



Technical Services and Engineered Solutions™

New Brand Products LLC
Camarillo, California USA

Email us at info@newbrandproducts.com
Visit us at www.newbrandproducts.com

Services We Provide

— Mechanical Engineering and Design

— Product Development

— Industrial Design

— Design Optimization FEA/DFM/DFA

— 3D Printing, Functional Prototype Development

— Reverse Engineering

— Concept Study, Analysis, Animation, Rendering

— CAD Design and Drafting

— Manufacturer Development and Support

— Fixture and Tooling Design

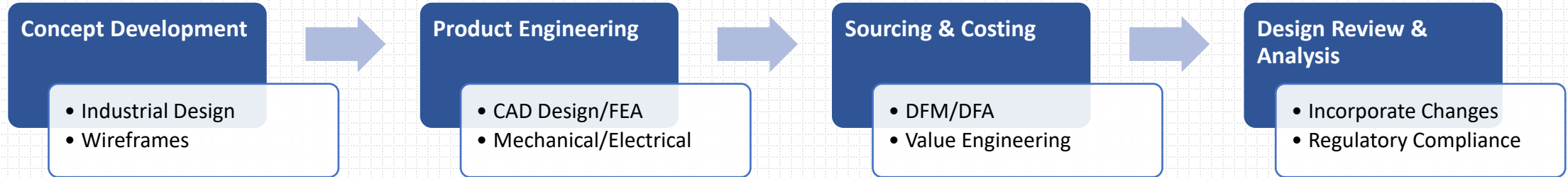


Why Partner With Us

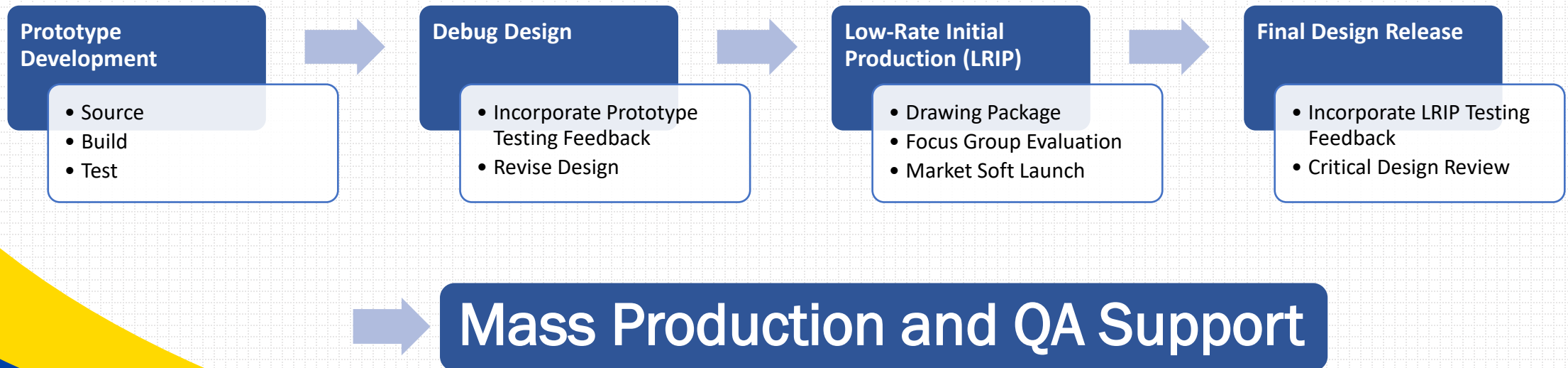
- Decades of Experience
- Commitment to Client Satisfaction
- Proven Track Record of Success
- Cross Functional Team Support
- We Stand Behind Our Work
- Open Communication
- Accessible 24/7
- Work Within Your Budget
- Project Phase or Whole Project Management
- Free Initial Consultation



