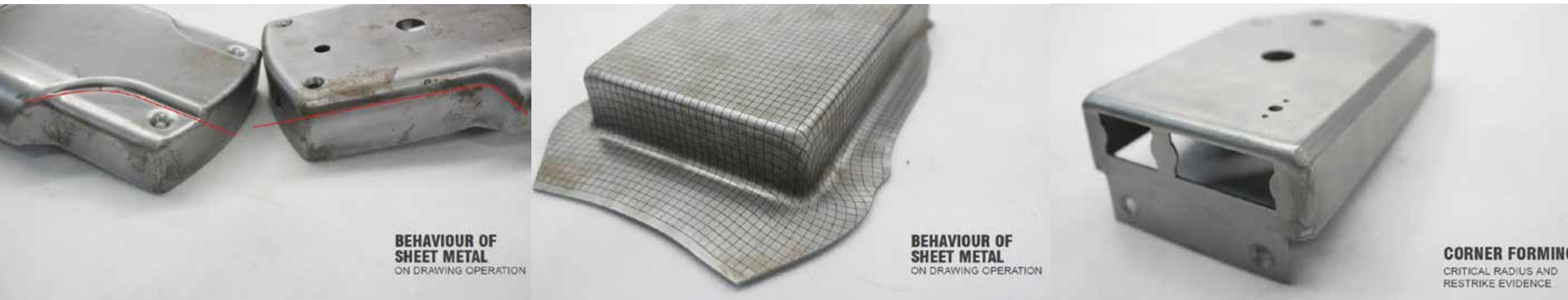
Design a new range of ULTRA XL Rim Locks (Dead bolt, Twin and Tri-Bolt) following a new design language.

Engineering points to considered:

1. Design the new range of locks as per the newly developed mechanism.
2. The design must adhere to the following design prerequisites:
 - 2.1 The design must follow the knob size constraint as mentioned by the engineering team.
 - 2.2 Design must include latch and aldrop for both TWIN and TRI-BOLT variants.
 - 2.3 New Godrej logo Pin is to be incorporated into all the three variants.
 - 2.4 All the newly designed knobs and latches should be retro-fitable within the designed range family.
3. Design must aid sheet metal forming operation.

Challenges

1. The design should be sheetmetal forming friendly.
2. Achieving minimum fillets, Chamfers and blend surfaces was a challenge.
3. The design cannot hold intricate details, due to sheetmetal forming limitations.



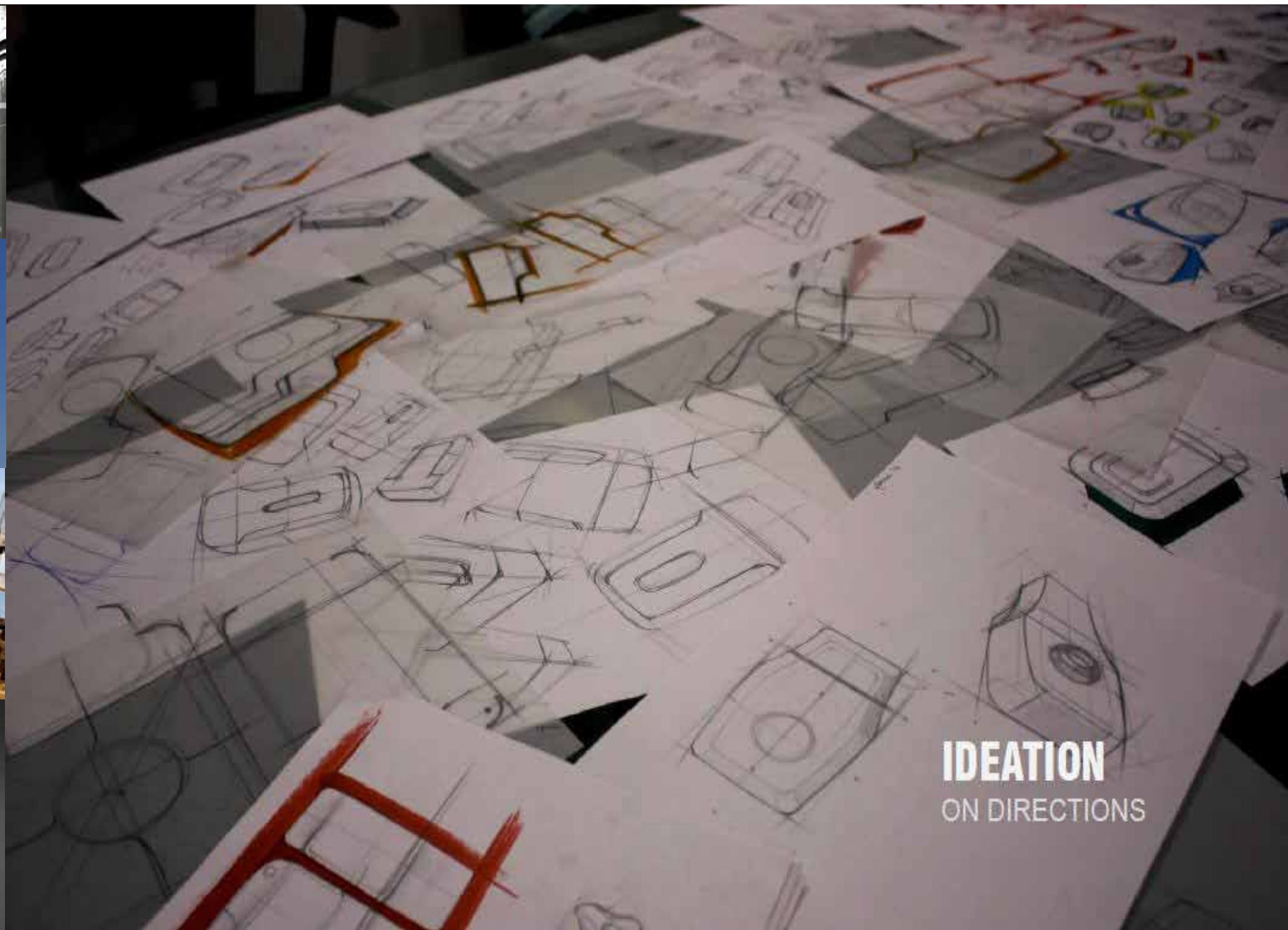
Study done on Sheetmetal behavior, operation and limitations

