



Materials Data Sheet

FC ProLiner™ Mill Liners

Martensitic White Irons

Martensitic white irons are produced to ASTM international specifications and offer good corrosion and excellent abrasion resistance while offering medium impact toughness.* Typical applications include high sliding abrasion environments such as autogenous, rod, and ball mill shell liners, feed end liners, discharge end liners, lifter bars, grates, filler rings, filler blocks, pulp lifters and dischargers.

Nominal Chemical Composition

Grade	FCA-31	FCA-32	FCA-33
Equivalent Standard	ATSM A532 Class II B	ATSM A532 Class II B	ATSM A532 Class III A
Composition (Weight %)			
Carbon	2.65	2.65	2.65
Manganese	1.00	0.75	2.00 max
Silicon	0.75	0.55	1.50 max
Chromium	16.00	16.00	27.00
Nickel	1.25	1.25	2.50 max
Molybdenum	1.50	2.80	3.00 max
Phosphorus	0.10 max	0.10 max	0.10 max
Sulphur	0.06 max	0.06 max	0.06 max
Copper	0.60	-	1.20 max
Surface Brinell Hardness (BHN)			
	610 min	610 min	610 min

* Standard FCA alloy grades are selected based on customer’s needs and can be customized to meet specific applications and challenges.