

Summer Internship

INFINITI[®]
Infiniti Modules P. Ltd.

Vinish Janardhanan

08613003

Industrial Design



About the company

- Furniture manufacturer, based in Goa
- School, office and seating
- Collaboration with Italian company  Furniture
 - Import components
 - Designs
-  Components P. Ltd.
 - B2B
 - Components for Infinity
 - Components for OMP Italy

products

- Office furniture
 - Panel, desks, conference, storage, seating



products

- School Furniture
 - Desks, chairs ,classrooms ,
storage ,library,
canteen, hostel, office



products

- Seating
 - Executive, operative, hospitality, seminar



working of infinity

- Learning of various departments and their functioning
- B2C
- 93% only through projects
- Major Clients being schools, offices
- Main tools
 - Network of franchise
 - Website
 - Magazine prints (Mentor)
 - Mails

Enquiry(By franchise)

Quotation (Bill of Quantity)

P.O. from Client + Advanced payment

Sales Order

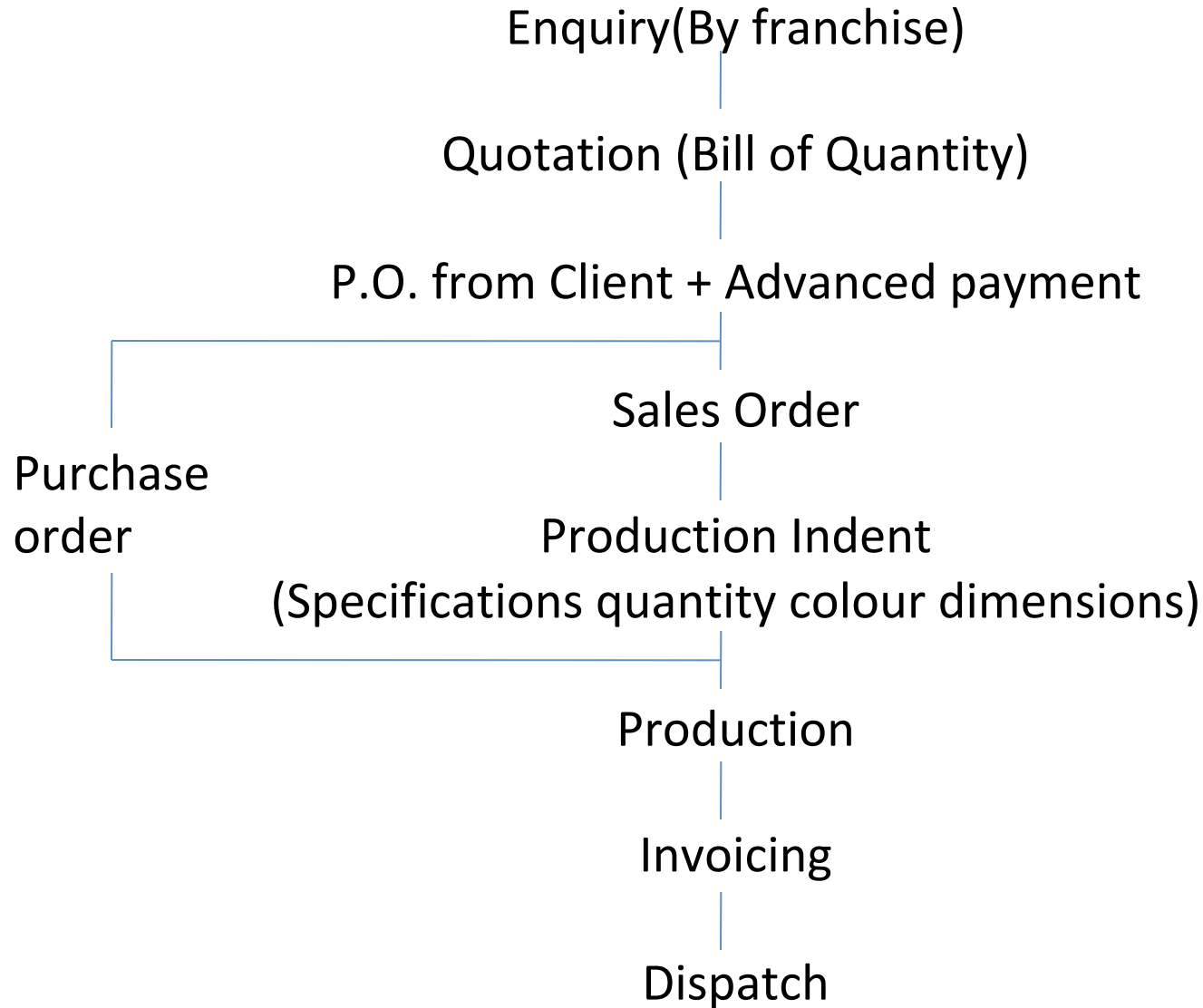
Purchase
order

Production Indent
(Specifications quantity colour dimensions)

