

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by: FILTER SOLUTIONS INC. 649 Enfield Road, Burlington, Ontario, Canada L7T 2X9
(Name and address of manufacturer)

2. Manufactured for: STOCK
(Name and address of purchaser)

3. Location of installation: Unknown
(Name and address)

4. Type: Vertical Filter 12041A TO E T2549.21 & A5794.3 B0104C2C REV.0 & REV.2 None 2011
(Horiz. or vert., tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1. 2007 Edition
(Year)

to A09 ADDENDA - None
[Addenda (date)] (Code Case Numbers) [Special Service per UG-120(d)]

6. Shell: SA 106C 1/2" 1/8" 7 5/8" 31"
(Material spec. Number, Grade) (Nominal thickness) (Corr. allow.) (Inner Diameter) (Length (overall))

7. Seams: SMLS None 100 1125 °F 1 hr Type 1 Full 100 1
[Long (Welded, Dbl. Sngl., Lap, Butt)] [R.T. (Spot or Full)] [Eff. (%)] (H.T. Temp.) [Time (hr)] [Grth (Welded, Dbl. Sngl., Lap, Butt)] [R.T. (Spot or Full)] [Eff. (%)] (No. of Courses)

8. Heads: (a) Material SA 516 70N (b) Material SA 234 WPB
(Spec. No., Grade) (Spec. No., Grade)

| | Location (Top, Bottom, Ends) | Minimum Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (Convex or Concave) |
|-----|------------------------------|-------------------|---------------------|--------------|----------------|------------------|--------------------|----------------------|---------------|--------------------------------------|
| (a) | Top | 1.863" | 1/8" | | | | | | 10" | |
| (b) | Bottom | 0.4505" | 1/8" | | | 2:1 | | | | Concave |

If removable, bolts used (describe other fastenings) SA-193-B7/SA-194-2H, 1.25"-8 UN ROD END/NUT, (4) Required
(Material, Spec. No., Gr., Size, Number)

9. MAWP 1440 psi - at max temp. 130 °F
(Internal) (External) (Internal) (External)

Min. design metal temp. -20 °F at 1440 psi Hydro., pneu., or comb. test pressure (Hydro) 1872 psig Proof test -

10. Nozzles, inspection, and safety valve openings:

| Purpose (Inlet, Outlet, Drain) | No. | Diameter or Size | Type | Material | Nominal Thickness | Reinforcement Material | How Attached | Location |
|--------------------------------|-----|------------------|-------------|----------|-------------------|------------------------|--------------|----------|
| Inlet (N1) | 1 | 2" | Cl.600 flg. | SA 106B | 0.344" | None | Welded | |
| Outlet (N2) | 1 | 2" | Cl.600 flg. | SA 105 | 0.344" | None | Welded | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

11. Supports: Skirt No Lugs No Legs 3 Others None Attached Clamped to shell
(Yes or No) (Number) (Number) (Describe) (Where and How)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: _____
(Name of part, item number, Mfg's name and identifying stamp)

-Built to drawing WO12041 FAB REV.0 / Impact test exempt per UCS-66(a) & (b)

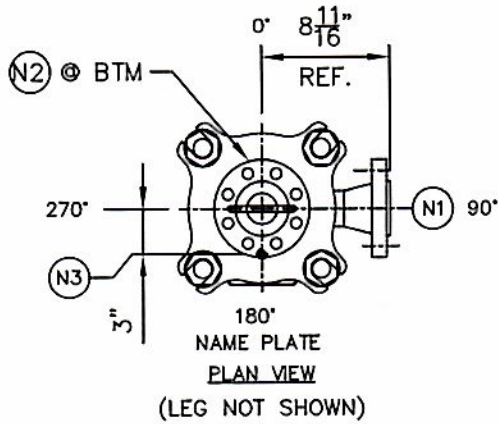
CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 35087
 expires May 3rd, 2011
 Date FEB 8 / 11 Co. Name Filter Solutions Inc. Signed _____
(Manufacturer) (Representative)

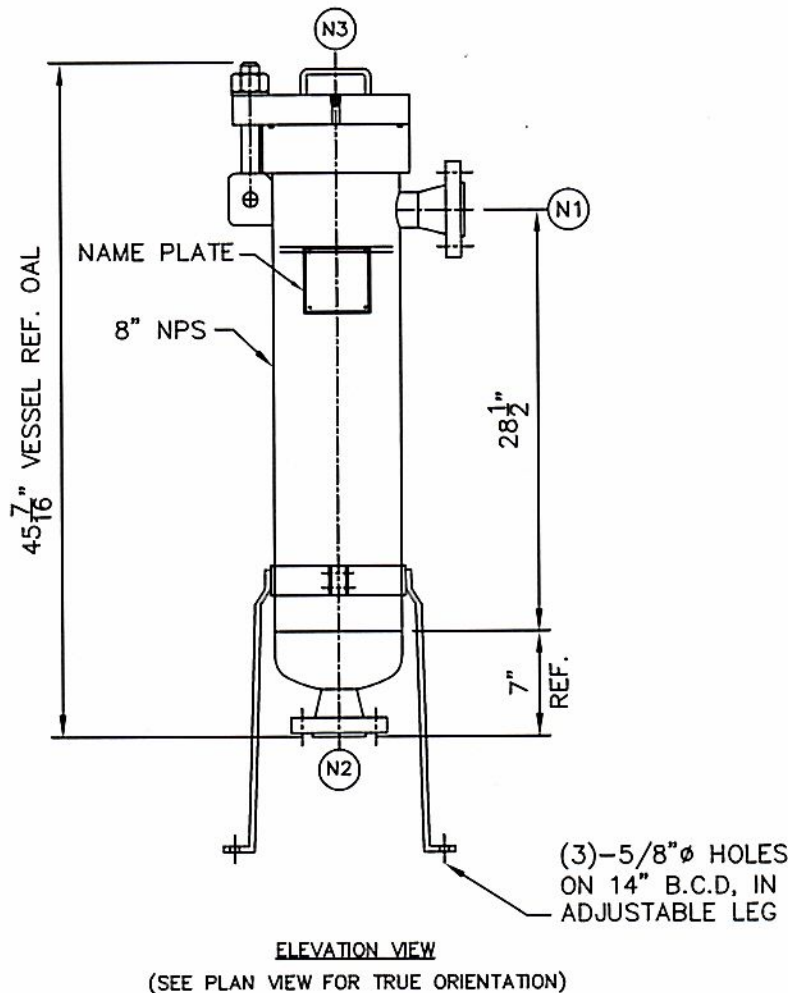
CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Filter Solutions Inc at Burlington, Ontario
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Ontario and employed by TSSA of Ontario
 have inspected the component described in this Manufacturer's Data Report on FEB 8, 2011 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the inspector nor his/her employer makes any warranty, expressed or implied concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date FEB 8, 2011 Signed [Signature] Commissions NB13474A ONT70
(Authorized Inspector) [Nat'l Board (incl. endorsements) State, Prov. and No.]



| DESIGN DATA | | | | |
|-------------------------|-----------------------|--------|---------|---------|
| DESIGN PRESSURE | 1440 PSIG | | | |
| MIN/MAX. DESIGN TEMP. | -20/130° F | | | |
| CODE | ASME SECT. VIII DIV.1 | | | |
| CODE STAMP | U | | | |
| CRN | YES | | | |
| CORROSION ALLOWANCE | 1/8" | | | |
| RADIOGRAPHY | 100% PER RT-1 | | | |
| PWHT | YES | | | |
| VESSEL OPENING SCHEDULE | | | | |
| MK. NO. | SIZE | RATING | FITTING | REMARKS |
| N1 | 2" | 600# | RF WN | INLET |
| N2 | 2" | 600# | RF WN | OUTLET |
| N3 | 1/4" | | D & T | VENT |



- NOTE:
1. FLANGE BOLT HOLES SHALL STRADDLE NORMAL
 2. REMOVE ALL SHARP EDGES
 3. SURFACE PREPARATION:
INTERNAL: AS WELDED
EXTERNAL: SSPC-SP6
COATING:
INTERNAL: NONE
EXTERNAL: STD BLUE ENAMEL
 4. ESTIMATED EMPTY WEIGHT: 300 LBS.

| |
|--|
| CUSTOMER: FSI |
| CUSTOMER P.O: STOCK |
| FSI WORK ORDER NO. : 12041 |
| QUANTITY : 5 REQ'D |
| MATERIAL OF CONSTRUCTION: C.S (PER ASME SPEC.) |
| APPROVED FOR FABRICATION : |

| TOLERANCES (EXCEPT AS NOTED) | REVISIONS | | |
|---------------------------------|-----------|------|----|
| | NO. | DATE | BY |
| DECIMAL ± 0.125" | 1 | | |
| | 2 | | |
| FRACTIONAL ± 3/8" | 3 | | |
| | 4 | | |
| ANGULAR ± 1° | 5 | | |
| | 6 | | |

FILTER SOLUTIONS INC.