Existing XL Rim Locks



1.4 GODREJ ULTRA XL RIM LOCKS

MODDBOARD | DIRECTIONS



1.4 GODREJ ULTRA XL RIM LOCKS



1.4 GODREJ ULTRA XL RIM LOCKS

CONCEPT 1

STURDY
INTUITIVE
SMOOTH
MINIMAL



1.4 GODREJ ULTRA XL RIM LOCKS

CONCEPT 2

STURDY
INTIUITIVE
RUGGED
MINIMAL



CONCEPT 2



1.5 GODREJ ULTRA XL RIM LOCKS PACKAGING

Brief in general:

Design a blister packaging for ULTRA XL Rim Locks. The new design should be, eye-catching, instructive, robust and appealing to the eyes of the customers.

Exisiting Locks Packaging Study

Problem Areas:

- 1. Overall Packaging is'nt eye catching and looks outdated. Colors used is very dull and mundane.
- 2. Product Visibility is Zero. The packaging doesn't fullfill the customers right to information on the contents or aesthetics. Since, customers cannot break the box seal prior to purchase
- 3. Product name isnt tangible enough and product description is very hard to navigate.
- 4. Lacks display feature



Exisiting Locks Packaging

Blister Packaging Study



COMPACT
SAVING SPACE, MATERIAL
& MONEY



PRODUCT ENHANCEMENT
CAPABILITY TO TAKE THE SHAPE
OF THE PRODUCT THUS
ENHANCING AESTHETICS



DISPLAY IMPACT
MULTIPLE DISPLAYING
POSSIBILITY TO BE ADAPTABLE
TO RETAIL STORAGE

Key roles undertaken:

- Project Lead
- Designed
- CAD Modelling
- Renders
- Assisted during Engineering development.
- Assisted in Graphics Development

1.5 GODREJ ULTRA XL RIM LOCKS PACKAGING

CONCEPT FEATURES:

1. Eye-catching packaging design which is robust, sturdy and compact.
2. Blister packaging enhances product visibility.
3. No breakage of seal required as all the infographics and contents are clearly visible on the packaging.
3. Tangible Product name and Description.
4. It is designed to be hung as well as serve the purpose as a display stand.



ORTHOGRAPHICS



CONCEPT RENDER W/O GRAPHICS



Materials: PP and Cardboard



CONCEPT RENDER W INDICATIVE GRAPHICS



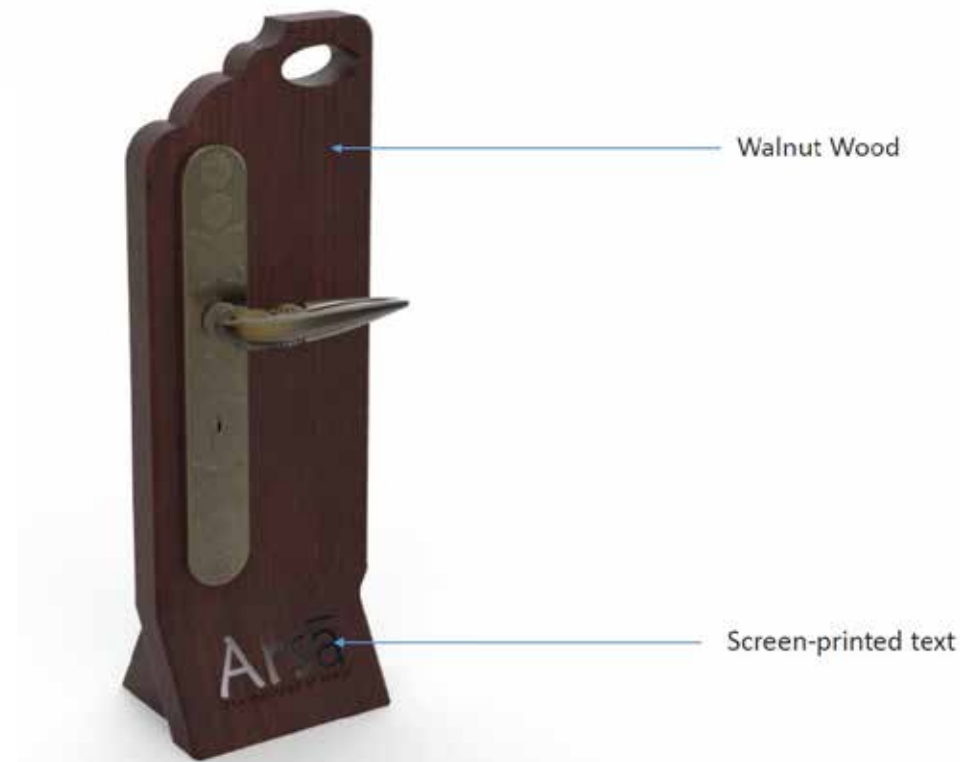
1.6 GODREJ INDIA SERIES DISPLAY STAND DESIGN