Production

Invoicing

Dispatch



- Manufacturing strength
 - Metal tube structures
 - Particle board processing
 - Sheet metal (outsourced)

Machines used in factory

- Infiniti
 - Circular Saw
 - Pneumatic Lamination Press
 - Drilling m/c
 - Routing m/c
 - Edge Binding
- OMP
 - Automatic/ Manual Cutting
 - Automatic Polishing
 - Manual/ Automatic Bending
 - Press
 - Manual Drilling
 - Mig Welding

design brief

- Redesign of Existing OMP chair



- Problems faced by existing model
 - Use of slotted screw
 - Scratches on seat top during stacking
 - Peeling of paint during stacking of chair



necessity in school furniture

- Low Cost
- Ergonomic
- Sizes – 2,3,4,5,6,7
- Sturdy in use
- Requisite Stiffness
- Tamper proof
- No sharp edges/corners/points
- Stable
- Aesthetic
- Life span – min 10years
- Should not scratch the floor
- Minimum number of components
- Easy to assemble on site
- Table Top flat/inclined
- Provision for pencil holder
- Provision for bag (Hook on desk)
- Provision for books(Shelf)

ergonomic seat and desk heights

Sizes	Table Height	Chair Height
2	520	300
3	580	340
4	640	380
5	100	420
6	160	460
7	820	500

parts of existing OMP school chair

	Part	material	Process of manufacture	No. of parts	Manufactured by	Attachment
1	Seat	poly propylene	Injection molded	1	Imported	Screw
2	Back rest	poly propylene	Injection molded	1	Imported	Rivet
3	Frame	MS round + oval(30x50) tubes	-	1	Outsourced (OMP)	-
4	Round Glides	ABS	Injection molded	2	Outsourced	Permanent Snap fit
5	Oval Glides	ABS	Injection molded	2	Outsourced	Permanent Snap fit

- Seat

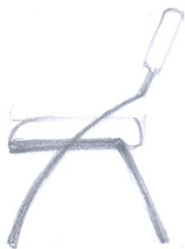


- Back rest

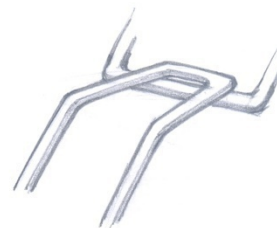
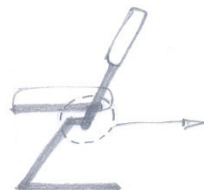


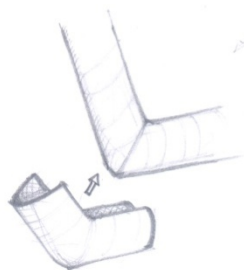
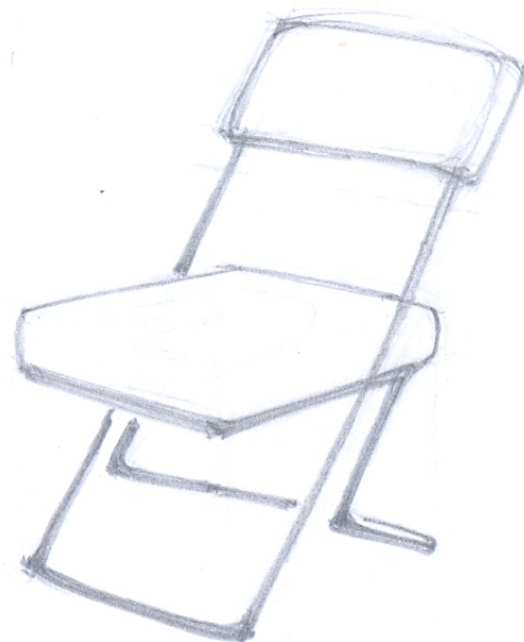
design concepts