BURLINGTON, ONTARIO , CANADA

TITLE FS-180-SE-CS-1440PSIG-2"FLG SOUR SERVICE GENERAL ARRANGEMENT

| | | | |
|-------------|-------------------|---------------|-----|
| DRW: KN | DATE: DEC 13 2010 | DRAWING NO. | REV |
| CHECK'D: CD | DATE: DEC 13 2010 | W O 1 2 0 4 1 | 0 |
| APPR'D: PB | SCALE: NTS | | |

CERTIFIED BY

FILTER SOLUTIONS INC.



1440 PSI AT **130** °F
(MAX ALLOWABLE WORKING PRESSURE)

-20 °F AT **1440** PSI
(MIN DESIGN METAL TEMPERATURE)

(SERIAL NUMBER) **12041A**

(YEAR BUILT) **2011**

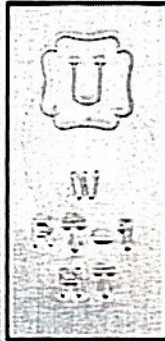
A5794.3
CRN **12549.21**

OIN

MADE IN CANADA

CERTIFIED BY

FILTER SOLUTIONS INC.



1440 PSI AT **130** °F
(MAX ALLOWABLE WORKING PRESSURE)

-20 °F AT **1440** PSI
(MIN DESIGN METAL TEMPERATURE)

(SERIAL NUMBER) **12041B**

(YEAR BUILT) **2011**

A5794.3
CRN **12549.21**

OIN

MADE IN CANADA

CERTIFIED BY

FILTER SOLUTIONS INC.



1440 PSI AT **130** °F
(MAX ALLOWABLE WORKING PRESSURE)

-20 °F AT **1440** PSI
(MIN DESIGN METAL TEMPERATURE)

(SERIAL NUMBER) **12041C**

(YEAR BUILT) **2011**

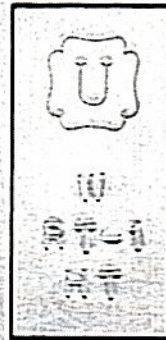
A5794.3
CRN **12549.21**

OIN

MADE IN CANADA

CERTIFIED BY

FILTER SOLUTIONS INC.



1440 PSI AT **130** °F
(MAX ALLOWABLE WORKING PRESSURE)

-20 °F AT **1440** PSI
(MIN DESIGN METAL TEMPERATURE)

(SERIAL NUMBER) **12041D**

(YEAR BUILT) **2011**

A5794.3
CRN **12549.21**

OIN

MADE IN CANADA

CERTIFIED BY

FILTER SOLUTIONS INC.



1440 PSI AT **130** °F
(MAX ALLOWABLE WORKING PRESSURE)

-25 °F AT **1440** PSI
(MIN DESIGN METAL TEMPERATURE)

(SERIAL NUMBER) **12041E**

(YEAR BUILT) **2004**

A5794.3

CRN **12549021**

OIN **[]**

MADE IN CANADA

KV Inspection Services Ltd.

1486 Wallace Road
Oakville, Ontario L6L 2Y2
Phone: 905-844-9448
Fax: 905-844-6697

Radiographic Examination Report RT

Specification - Acceptance Criteria

ASME UW-51 UW-52 B31.1 B31.3NS CSA Other

General Data

| | | | |
|------------|-------------------------|--------------|--|
| Customer | <i>FILTER SOLUTIONS</i> | Date | <i>JAN 25/11</i> |
| Location | <i>BURLINGTON ONT</i> | P. O. # | <i>9616</i> |
| Project | <i>Pressure Vessels</i> | Shop Order # | <i>12041</i> |
| Procedure | <i>W #6 REV 0</i> | Worksheet # | <i>32375</i> |
| Technician | <i>E. DUTSCHAEVER</i> | CGSB Reg # | <i>515</i> ASNT/SNT-TC-1A Level <i>III</i> |

Technical Data

| | | | | | |
|-------------------------|---|---|---|---------------------|--|
| Material Type | Carbon <input checked="" type="checkbox"/> Alloys | Isotope | IR 192 <input checked="" type="checkbox"/> Other | Physical/Focal Size | <i>12</i> |
| Base Material Thickness | <i>380</i> | Exposure | Single Wall <input checked="" type="checkbox"/> Double Wall | Film per Cassette | <i>1</i> |
| Weld Thickness | <i>.500</i> | View | Single Wall <input checked="" type="checkbox"/> Double Wall | PWHT | Yes No <input checked="" type="checkbox"/> |
| Reinforcement | <i>+ 48</i> | Number of Exposures | <i>1 PER WELD</i> | | |
| Film Mfg. | <i>AGFA</i> | Minimum Source to Object Distance | <i>PANORAMIC</i> | | |
| Film Type | <i>GEN D5</i> | Maximum Distance from Source Side of Object to Film | <i>5/8</i> | | |

| UNIT No. | SIZE/LOC | SLAG | L.O.P. | L.O.F. | CRACK | POROSITY | U.C. | OTHERS | ACC | REJ |
|------------|-------------|------|--------|--------|-------|-------------------------------------|------------|------------------|-------------------------------------|-----|
| <i>C1A</i> | <i>8"Q</i> | | | | | | | | | |
| | <i>0-14</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| | <i>14-0</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| <i>C1B</i> | <i>0-14</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| | <i>14-0</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| <i>C1C</i> | <i>0-14</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| | <i>14-0</i> | | | | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| <i>C1D</i> | <i>0-14</i> | | | | | <input checked="" type="checkbox"/> | <i>INT</i> | | <input checked="" type="checkbox"/> | |
| | <i>14-0</i> | | | | | <input checked="" type="checkbox"/> | <i>INT</i> | <i>100% root</i> | <input checked="" type="checkbox"/> | |
| <i>C1E</i> | <i>0-14</i> | | | | | <input checked="" type="checkbox"/> | <i>INT</i> | <i>100% root</i> | <input checked="" type="checkbox"/> | |
| | <i>14-0</i> | | | | | <input checked="" type="checkbox"/> | <i>" "</i> | <i>" "</i> | <input checked="" type="checkbox"/> | |

ED DUTSCHAEVER
CGSB LEVEL II, Reg# 515
RT/MT/PT
SNT-TC-1A, LEVEL III
RT/MT/PT

| | | | |
|--------------------------|--------------------|------|------------------|
| KV Inspection Technician | <i>[Signature]</i> | Date | <i>Jan 25/11</i> |
| Customer Representative | <i>[Signature]</i> | Date | <i>Jan 27/11</i> |

CONREX STEEL LIMITED
 50 TABER ROAD
 REXDALE, ONTARIO M9W 3A9
 HEAT TRACING RECORD

| CSL WO# | QTY | DESCRIPTION | CUSTOMER | CUST PO# |
|---------|-----|--|------------------|----------|
| 68195 | 5 | 9/s housings 8.625" dia x 3" lg w/ covers | Filter Solutions | 9631 |
| | | serial # 12041 A to E | | |

HEAT TREATMENT SPECIFICATION: Filter Solutions AwHT Proc. HT-2 rev 5
 HEAT AT 100°F PER HOUR FROM 800°F
 HOLD min 60 MINUTES AT 1150°F ± 25°F
 COOL AT 100°F PER HOUR TO 800°F

NOTES: Thermocouples #1:2

All temperatures in degees Fahrenheit unless noted

SIGNED FOR CSL [Signature] DATE Jan 27/11

| TIME | STEP | SETPT | CHART TEMPERATURES | | | | | |
|-------|------|-------|--------------------|------|------|------|------|------|
| | | | TC#1 | TC#2 | TC#3 | TC#4 | TC#5 | TC#6 |
| 17:34 | 1 | 134 | 122 | 130 | 124 | 110 | 117 | 126 |
| 17:44 | 1 | 212 | 204 | 205 | 205 | 179 | 184 | 195 |
| 17:54 | 1 | 275 | 280 | 273 | 281 | 242 | 247 | 259 |
| 18:04 | 1 | 353 | 352 | 343 | 353 | 307 | 313 | 326 |
| 18:14 | 1 | 431 | 437 | 422 | 438 | 383 | 389 | 403 |
| 18:24 | 1 | 509 | 518 | 499 | 518 | 458 | 464 | 478 |
| 18:34 | 1 | 587 | 594 | 572 | 594 | 530 | 536 | 551 |
| 18:44 | 1 | 665 | 671 | 651 | 671 | 609 | 614 | 629 |
| 18:54 | 1 | 735 | 738 | 718 | 738 | 677 | 683 | 697 |
| 19:04 | 1 | 782 | 782 | 763 | 782 | 723 | 730 | 743 |
| 19:14 | 2 | 813 | 827 | 808 | 826 | 771 | 775 | 789 |
| 19:24 | 2 | 827 | 833 | 816 | 832 | 780 | 786 | 799 |