Our Design Process

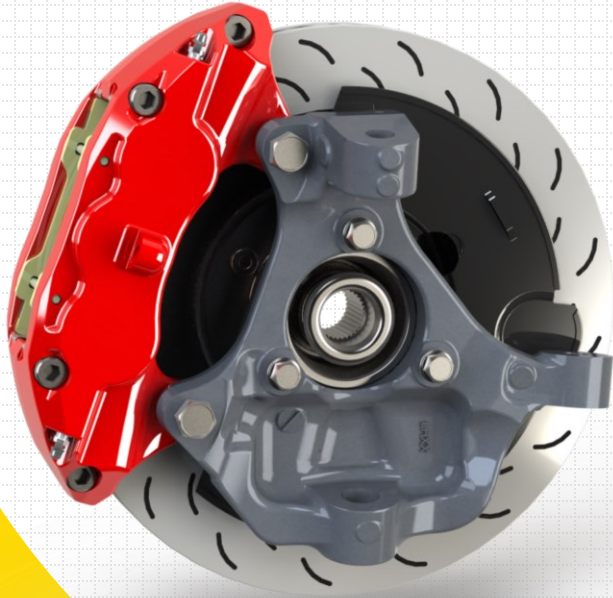


Our Post Design Process

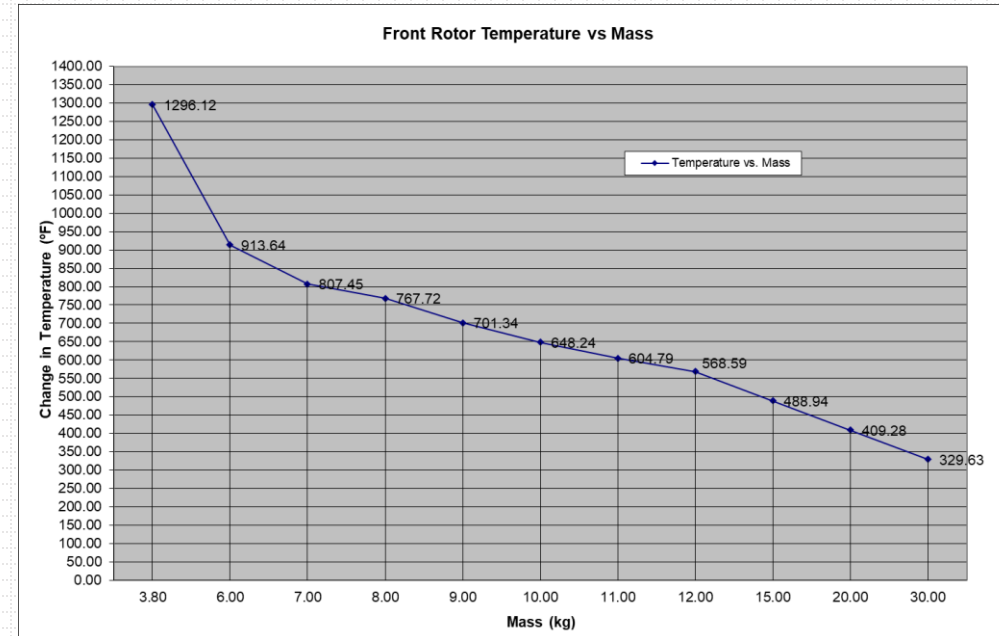
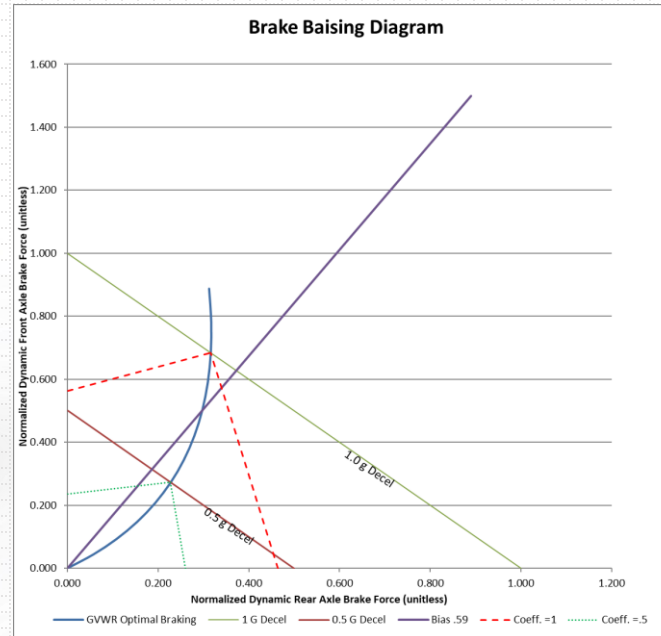


Case Study 1

New Brand Products was tasked with designing a hydraulic foundation braking system for a heavy wheeled vehicle. This involved CAD design, thermal studies, stress analysis, DFM/DFA, ITAR compliance.