Brief in general:

Design a display stand for 'Arsā' Premium Mortise handles following the design language of the India Series.

"Arsā", an intriguing range of handles, celebrating the Indian heritage of fine craftsmanship and its luxuriance of myriad cultures, "Arsā" symbolizes sacred descent and golden eras, thus presenting a series that exceptionally illustrates intricate carvings embellishing temples, majestic forts and magnificent palaces all through our realm.

CONCEPT



FINALISED CONCEPT

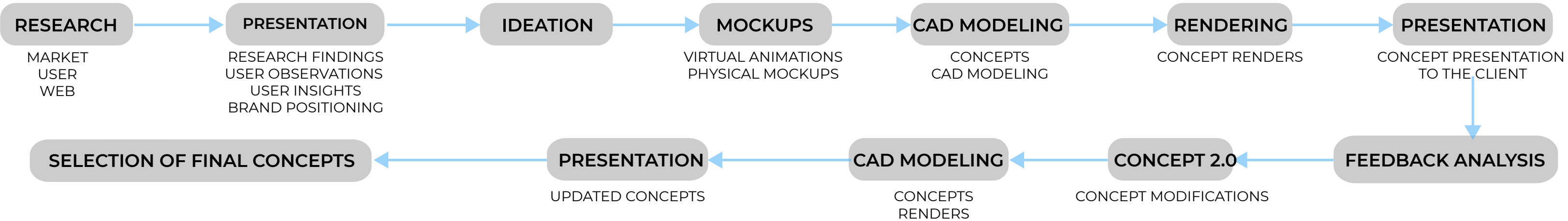


1.7 GODREJ SKIDO KITCHEN ORGANISERS

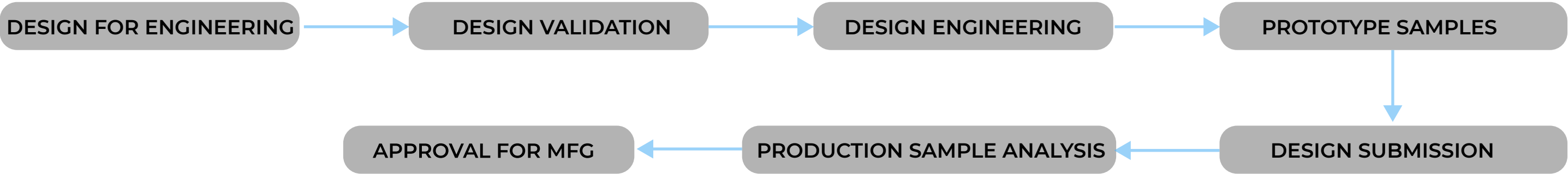
Brief in general:

Study the modular kitchen market in India and design a unique range of modular kitchen solutions for Godrej and Boyce. The design should cater to the Indian needs and aspirations.

Design Process (Concept Presentation):



Design Process (Post Final Selection):




- Key roles undertaken:**
- PROJECT DURATION IN WAVES 1 AND 2 (2.5 years progressively)
 - Project Management (Project lead)
 - Team Management
 - Research and Design Development (Concept: Cutlery tray/ Cups and Saurce and Thali(crockery organiser))
 - Mentorship
 - Concept Rendering Assistance
 - Mockup and Prototyping Development
 - Presenation
 - Engineering Assistance
 - Analyzing Samples as per intended design principles.

NOTE: Due to NDA with Godrej and Boyce Locks. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm will to discuss and show POC in person.



1.7 GODREJ SKIDO KITCHEN ORGANISERS

FINAL OUTPUT




Who We AreWhat We DoBrighter LivingGood & GreenCareersInvestorsMediaContact Us


1/2

←→


Products(13)