CHART TEMPERATURES

| TIME | STEP | SETPT | TC#1 | TC#2 | TC#3 | TC#4 | TC#5 | TC#6 |
|-------|------|-------|-------|-------|------|------|------|------|
| 19:34 | 2 | 835 | 843 | 829 | 842 | 796 | 801 | 813 |
| 19:44 | 2 | 849 | 854 | 842 | 853 | 809 | 814 | 826 |
| 19:54 | 2 | 862 | 867 | 857 | 866 | 826 | 830 | 842 |
| 20:04 | 2 | 876 | 880 | 873 | 879 | 843 | 847 | 858 |
| 20:14 | 2 | 891 | 891 | 884 | 891 | 855 | 859 | 870 |
| 20:24 | 2 | 904 | 908 | 902 | 907 | 872 | 876 | 888 |
| 20:34 | 2 | 918 | 919 | 914 | 918 | 885 | 889 | 900 |
| 20:44 | 2 | 931 | 928 | 926 | 928 | 898 | 902 | 913 |
| 20:54 | 2 | 943 | 943 | 938 | 942 | 911 | 914 | 925 |
| 21:04 | 2 | 953 | 954 | 951 | 953 | 924 | 927 | 938 |
| 21:14 | 2 | 965 | 965 | 962 | 965 | 935 | 939 | 949 |
| 21:24 | 2 | 977 | 979 | 976 | 978 | 949 | 952 | 963 |
| 21:34 | 2 | 989 | 990 | 988 | 989 | 961 | 965 | 975 |
| 21:44 | 2 | 1000 | 1001 | 1001 | 1001 | 975 | 978 | 989 |
| 21:54 | 2 | 1012 | 1014 | 1013 | 1013 | 987 | 990 | 1000 |
| 22:04 | 2 | 1022 | 1021 | 1018 | 1019 | 992 | 998 | 1007 |
| 22:14 | 2 | 1034 | 1037 | 1037 | 1036 | 1011 | 1014 | 1025 |
| 22:24 | 2 | 1046 | 1047 | 1047 | 1046 | 1022 | 1025 | 1035 |
| 22:34 | 2 | 1056 | 1055 | 1056 | 1053 | 1031 | 1035 | 1045 |
| 22:44 | 2 | 1068 | 1065 | 1065 | 1065 | 1041 | 1044 | 1054 |
| 22:54 | 2 | 1076 | 1077 | 1078 | 1076 | 1054 | 1056 | 1066 |
| 23:04 | 2 | 1085 | 1082 | 1084 | 1081 | 1060 | 1063 | 1073 |
| 23:14 | 2 | 1096 | 1094 | 1096 | 1094 | 1072 | 1075 | 1085 |
| 23:24 | 2 | 1108 | 1108 | 1108 | 1107 | 1084 | 1087 | 1097 |
| 23:34 | 2 | 1118 | 1116 | 1118 | 1115 | 1095 | 1098 | 1107 |
| 23:44 | 3 | 1125 | →1129 | →1127 | 1125 | 1103 | 1107 | 1117 |
| 23:54 | 3 | 1125 | 1130 | 1128 | 1125 | 1105 | 1108 | 1118 |
| 00:04 | 3 | 1125 | 1129 | 1128 | 1124 | 1106 | 1109 | 1118 |
| 00:14 | 3 | 1125 | 1128 | 1128 | 1123 | 1107 | 1109 | 1119 |
| 00:24 | 3 | 1125 | 1129 | 1129 | 1124 | 1108 | 1110 | 1119 |
| 00:34 | 3 | 1125 | 1126 | 1127 | 1120 | 1106 | 1109 | 1118 |
| 00:44 | 3 | 1125 | 1127 | 1128 | 1123 | 1108 | 1110 | 1119 |
| 00:54 | 3 | 1125 | 1129 | 1130 | 1124 | 1109 | 1112 | 1121 |
| 01:04 | 3 | 1125 | 1127 | 1128 | 1122 | 1108 | 1111 | 1120 |
| 01:14 | 3 | 1125 | 1126 | 1129 | 1122 | 1109 | 1112 | 1121 |
| 01:24 | 3 | 1125 | 1126 | 1129 | 1122 | 1109 | 1112 | 1121 |
| 01:34 | 3 | 1125 | 1126 | 1128 | 1121 | 1108 | 1111 | 1121 |
| 01:44 | 3 | 1125 | 1122 | 1124 | 1118 | 1105 | 1108 | 1117 |
| 01:54 | 3 | 1125 | 1127 | 1129 | 1122 | 1109 | 1112 | 1121 |
| 02:04 | 3 | 1125 | 1126 | 1129 | 1121 | 1109 | 1112 | 1121 |
| 02:14 | 3 | 1125 | 1128 | 1130 | 1123 | 1110 | 1113 | 1122 |
| 02:24 | 3 | 1125 | 1128 | 1131 | 1123 | 1111 | 1114 | 1123 |
| 02:34 | 3 | 1125 | 1126 | 1129 | 1121 | 1110 | 1112 | 1121 |
| 02:44 | 3 | 1125 | 1127 | 1131 | 1122 | 1111 | 1114 | 1123 |
| 02:54 | 3 | 1125 | 1127 | 1130 | 1122 | 1111 | 1113 | 1122 |
| 03:04 | 3 | 1125 | →1125 | →1129 | 1120 | 1110 | 1113 | 1121 |
| 03:14 | 3 | 1125 | 1123 | 1128 | 1119 | 1109 | 1112 | 1121 |
| 03:24 | 3 | 1125 | 1123 | 1127 | 1118 | 1108 | 1111 | 1120 |
| 03:34 | 3 | 1125 | 1122 | 1126 | 1117 | 1108 | 1111 | 1119 |
| 03:44 | 4 | 1117 | 1118 | 1121 | 1114 | 1101 | 1105 | 1112 |
| 03:54 | 4 | 1101 | 1103 | 1104 | 1098 | 1085 | 1088 | 1095 |
| 04:04 | 4 | 1085 | 1088 | 1087 | 1082 | 1069 | 1071 | 1078 |
| 04:14 | 4 | 1069 | 1071 | 1072 | 1066 | 1052 | 1056 | 1062 |

3H + 20min
CP P888/11

| CHART TEMPERATURES | | | | | | | | |
|--------------------|------|-------|------|------|------|------|------|------|
| TIME | STEP | SETPT | TC#1 | TC#2 | TC#3 | TC#4 | TC#5 | TC#6 |
| 04:24 | 4 | 1053 | 1056 | 1055 | 1050 | 1036 | 1039 | 1045 |
| 04:34 | 4 | 1037 | 1041 | 1038 | 1034 | 1020 | 1022 | 1028 |
| 04:44 | 4 | 1021 | 1024 | 1023 | 1018 | 1003 | 1007 | 1012 |
| 04:54 | 4 | 1005 | 1009 | 1006 | 1002 | 987 | 990 | 995 |
| 05:04 | 4 | 989 | 994 | 989 | 986 | 971 | 973 | 978 |
| 05:14 | 4 | 973 | 977 | 974 | 970 | 954 | 958 | 962 |
| 05:24 | 4 | 957 | 962 | 957 | 954 | 938 | 941 | 945 |
| 05:34 | 4 | 941 | 947 | 940 | 938 | 922 | 924 | 928 |
| 05:44 | 4 | 925 | 930 | 925 | 922 | 905 | 909 | 912 |
| 05:54 | 4 | 909 | 915 | 908 | 906 | 889 | 892 | 895 |
| 06:04 | 4 | 893 | 900 | 891 | 890 | 873 | 875 | 878 |
| 06:14 | 4 | 877 | 883 | 876 | 874 | 856 | 860 | 862 |
| 06:24 | 4 | 861 | 868 | 859 | 858 | 840 | 843 | 845 |
| 06:34 | 4 | 845 | 853 | 842 | 842 | 824 | 826 | 828 |
| 06:44 | 4 | 829 | 836 | 827 | 826 | 807 | 811 | 812 |
| 06:54 | 4 | 813 | 821 | 810 | 810 | 791 | 794 | 795 |
| 07:04 | 4 | 797 | 806 | 793 | 794 | 775 | 777 | 778 |
| 07:14 | 4 | 781 | 789 | 778 | 778 | 758 | 762 | 762 |
| 07:24 | 4 | 757 | 765 | 754 | 756 | 732 | 738 | 736 |
| 07:34 | 4 | 733 | 742 | 729 | 733 | 707 | 713 | 711 |
| 07:44 | 4 | 709 | 718 | 705 | 708 | 683 | 689 | 688 |
| 07:54 | 4 | 685 | 694 | 681 | 686 | 657 | 665 | 662 |
| 08:04 | 4 | 661 | 671 | 656 | 663 | 632 | 640 | 637 |
| 08:14 | 4 | 637 | 647 | 632 | 638 | 608 | 616 | 614 |
| 08:24 | 4 | 613 | 623 | 608 | 616 | 582 | 592 | 588 |
| 08:34 | 4 | 589 | 600 | 583 | 593 | 557 | 567 | 563 |
| 08:44 | 4 | 565 | 576 | 559 | 568 | 533 | 543 | 540 |
| 08:54 | 4 | 541 | 552 | 535 | 546 | 507 | 519 | 514 |
| 09:04 | 4 | 517 | 529 | 510 | 523 | 482 | 494 | 489 |
| 09:14 | 4 | 493 | 505 | 486 | 498 | 458 | 470 | 466 |
| 09:24 | 4 | 469 | 481 | 462 | 476 | 432 | 446 | 440 |
| 09:34 | 4 | 445 | 458 | 437 | 453 | 407 | 421 | 415 |
| 09:44 | 4 | 421 | 434 | 413 | 428 | 383 | 397 | 392 |

REF#1916

CONREX STEEL LTD.

