N.S.UGANDHAR

Phone Number: 7708992693
Email id:nsugandhar1995@gmail.com

Contact Address
No 112, gandhi salai
Velachery - 600042.

OBJECTIVE

Dedicated Mechanical engineer seeking a position in a company that enables me to develop as a professional and enhance the growth of company.

EDUCATION

St.Joseph's institute of technology **(2013-2017)**
B.E. Mechanical engineering-6.64

Velammal matriculation higher secondary school **(2012-2013)**
HSC-91.25%

Viswa bharathi matriculation higher secondary school **(2010-2011)**
SSLC-84%

ENGINEERING EXPERIENCE

Course- Automotive sheet metal design of Body in White –BIW components using NX CAD & CATIA

1. Engineering design of hood inner & outer panel using NX CAD

- Hood inner panel is designed as per **EURO NCAP** regulations .considering pedestrian safety and passenger safety when frontal crash occurs.
- **Embosses** are provided to improve stiffness and allows the force to dissipate towards hinge.
- Provided **latch & striker, hinge reinforcement** and positioned the striker plate based on **hinge axis**.
- Required draft angle and **corner relief** are provided for **stamping & hemming** operation.

2. Design of front fender using NX CAD

- Based on the design consideration the following portion of the fender is designed, **Drip area, Bumper mount area, Sill area, Baffle mount area.**
- There are five mounting points in fender .They are **Body, sill, A-pillar, cowl** and **drip**.
- **Drip area** is the joining between the fender and the engine compartment.
- The length of the drip area is considered based on the gap between the rear end of the fender and front end of the fender.
- The drip area is mounted with the engine compartment with the help of **nut welding**.
- We use **fasteners** for mountings. Since fender is styling oriented part, we can't use spot welding.

3. **Wheel arch area calculation**
    - When the car is viewed from front view, the wheel should be positioned inside the fender. If it is placed outside it causes more **chipping**, this causes more damage to pedestrians as well as to the car.
    - Once I get my fender and wheel data. I draw straight line from **0 to 180** on wheel centre. I draw **50 degree** line on right side and **30 degree** line on left and project them on the fender.
    - A clearance of **minimum 5 mm** should be there on these regions when viewed from top view. Then only the car passes the **Japan** requirement.
    - Similarly the **U.S and European** countries have different regulations.

4. **Design of car roof using NX CAD**
    - Design **ditch area** to join the roof with the body side.
    - Considered **heat distortion criteria** and thereby calculating the number of **bow** and the position of bow roofs.
    - Designed the **front roof rail, centre roof rail and rear roof rail reinforcements**, based on the front and rear view.

5. **Design and development of TAILGATE using NXCAD & CATIA.**
    - Followed the design methodology and **designed tailgate inner panel, emboss definition, hinge and latch placement.**
    - Incorporated design of **sealing flange, determined gas stay position and designed gas stay reinforcements.**
    - Considered & designed **rear wiper mount & back door trim** part as per requirement.

PERSONAL DETAILS

Nationality **: INDIAN**
Date of birth **:** 19/04/1995
Languages know **:** Telugu, Tamil, English .

DECLARATION

I hereby declare that all the above mention details are true to the best of my knowledge.

PLACE: CHENNAI **N S UGANDHAR**