

Summer Internship

INFINITI[®]
Infiniti Modules P. Ltd.

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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



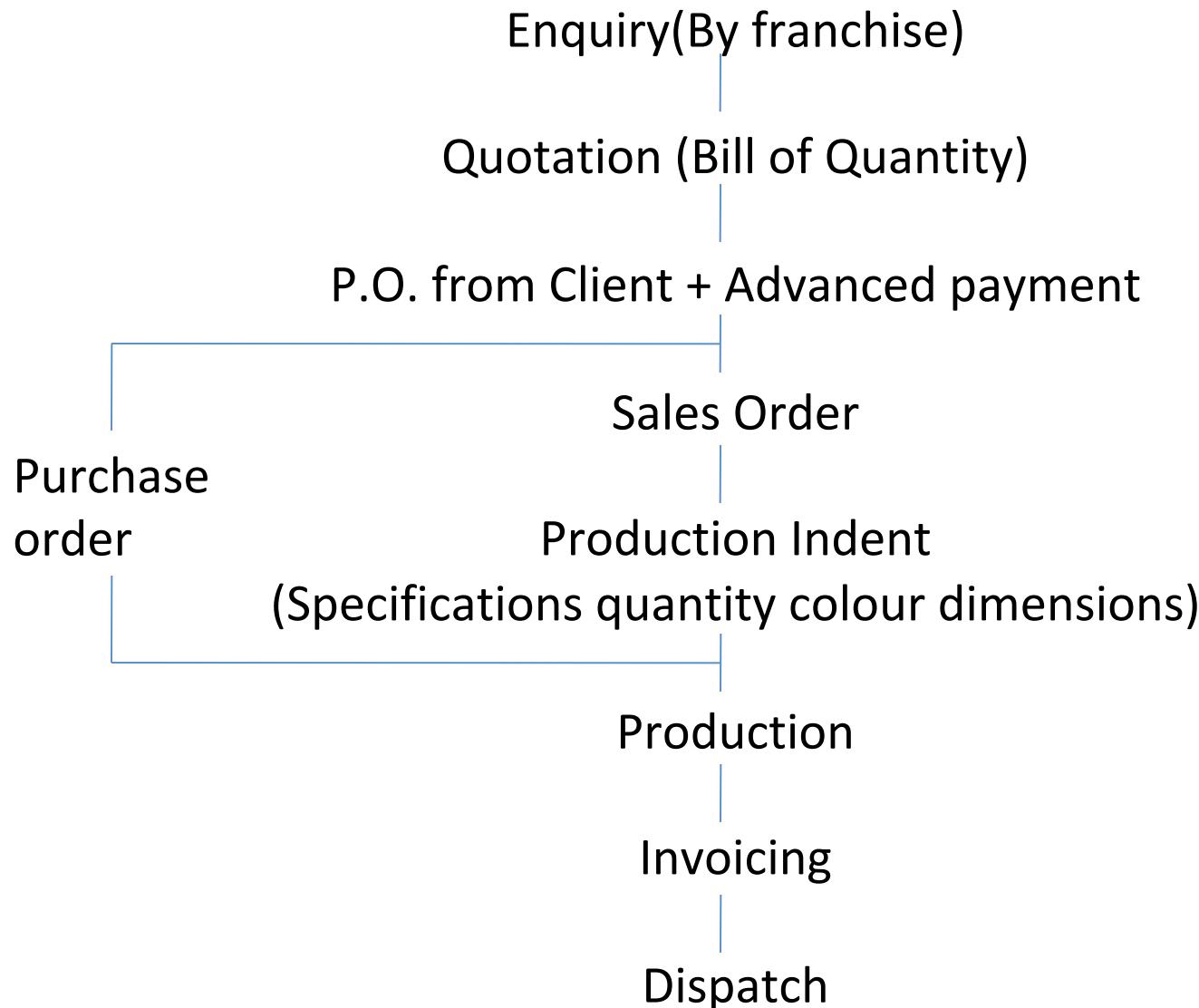
products

- 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



- Manufacturing strength
 - Metal tube structures
 - Particle beard 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 |