50 Taber Road. Rexdale. Ontario, M9W 3A9 Phone (416)-747-4665 Fax (416)-747-4667

CALIBRATION CERTIFICATE

INSTRUMENT: STRESS RELIEF FURNACE #2
 MANUFACTURER: NORTH AMERICAN.
 SERIAL NUMBER: CONREX #2

| Standard | As Found | Calibrated | Standard | As Found | Calibrated |
|----------|----------|------------|---------------------------------|----------|------------|
| LOAD#1 | | | ADDITIONAL TEMPERATURE CONTROLS | | |
| 1125°F | 1125°F | 8-17-10 | 1#: 1125°F | 1127°F | 8-17-10 |
| 1650°F | 1651°F | " " " | 1650°F | 1652°F | " " " |
| | | | 2#: 1125°F | 1127°F | " " " |
| LOAD#2 | | | 1650°F | 1652°F | " " " |
| 1125°F | 1127°F | 8-17-10 | 3#: 1125°F | 1127°F | " " " |
| 1650°F | 1651°F | " " " | 1650°F | 1652°F | " " " |
| | | | 4#: 1125°F | 1127°F | " " " |
| LOAD#3 | | | 1650°F | 1652°F | " " " |
| 1125°F | 1127°F | 8-17-10 | 5#: 1125°F | 1127°F | " " " |
| 1650°F | 1652°F | " " " | 1650°F | 1652°F | " " " |
| | | | 6#: 1125°F | 1127°F | " " " |
| | | | 1650°F | 1651°F | " " " |
| | | | 7#: 1125°F | 1126°F | " " " |
| | | | 1650°F | 1650°F | " " " |
| | | | 8#: 1125°F | 1126°F | " " " |
| | | | 1650°F | 1651°F | " " " |

If 'calibrated' column is blank. No adjustments were necessary

COMMENTS: STANDARD: PPS MINITEMP MODEL 1062, SER# B67568

QC INSPECTOR: [Signature] QC MANAGER: Ling Tang DATE: 8-17-10

DATE: 05/26/10
 TIME: 12:43:50
 SERIAL NO: F0058712

TUBULAR PRODUCTS
 CERTIFIED TEST REPORT
 (IN ACCORDANCE WITH ISO 10474/EN10204/DIN50049 Type 3.1.7)

UNITED STATES STEEL



| | | |
|--|---|------------|
| MAIL ORDER ITEM NO T103343 04 | SUPPLER NO. G1-795 | VEHICLE ID |
| SOLD TO ADDRESS COMCO PIPE & SUPPLY CO. RR#3 KERR INDUSTRIAL PARK ABERFOYLE CORLEH ON HIGH 6H9 | MAIL TO ADDRESS USS TUBULAR PRODUCTS USS FAIRFIELD WORKS P.O. BOX 599 FAIRFIELD ALABAMA 35064 | VENDOR |

PIPE CARBON SMLS STD PIPE ASTM A106-08 GRADE B ASME SA106-2007 EDITION GRADE B ASTM A53-07 GRADE B ASME SA53-2007 EDITION GRADE B BLK REG MILL COAT PE BEV 30 DEG MEETING ALL THE APPLICABLE REQUIREMENTS OF NACE STANDARD MR-01-75 *2003/COR.1:2005 AND MR0103-2007

| MATERIAL COND: | AS - ROLLED | | W - WELD | |
|------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | W | H | W | H |
| PRODUCT IDENTIFICATION | U01236 | U01236 | U01236 | U01236 |
| TEST TYPE/ ORIENTATION | STRIP/L/B | STRIP/L/B | STRIP/L/B | STRIP/L/B |
| TEST COND. | AR | AR | AR | AR |
| GAUGE WIDTH | 1.5 | 1.5 | 1.5 | 1.5 |
| YIELD | MIN: 40,000 MAX: 47,800 | MIN: 40,000 MAX: 47,700 | MIN: 40,000 MAX: 47,800 | MIN: 40,000 MAX: 47,700 |
| TENSILE | MIN: 70,000 MAX: 78,000 | MIN: 70,000 MAX: 78,000 | MIN: 70,000 MAX: 78,000 | MIN: 70,000 MAX: 78,000 |
| ELONG % | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |
| SCALE: ERB | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |
| HARDNESS | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |
| MON HYDRO | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |
| PSI | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |
| WELDED | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 | MIN: 16.5 MAX: 37.8 |

| LEGEND: | L - LONGITUDINAL | | T - TRANSVERSE | | QT - QUENCH & TEMPERED | | AR - AS ROLLED | | B - BODY | | W - WELD | |
|------------------------|------------------|-----------------|----------------------|-------------------------------|------------------------|--------|----------------|--------|----------|--------|----------|--------|
| | U - UPSET | NM - NORMALIZED | SR - STRESS RELIEVED | TR - THERMO MECHANICAL ROLLED | MO | CR | NI | CU | SI | SE | CS | CO |
| PRODUCT IDENTIFICATION | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 | U01236 |
| TYPE | HEAT | PROD | PROD | PROD | PROD | PROD | PROD | PROD | PROD | PROD | PROD | PROD |
| | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| | 98 | 99 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 |
| | 007 | 008 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 | 007 |
| | 23 | 23 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| | 04 | 04 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 |
| | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 |
| | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 |
| | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |

CERTIFIED BY: **FILTRON CORPORATION INC.**
 THIS MATERIAL MEETS ASME SECTION III PART A EDITION 2007
 ADDENDA A09

DECIMAL POSITIONS FOR ELEMENTS ARE INDICATED BY THE LEFT MARGIN, VERTICAL DOTTED LINE OR DECIMAL POINT.
 466041002 T78222A59 0051485015 CAA 1-0-0 PAGE 1 OF 2

[FS-93A] 8" SCH 80 - SA-106C

PO 9466
 WO 12041
 ITEM #1

Order: 78414 - B Seg 6 Post: 9466 Heat: U01236 Mfr: U.S. Steel
 Part: P 8 X5 56 S B Part Desc: Pipe 8 (219.1mm O.D.) EXTRA HEAVY SMLS A5A106 B SRL BEVELLED END (500M)



UNITED STATES STEEL

TUBULAR PRODUCTS

CERTIFIED TEST REPORT

(IN ACCORDANCE WITH ISO 10474EN10204/DIN50049 "type 3.1")

DATE: 05/26/10
 TIME: 12:43:50
 SERIAL NO: F0058712

| | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|---|--|----------------|--|----------------------------------|--|---------------------------|--|----------------------------------|--|------------|--|--------------------------------|--|---|--|-----|--|---------|--|
| MILL ORDER ITEM NO TT03343-04 | | SHIPPER'S NO. G1-795 | | P.O. NUMBER | | O.D. 8.625 (219.075) | | I.D. 0.500 (12.700) | | WALL THICKNESS 0.500 (12.700) | | | | | | | | | | | |
| MATERIAL COND. AS-ROLLED | | MIN COLLAPSE | | DIR | | TEST LOC. | | TEMP | | SIZE | | TEST COND. | | CHARTER V-NOTCH IMPACT TESTING | | | | | | | |
| PRODUCT IDENTIFICATION U01236 | | FLAT | | BEND | | GRAIN SIZE | | END OF DATA THIS SHEET ** | | DEG | | 1 | | 2 | | 3 | | AVG | | % BREAK | |
| LEGEND | | L - LONGITUDINAL | | T - TRANSVERSE | | B - BODY | | W - WELD | | HAZ - HEAT AFFECTED ZONE | | | | | | | | | | | |
| | | TEST / INSPECTION | | YES | | TESTING / INSPECTION INFORMATION | | RESULTS / COMMENTS | | | | | | | | | | | | | |
| | | FULL LENGTH VISUAL | | X | | | | | | | | | | | | | | | | | |
| | | FULL LENGTH EMI | | X | | | | | | | | | | | | | | | | | |
| | | FULL LENGTH MPI | | | | | | | | | | | | | | | | | | | |
| | | FULL LENGTH UT | | | | | | | | | | | | | | | | | | | |
| | | END AREA INSPECTION (PLAIN END) | | X | | | | | | | | | | | | | | | | | |
| | | SPECIAL END AREA (SEA) INSP | | | | | | | | | | | | | | | | | | | |
| | | FULL LENGTH DRIFT | | | | | | | | | | | | | | | | | | | |
| | | ADDITIONAL NOTES/COMMENTS | | | | | | | | | | | | | | | | | | | |
| | | ALL MELTING AND MANUFACTURING TOOK PLACE IN THE USA. | | | | | | | | | | | | | | | | | | | |
| | | MANUFACTURED IN AN ISO 9001 CERTIFIED FACILITY - CERTIFICATE #30727. | | | | | | | | | | | | | | | | | | | |
| | | NO REPAIRS BY WELDING. NO MERCURY OR MERCURY COMPOUNDS ARE ADDED TO THE STEEL AND ALL MERCURY BEARING EQUIPMENT IS PROTECTED BY A DOUBLE BOUNDARY OF CONTAINMENT. | | | | | | | | | | | | | | | | | | | |
| | | *NOTE A SEE ATTACHED REPORT FOR ADDITIONAL NOTES. | | | | | | | | | | | | | | | | | | | |
| | | ** END OF DATA ** | | | | | | | | | | | | | | | | | | | |

THIS IS TO CERTIFY THAT THE PRODUCT DESCRIBED HEREIN WAS MANUFACTURED, SAMPLED, TESTED AND/OR INSPECTED IN ACCORDANCE WITH THE SPECIFICATION AND FULFILLS THE REQUIREMENTS IN SUCH RESPECTS.

