

# MATERIAL CERTIFICATION



**NIAGARA**  
SPECIALTY METALS

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

Customer: NJ STEEL BARON

Date of shipment: 07/17/2020

NJSB TAG NO. 489

Production Order: 128095

Grade: 440-C ESR

Description: 440-C ESR HRA DESCALED SHEARED PLATE  
.275/.300 x 22/25" RW x 36.000" Ex.  
Heat# N90949

## Chemistry Analysis

NSM Heat Number: N90949

Hardness:

Carbon:	<input type="text" value="1.060"/>	Manganese:	<input type="text" value="0.810"/>	Phosphorus:	<input type="text" value="0.017"/>	Copper:	<input type="text" value="0.080"/>
Silicon:	<input type="text" value="0.270"/>	Chromium:	<input type="text" value="16.340"/>	Vanadium:	<input type="text" value="0.060"/>	Niobium:	<input type="text" value="0.010"/>
Cobalt:	<input type="text"/>	Molybdenum:	<input type="text" value="0.500"/>	Nickel:	<input type="text" value="0.190"/>	Nitrogen:	<input type="text" value="0.044"/>
Sulphur:	<input type="text" value="0.001"/>	Tungsten:	<input type="text"/>	Titanium:	<input type="text"/>	Aluminum:	<input type="text"/>

## Remarks

Chemistry as per SPECIFICATION;ASTM A-276

ASTM F899-12b

Country of origin: USA

Material received date: July 22, 2020

Original mill heat no: G27046

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.