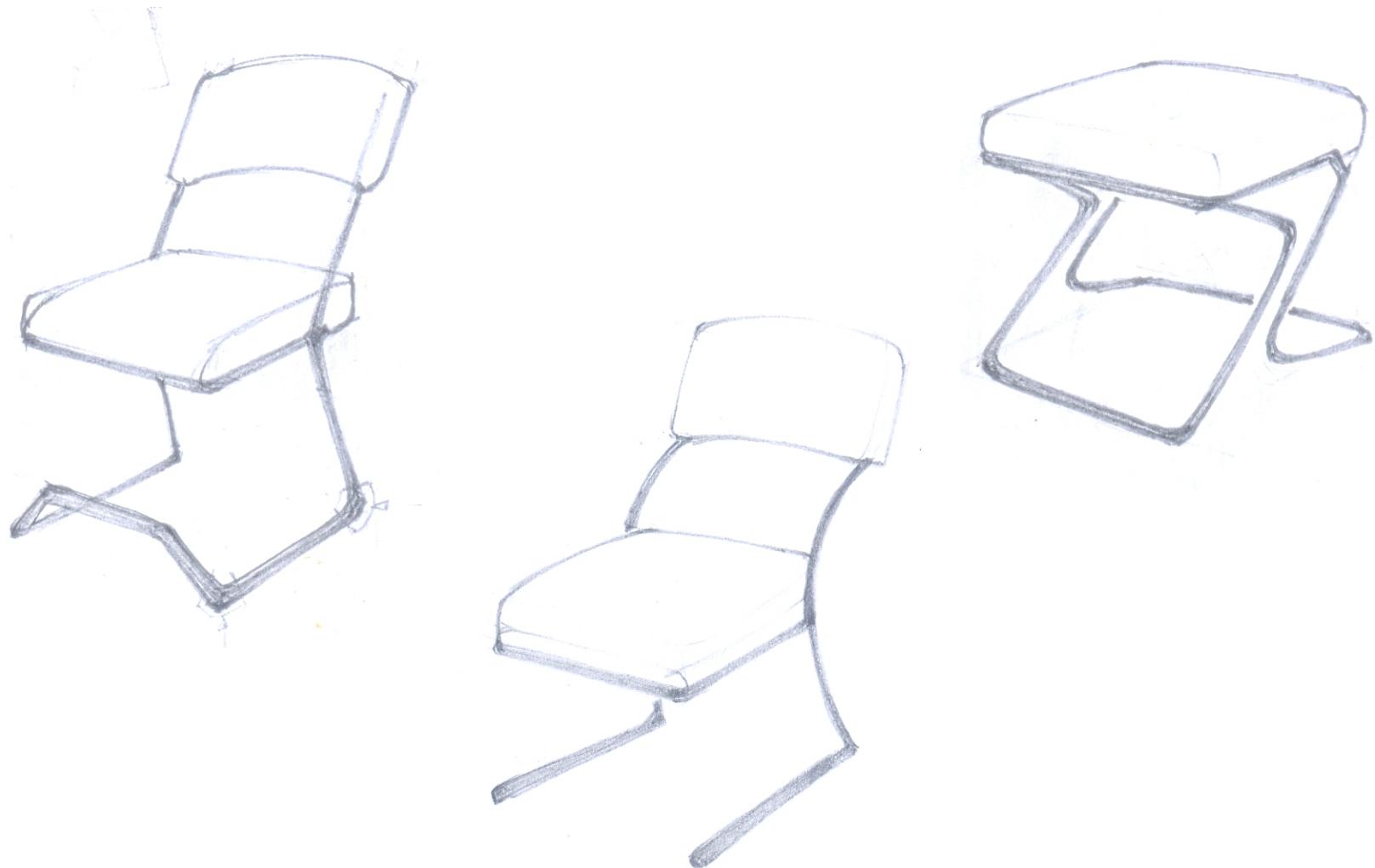
- **Seat**

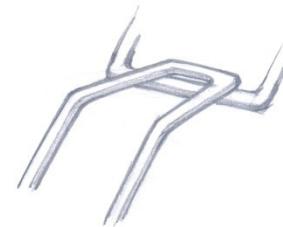
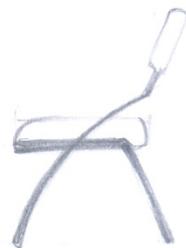