PREPARED BY THE OFFICE OF: J. MAJTKRZAK - MANAGER, Q.A.

DATE: 05/26/10

466041002

T7822A59

0051485015

CAA 1-0-0

PAGE 2 OF 2

Po 9466



UNITED STATES STEEL

TUBULAR PRODUCTS
SUPPLEMENTAL STATEMENT SHEET

DATE: 05/26/10
TIME: 12:44:03
PAGE: 1

| | | | |
|---|---------------------|--|------------------|
| MILL ORDER ITEM NO TT03343 04 | SHIPPER'S NO. 04 | P.O. NUMBER G1-795 | HEAT F0058712 |
| SOLD TO ADDRESS COMCO PIPE & SUPPLY CO. RR#3 KERR INDUSTRIAL PARK ABERFOYLE GUELPH ON N1H 6H9 | MAIL TO ADDRESS | VENDOR USS TUBULAR PRODUCTS USS FAIRFIELD WORKS P.O. BOX 599 FAIRFIELD ALABAMA 35064 | |
| <p>ALSO MEETS THE REQUIREMENTS OF ASTM A106-08/ASME SA106-2007 ED. GRADE C MATERIAL WAS HOT FINISHED AND NO HEAT TREATMENT. ORDER MEETS ALL THE APPLICABLE REQUIREMENTS OF NACE STANDARD MR-01-75</p> | | | |

Order#: 90373 Seq: 1 PO#: 9602GL Heat#: 53H30014 Mill: BKL - Thai Benkan
 Part#: WF 8 XS C PB Part Desc: Weld Fittings 8 (219.1mm O.D.) XS BUTT WELD CAP A/SA234-WPB



Thai Benkan Co., Ltd.
 58 Soi Watkrunai, Bangkok, Prapadaeng,
 Samutprakarn, 10130 Thailand.

D M Y Certificate No.
 09/11/2010 T- 2310143667

INSPECTION CERTIFICATE

TO EN10204 3.1

Purchaser: COMCO PIPE AND SUPPLY COMPANY

E.No. MC-149 Purchase Order No. G1-1317 Job No.

| No. | TY (%) | MFG. No. (Heat Identification No.) | Product & Size | Quantity | Heat Treatment (Note 1) | Visual Examination | Dimensional Inspect | Specification for Material | | Specification for Inspection | | | | | | | | | | | | | | |
|-------------------|---------|---------------------------------------|----------------|---------------|----------------------------|--------------------|---------------------|---|-----------------|------------------------------|------|-----------------|-----|-----|-----|----|-----|-----|------|-----|-----|------|--------|------|
| | | | | | | | | Made from Seamless Pipe | ASME 816.9-2007 | | | | | | | | | | | | | | | |
| 1 | 0.000 | 53H30014 | C WPB 8 XS | CERTIFIED BY: | *N | Good | Good | ASTM A234-10/ASME SA234-07 Gr. WPB | ASME 816.9-2007 | ASME 816.9-2007 | Good | | | | | | | | | | | | | |
| 2 | | | | 709 | | | | SA 7245, 11-09 Gr. 241 CAT 1 SS NACE MR0175/ISO 15156-2, 0.03 MR0103-07 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Specification | | | | | | | | Chemical Composition % | | | | Tension Test #2 | | | | | | | | | | | | |
| Min. | | | | | | | | C | Si | Mn | P | S | Cu | Ni | Cr | Mo | V | Nb | C.E. | YS | TS | E | | |
| Max. | | | | | | | | x | 100 | x | 100 | x | 100 | x | 100 | x | 100 | x | 1000 | x | 100 | MPa. | % | |
| Material Heat No. | | | | | | | | 23 | 10 | 29 | 106 | 50 | 10 | 40 | 40 | 15 | 80 | 20 | 40 | 240 | 415 | 30 | 197 HB | GOOD |
| 1 | 0421005 | 20 | 21 | 100 | 3 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 37 | 479 | 655 | 45 | 45 | 399 | 479 | 45 | 45 | 45 | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |

(Note 1) A: Hot formed with final temperature between 620°C-980°C. Air Cooling. N: Normalizing 910°C±0.5 HR. Air Cooling. *N: Normalizing 910°C±0.5 HR. Air Cooling (Specification for material made from plate) S: Stress Relieving 675°C±0.5 HR. Air Cooling.
 The fittings was manufactured, sampled, tested, and inspected in accordance with the specification and was found to meet the requirements.
 C.E. = C-Mn/64-(Cr-Mo+V)/5+(Ni-Cu)/15
 We hereby certify that the product described herein, has been manufactured in accordance with the specifications concerned and also with the purchaser's requirements and that the test results shown herein are correct.
 * 1: T: Symbolized wall thickness in mm. * 2: YS Yield strength TS = Tensile strength E = Elongation

Quality Assurance Manager
 Thai Benkan Co., Ltd.

PO # 9602 WO 12041 Item 2 [vessel A, B, C]

CERTIFIED BY:
FILTER SOLUTIONS INC.
 THIS MATERIAL MEETS ASME
 SECTION II PART A
 2007 EDITION
 A09 ADDENDA

Date: Mar 3, 2010
 Certificate No.: 10-000-091100000
 Certificate Issued to: EN10204-2004 3 1

MATERIAL TEST REPORT
 YANGZHOU HUAYU PIPE FITTING CO., LTD.
 ZHENYING INDUSTRY ZONE JIANTU TONGJIANBOYING COUNTY, JIANGSU PROVINCE P.R. CHINA 215009

Purchaser: CRANE SUPPLY VALVE WAREHOUSE
 Order No.: 0002 628066
 Invoice No.: HY20100303