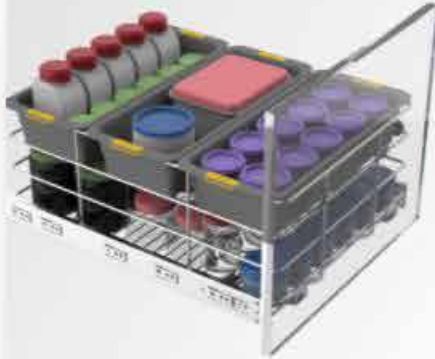
SKIDO Plain Wire Basket SS+




Cutlery Organizer




Cup & Saucer Oragnizer




Jars & Bottles Organizer




Thali Organizer




Fry Pan Organizer




Wok / Kadhai Organizer



Container Organizer



Universal Cutlery Organiser



Universal Cup & Saucer Oragniser

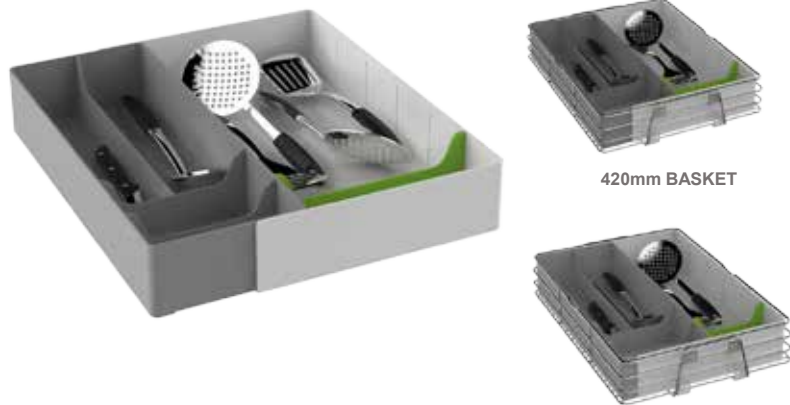
Source: <https://www.godrej.com/Search/skido>

NOTE: Due to NDA with Godrej and Boyce Locks. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm will to discuss and show POC in person.

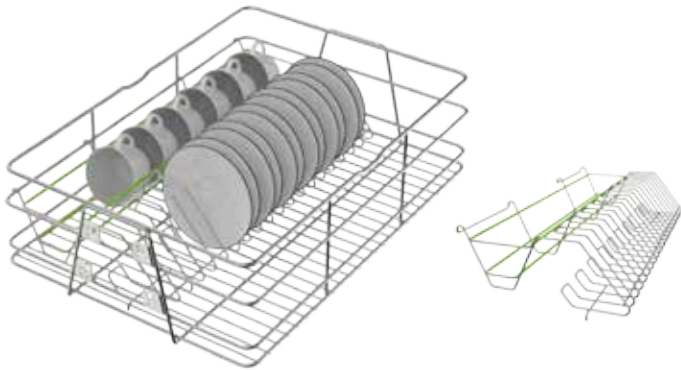
1.7 GODREJ SKIDO KITCHEN ORGANISERS

PROOF OF CONCEPT

Concepts during development stage images.



CUTLERY ORG



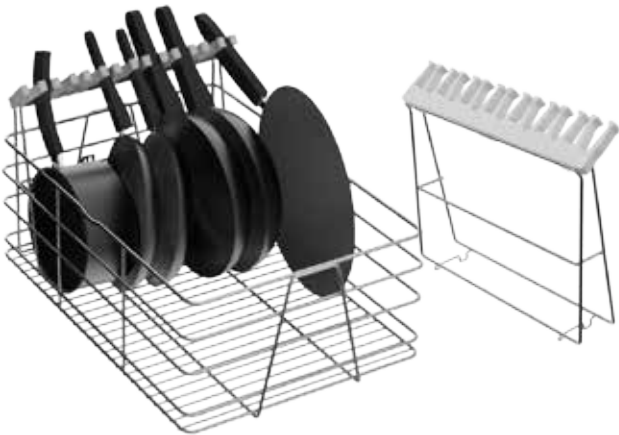
CUPS AND SAUCER ORG



THALI ORG



M-TRAY



PAN HOLDER



WOK ORG



6 INCH BASKET



8 INCH BASKET

BASKET DIVIDER

NOTE: Due to NDA with Godrej and Boyce Locks. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm will to discuss and show POC in person.



AIR COOLER (PLASTIC INJECTION MOLDING)

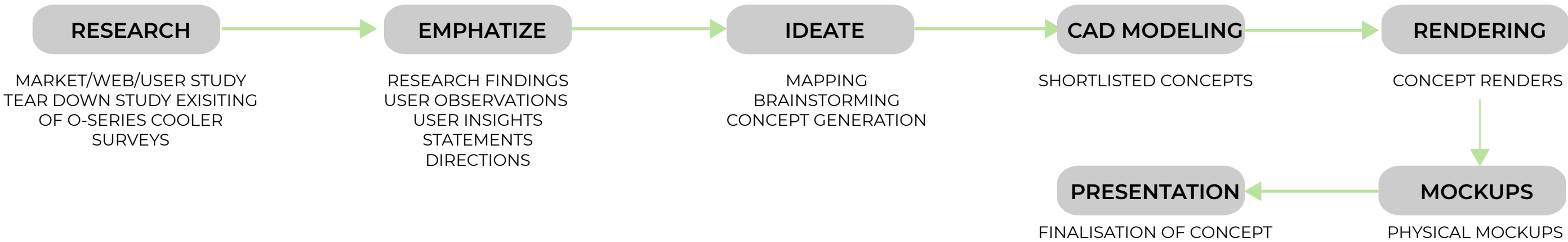
E-Kart is a medical equipment carrying cart. This cart is designed by considering conditions of a fast-paced hospital environment. One can transport the cart on its wheel from one place to another place safely and very quickly. e-kart is all in one solution, which includes the PC unit (Personal Computer), UPS (uninterruptible power supply), Printer and ECG unit (electrocardiogram). Easy handling, lightweight and less consuming area make this cart perfect for the usage in an emergency hospital environment.

