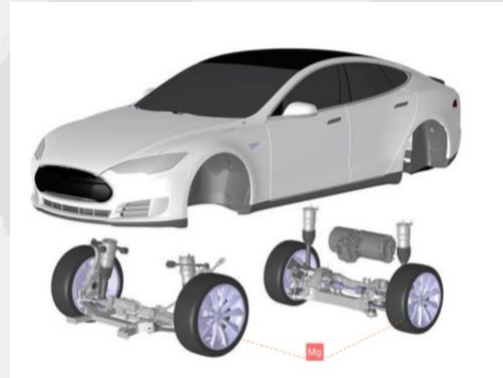


If the world switched to BTG Mg wheels we can successfully reduce emissions, save energy, and increase MPG/MPC's up to 15%.

Our Mission is to sustain the highest performance and green energy for all Automobiles.



BLUETECH GLOBAL (BTG) is an innovative leader in specializing in magnesium alloy that provides a 40% weight reduction from aluminum at comparable cost. In summary, BTG's proprietary BM300 alloy, patented forging process, and mine/mill vertical integration have led to the best-in-class anti-corrosive and cost-effective magnesium wheels on the market.

- Our BM300 proprietary alloy is industry leading and in production for forged wheels in NA, Europe and China.
- Vertical integration with rights to Mg mine and ownership of mill for best cost Mg alloys. Can produce over 30+ alloys in Mg.
- Core capabilities are in aluminum and magnesium fields focusing on chassis and other structural components.
- 220,000 Sq M facility in Zhengzhou
- 100million+ in yearly sales servicing automotive, aerospace, industrial and medical industries.
- ISO and IATF certified selling direct to NA, EU, and China OEMs.

Patented Forging for high Yields/Sustainable Cost



Patented one step front and back (compression) forging

- Net or near net shapes
- 3 Sigma Yield Rate (95% Above)
- Process ensures material grain size $\leq 25 \mu\text{m}$ which improves structural integrity and strength
- 480,000 pcs. Annual Capacity
- Aluminum & Magnesium capability (Best in Class Pricing)
- Up to 24"
- Press force 8500 and 12,500 Metric Tons



Net Shapes for best-in-class pricing for Forged Wheels

20"x 10" Base Price	Avg. Price / Wheel	Avg. Weight
Carbon Fiber	\$1,800	9 KG
Forged Magnesium	\$1500	9.0 KG
<i>BTG Forged Magnesium</i>	<i>\$950</i>	<i>9.0 KG</i>
Forged Aluminum	\$450	13.5 KG
<i>BTG Forged Aluminum</i>	<i>\$400</i>	<i>13.5 KG</i>
Cast Aluminum	\$105	16 KG

Three Forging Presses (1) 8500 Ton and (2) 12500 Ton



(35) CNC 4/5 axis, (40) CNC Lathe Vertical and Horizontal



Painting, Coating and Polishing in house Up to 450,000 yearly capacity



BM300 Proprietary Alloy Strength and Benefits



BTG's vertical integration allowed for over 10+ years to develop BM300 Mg alloy. This alloy is stronger, more ductile, and corrosion resistant while providing up to 30+ pounds of weight reduction.



Increased Miles per Gallon and Miles per Charge

- Over 40% reduction in mass directly reduces un-sprung weight
- Up to 15% fuel economy savings
- Increased Miles Per Gallon up to 15%
- Increased Miles Per Charge up to 15%



Reduce Emissions and Save Energy

- Reducing emissions up to 15%
- More Miles per charge provides less energy to fuel EV's
- Increase up to 50 miles per charge on EV's saving electricity for a more efficient energy infrastructure



Increased Life of Chassis systems and tires

- Higher Dampening Capacity to increase life of suspension systems and tires up to 20%
- Thermal Improvements to prolong life of chassis systems and tires up to 20%
- Less waste from tires and chassis parts



Strength, safety, and performance

- Magnesium is 1.5 times stronger than Aluminum for a safer ride
- Reduced un-sprung mass provides shorter breaking distance and better cornering

Proprietary BM300 Alloy Material Card



BTG is vertically integrated from the mine/mill through manufacturing and our R&D team, over 10+ years, has developed a anti-corrosive Mg alloy known as BM300

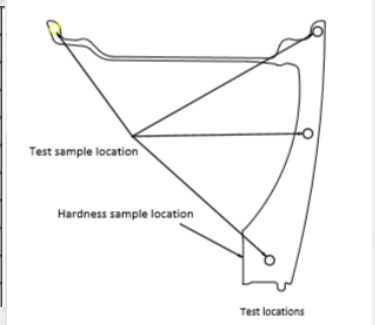
- Main Mass in the Mg alloy is Al, Zn, Mn
- Reduction in levels of highly corrosive elements (Fe, Si, Ni, Cu)
- Introduction of Rare Earth proprietary blend
- BM300 is machined in water-based solution
- BTG uses specific Pre-Treatments
Based on OEM requirements and standards