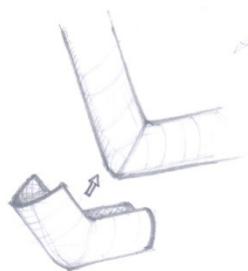
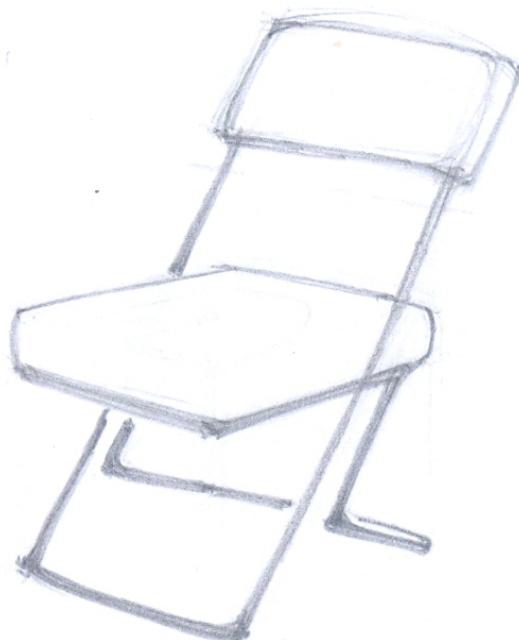
- **Back rest**



design concepts

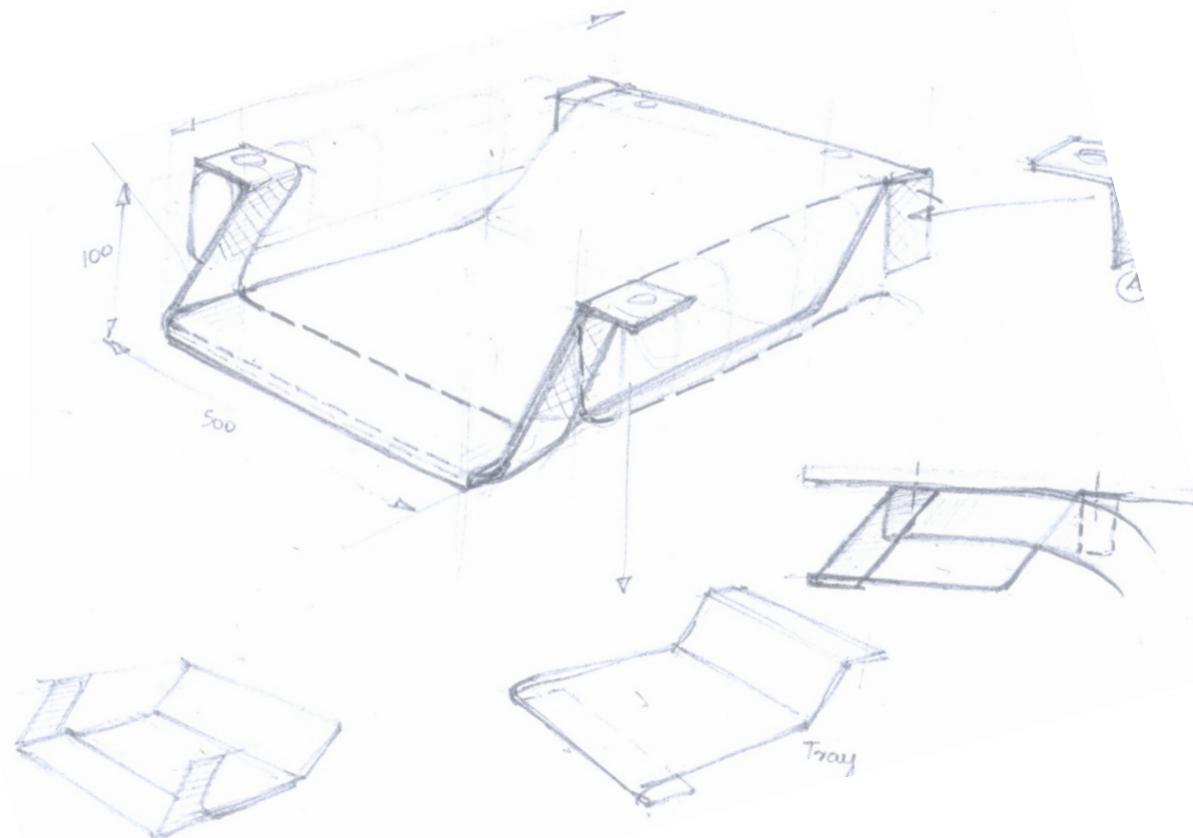
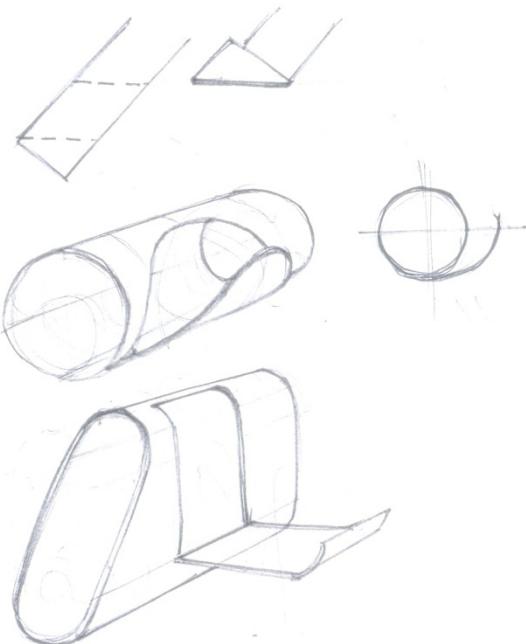




