

CERTIFICATE OF INSPECTION & TEST (EN 10204 3.1)

ST ST&H CORPORATION
 74, Jwadongsunhwan-ro, Haeundae-gu, Busan, Korea
 Tel : +82.51.744-4680(5 line) Fax : +82.51.744-4670
 E-mail :qm@stnhcorp.com



Certificate No. MES9300-03/09 Date : MAY. 09. 2016
 Customer PLESA ANAHUAC Y CIAS., S.A. DE C.V.
 Contract No. 23308
 Spec. For Material ASTM A105N-14, ASME SA105N-15, NACE MR0175/ISO15156-1:2015
 Heat Treatment 930°C NORMALIZED & A.C

Certified to ISO9001:2008, ISO14001:2004, PED97/23/EC by LRQA

Dimensional inspection ASME B16.5 - 2013

| ITEM / SIZE | Q'ty | Heat No./ Batch No. | Size of Test Specimen | | Tension Test | | | | Hardness Test (HB) | | Charpy Impact Test (10X10mm Specimen Size) | | | | | |
|-------------|---------------------|------------------------|-----------------------|------|--------------|-----|-----|-----|--------------------|-----------|--|--------|------|-------|-------|-----|
| | | | D | GL | Max | Y.S | T.S | E.L | R.A | Test (HB) | 187 | Indiv. | Ave. | Notch | Temp. | |
| | | | mm | mm | | | | | | | | | | | | Min |
| BA150SR14 | 150LBS SO RF 14" | 20 | 102902B | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150SR5 | 150LBS SO RF 5" | 50 | 102902B | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA600SR4 | 600LBS SO RF 4" | 20 | 102902B | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA600SR3 | 600LBS SO RF 3" | 20 | 102902B | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA600WRSTD3 | 600LBS WN RF STD 3" | 20 | 102902B | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150SR10 | 150LBS SO RF 10" | 100 | 102902C | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150SR8 | 150LBS SO RF 8" | 100 | 102902C | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150SR6 | 150LBS SO RF 6" | 500 | 102902C | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150SR3 | 150LBS SO RF 3" | 300 | 102902C | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |
| BA150TR3 | 150LBS TH RF 3" | 100 | 102902C | 12.5 | 50.0 | | 333 | 524 | 36 | 70 | 144 | 148 | | | | |

| Heat No./ Batch No. | Max Min | Chemical Composition (%) | | | | | | | | | | NDE | | | | | | |
|------------------------|------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--|--|----|----|----|-------|
| | | C | Si | Mn | P | S | Ni | Cr | Mo | Cu | V | | | | CE | UT | MT | PT |
| | | 0.350 | 0.350 | 1.050 | 0.035 | 0.040 | 0.400 | 0.300 | 0.120 | 0.400 | 0.080 | | | | | | | |
| 102902B | H | 0.184 | 0.229 | 0.910 | 0.019 | 0.010 | 0.018 | 0.142 | 0.002 | 0.009 | 0.002 | | | | | | | 0.366 |
| | P | 0.178 | 0.218 | 0.910 | 0.018 | 0.009 | 0.019 | 0.152 | 0.002 | 0.008 | 0.001 | | | | | | | 0.362 |
| 102902C | H | 0.184 | 0.229 | 0.910 | 0.019 | 0.010 | 0.018 | 0.142 | 0.002 | 0.009 | 0.002 | | | | | | | 0.366 |
| | P | 0.178 | 0.218 | 0.910 | 0.018 | 0.009 | 0.019 | 0.152 | 0.002 | 0.008 | 0.001 | | | | | | | 0.362 |
| BLANK | | | | | | | | | | | | | | | | | | |

REMARK * H : Heat Analysis P : Product Analysis

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order.

H. J. LEE
 Witnessed by / H. J. LEE



Manager of Q.A Dept. / E. S. PARK