Material Card

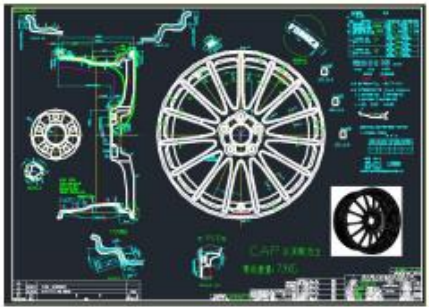
wheel	status	Tensile Strength/MPa	Yield strength /MPa	Elongation /%	Brinell Hardness
BM300	requirement	>290	>175	7%-10%	80-120
forged	Typical data	300	180	10%	100

1. Elastic modulus of finished wheel 45GPa
2. Poisson's ratio 0.35
3. Density 1.80g/cm³

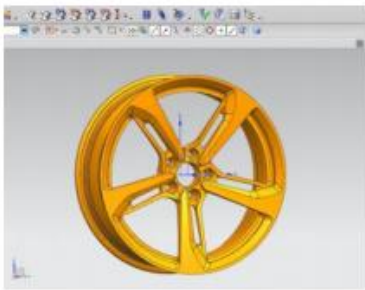
TABLE 1: MATERIAL REQUIREMENTS				
MECHANICAL				
	O/B FLANGE	I/B FLANGE	SPOKES	HUB
ULTIMATE (MIN)	300MPa	300MPa	280MPa	280MPa
YIELD (MIN)	190MPa	190MPa	180MPa	165MPa
ELONGATION (MIN)	10%	10%	8%	7%
HARDNESS (MIN)	HB: 90	HB: 90	HB: 90	HB: 90
CHEMISTRY & MICROSTRUCTURE				
FORGED MAGNESIUM ALLOY # - BM300				



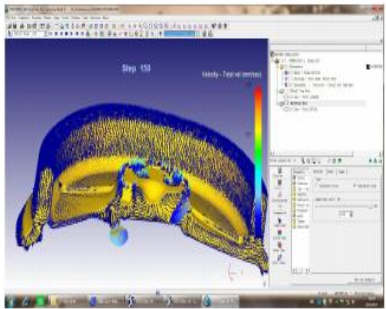
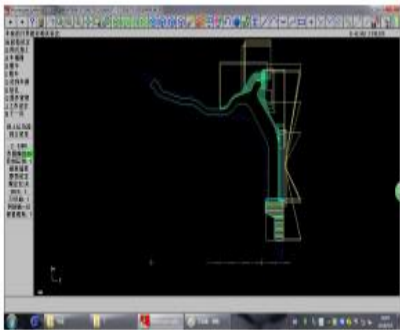
Engineering to optimize weight and strength