Rendered in PhotoView 360



Radial change (determined by linear CTE)

Input values		Table	
190.00	L_0	L_0	Original length (mm)
-18	beginning temperature (°C)	ΔL	Change in length (mm)
1205	final temperature (°C)	L	Resultant length (mm)
1223	ΔT	α	CTE (mm x 10 ⁻⁶ /°C)
3.5E-06	α	ΔT	Change in temperature (°C)

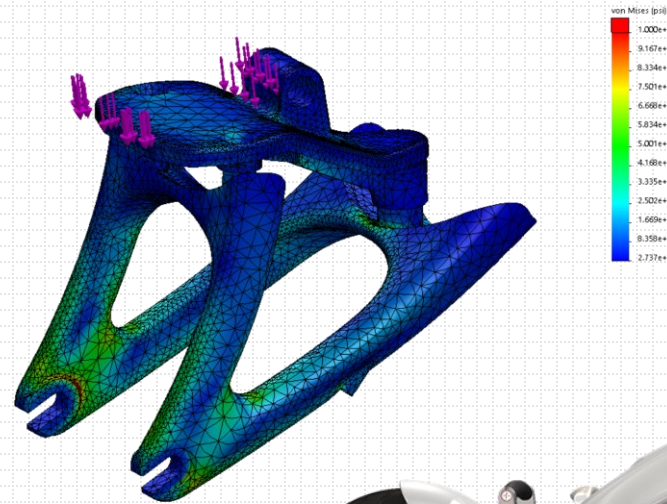
Formula: $L=L_0(1+\alpha\Delta T)$

L=	190.81 mm	
ΔL =	0.81 mm	Change in outside radius of brake disc



Case Study 2

New Brand Products was contracted to design and engineer a lightweight seated folding electric scooter for last mile use. The vehicle needed to weigh under 30lbs and be EU compliant with 15-mile range on single charge of custom Li-Ion battery pack.