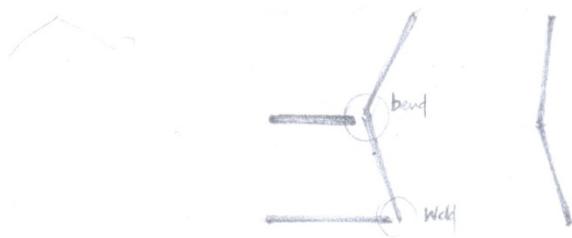
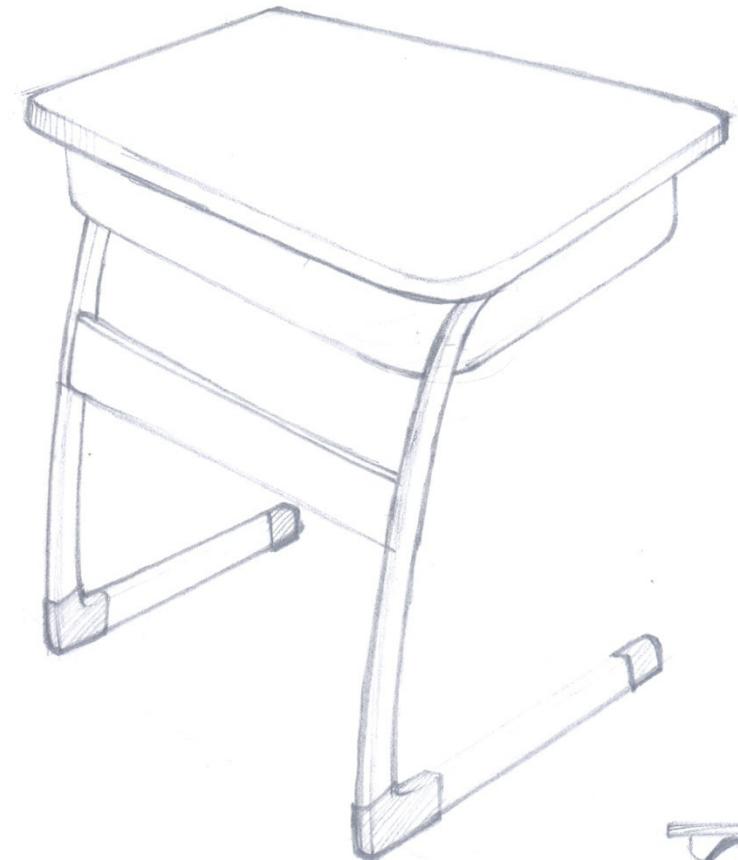