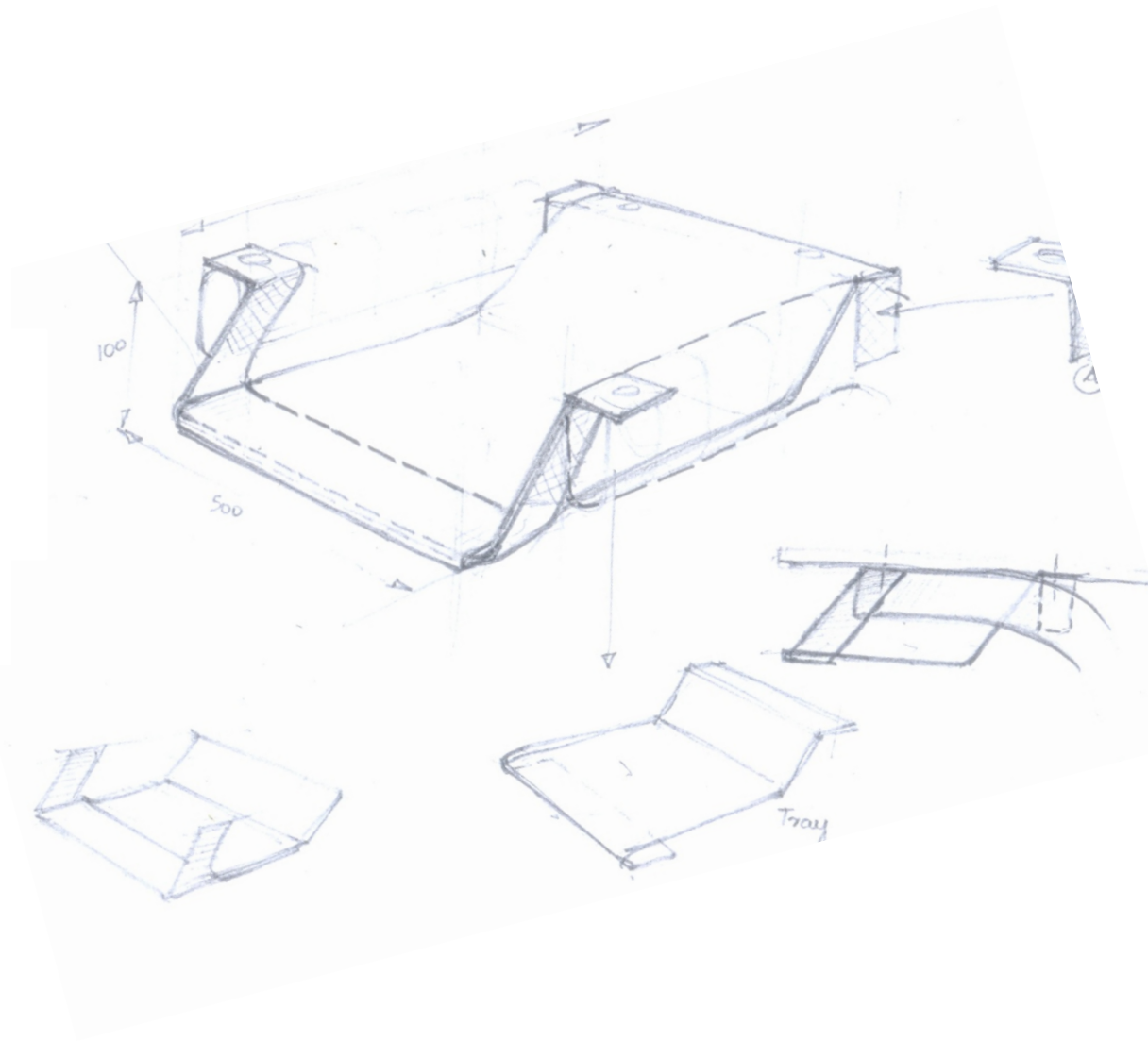
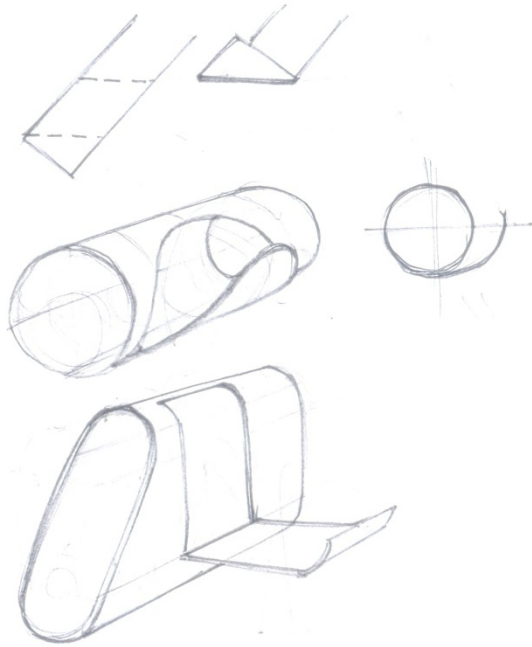


