

(GOVERNMENT OF INDIA RECOGNISED EXPORT HOUSE)

ISO 9001:2015 CERTIFICATE NO. 04 100 011022

F860(F824) QC 09/00/11.01.2018

L/C NO. & DATE :

**MILL TEST CERTIFICATE / INSPECTION CERTIFICATE**

ACCORDING TO EN 10204-3.1:2005

<b>CONSIGNEE :</b>				<b>TEST CERTIFICATE NO. :</b> TC-0087-23-24/02 <b>DATE OF ISSUE :</b> 03/07/2023 <b>P.O. NO. :</b> LA8596 <b>S/C NO. &amp; DATE :</b> 22-23/00112, Dt. 02/09/2023 <b>INVOICE NO. &amp; DATE :</b> TC-0087-23-24, Dt. 03/07/2023								
<b>PRODUCT DESCRIPTION</b> STAINLESS STEEL ANGLES [HRAP]				<b>LENGTH</b>						<b>NET WEIGHT</b>		
				<b>ORDERED</b>			<b>ACTUAL</b>					
				20-22 FEET			20-22 FEET			3927 LBS		
<b>ARTICLE #</b>	<b>ITEM #</b>	<b>HEAT #</b>	<b>GRADE AISI</b>	<b>SIZE IN</b>		<b>TOLERANCE</b>		<b>PROCESS ROUTE</b>				
-	A6L01000008	CH-18985	316/316L S31600/S31603	1X1X1/8		ASTM A484		Electric Melting, A.O.D. Refining, Continuous Casting				
<b>CHEMICAL COMPOSITION (WEIGHT %)</b>												
	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Cr</b>	<b>Mo</b>	<b>Ni</b>	<b>Cu</b>	<b>Ti</b>	<b>Nb/Cb</b>	<b>N</b>
<b>MIN</b>	-	-	1.25	-	-	16.00	2.00	10.00	-	-	-	-
<b>MAX</b>	0.030	1.00	2.00	0.040	0.030	18.00	3.00	14.00	1.00	-	-	0.1000
<b>RESULTS</b>	0.023	0.53	1.74	0.040	0.002	16.81	2.05	10.02	0.46	-	-	0.0640
<b>MECHANICAL PROPERTIES</b>												
<b>Test Method :- EN ISO 6892-1 &amp; EN ISO 6506-1</b>												
<b>SPECIFIED VALUES</b>	<b>YIELD STRENGTH</b> N/mm <sup>2</sup> /MPa 0.2% (Rp0.2)		<b>TENSILE STRENGTH</b> N/mm <sup>2</sup> /MPa (Rm)		<b>ELONGATION after</b> Fracture (A) % 4D / 5D			<b>REDUCTION OF AREA</b> (%)		<b>HARDNESS</b> HBW		
<b>MIN</b>	206		517		30			50		140		
<b>MAX</b>	-		792		-			-		255		
<b>RESULTS</b>	366		678		36			60		222-225		
<b>Remarks :</b>												
<ol style="list-style-type: none"> <li>Hot Rolled, Shot-Blasted and Pickled.</li> <li>PMI Test done 100% &amp; found satisfactory.</li> <li>Solution Annealed at 1050 C and soaked for 30 minutes and water quenched.</li> <li>Grainsize No. 5-7 as per ASTM E 112-13 test method.</li> <li>Material is free from mercury contamination.</li> <li>Material is free from radio-active contamination.</li> <li>Macro Structure - C2R2S2 of ASTM E 381-01.</li> <li>Micro structure reveals- equiaxed grains of Austenite &amp; free from carbide Precipitation.</li> <li>InterGranular Corrosion Test found satisfactory as per ASTM A262 - 15 (Pr.E).</li> <li>Location of sample - Off centre, Direction - Longitudinal, Test Temp - Room Temp., Shape of Test Piece - Flat.</li> <li>Marking details - Company Logo, Size, Grade &amp; Heat No.</li> <li>The material is manufactured /melt in Chandan Steel Mill and is of Indian Origin.</li> <li>No welding/weld repairs was performed on this material.</li> <li>The material conforms to ASTM A276/A276M-17, ASTM A484/A484M-20a, ASTM A479/A479M-20, ASME SA479/SA-479M-19 SECTION II-PART A, AMS-QQ-S-763D, AMS-5647K &amp; AMS-5639J Specifications.</li> <li>AMS 5648M (AISI 316 / 316L), AMS 5653H (AISI 316 / 316L) specification</li> </ol>												
<b>BUNDLE NO. :</b> 7F82,7F90,7F81						<b>COLOUR :</b> WHITE						

It is hereby certified that the above results are true and correct in every details and are meeting the requirements of specification & Purchase Order.



**B. S. RAUTELA**  
MANAGER - QUALITY ASSURANCE