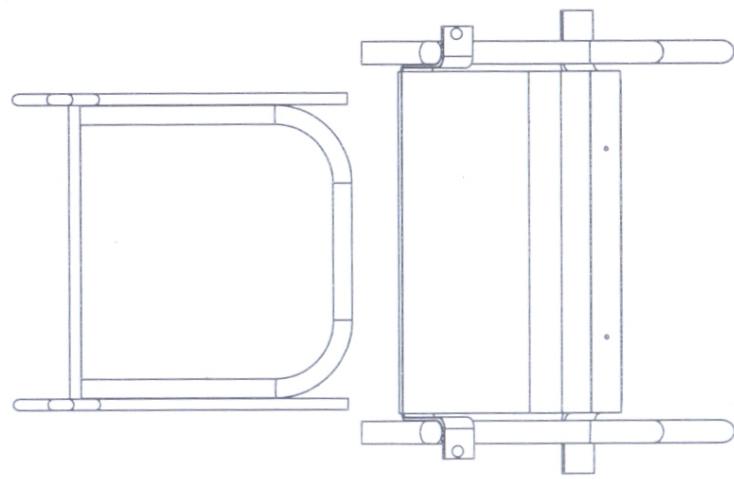
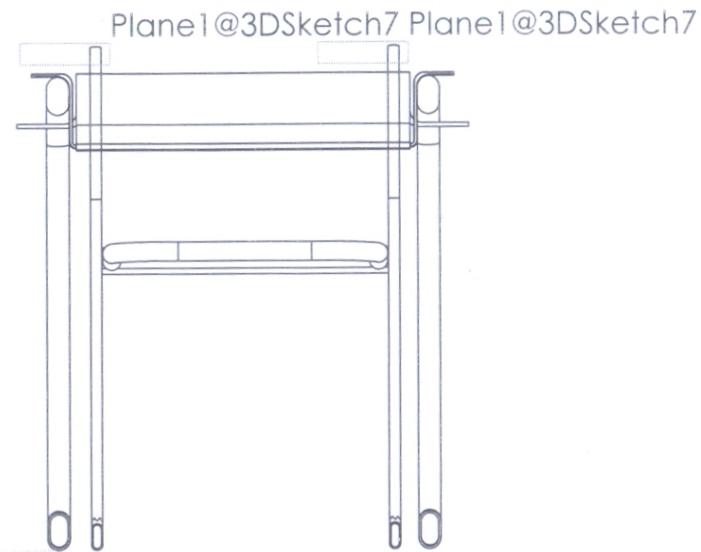
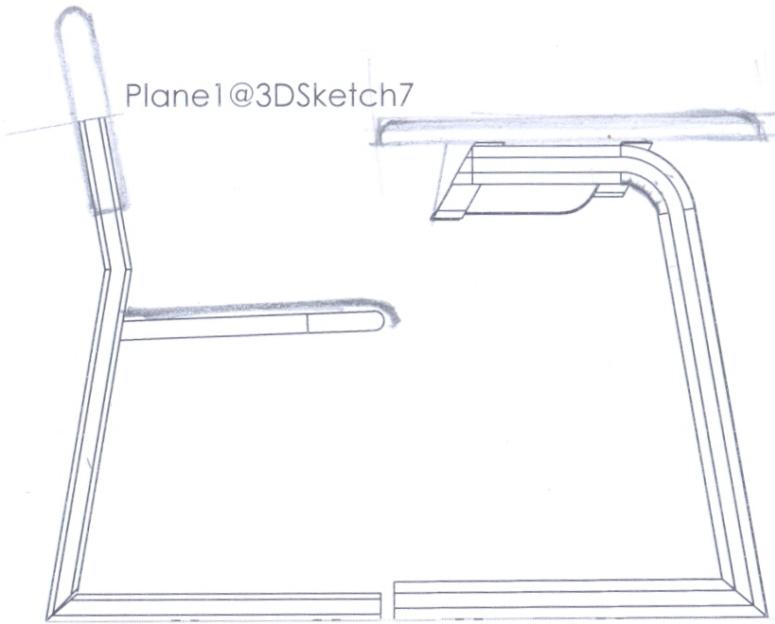
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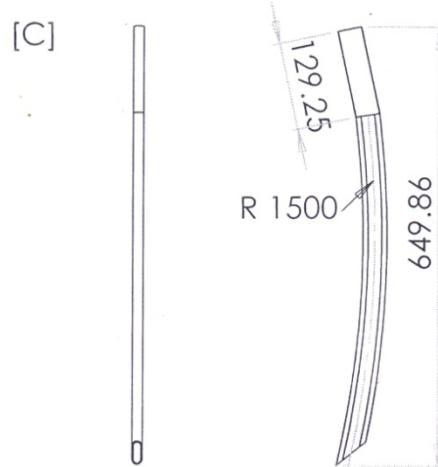