Material Specification
 ASTM A516 (SA234 04 WPB)
 NACE MR0175-02

Specification for Inspection
 ASME B16.9-2007

Visual and Dimensional
 Inspection: GOOD

Hardness
 Mar 19/7/10
 GOOD

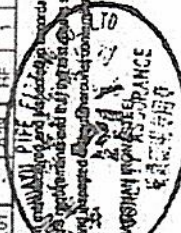
Cu+Ni+P+Ni
 < or +1.00%

C+N+H
 < or +0.12%

PLANT: GOOD

| Product Description | Heat I.D. | Quantity (Pcs) | Tension Test (1) | | Chemical Composition % | | | | | | | | | | | Heat Treatment (3) | Raw Material | | | | | | | | | | | | | | | | |
|-----------------------------|------------|----------------|------------------|------|------------------------|------|------|-------|-------|------|------|------|------|------|------|--------------------|--------------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | YS MPa | E % | C | Si | Mn | P | S | Cr | Mo | Ni | Cu | V | Nb | | CE(2) | Type | Manufacturer (6) | | | | | | | | | | | | | | |
| 10 STD WPB WELD CAP | 0471001931 | 50 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 12 STD WPB WELD CAP | 0471001931 | 20 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 14 STD WPB WELD CAP | 0471001931 | 40 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 16 STD WPB WELD CAP | 0471001932 | 30 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 18 STD WPB WELD CAP | 0471001931 | 10 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 20 STD WPB WELD CAP | 0471001932 | 5 | 350 | 30 | 0.30 | 0.10 | 0.20 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG | |
| 2-1/2 XH WPB LR 90 WELD ELL | 313301 | 78 | 305 | 45 | 0.19 | 0.27 | 0.83 | 0.009 | 0.004 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | SHSG | 3 | SHSG |
| 1-1/2 XH WPB LR 45 WELD ELL | 327918 | 30 | 295 | 45 | 0.19 | 0.27 | 0.83 | 0.009 | 0.004 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | SHSG | 3 | SHSG |
| 2-1/2 XH WPB LR 45 WELD ELL | 313301 | 20 | 305 | 45 | 0.19 | 0.27 | 0.83 | 0.009 | 0.004 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | SHSG | 3 | SHSG |
| 1-1/2 XH WPB SR 90 WELD ELL | 327918 | 10 | 295 | 45 | 0.19 | 0.27 | 0.83 | 0.009 | 0.004 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | 0.04 | 0.02 | SHSG | 3 | SHSG |
| 5 XH WPB SR 90 WELD ELL | 903275 | 2 | 320 | 47.5 | 0.19 | 0.25 | 0.52 | 0.01 | 0.004 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | SHSG | 3 | SHSG |
| 3 EX HY WPB WELD TEE | 374025 | 20 | 285 | 45 | 0.13 | 0.28 | 0.75 | 0.007 | 0.006 | 0.03 | 0.01 | 0.04 | 0.06 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 6 EX HY WPB WELD TEE | 903277 | 10 | 320 | 48.0 | 0.18 | 0.21 | 0.45 | 0.017 | 0.003 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 8 EX HY WPB WELD TEE | 903297 | 10 | 330 | 49.0 | 0.20 | 0.23 | 0.52 | 0.015 | 0.002 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 14 EX HY WPB WELD TEE | 73-04332 | 2 | 325 | 52.5 | 0.19 | 0.22 | 0.68 | 0.016 | 0.012 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 2-1/2 XH WPB WELD CAP | 88-03171 | 10 | 310 | 45.0 | 0.18 | 0.22 | 0.77 | 0.012 | 0.010 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 18 XH WPB WELD CAP | 2315465 | 5 | 285 | 45.0 | 0.15 | 0.23 | 0.72 | 0.010 | 0.011 | 0.04 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 10 STD WPB WELD CAP | 2116488 | 5 | 340 | 51.5 | 0.19 | 0.20 | 0.89 | 0.016 | 0.006 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 12 XH WPB WELD CAP | 2315465 | 2 | 340 | 51.5 | 0.19 | 0.20 | 0.89 | 0.015 | 0.006 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |
| 13X4 STD WPB BW ECC RED | 700528 | 5 | 335 | 48.5 | 0.18 | 0.20 | 0.46 | 0.014 | 0.007 | 0.04 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | SHSG | 3 | SHSG |

Note (1) YS=Yield Strength, TS=Tensile Strength, E=Elongation
 Note (2) HF: Hot formed (820-900 °C) and cooled in air, CF: Cold formed and normalized (850 °C) 50% RH, cooled in air.
 Note (3) HF: Hot formed (820-900 °C) and cooled in air, CF: Cold formed and normalized (850 °C) 50% RH, cooled in air.
 Note (4) 1-Scanless Pipe, 2-Welded Pipe, 3-Shop Pipe
 Note (5) PH=Positive Neutral Inspection
 Note (6) SHOX-SHANGHAI ZHONGNAN HYDRO-PNEUMATIC VALVE STEEL WELD-ROUNDED END, JSCD-JINXSU CHENGDE WYDK-WUXI/DEXIN PGG-PARGANG GROUP BSR-BASIJIAN WANGJIE SHANGHA
 YUJI-YANTAI LUBAO QINGBO-QIANGQIANG SHOUANG PLATE SHIS-SHANGHAI SANGANG AHTD-ANHUI TANDA



PO 9588
 W012041D
 ITEM #2

INSPECTION CERTIFICATE

EN 10204 3.1B

Purchaser: C

D M Y Certificate No.



E-No. **MA-259** Purchase Order No. **4873443** Job No.

13/07/2005 T- 2005200515

| No. | MFG. No. (Heat Identification No.) | Specification for Material Made from Seamless Pipe | Specification for Inspection | | Visual Examination | Dimensional Inspection |
|----------------|---------------------------------------|---|------------------------------|-------------------------|--------------------|------------------------|
| | | | ASME / ANSI B16.9 | Heat Treatment (Note 1) | | |
| Product & Size | | ASTM A234-03/ASME SA234 WPB CSA Z245.11 GR241 CAT 1 NACE MR0175-2000 | Quantity | Heat Treatment (Note 1) | Symbol No. | |
| | | | | | | |
| 1 | 05B30015 | C WPB 8 S80 | 8/25 | *N | 7511483 | Good |
| 2 | 05F30005 | C WPB 8 S80 | 15/25 | *N | 7511483 | Good |
| 3 | 05F30024 | C WPB 8 S80 | 4/25 | *N | 7511483 | Good |
| 4 | | | | | | |
| 5 | | | | | | |

| Specification | Chemical Composition % | | | | | | | | | | | Tension Test *2 | | | |
|-------------------|------------------------|-------|-------|--------|--------|-------|-------|-------|-------|--------|--------|-----------------|-----|-----|----|
| | C | Si | Mn | P | S | Cu | Ni | Cr | Mo | V | Nb | C.E. | YS | TS | E |
| Min. | X 100 | X 100 | X 100 | X 100K | X 100K | X 100 | X 100 | X 100 | X 100 | X 1000 | X 1000 | X 100 | | | |
| Max. | | | | | | | | | | | | | | | |
| Material Heat No. | 23 | | 106 | 50 | 58 | 40 | 40 | 40 | 15 | 80 | 20 | | | | |
| 1 | 992 | 15 | 17 | 82 | 15 | 10 | <2 | 1 | <0.4 | 2 | <10 | 26 | 288 | 460 | 43 |
| 2 | 3786 | 19 | 28 | 105 | 6 | 4 | 6 | 4 | 12 | 1 | 0.4 | 41 | 305 | 472 | 44 |
| 3 | 6-0363 | 15 | 20 | 95 | 11 | 5 | 2 | 2 | 2 | 1 | 1 | 31 | 280 | 448 | 43 |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |

(Note 1) A : Hot formed with final temperature between 620°C-980°C, Air Cooling. N : Normalizing 910°Cx0.5 HR, Air Cooling. S : Stress Relieving 675°Cx0.5 HR, Air Cooling

* N : NORMALIZING 810 C X 0.5 HR, AIR COOLING (SPECIFICATION FOR MATERIAL MADE PLATE)

C.E. = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15

MAGNETIC PARTICLE EXAMINATION FOR TEE ONLY:

We hereby certify that the product described herein has been manufactured in accordance with the specifications concerned and also with the purchaser's requirements and that the test results shown herein are correct.

* 1 : T symbol used with thickness in mm * 2 : VE Value indicated on the certificate

Quality Assurance Manager

Thai Benhan Co., Ltd.

58 Soi Wai-truani, Bangskru, Pathadibene.

PO 9588

W0120416

ITEM #2



VASTAANOTTODISTUS INSPECTION CERTIFICATE

EN 10 204-3.1 (2004)

A 25257
24.10.

Tilauksen Ostaja
OLBERT METAL SALES LIMITED
 ONTARIO LST 2JB CANADA
 Tilauksen nro / Order No: 90688
 Toimitus / Delivery: DONGEBORG

Pakkaus Päivä
 26.10.2009
 Valmistajan merkintä / Mark of the Manufacturer

Tilauksen Käsitellyt
OLBERT METAL SALES LIMITED
 ONTARIO LST 2JB CANADA
 Tilauksen nro / Order No: 90688
 Toimitus / Delivery: DONGEBORG

Tarkastajan Läsnäolo
 Stamp of work's Inspector
 Vastuunottoajan läsnäolo / Stamp of Buyer
 M...
 Muut leimämerkinnät / Other Stamps

Tuotteen Tyyppi
 Delivery type
TOTAL DELIVERY

Sisäisen nro / levy nro
 Cast No / Plate No
 XXXXX XXX XX XXX

Tuotteen Käsitellyt
 Delivery type
TOTAL DELIVERY

Toleranssit / Tolerances
 ASME SA-20 ED. 2008A

Tekninen vastuunottoajan valvonta / Technical terms of Delivery and/or Official Regulation

HEAVY PLATES
 GR 70 ASME SA518-07 / STM A518-06

PRESS VESSEL STEEL ASME CODE SEC II ED 2007/ADD-09B SA20

| Porin nro / Serial No | Määrä / Quantity | Merkki / Mark | Korkeus / Height | Leveys / Width | Paino / Weight | Kpl / Pcs | Sisäisen nro / Cast Plate No | SP | NO | UT | MT |
|-----------------------|------------------|---------------|------------------|----------------|----------------|-----------|------------------------------|-----|----|----|----|
| 001 | 82.55 X 2590 | X | 6147 | 31/4X102X242 | 10320 | 1 | 79797 013 | 013 | | | |
| 001 | 82.55 X 2590 | X | 6147 | 31/4X102X242 | 10320 | 1 | 79797 031 | 031 | | | |
| 002 | 88.90 X 2590 | X | 6147 | 31/2X102X242 | 11114 | 1 | 79797 021 | 021 | | | |
| 002 | 88.90 X 2590 | X | 6147 | 31/2X102X242 | 11114 | 1 | 79797 022 | 022 | | | |
| | | 3.5" | | | | | | | | | |

*** 4 42868

CERTIFIED BY:
FILTER SOLUTIONS INC.
 THIS MATERIAL MEETS ASME
 SECTION II PART A
 2007 EDITION
 A09 ADDENDA

Raabe Steel Works

Tarkastus ja tarkastus / Testing and inspection

Minna Valkama

MINNA VALKAMA
 Valvottuun tarkastukseen / Authorized Inspector
 Yhtiön nimi / Company Name: RAUTARAJUKKI OYJ
 Kollektiivisä Rekisteröitynä / Registered Office: HELSINKI

Po 9475

Osasto / Department: PL 99, P.O. Box 99
 FIN-02101 RAAHE, FINLAND
 Puhelin / Telephone: +358 20 6011

Telokopio / Telephone: 020 622 3736
 Y-tunnus / Business ID: 0113274-9

Tilauksen toimitus, että toimitus on täysin vastustettu.
 We hereby certify that the material described above has been tested and complies with the terms of the order contract

wo 12044 Item 3

FS-180-1440-SOUP - CLOSURE



AINESTODISTUS TEST REPORT

EN 10 204-3.1 (2004)

A 25257
24.10.

