



**FOUNDRY**

**CM22 SPECIFICATIONS**

**TOWNLEY ALLOY CM22**

Alloy CM22 is a chromium/molybdenum alloy white iron and is recognized as providing the highest level of abrasion resistance and toughness of any alloy white iron. CM22 closely conforms to ASTM A532 Class II, Type B chemical requirements, but through a unique multi-step heat treating process, a structure with less than 10% retained austenite is produced resulting in excellent abrasion resistance and a good measure of toughness

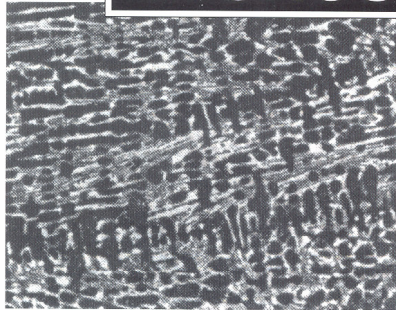
**Chemical Analysis:**

Carbon	2.0 - 3.3
Manganese	2.0 Max
Silicon	1.5 Max
Nickel	2.5 Max
Chromium	14.0 - 18.0
Molybdenum	3.0 Max
Copper	1.2 Max
Phosphorus	0.10 Max
Sulfur	0.06 Max

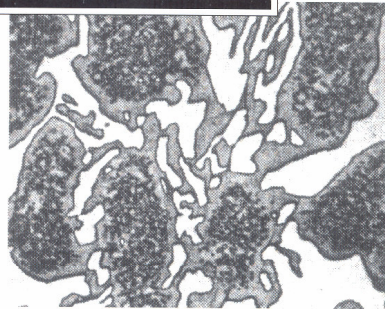
**Mechanical Properties**

Tensile Strength:	80,000 - 120,000 PSI
Hardness:	700 - 780 Brinell
Compressive Yield Strength:	280,000 - 380,000 PSI
Impact Energy:	(using unnotched standard Charpy Test)
	140 - 150 Ft. Lb.
Density, lb. per cu. in.	0.275 - 0.280

**MICROSTRUCTURE**



**100X**



**1000X**

Samples of each heat are analyzed prior to pouring to insure exact metal chemistry. Microstructural analysis are performed randomly and each casting is checked for proper hardness at several intervals during production.

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