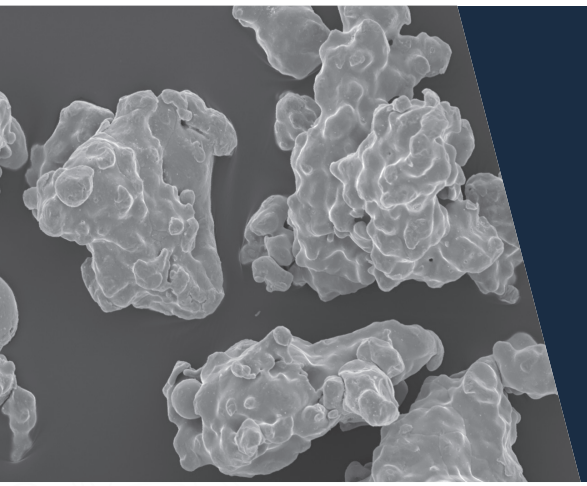
ANCORSTEEL 721 SH



This is a water atomized, prealloyed steel powder specifically developed for sinter-hardening. It complements Ancorsteel 737 SH as it contains slightly lower levels of molybdenum and nickel. The material has good compressibility and stable dimensional change. Ancorsteel 721 SH is the powder of choice for small to medium size parts that are to be sinter-hardened.

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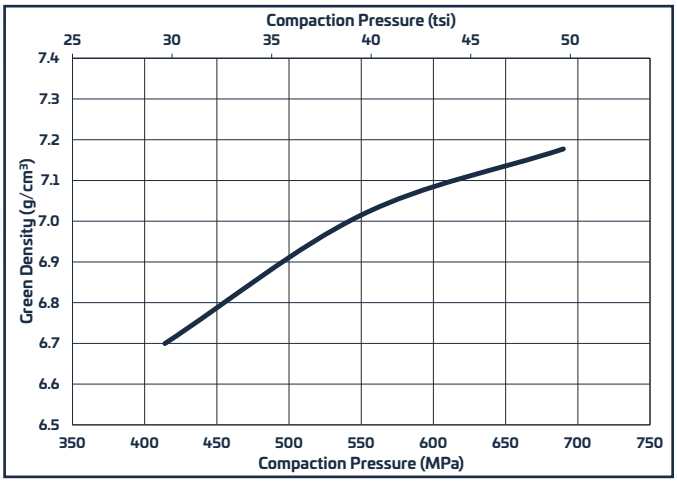
Nominal Chemistry *(weight %)*				
Iron	Manganese	Nickel	Molybdenum	Copper
Bal.	0.40	0.50	0.90	0.50

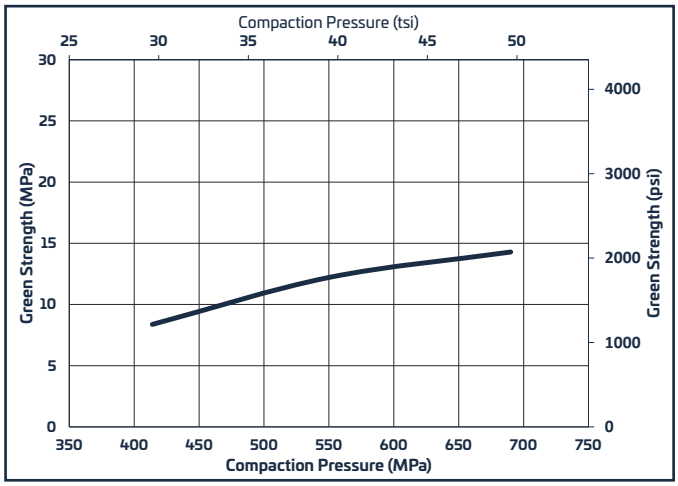
Typical Particle Size *(weight %)*				
Micrometers	+250	-250/+150	-150/+45	-45
U.S. Standard Mesh	(+60)	(-60/+100)	(-100/+325)	(-325)
	Trace	10	70	20

Green Density



(with 0.75 wt% EBS)

