MATERIAL CERTIFICATION

NIAGARA
SPECIALTY METALS

12600 Clarence Center Road
Akron, NY 14001
716-542-5552
716-542-5555
Email: nsm@nsm-ny.com

Date of shipment: 12/01/2020

Production Order: 129955

Grade: 440-C ESR

NJSB TAG NO. 582

Description: 440-C ESR HRA DESCALED SHEARED SHEET
.172/.188 x 23/25" RW x 36.000" Ex.
Heat# N80942

Remarks

Chemistry as per ASTM A-276, ASTM F899-12b

BHN HARDNESS = 179

Country of origin: USA

Material received date: September 29, 2020

Original mill heat no: G27779

Federal ID #: 16-1179936

Robert Shabala

We provide material that is free from mercury contamination and radiation at the time of shipment. No weld repair is done. We are compliant with EU directive 2002/95/EC (ROHS), REACH, EN 10204 2004 3.1 and DFARS 252.225.7001,7002,7008,7009. Material is melted and manufactured in North America.

Chemistry Analysis

NSM Heat Number:	N80942			**Hardness:**			
Carbon:	1.050	**Manganese:**	0.770	**Phosphorus:**	0.019	**Copper:**	
Silicon:	0.280	**Chromium:**	16.210	**Vanadium:**		**Niobium:**	
Cobalt:		**Molybdenum:**	0.520	**Nickel:**		**Nitrogen:**	
Sulphur:		**Tungsten:**		**Titanium:**		**Aluminum:**	