2 BAYBREEZE AIR COOLER

Brief in general:

Design an Air cooler for Baybreez keeping technical aspects of Baybreez O series (Metal cooler) into consideration.
The design developed should be using plastic injection molding method for manufacturing.

Design Process (Concept Presentation):



MARKET STUDY

USER STUDY

TEAR DOWN- O-SERIES

NAGPUR VISIT
(CLIENTS CITY)

DESIGN TEAM

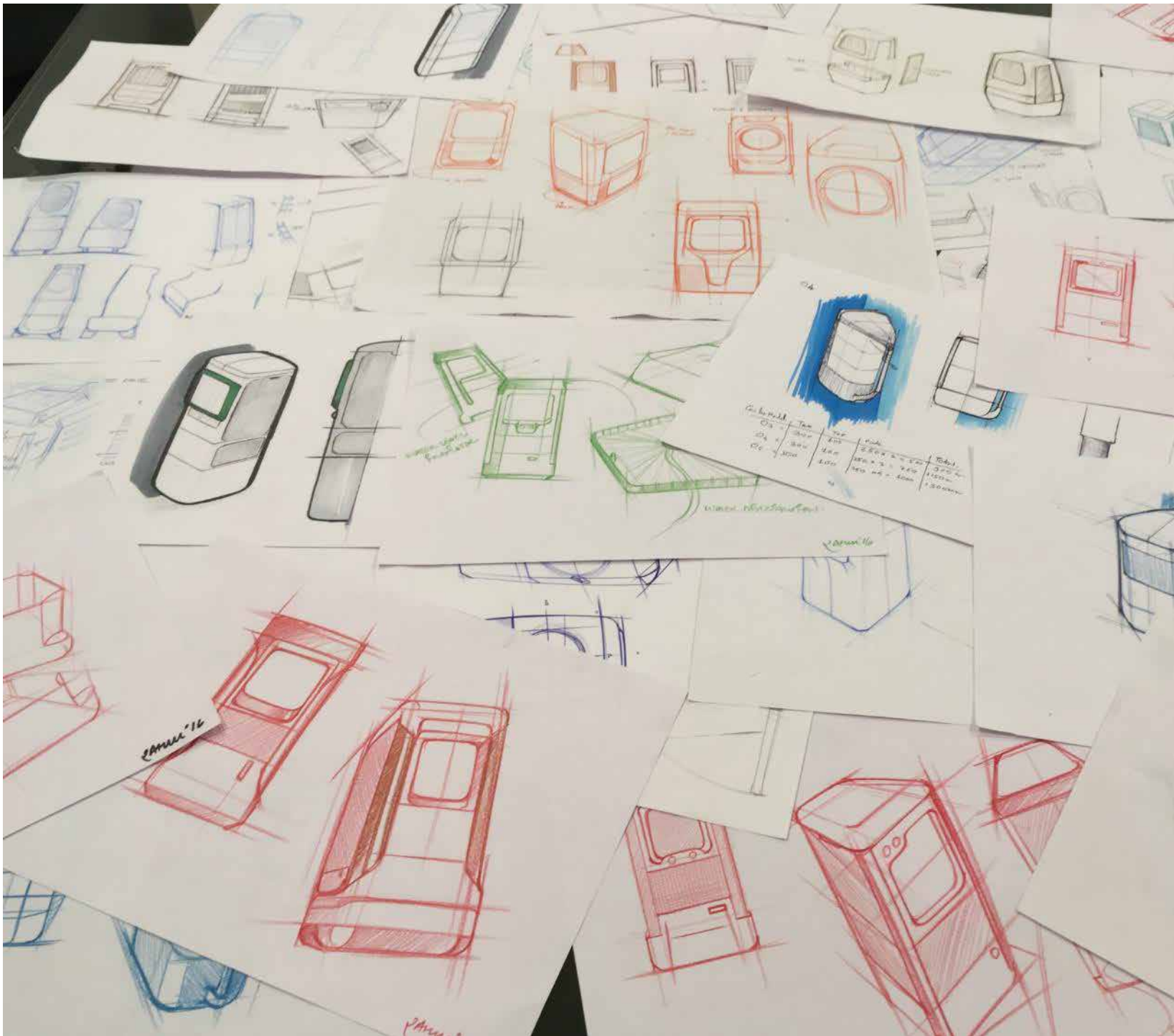


2 BAYBREEZE AIR COOLER

MOODBOARD | DIRECTION



CONCEPT GENERATION



2 BAYBREEZE AIR COOLER

FINAL OUTPUT

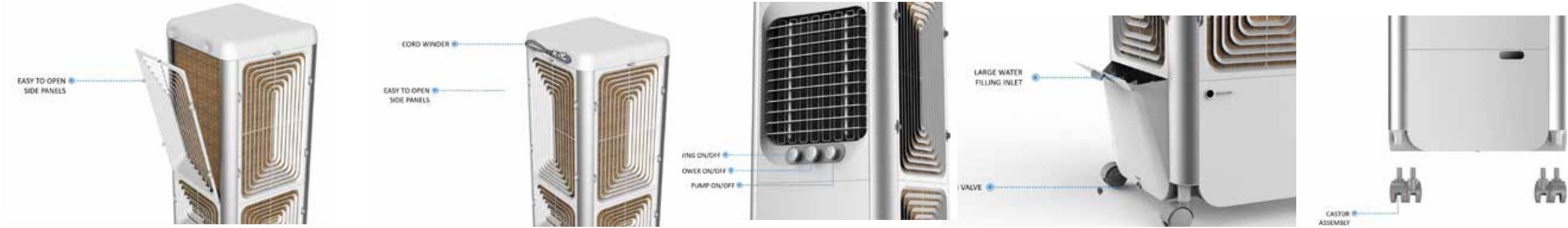
FEATURES

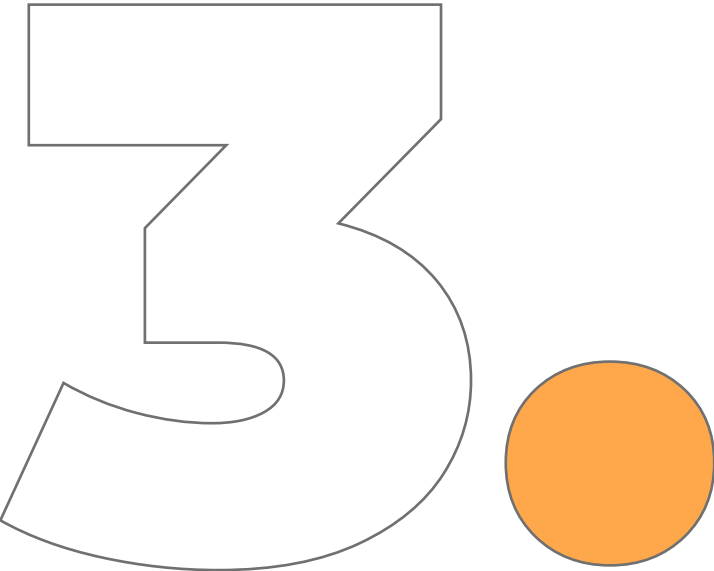
- EASY TO ASSEMBLE AND DISASSEMBLE.
- EASY WATER LOADING OPERATION.
- DUST AND MOSQUITO NET.
- PORTABILITY WITH CASTORS WITHIN THE TANK.
- HANDLE WITH CORD WINDING PROVISION.
- EASY TO REMOVE PADS FOR CLEANING AND REPLACEMENT.