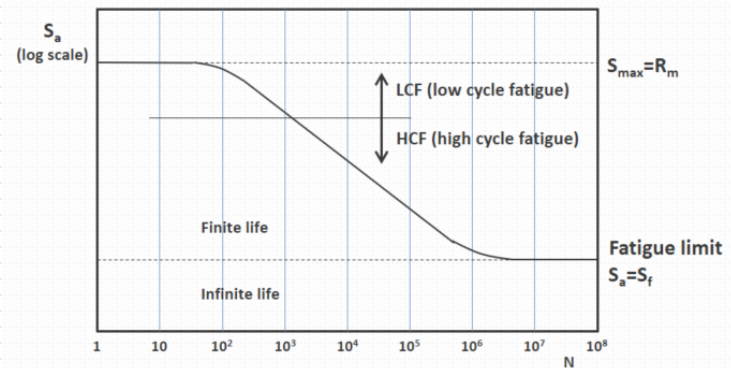
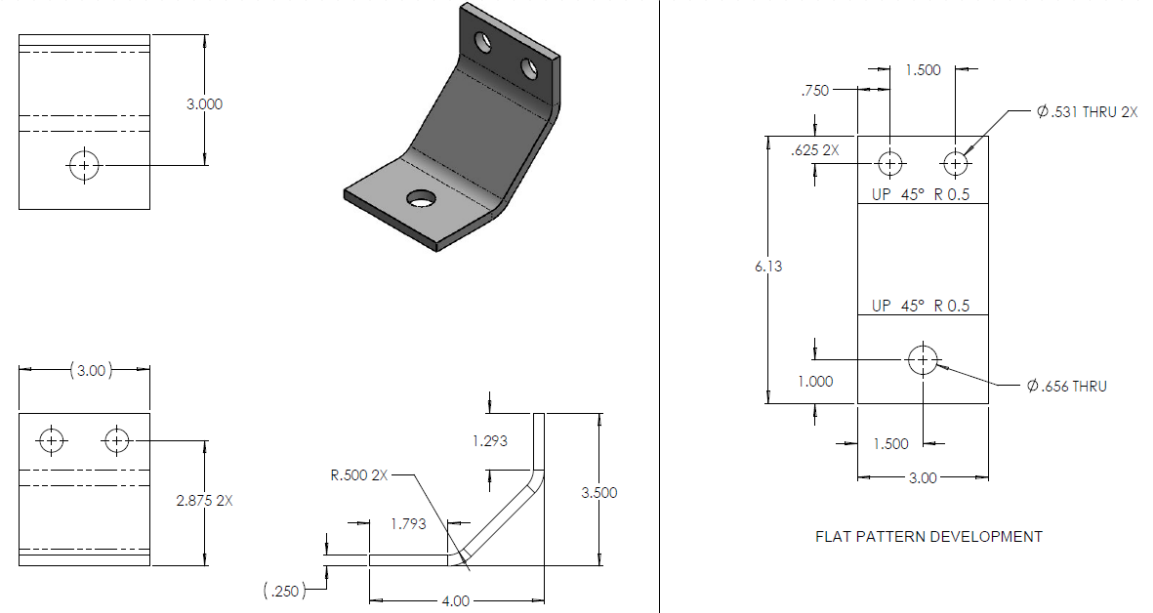
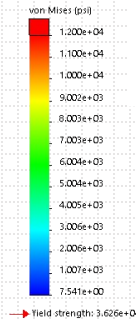
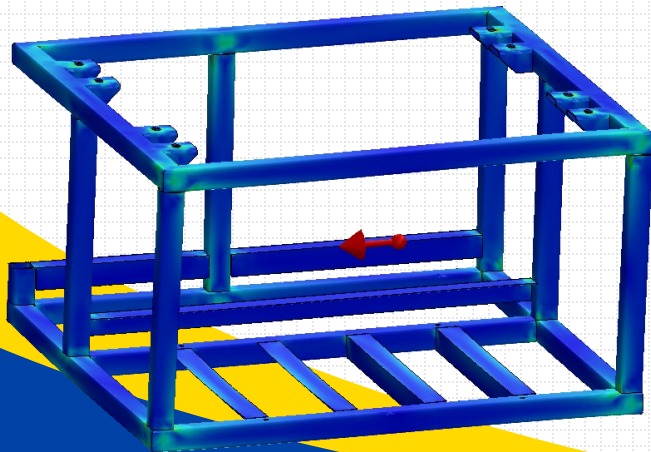
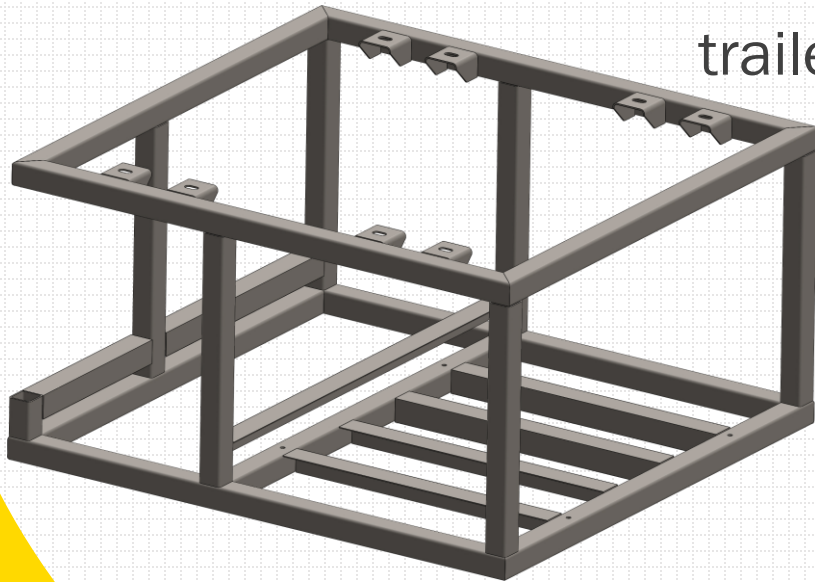