Tilaisija Purchaser
OLBERT METAL SALES LIMITED
SUITE 305
Aulakkaari merkki Shipping mark

Väestönoikeus Consignee
OLBERT METAL SALES LIMITED
SUITE 305
Aulakkaari merkki Shipping mark

Luokitus Classification
N 920C, T=1, 1(MIN)XTHICK(N)(MM)

Valmistusmerkki Mark of the Manufacturer
jalkivaivakuu hapettamaton
Oxygen steel, continuous casting

Valmistuspaikka Date
26.10.2009

Valmistusmerkki Mark of the Manufacturer
jalkivaivakuu hapettamaton
Oxygen steel, continuous casting

GR 70

QUALITY SPECIFICATIONS

PRESS VESSEL STEEL ASME CODE SEC II ED 2007/ADD-08B SA20

| Pos. Item | Sulatus, kääntöno Cast, test No | Veloitus Test | | Fila Cond | RP02 KSI | REL KSI | RSH KSI | RM KSI | A % | REN /RM | RU* AS | RAZ % | Kestävyys Avg/200 | Läpivälitys KSI | Kestävyys D-X1 | Huon No | Pääte Term |
|-----------|------------------------------------|---------------|----|--------------|-------------|------------|------------|-----------|-----|------------|--------|-------|----------------------|--------------------|-------------------|------------|---------------|
| | | K2 | F | | | | | | | | | | | | | | |
| 001 | 79793 013 | N J1 | 44 | | 75 | | | | 27 | | | | | | | | |
| 001 | 79797 031 | N J1 | 43 | | 74 | | | | 27 | | | | | | | | |
| 002 | 79797 021 | N J1 | 44 | | 76 | | | | 28 | | | | | | | | |
| 002 | 79797 022 | N J1 | 45 | | 76 | | | | 29 | | | | | | | | |

K2: J1-BOTTOM, TRANSV

K3: 1B1-CH-VMSO-V0J1-05X10, BOTTOM T4, LONGIT

| Pos. Item | Sulatus, kääntöno Cast, test No | Lisätestit Impact test | | Sifonimurtuma Ductile Fracture | | | Huon No | Pääte Tempering |
|-----------|------------------------------------|------------------------|------|--------------------------------|----|----|------------|--------------------|
| | | K3 | F | 1 | 2 | 3 | | |
| 001 | 79793 013 | 1B1 | -020 | 68 | 70 | 69 | | |
| 001 | 79797 031 | 1B1 | -020 | 67 | 60 | 58 | | |
| 002 | 79797 021 | 1B1 | -020 | 38 | 79 | 50 | | |
| 002 | 79797 022 | 1B1 | -020 | 42 | 59 | 66 | | |

Raabe Steel Works

Testaus ja tarkastus Testing and Inspection

Minna Valkama
MINNA VALKAMA
Valtuutettu tarkastaja Authorized Inspector

Yhtiön nimi Company Name: RAUTARUUKKI OYJ
Kotipaikka Registered Office: HELSINKI

Osasto Address: PL 63, P.O. Box 63
FIN-02101 ROJALU, FINLAND

Puhelin Telephone: 020 6911
Puhelin Telephone: +358 20 592 2736

Talutieto Telefax: 020 662 2736
Talutieto Telefax: +358 20 592 2736

Yhteyshenkilö Contact Person: Y. Hannu Business ID: 0113276-9

Tämän todistuksen, että toteutus on ilausvaivakuun mukainen.
We hereby certify that the material described above has been tested and complies with the terms of the order contract.



**ANALYYSITODISTUS ANALYSIS CERTIFICATE
ANALYSEBESCHEINIGUNG COMPOSITIO CHIMIQUE CERTIFICAT
СЕРТИФИКАТ АНАЛИЗА**

A 25257
24.10.

Printed Date Datum Date Data
26.10.2009

Analyst % Chemical composition % Chemisch Zusammensetzung % Composition Chimique % Analyse analyser % (*-ppm)

| Sulatus nro Cast No Schmelzen Nr N° de coulée No Fusion | Koe nro Test No Prüf Nr Essai No No Test | Posiolo Item Pos. Poste Pos. | C | SI | MN | P | S | AL | NB | V | TI | CU | CR | NI | MO |
|---|--|--|------|-----|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | | | | |
| 79793 | 001 | .42 | .212 | .38 | 1.15 | .014 | .001 | .044 | .016 | .014 | .004 | .021 | 0.05 | 0.05 | .004 |
| 79797 | 001 | .41 | .207 | .38 | 1.14 | .016 | .001 | .053 | .016 | .012 | .004 | .018 | 0.05 | 0.05 | .003 |
| 79797 | 002 | .41 | .207 | .38 | 1.14 | .016 | .001 | .053 | .016 | .012 | .004 | .018 | 0.05 | 0.05 | .003 |



CBQ=C+MN/6+(CR+MO+V)/5+(NI+CU)/15

Raahе Steel Works

Testaus ja tarkastus
Prüfung und Kontrolle
Etsästä ja kontrolle
Kraahеn ja kontrolle tarkastus

Minna Valikama
MINNA VALIKAMA
Valikama tarkastus
Werkstoffkontrolle
Yhteisön Yhtiö Oy
Kokipäästä rekisteröity toimipaikka: HELSINKI

Authorized Inspector
Inspector autorisat
Yhteisön Yhtiö Oy
Office Address: FIN-02101 RAAHЕ, FINLAND
Puhelin Telephone: +358 20 5911
Faksin Telephone: 020 592 2736
+358 20 592 2736

Steel manufactured and supplied by Raahе Steel Works is free from restriction.
(Produced and supplied by Raahе Steel Works «Raahе Steel Works» is not restricted)
Acierul fabricat și furnizat de Raahе Steel Works este liber de restricții.

Yhteisön Yhtiö Oy
Business ID: 0113276-9

ESSAR Steel Algoma Inc. 105 West St., Sault Ste. Marie, Ontario, Canada, P6A 7B4

| | | | | | | | |
|---|--------------------------|-------------------------|------------------------|----------------------|-------------------------|-----------|---------------------|
| CUSTOMER PURCHASE ORDER NUMBER 13144 - STK | ENTRY DATE 2010/01/19 | SHIP DATE 2010/02/07 | TALLY NUMBER 161503 | SHIPPERS NUMBER - | BEST TRANSFER-704166 ON | -2050 :TK | MILL ORDER 57462 |
|---|--------------------------|-------------------------|------------------------|----------------------|-------------------------|-----------|---------------------|

CHARGE TO CUSTOMER NAME & ADDRESS
CANADIAN PLATE AND PROFILES INC
920 KAMATO ROAD
MISSISSAUGA ONTARIO
L4W 2R6

SHIP TO CUSTOMER NAME & ADDRESS
CANADIAN PLATE AND PROFILES INC
920 KAMATO ROAD
MISSISSAUGA ONTARIO

MILL TEST REPORTS
ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES

CUSTOMER SPECIFICATION
HR PLATE - CARBON - ASME SA516 GR 70 (09B) - CVNL 15/12 FT LBS AT -50 F -
C 0.23 MAX, D.O. CE 0.45 MAX - FINE GRAIN - NORMALIZED 30 MINUTES MIN. PER
INCH @ 1670 F - PVQ - NORMALIZED - FLATNESS 1/2 A-20

SUPPLEMENTARY INSTRUCTIONS
TEST CERT 1: SM1 905-206-9449 TEST CERT 2: PLATE TEST COUPON:
INSR T/R TEST REPORTS REQUIRED 2000132951 PF
CUST USE RESALE 2010/02/08 16:06