Sketch

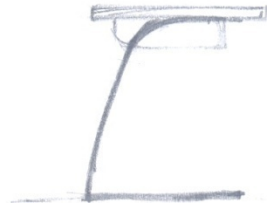
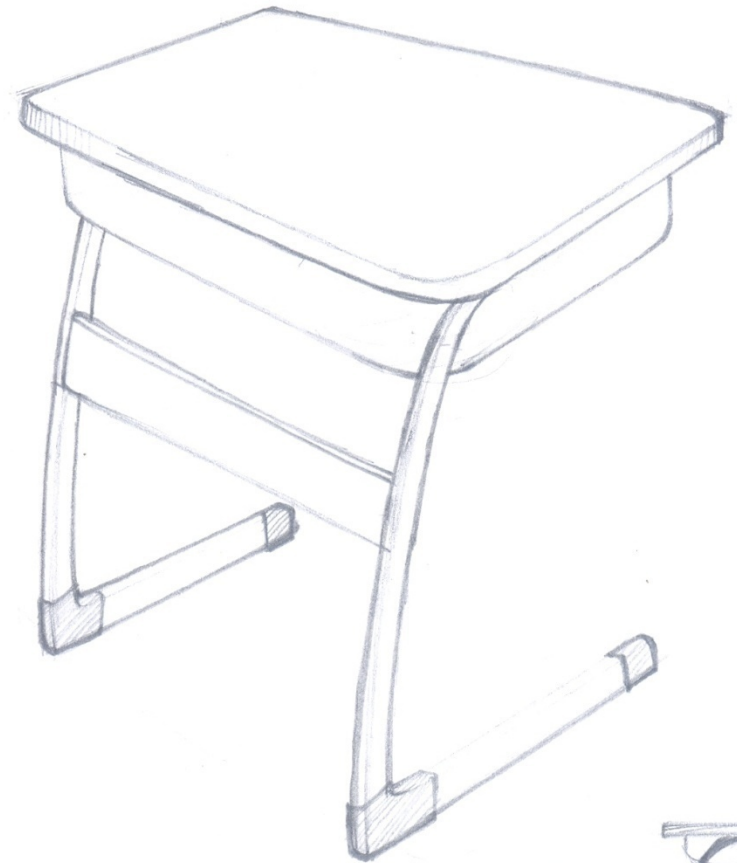
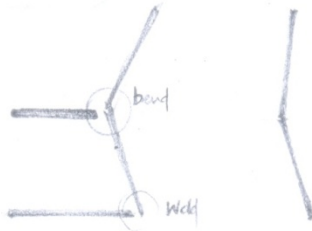


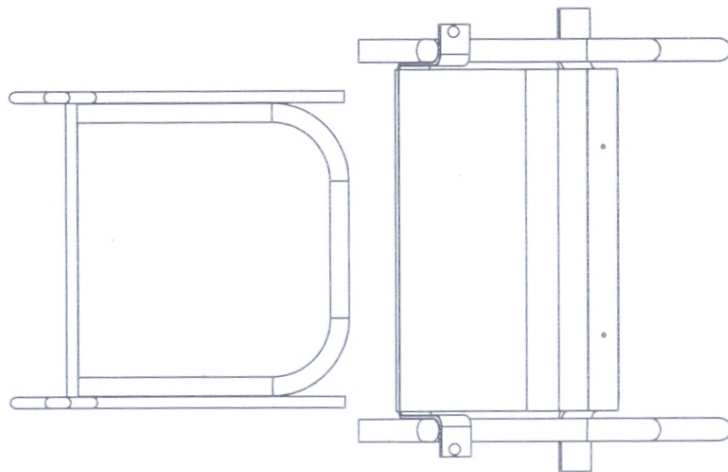
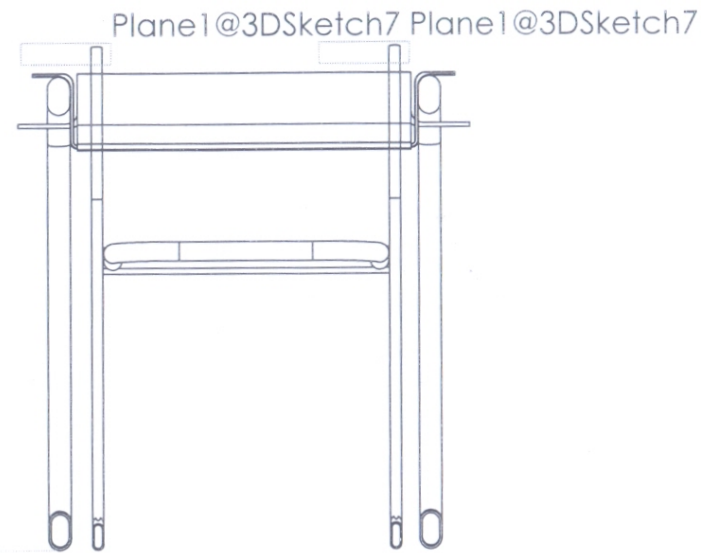
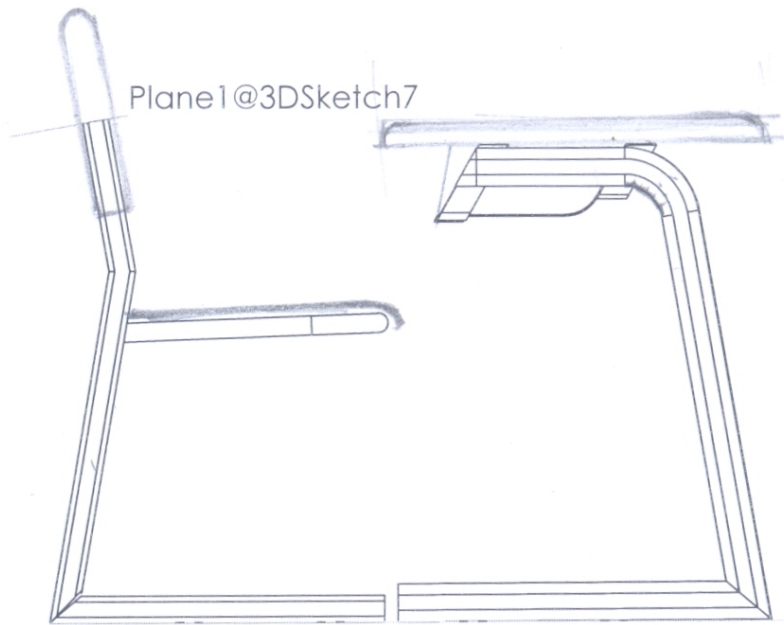