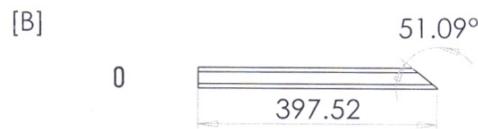
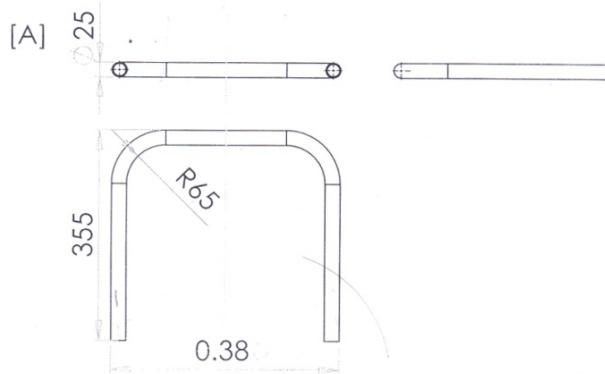
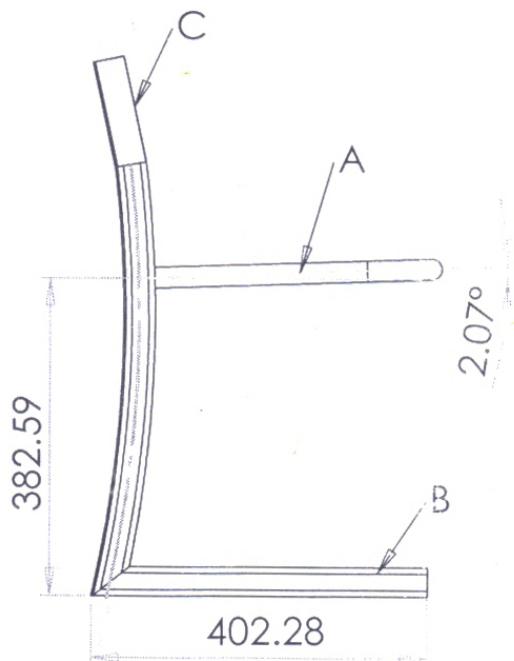
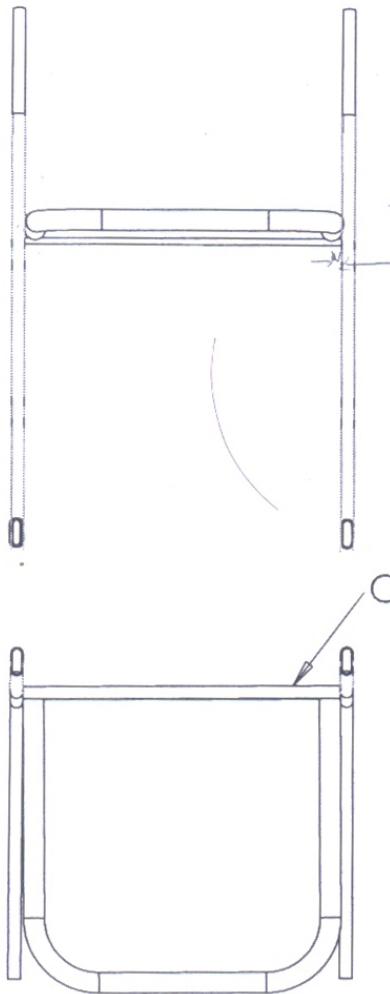
shelf, hook and pencil holder concepts



