ALLOY GUIDE FOR AUTOMOTIVE PARTS

Alloy	Alloy 3	Alloy 25	Alloy 10X	Alloy 174	Alloy 190	PerforMet [®]	SupremEX [®]	ToughMet [®] 3
Chemical Composition	CuBe	CuBe	CuBe	CuBe	CuBe	CuNiSiCr		CuNiSn
ELECTRICAL								
EV/HEV Charge Coupler Connectors		~		*	*			
Micromotor Contacts				/	1			
RF Connectors		/			/			
Switch and Electromechanical Relays				*	~			
Wire Harness Terminals				/	1			
POWERTRAIN								
Cam Follower Roller Bushings								✓
Combustion Pre-Chambers	/		1			✓		
Combustion Seals								✓
Connecting Rods							✓	
Connecting Rod Bearings		/						✓
Crankshaft Main Bearings								✓
Exhaust Valve Seats	✓		/			✓		
Gearbox Bearings		/						✓
Idler Bearings		/						✓
Intake Valve Seats		/				✓		
Needle Roller Bearing Cages								✓
Pistons							✓	
Piston Pin / Small End / Wristpin Bushings		✓						✓
Piston Rings						✓		✓
Rocker Arms							✓	
Thrustwashers								✓
Valve Guides	/	/	1			~		✓
Valve Spring Retainers							✓	
STRUCTURAL								
Brake Caliper Bushings								/
Braking Disks							✓	
Steering Bushings								~
Uprights							✓	

For help choosing the best material for your application, please contact our Technical Services team at 216-383-6800.

Learn more about all our advanced materials soultions for automotives designs.