- BETTER BUILD QUALITY AND FINISH.
- BETTER AESTHETICS AND SHAPE.
- WATER LEVEL INDICATOR WITH CLEAR VISIBILITY.
- MODULAR DESIGN.
- LESS SPACE CONSUMPTION (FOOT PRINT).
- EASY ACCESSIBILITY FOR THE TANK.
- FAN MOTOR ASSEMBLY ON THE FRONT PANEL.
- LESS NOISY.
- BETTER AIR DELIVERY.
- EASY STORAGE.
- CHOICE OF GOOD GRADE OF PLASTIC THAT IS RUGGED IN LOOKS.

MIN COOLER TO MAX COOLER TRANSITION



EXTRUSION BASED STRUCTURE FOR ASSEMBLY





LATITUDE RANGE OF FUEL DISPENSERS

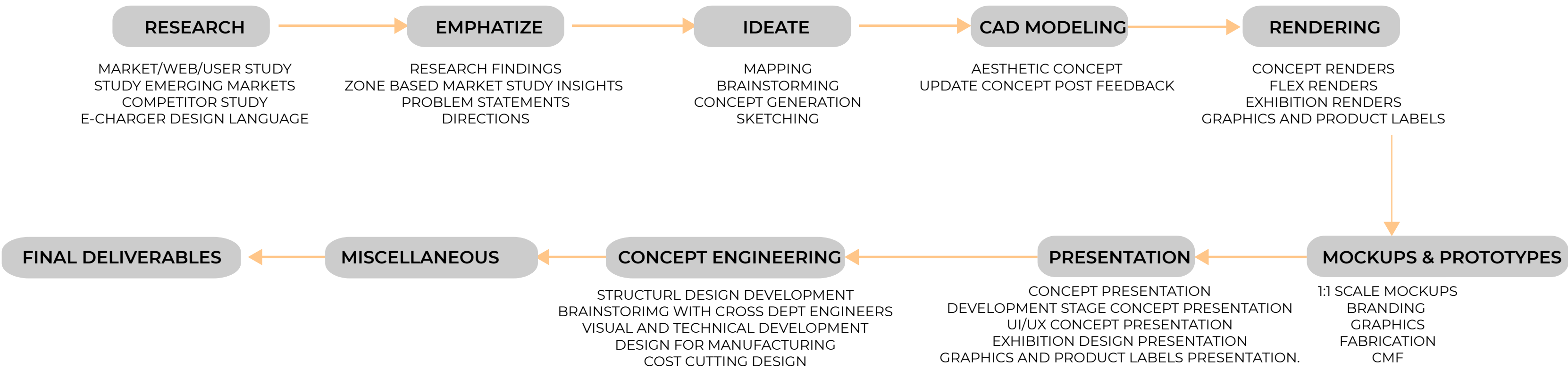
The LATITUDE™ series from Gilbarco Veeder-Root is the next generation of dispensers to fuel you into the future. With 5 different configurations to choose from, the LATITUDE™ series offers you the freedom to tailor, scale and future-proof your dispensers to meet your specific and ever-changing needs.

