

		Al alloys	Mg alloys	Cast irons	General steels	Stainless steels	Ni alloys	Co alloys	Ti alloys	Zr alloys	Solder alloys
Phases	Temperature stepping	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Concentration stepping	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Profiling/Coating	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Metastable phases	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Physical and thermo-phys. properties*	Specific heat / enthalpy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Density / molar volume	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Thermal expansion coefficient	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Thermal conductivity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Electrical conductivity/resistivity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Surface tension	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Liquid viscosity/diffusivity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Poisson's ratio	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Young's/shear/bulk moduli	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Stacking fault energy				✓	✓	✓	✓			
Gamma/Gamma' mismatch						✓					
Solidification	Phases and physical properties	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cooling curve	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cast Strength	✓		✓							
	Secondary dendrite arm spacing	✓									
Mechanical properties**	Room temp strength/hardness				✓	✓	✓		✓		
	High temp strength/hardness				✓	✓	✓	✓	✓		
	Strength/hardness conversion				✓	✓	✓		✓		
	Room temp stress-strain curve				✓	✓	✓		✓		
	High temp stress-strain curve				✓	✓	✓	✓	✓		
	Creep and rupture life				✓	✓	✓	✓	✓		
	Rupture strength				✓	✓	✓	✓	✓		
	Jominy hardenability				✓						
Cast Strength	✓		✓								
Phase transformations	TTT/CCT diagram	✓		✓	✓	✓	✓	✓	✓	✓	
	Isothermal transformations	✓			✓	✓	✓	✓	✓	✓	
	Energy changes			✓	✓	✓	✓		✓		
	Cooling transformations				✓	✓			✓		
	Martensite formation				✓	✓			✓		
	Stress induced martensite				✓	✓					
	Quench and welding data				✓						
	Simultaneous carbide precipitation				✓						
	Gamma'/Gamma'' coarsening						✓				
Gamma' microstructure & strength						✓					
Data export	Forging simulation data				✓	✓	✓	✓	✓		
	Heat treatment simulation data				✓						
	Solidification simulation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* These properties can be calculated during/after heat treatment or during solidification for the whole temperature range including in the liquid phase. When relevant, properties are given for each phase.

** Proof stress, tensile stress and hardness are calculated at any temperature up to the melting point.