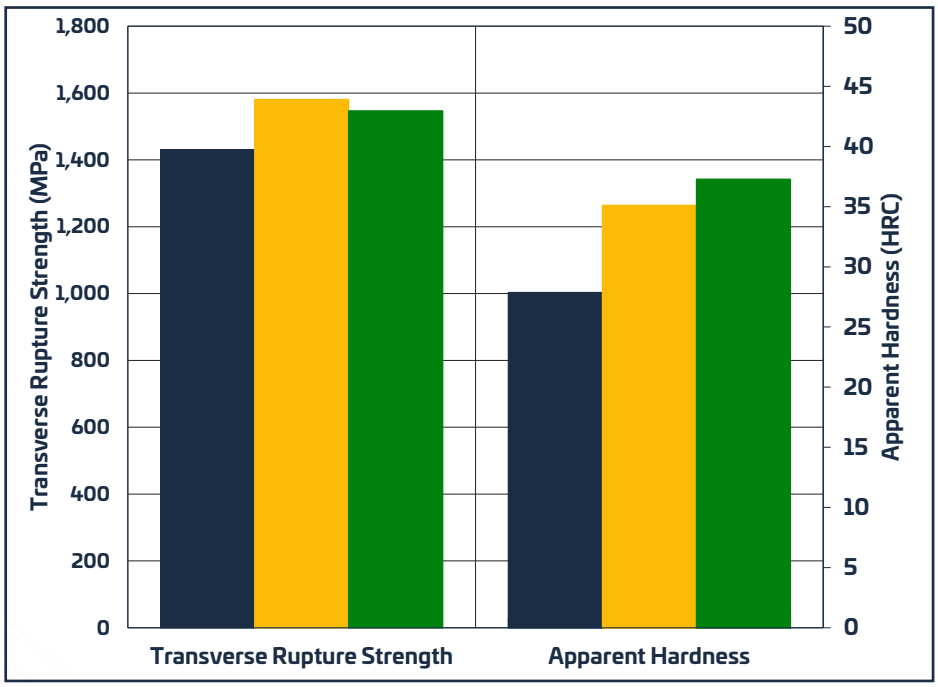
Green Strength



(with 0.75 wt% EBS)

ANCORSTEEL 721 SH

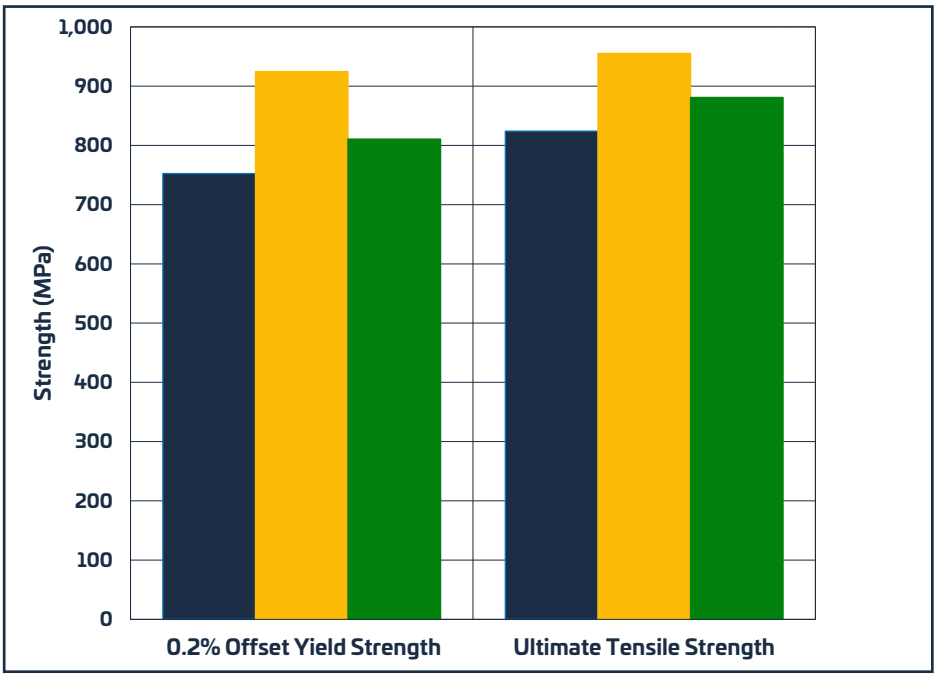
Transverse Rupture Strength Properties



(with 0.75% EBS)

- 721 SH + 0.7% Graphite
- 721 SH + 1% Copper + 0.7% Graphite
- 721 SH + 2% Copper + 0.9% Graphite

Tensile Properties



(with 0.75 wt% EBS)

All test specimens were compacted to 7.0 g/cm³ and sintered at 1120 °C (2050 °F) in 90N_2-10H_2 atmosphere with accelerated cooling (~1.7 °C/s). Samples tempered at 200 °C for one hour.