3 GILBARCO VEEDER ROUTE LATITUDE FUEL DISPENSER

Brief in general:

Design a new range of Fuel Dispenser for GILBARCO VEEDER ROUTE keeping electric charger imagery in mind. The design should be future ready not only aesthetically, but also in terms of technology, features, value, usability and overall promise.

Design & Development Process



Key roles undertaken:

- | | |
|-----------------------------------|--|
| Project Management (Project lead) | Mockup and Prototyping Development |
| Team Management | Presenations |
| Concept Design Development | Engineering and marketing workshops with clients team. |
| Mentorship | Cross-functional workshop with clients engineering and marketing team. |
| Concept Rendering Assistance | Graphics and visual design for the fuel dispenser |
| Exhibition Design | Engineering and structural development assistance |
| UI/UX Design | Factory Visit and supervision. |
| Forecourt Design | |

NOTE: Due to NDA with GILBARCO VEEDER ROUTE. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm willing to discuss and show POC in person.

3 GILBARCO VEEDER ROUTE LATITUDE FUEL DISPENSER

FINAL OUTPUT



<https://www.gilbarco.com/sea/latitude>

NOTE: Due to NDA with GILBARCO VEEDER ROUTE. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm willing to discuss and show POC in person.

3 GILBARCO VEEDER ROUTE LATITUDE FUEL DISPENSER

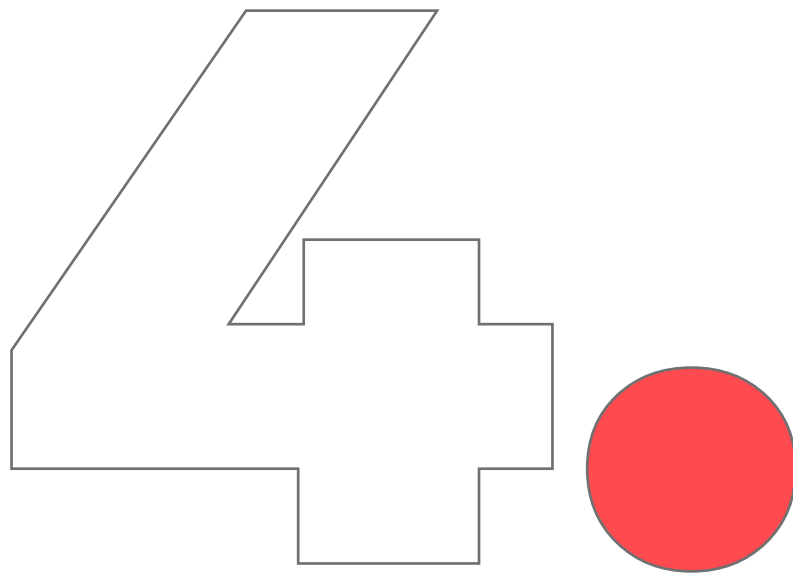
PROOF OF CONCEPT



Lets discuss further.

<https://www.gilbarco.com/sea/latitude>

NOTE: Due to NDA with GILBARCO VEEDER ROUTE. User, Research Detailed Concept Development, Presenations and progressive work cannot be shared. However, If needed I'm willing to discuss and show POC in person.



SoftLink
International

MEDI KART / E-KART

E-Kart is a medical equipment carrying cart. This cart is designed by considering conditions of a fast-paced hospital environment. One can transport the cart on its wheel from one place to another place safely and very quickly. e-kart is all in one solution, which includes the PC unit (Personal Computer), UPS (uninterruptible power supply), Printer and ECG unit (electrocardiogram). Easy handling, lightweight and less consuming area make this cart perfect for the usage in an emergency hospital environment.

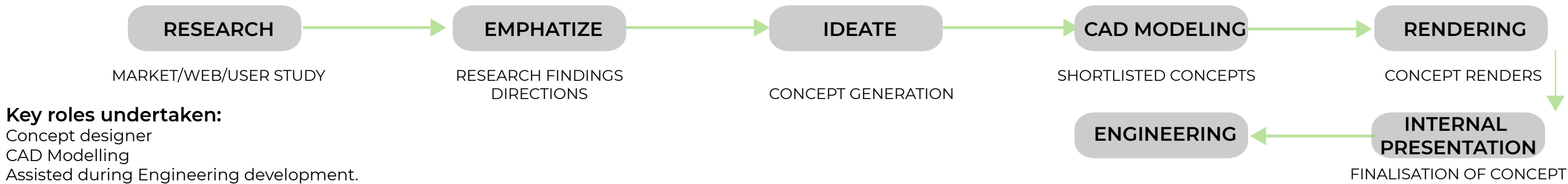


4 SOFTLiNK InternationalMEDI E-KART

Brief in general:

Design a medical equipment carrying cart, which include the PC unit, UPS, Printer and ECG unit. Design should be easy to handle lightweight and with lesser foot print.