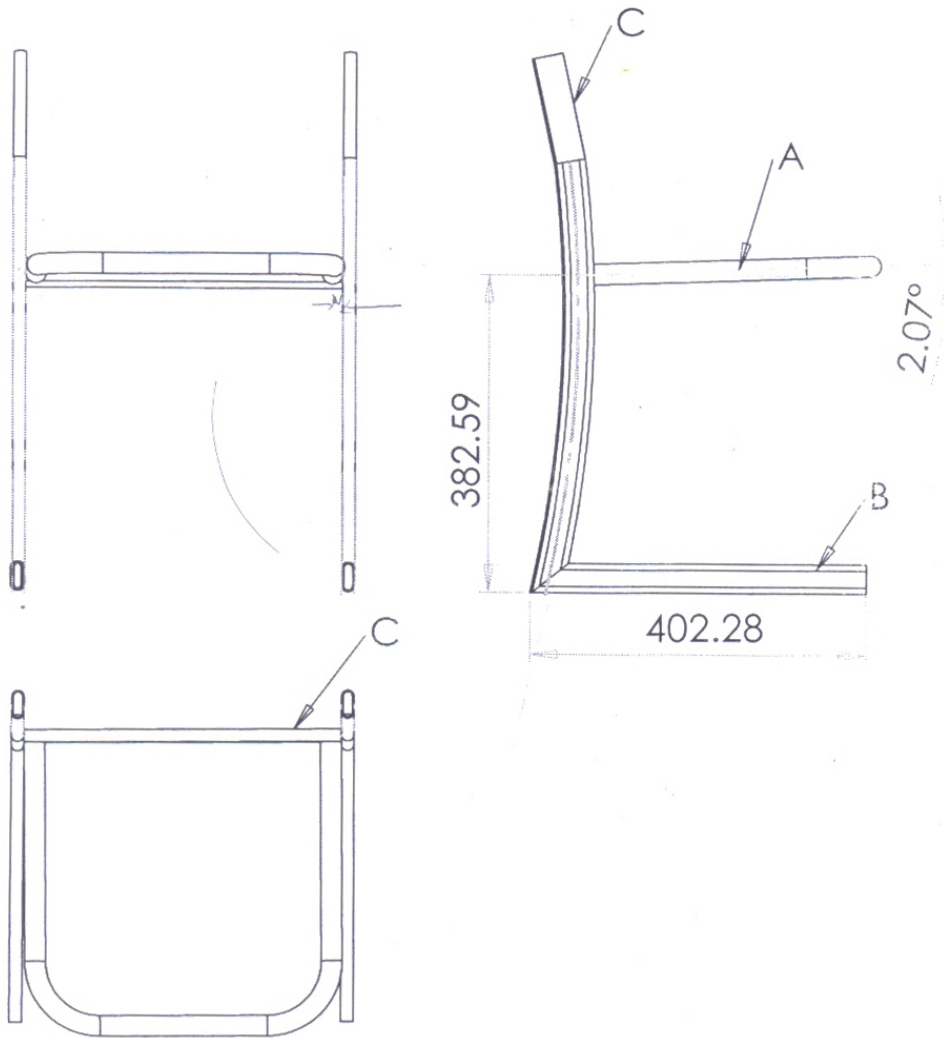
shelf, hook and pencil holder concepts



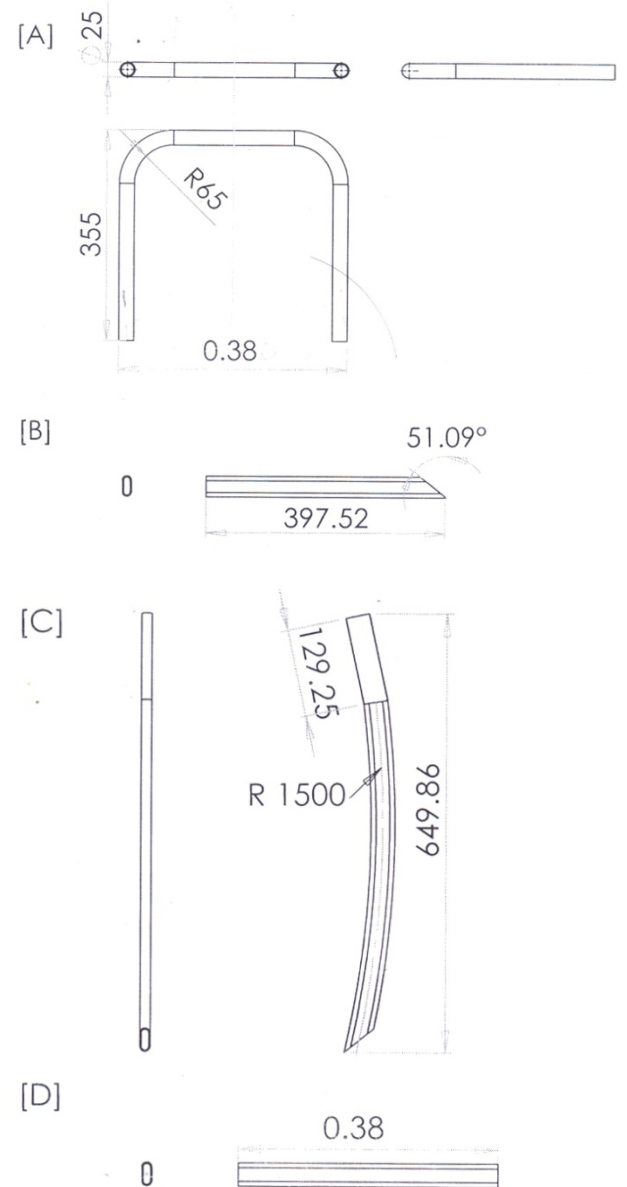
final concept

