

GMAW Filler Metal Test Reports

77K

Cryogenic

8/24/05

Property	Required	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch
Elastic Modulus	21 Msi	Need Retest	Acceptable WM Report 5-26097	Acceptable WM Report 5-32228	Need plate When we Get wire	
0.2% Yield Strength	72 ksi		Acceptable WM Report 5-26097	Acceptable WM Report 5-32228		
Tensile Strength	95 ksi		Acceptable WM Report 5-26097	Acceptable WM Report 5-32228		
Elongation	32%		Acceptable WM Report 5-26097	Acceptable WM Report 5-32228		
Charpy V – notch Energy	35 ft-lbs		Acceptable STL Report 05P-1007	Acceptable WM Report 5-32228		

**GMAW Filler Metal Test Reports
293K
Room Temperature**

Property	Required	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch	LNM 4455 Lot/Batch
3018926/78309 3012668/82743 3017006/72262 3018513/78308 30 Rolls 14 Rolls 4 Rolls 5 Rolls 8/3/05						
Elastic Modulus	20 Msi	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2532	
0.2% Yield Strength	30 ksi	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2532	
Tensile Strength	78 ksi	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2532	
Elongation	36%	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2532	
Charpy V – notch Energy	50 ft-lbs	Acceptable STL Report 05P- 2334	Complete Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2334	Acceptable STL Report 05P- 2532	

SMAW Filler Metal Test Reports

77K

Cryogenic

Property	Required	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch
		W019/11 179LBS		W021/35 60LBS			
Elastic Modulus	21 Msi	Acceptable WM Report 5- 26097	Acceptable WM Report 5-3228				
0.2% Yield Strength	72 ksi	Acceptable WM Report 5- 26097	Acceptable WM Report 5-3228				
Tensile Strength	95 ksi	Acceptable WM Report 5-26097	Acceptable WM Report 5-3228				
Elongation	32%	Acceptable WM Report 5-26097	Acceptable WM Report 5-3228				
Charpy V – notch Energy	35 ft-lbs	Acceptable STL Report 0SP- 4007	Acceptable WM Report 5-3228				

SMAW Filler Metal Test Reports
293K
Room Temperature

Property	Required	Metrode B316NF Batch W019711 179LBS	Metrode B316NF Batch W021735 60LBS	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch	Metrode B316NF Batch
Elastic Modulus	20 Msi	Acceptable WM Report 5-26097	Acceptable STL Report 05P-2334				
0.2% Yield Strength	30 ksi	Acceptable WM Report 5-26097	Acceptable STL Report 05P-2334				
Tensile Strength	78 ksi	Acceptable WM Report 5-26097	Acceptable STL Report 05P-2334				
Elongation	36%	Acceptable WM Report 5-26097	Acceptable STL Report 05P-2334				
Charpy V – notch Energy	50 ft-lbs	Acceptable STL Report 05P-0554	Acceptable STL Report 05P-2334				