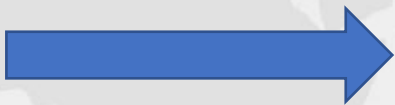
CAD



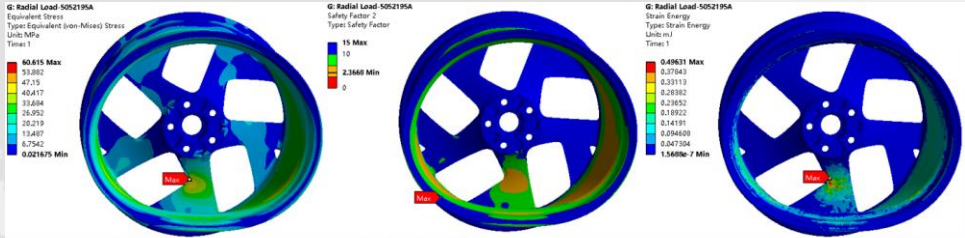
UG



FEA



Results for Radial Load

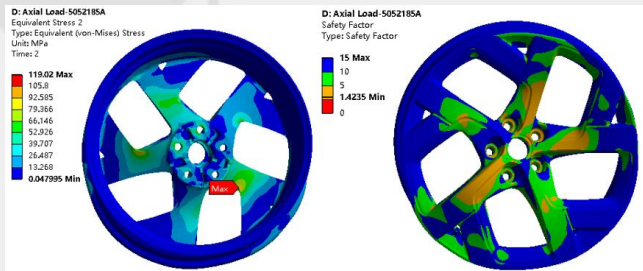


Stress

Safety Factor

Strain Energy

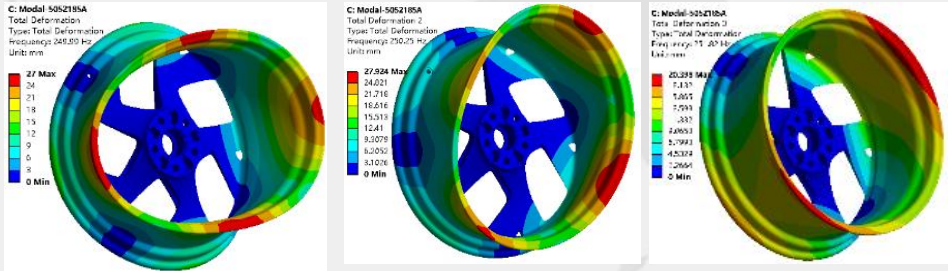
Stress and Safety Coefficient Axial Load



Stress Contour

Safety Factor

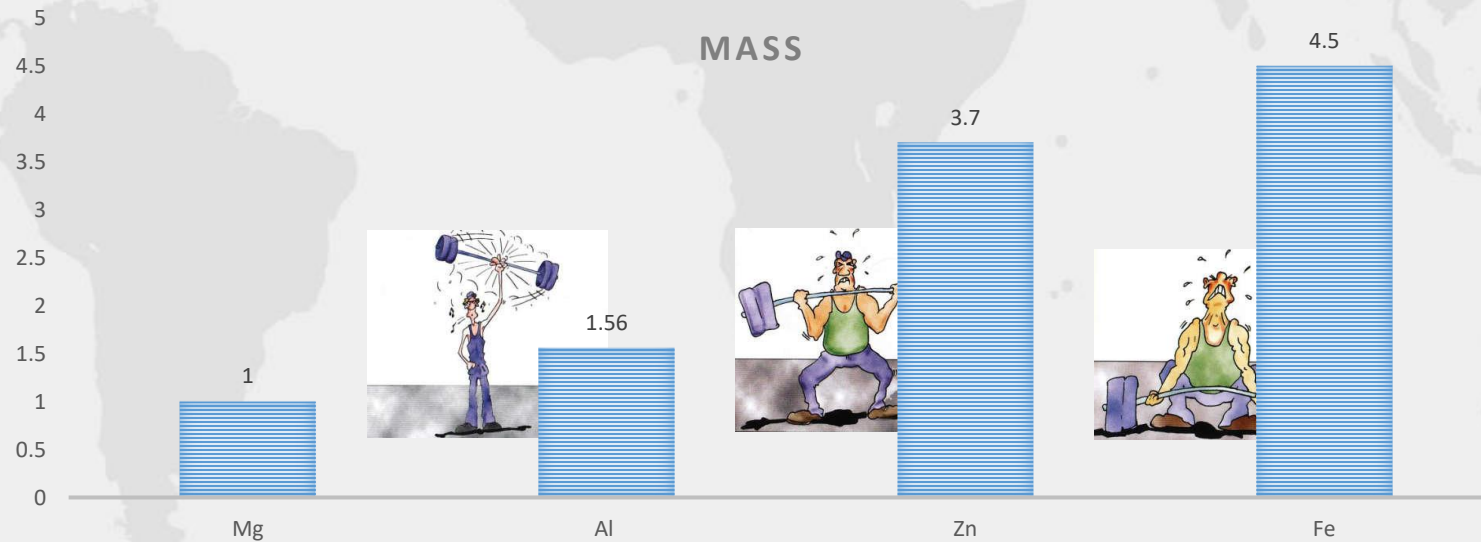
Modal Displacements:



Did You Know Un-sprung Mass Reduction



- Based on studies, for vehicle operation feeling, 1kg mass reduction on wheels (below suspension spring) equals to body mass reduction of 10-15kg.
20%-45% weight reduction (~5kg) per wheel from Al alloy to Mg wheel, total ~250KG weight reduction equivalent to body mass.
- Reduce Fuel Consumption, CO2 emission, Extends mileage per EV Charge
- A 5% mass reduction leads to 4% lower fuel consumption in city driving, according to calculations made by the U.S. Environmental Protection Agency.



Thank You

(America)
Head Quarters



(Europe)
Frankfurt



Zhengzhou
1. Mg Mill
2. Wheel Manufacturing



Shanghai, CN
Electrical and R&D



Blake Bonatz
BDM
Mobile: +1-248-794-6142
Email: bbonatz@bluetechglobal.net
100 W, Long Lake Suite 111
Bloomfield Hills, MI 48304



Plant



Warehouse



Sales Office



R&D Center