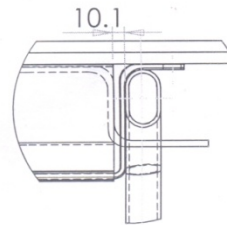
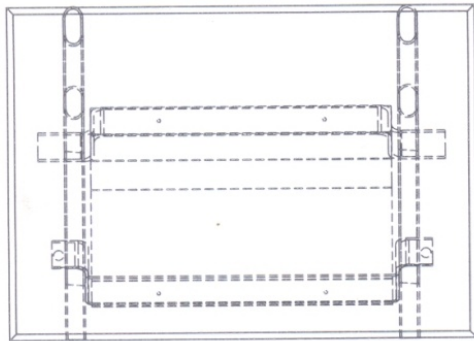
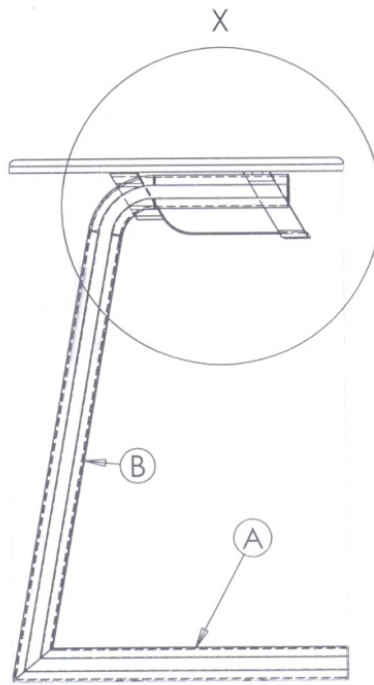
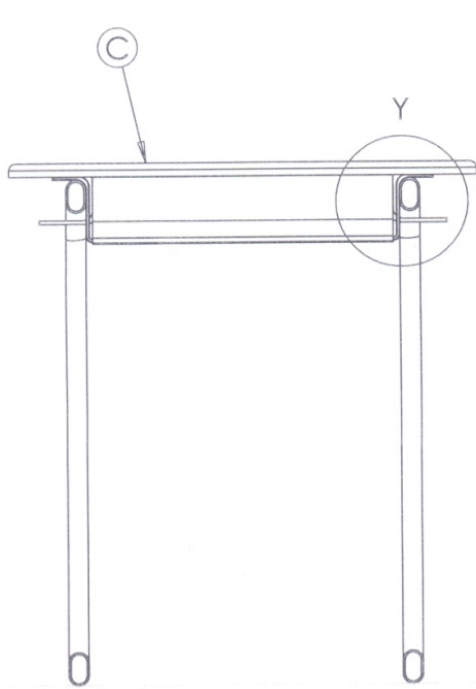