$$V = IR$$



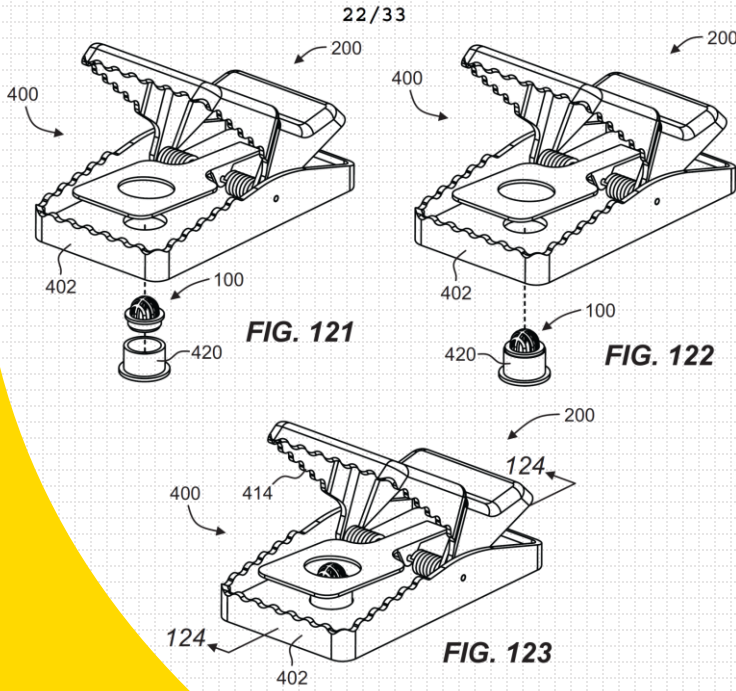
Case Study 3

New Brand Products was hired to design a steel weldment chassis carrier for hauling industrial equipment under a semi trailer. Structural analysis and fatigue were factors in the design.



Case Study 4

New Brand Products created an environmentally friendly pest control product called Bait Cage. We handled product design, patent application, packaging, compliance, and branding.



Software We Use



GIMP GNU Image
Manipulation Program



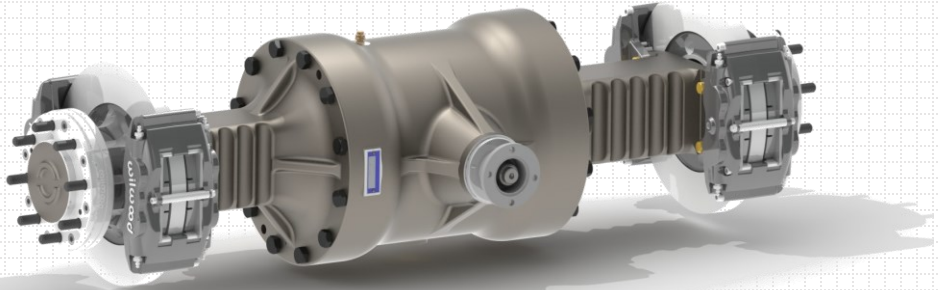
INKSCAPE
Draw Freely.



OpenShot
Video Editor



Industries Served



Automotive On & Off Highway

Toys and Juvenile Products

Industrial Machinery

Electronics

Military and US Government Entities

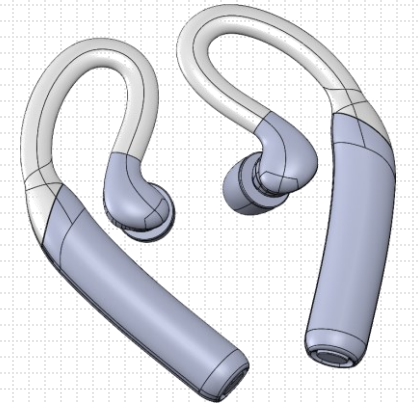
Mobility Electric Vehicles

Consumer Packaged Goods

Structural Plastic

Hard and Soft Goods for Fashion

Sporting Goods



...and more

