Get High Pressure Component Performance Using Our AG-80 Alloy Steel

15,000 PSIG --
Production Manifold Skid
utilizing AG-80 Alloy Steel

AG-80 Alloy Steel - *High Strength, Excellent Toughness, Good Weldability, Weight and Space Savings:*

Taylor Forge's AG-80 is a proprietary, high strength low alloy forging material developed and proven for use in critical, high pressure applications.

Advantages vs Conventional Materials
- Weldability – Low CE, ductile and tough
- Heat Treat Ability – Better control of hardness in weld and HAZ
- Toughness – Excellent
- USA Suppliers – Reliable lead times
- Experience – Proven in the field

Applications
- High Pressure Fittings
- High Pressure Pipe
- Scraper Traps/Scraper Trap Components
- Small Diameter/Heavy Wall Pressure Vessels
- ANSI & API Flanges, Clamp Type Connectors
- Wherever weldability, weight and space savings are key to your project's success

AG-80 is the starting material for components certified to MSS SP-75, CSA Z245.11, ASTM A-694, ISO 15590 and API 6A for grades up to 80 ksi yield strength.

AG-80
High-Pressure
Elements

Contact us to see the advantages of our engineered equipment for your offshore applications.

TF TAYLOR FORGE
Engineered Systems

www.tfes.com 208 N. Iron Street, Paola, Kansas 66071
Phone: (913) 294-5331

15,000 PSIG --
Trap Skid utilizing
AG-80 Alloy Steel

Typical Mechanical Properties

Yield Strength – Thickness (max)	70 ksi – 10" 80 ksi – 4"
Toughness (CVN's)	15 ft/lbs (min) @ -50°F 25 ft/lbs (min) @ -20°F
Elongation	20% (min)
Hardness	HRC 22 max

Carbon Equivalents & Weldability

Carbon Equivalents (max)	IIW	.45
	Pcm	.22
	CSA	.35
Weldability	Good	

Corrosion Resistance

NACE MR0175/ISO 15156-2 (Annex A) Compliant	70 ksi – Yes 80 ksi – N/A
SSCC Results	Good
HIC Results	N/A

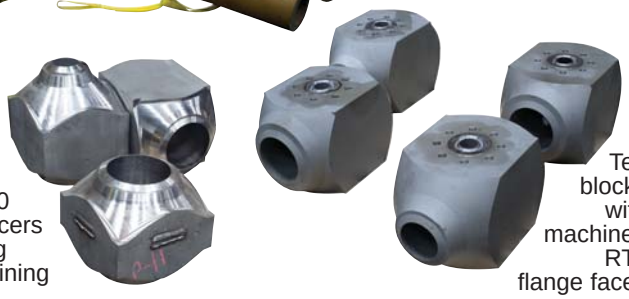
Other Characteristics

Formability & Machinability	Excellent
Thru Wall Consistency	Excellent
Maintain Strength After PWHT	Excellent
Grain Size	Fine Grain
Availability	USA Suppliers

Material Comparison – AG-80 vs. 4130

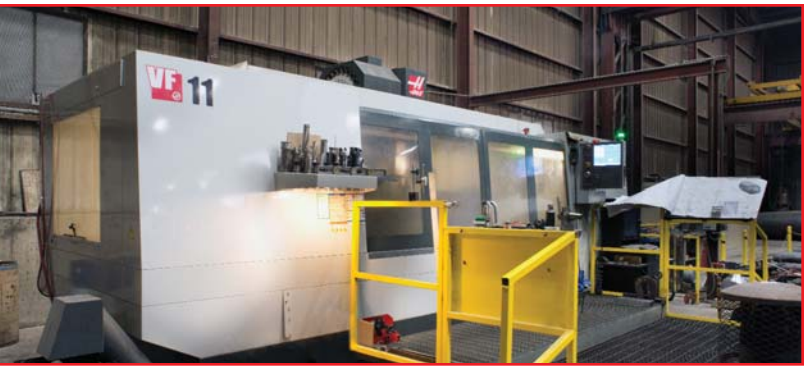
Material Characteristic	AG-80	4130
Strength	Excellent	Excellent
Toughness @ -20°F	Excellent	Poor
Hardness	Good	Poor
Weldability	Good	Poor
Carbon Equivalent	Good	Poor
Formability & Machinability	Excellent	Good
Maintain Strength After PWHT	Excellent	Good
Thru Wall Consistency	Excellent	Poor to Fair
NACE Compliant	Yes	Marginal

AG-80 Elbows prior to machining



AG-80 Reducers during machining

Tee blocks with machined RTJ flange faces



One of our Multi-Axis CNC Machining Centers

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