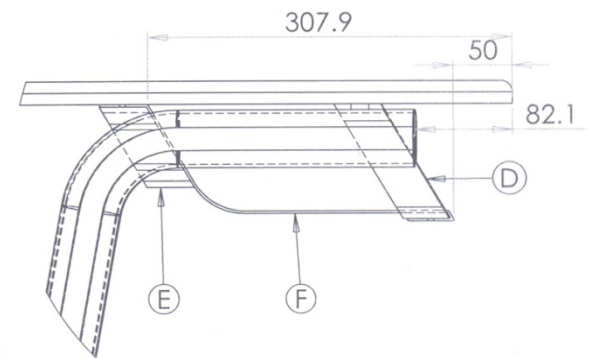


Dimensional drawing of chair

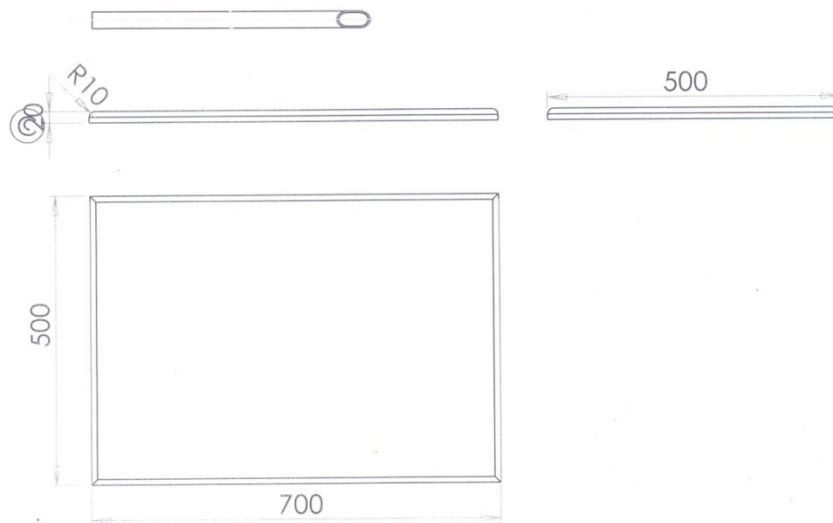
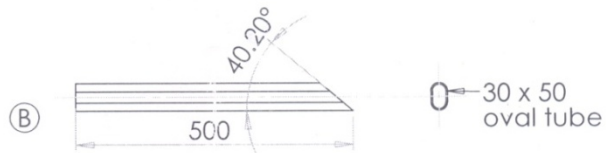
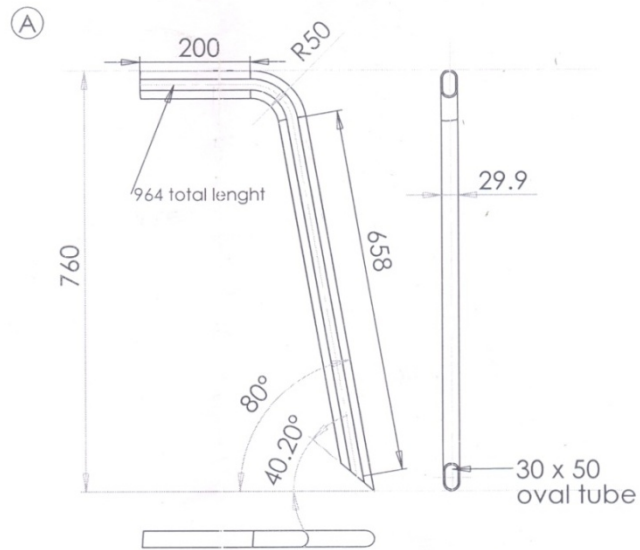