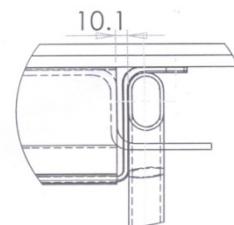
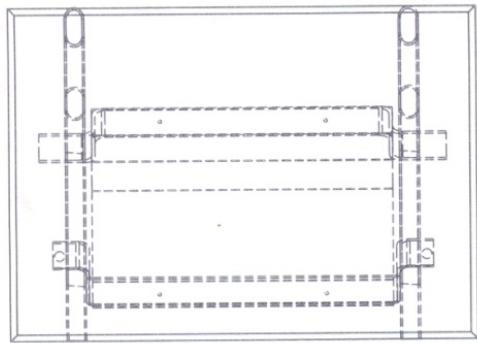
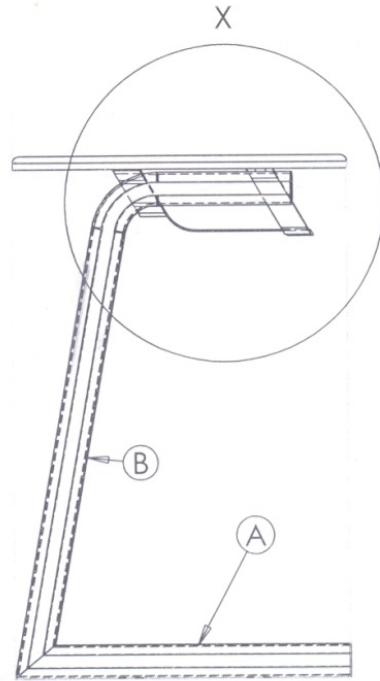
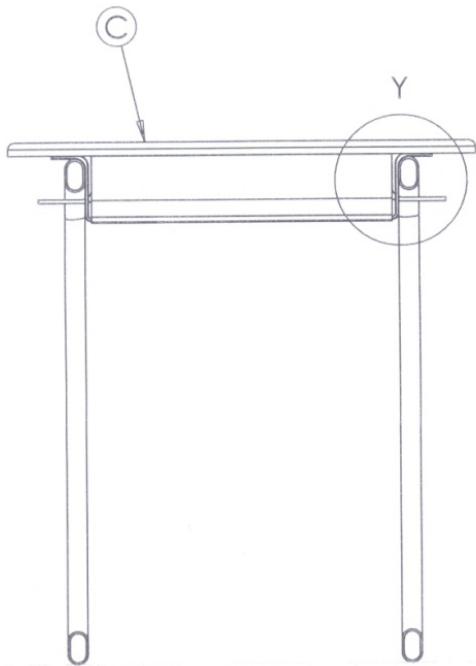
final concept



