



BENTON
FOUNDRY, INC.

Phone: 570-925-6711

The Casting Specialists

DUCTILE IRON

Ductile Iron offers the castability, machinability, and corrosion resistance of gray iron while adding the high strength, ductility, and hardening ability of steel. Our ductile iron castings are well known throughout the industry for high-impact resistance and a high modulus of elasticity and strength, resulting in heavier load capacity with less deflection.

Specifying Body	Spec. No.	Use	Class or Grade	Min. Tensile PSI	Min. Yield PSI	% Elongation	Heat Treatment	Other Requirements
ASTM	A395	Pressure retaining parts for use at elevated temperatures (up to 650°F)	60-40-18	60000	40000	18	Ferritized by annealing	Chemical composition is subordinate to mechanical properties.
ASTM	A536	Maximum shock resistance	60-40-18	60000	40000	18	May be annealed	
		Most widely used grade for normal service	65-45-12	65000	45000	12		
		Suitable for flame and induction hardening	80-55-06	80000	55000	6		

		Best combination of strength, wear resistance and response to surface hardening	100-70-03	100000	70000	3	Usually normalized	
		Maximum strength and wear resistance	120-90-02	120000	90000	2	Usually quench and tempered	
					BHN of Casting			
SAE	J434	For automotive and allied industries	D-4018		170 Max.		May be annealed	The Microstructure shall consist of at least 80% spheroidal graphite conforming to Types I and II and be substantially free of primary cementite.
			D-4512		156-217			
			D-5506		187-255			
			D-7003		241-302		May be normalized	