



# Generalety – Your choice for engineering designs





## Company Profile

- Generalty is a leading global engineering and outsourcing service provider with offices in USA, Canada and China.
- It is specialized in CAD/CAE in vehicle crashworthiness, durability, NVH, CFD, multi-body dynamics, aircraft structures and sheet metal stamping.
- Its core business includes CAD/CAE services, contracted R & D, training, contract employment and outsourcing services.
- With many years of track record for design and engineering, Generalty consistently delivers a competitive advantage to more than 60 customers in automotive, aerospace, metal stamping, raw materials and construction industries.

**High Quality**  
**Low Cost**  
**Speedy Delivery**



### ■ Mission

To assist our customers to reduce design & manufacturing costs, shorten time to market and improve product quality by applying and advancing engineering technologies in automotive, stamping and aerospace industries.

### ■ Objectives of CAD/CAE

- Avoid Design Changes after Production Launch
- Reduce Cost of Testing and Prototyping
- Reduce Production Cost
- Shorten Development Time
- Improve Performance and Quality
- Improve Customer Satisfaction

### ■ Customer Base

Chrysler, Ford, GM, Magna, Alcoa, USS, ABB, BE and over 60 automotive and aerospace suppliers in component manufacturing, tooling, stamping and raw materials.

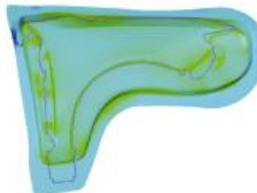
## Tooling and Metal Stamping

- Progressive, Transfer, Stage Die Designs
- Binder, Addendum and Draw Developments
- Process Design & Troubleshooting
- Press Capacity Evaluation
- Press Machine Design and Analysis
- Blank Size Development and Nesting
- Material Cost Estimation
- Cost Reduction Strategies
- Tubular Bending and Hydroforming
- Forming of Tailor Welded Blanks
- Forming of High Strength Steels
- Springback Estimation and Compensation
- Forming of Laminated Materials
- Tool & Die Making



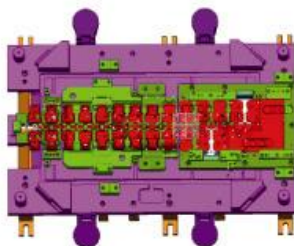
## Structures & Durability

- Linear Stress Analysis
- Nonlinear Stress Analysis
- Analysis of Drum Drop Test
- Analysis of Palm Print
- Analysis of Seatbelt Pull
- Analysis of Dent Resistance
- Analysis of Oil Canning
- Fatigue Life Analysis
- Material Selection for Light Weight Vehicle Design



## Vehicle Dynamics

- Multi-body Dynamics
- Chassis and Suspension Systems
- Powertrain & Transmission Systems



## Vehicle Crashworthiness

- NCAP Frontal Impact
- IIHS Side Impact
- Rear Impact
- Side Pole Impact
- Roof Crush
- Rollover
- Body Structural Design
- Material Database
- Selection of Light Weight Materials
- Design for Cost and Weight Reductions

## Vehicle NVH

- Mode Analysis (Normal, Operating, MPF)
- Static/Dynamic Stiffness Evaluation
- Noise Performance
- Shock/Boom Performances
- Beaming and Aftershake Performances
- Mobility Evaluation/Analysis

## Outsourcing Services

- Stamping Tools & Dies
- Fixtures
- Stamping Parts
- Plastic Parts
- Raw Materials





#### **Generalety, LLC**

36159 Plymouth Road, Livonia,  
MI 48150, USA  
Tel: +1-734-522-1488  
Fax: +1-734-468-6362  
Email: [info@generalety.com](mailto:info@generalety.com)  
[www.generalety.com](http://www.generalety.com)

#### **Generalety Canada, Inc.**

10 Post Oak Dr,  
Unit 13,  
Richmond Hill, On. L4E 4H8  
Canada  
Email: [info@generalety.com](mailto:info@generalety.com)

#### **Generalety Beijing**

205D, No. 2 Shangdi Xinxu Rd,  
Haidian District, Beijing, China  
Tel: +86-10-8289-5647  
Email: [info@generalety.com](mailto:info@generalety.com)  
[www.generalety.com.cn](http://www.generalety.com.cn)

#### **Generalety Suzhou**

625 Binhe Rd, Unit 5-608  
New District, Suzhou, China  
Tel: +86-512-6878-6276  
Fax: +86-512-6878-6276  
[www.generalety.com.cn](http://www.generalety.com.cn)