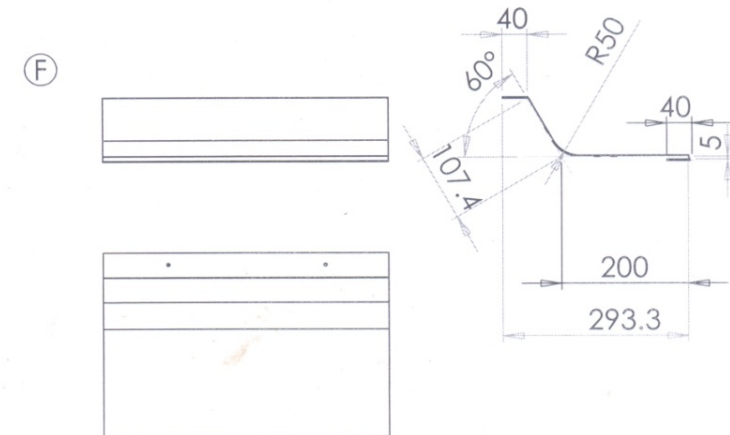
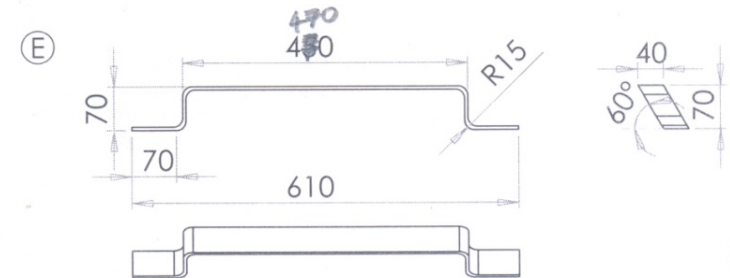
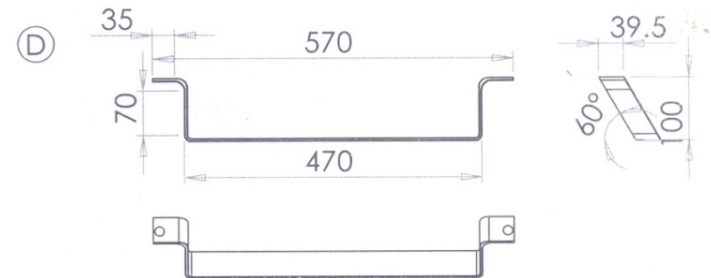
DETAIL Y
SCALE 1 : 5



Dimensional drawing of chair



DETAIL X
SCALE 1 : 5



Manufacture

- Size 4 Chair
- Raw Material : MS Oval Tubes (30mm x 50mm)
MS round tube (20mm dia)
Particle board (20mm)
- Process used : Cutting, Bending, Punching, Welding (Mig),
Grinding, Powder coating
Lamination, Edge Binding, Routing



manufacture



manufacture



manufacture

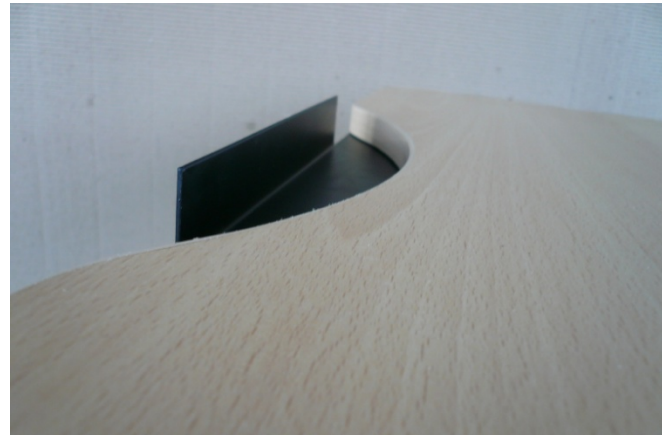




final product



final product



final product



final product





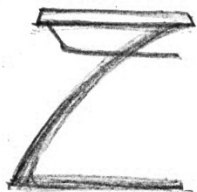
final product

Improvements in the new design

- Previous problems have been taken care of
- Stack ability maintained
- Maintenance
- Aesthetics
- Integrated shelf and pencil rack for table

Suggestions

- Changes in the mould
- Texture to the mould
- Guides



podium



INFINITI[®]

51- A, IDC

Pilerne Estate

Bardez, Goa - 403511

India

+91 83 26653355

+91 9823374471

www.impl.biz

www.ompindia.com