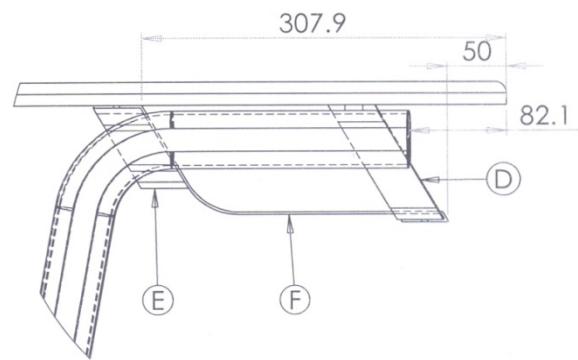




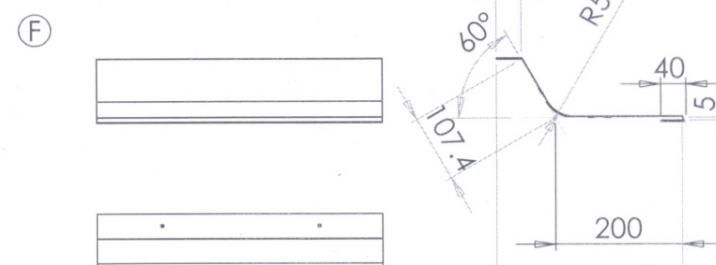
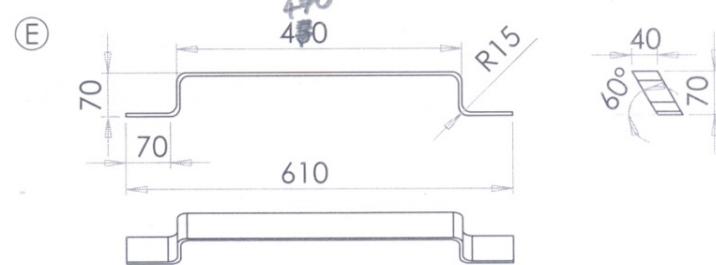
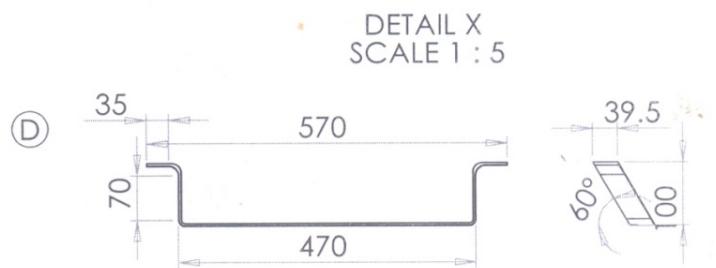
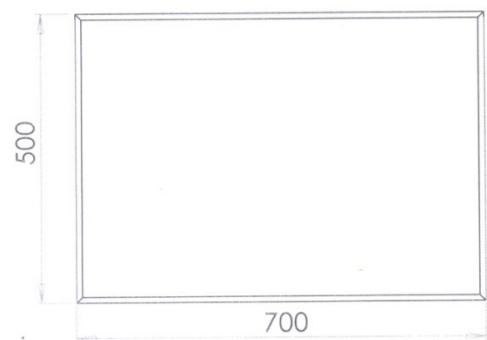
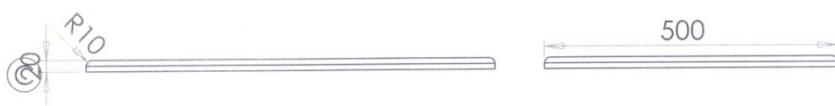
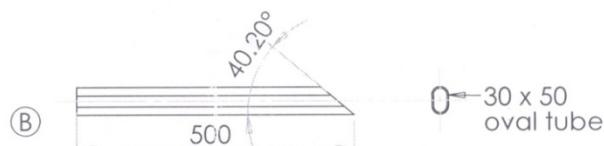
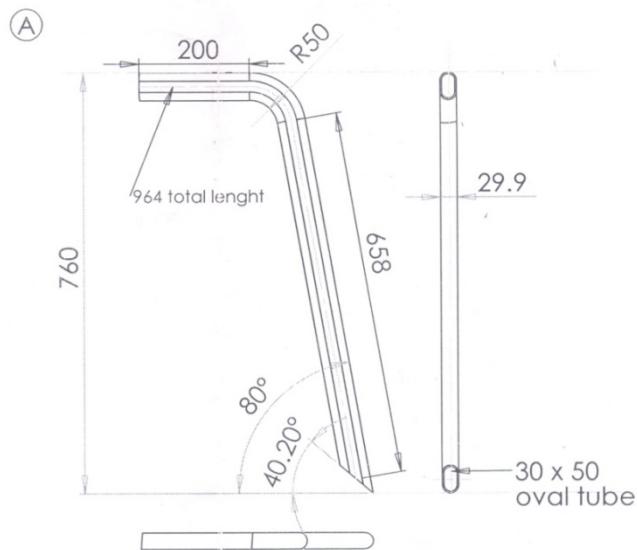
Dimensional drawing of chair



DETAIL Y
SCALE 1 : 5



Dimensional drawing of chair



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



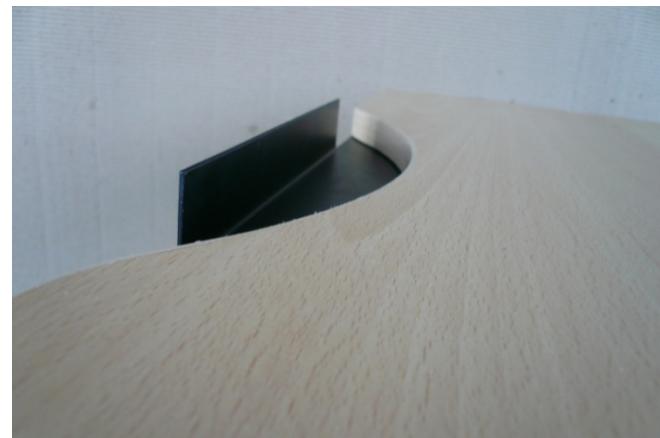
manufacture



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
- Glides



podium





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