Design Process



FINAL PRODUCT



SYMPHONY '*TOUCH*' SERIES OF AIR COOLER

The future of air cooling is here! A yet another innovation from Symphony, the world's largest brand in air cooling, Symphony Touch series is loaded with new age features like 6 aspen pads, fully closable louvers and cassette type removable pads that are unheard of in the domain of air cooling. With its stunning looks, 4-side cooling pads and powerful cooling aided by double blower, this technological marvel will surely lure you to Touch it.



5 SYMPHONY LTD. TOUCH SERIES AIR COOLER

Brief in general:

Design a cooler which robust and sturdy in aesthetics, with fully closeable louvers, 4 side cooling pads for efficient cooling, that is easy to remove and clean. Also include ducting option for south american market.

Key roles undertaken:

Concept initiator and initial concept developer

I was part of the design assistance team for development.

Concept Sketches

Presentation

Overlooking the design received from the design consultancy

Assisted during Engineering development.



FINAL PRODUCT FOR INDIAN MARKET WITHOUT DUCT

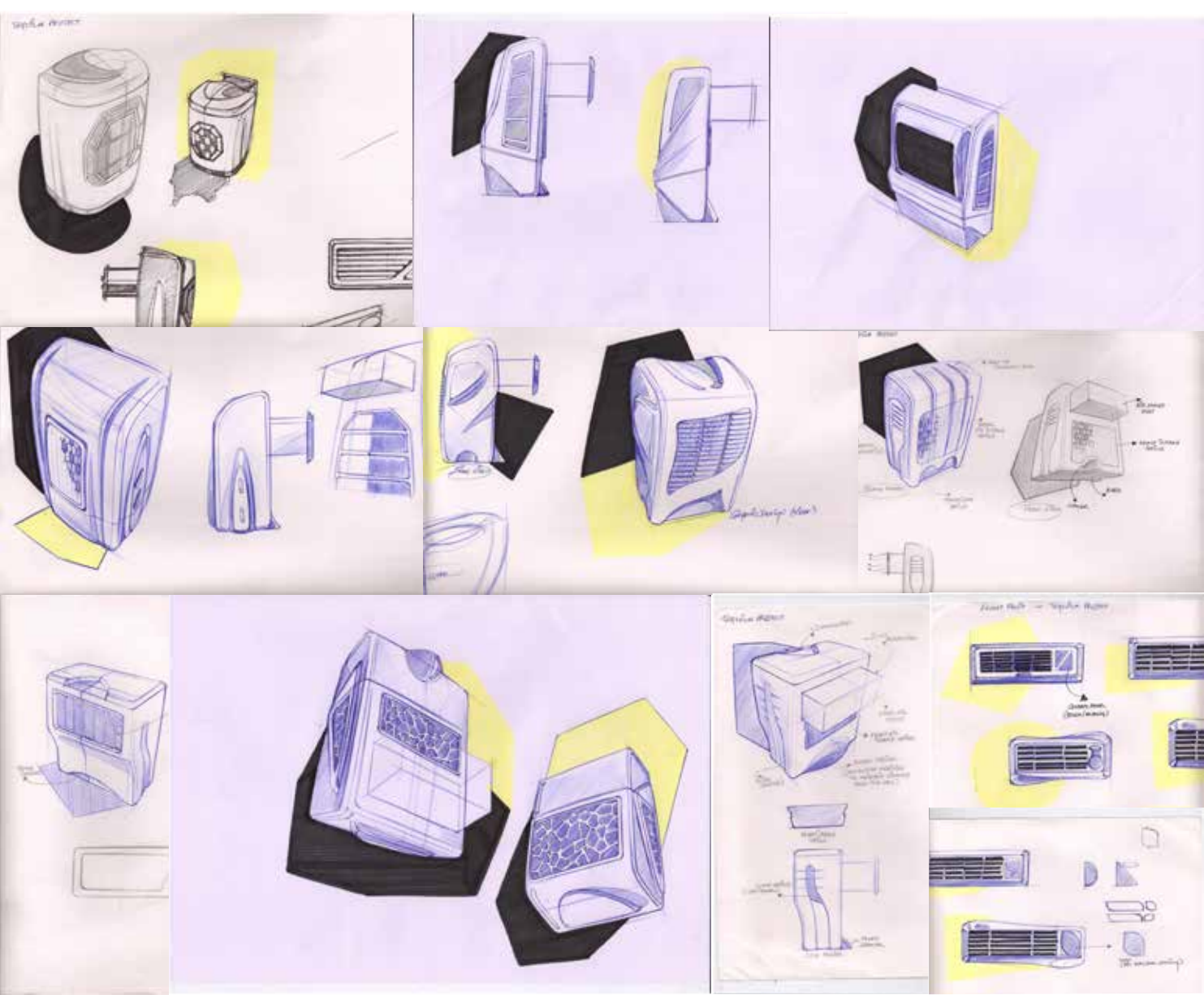


5 SYMPHONY LTD. TOUCH SERIES AIR COOLER

MOODBOARD | DIRECTION



CONCEPT GENERATION



DUCT FASCIA DESIGN



Thank you for reviewing my portfolio!



RAHUL NAIR
INDUSTRIAL DESIGNER

Mobile: +91 – 9049 869 805 | **Email:** rahulnair.designer@gmail.com

LinkedIn: <https://www.linkedin.com/in/rahul-nair-36407254/> | **Skype ID:** rahulronilnair