MEETS EN 10204 3.1
ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM
ALL HEATS FULLY KILLED
HEATS INDICATED WITH (+) FINE GRAINED
HEATS INDICATED WITH (*) MADE IN CANADA WITH DOMESTIC AND NORTH AMERICAN MATERIALS
* * * * * P R O D U C T S H I P P E D * * * * * SECTION 10.1.1.1 EDITION
CUSTOMER ITEM 00007 OUR ITEM 004 DIMENSIONS 2.000 X 120 X 288 " 2007 ADDENDA

| PLATE NUMBER | HEAT | NO. PIECES | WEIGHT | PLATE NUMBER | HEAT | NO. PIECES | WEIGHT |
|--------------|----------|------------|--------|--------------|------|------------|--------|
| 0934K-01 | 0934K-01 | 1 | 19602 | | | | |

TENSILE TESTS:

| PLATE NUMBER | SRCE | GAUGE | COND METH | DIR | YIELD TENSILE KSI | TENSILE KSI | % ELONG |
|--------------|------|--------|-----------|------|-------------------|-------------|---------|
| 0934K 27535 | 166" | 2.0000 | N | .2 T | 45.0 ✓ | 72.1 ✓ | 34(2") |

IMPACT TESTS:

| PLATE NUMBER | SRCE | GAUGE | COND METH | DIR | SIZE TEMP | FTLB | AVG |
|--------------|------|--------|-----------|-----|-------------|------|----------|
| 0934K 27535 | 166" | 2.0000 | N | CVN | L FULL -50F | 63 | 41 52 52 |

****WARNING****
THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

PO 9475 WO 12041 Item 4 FS-180-1440-SOUR - COVERAGE 1 OF 3

J. JOHNSTON
MANAGING METALLURGIST

THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-7674 COLLECT FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT

CERTIFIED BY: [Signature]

ESSAR Steel Algoma Inc.

105 West St., Sault Ste. Marie, Ontario, Canada, P6A 7B4

| | | | | | | |
|---|--------------------------|-------------------------|------------------------|---|------------------------------------|---------------------|
| CUSTOMER PURCHASE ORDER NUMBER 13144 - STK | ENTRY DATE 2010/01/19 | SHIP DATE 2010/02/07 | TALLY NUMBER 161503 | SHIP TO CUSTOMER NAME & ADDRESS CANADIAN PLATE AND PROFILES INC 920 KAMATO ROAD MISSISSAUGA ONTARIO L4W 2R6 | CARRIER BEST TRANSFER-704166 ON | MILL ORDER 57462 |
|---|--------------------------|-------------------------|------------------------|---|------------------------------------|---------------------|

MILL TEST REPORTS
 ESSAR STEEL ALGOMA INC HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES

SHIP TO CUSTOMER NAME & ADDRESS
 CANADIAN PLATE AND PROFILES INC
 920 KAMATO ROAD
 MISSISSAUGA ONTARIO

CUSTOMER SPECIFICATION
 HR PLATE - ASME SA516 GR 70 (09B) - CVNL 15/12 FT LBS AT -50 F -
 C 0.23 MAX, D.O. CE 0.45 MAX - FINE GRAIN - NORMALIZED 30 MINUTES MIN. PER
 INCH @ 1670 F - PVQ - NORMALIZED - FLATNESS 1/2 A-20

J. JOHNSTON
 MANAGING METALLURGIST

THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-2624 COLLECT FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT.

TEST CERT 1: SM1 905-206-9449 TEST CERT 2: PLATE TEST COUPON:

INSP T/R TEST REPORTS REQUIRED 2000132951 PF
 CUST USE RESALE 2010/02/08 16:06

| | | | | | | | | | | | | | | |
|-------------|------|------|-------|-------|------|------|------|------|------|-------|-------|-------|----|-----|
| HEAT (WT %) | C | MN | P | S | SI | CR | NI | CU | MO | AL | CB | V | B | DO |
| 0934K** | 0.19 | 1.07 | 0.013 | 0.002 | 0.35 | 0.03 | 0.14 | 0.05 | 0.01 | 0.036 | 0.000 | 0.015 | CA | .39 |
| | .003 | | | | | | | | | | | | | |

WARNING
 THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

NUCOR
PLATE MILL

P.O. Box 279
Winston, NC 27386
(757) 355-3700

Mill Test Report

Page 2



Issuing Date: 02/04/2010 BA No.: 232415 Load No.: 253798 Our Order No.: 789225
 Vehicle No: NOKL 725124 Sold To: SAMUEL PLATE SALES 12 TEAL AVENUE STONEY CREEK HAMILTON, ON L8P4Z3
 Specification: B6000 x 96.000" x 480.000" ASTM A518 70-00/ASME SA518 70 BA818-436 PVC 2009 Addenda

Cust. Order No.: M64628
 Ship To: SAMUEL PLATE SALES CO STEEL CARE (HAMILTON TRANSFER) STATION 3477 480 LONO WOOD RD SOUTH HAMILTON, ON L8W3H1

Marking:

| Heat No | C | Mn | P | S | Si | Cu | Ni | Cr | Mo | Al(%) | V | Nb | Ti | N | Ca | B | Sn | CEQ | PCMI |
|---------|------|------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|--------|--------|--------|------|------|------|
| 0500842 | 0.19 | 1.02 | 0.011 | 0.003 | 0.17 | 0.24 | 0.08 | 0.10 | 0.02 | 0.020 | 0.008 | 0.002 | 0.001 | 0.0008 | 0.0001 | 0.0012 | 0.41 | 0.27 | |
| 0500843 | 0.19 | 1.02 | 0.013 | 0.004 | 0.18 | 0.19 | 0.08 | 0.09 | 0.01 | 0.024 | 0.007 | 0.002 | 0.001 | 0.0009 | 0.0001 | 0.009 | 0.39 | 0.26 | |

| Plate Serial No | Tensile Test | | Elongation | | Charpy Impact |
|-----------------|--------------|--------|------------|---------|---------------|
| | Force | Dir. | % in 2" | % in 4" | |
| 0500842-07 | 3 | 9.80 T | 53,600 | 79,100 | 24.1 |
| 0500842-08 | 3 | 9.80 T | 56,000 | 77,600 | 17.9 |
| 0500843-01 | 2 | 8.53 T | 54,300 | 78,300 | 21.0 |

CERTIFIED BY:
FILTER SOLUTIONS INC.
 THIS MATERIAL MEETS ASME
 SECTION II PART A
 2007 EDITION
 703 ADDENDA

W01204L Item 9
 Po 9356 FS-1440 LOGS 100 PCS.

CERTIFIED BY:
 TEST REPORT
 SHIPPED ON:
 YOUR PK:
 OUR ORDER:
 DATE:

Manufactured to fully stated tensile strength by (ASME) Ac Service Vessels or weld repair area not performed on this material. We hereby certify that the contents of this report are accurate and correct. All test results and calculations performed by the material manufacturer are in compliance with the applicable specifications, including customer specifications.

Yield by 0.2%: method unless otherwise specified. Ceq = C + Mn/6 + Ni/6 + Cr/5 + Cu/5 + Nb/5 + Ti/5 + V/5 + B. (0.00084) in the USA. ISO 9001:2008 certified (000441) in SRI Quality System Register (09943-09) PLO 07/23/EC 172 Annex 1, Para 4.3 Conforms. DMI 50049 3.1 (B/E) 11/2004, DMI EN 10204 3.1 (2005) compliant. For ASME grades only. Quality Assurance certificate 24-04870A-341

T. A. Depress, Metallurgist
 02/04/2010 4:51:58 PM

698474



CERTIFICADO DE INSPECCION
 Inspection Certificate - Certificat de Réception

CLIENTE / Customer / Client
 DIN EN 10204 / 3.1
 ISO 10474 / 3.1

ULMA FORJA, S.COOP.
 Bº Zubillaga, 3 - Apdo. 14
 20500 ORMAI (Gipuzkoa) SPAIN
 Tel: 34 - 943 780632
 Fax: 34 - 943 781808
 E-mail: ulma@ulmaproving.com

SGS 192294

SGS 800203

130074
 HOJA: Page: 1

FECHA: 17/02/2010 N.º No. 11410AES - EDMONTON

Certified acc. PED 97/23/EC
 by TDV Rheinland
 N.º 01 202 EQ 02 7443

15747

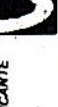
DEPARTAMENTO QUALITY ASSURANCE

DE
 of - de 14/01/2010

SU PEDIDO N.º 11410AES - EDMONTON
 Your Order No. Votre Cde. N.º

PRODUCTO FLANGES
 Article - Produit

MARCA DEL FABRICANTE
 Mark of factory
 Marque du fabricant



DEPARTAMENTO QUALITY ASSURANCE

DE
 of - de 14/01/2010

SU PEDIDO N.º 11410AES - EDMONTON
 Your Order No. Votre Cde. N.º

PRODUCTO FLANGES
 Article - Produit

REQUISITOS ASME B16.5-09

ARTIMATERIALES

ASME SA106N-06

ACE MR-01-75/ISO15166-2-08 & MR-01-03/03

REQUISITOS ASME B16.5-09

ARTIMATERIALES

| PARTIDA Item | CANTIDAD Quantity | DESCRIPCION Description | OBSERVACIONES Remarks | COLADA N Heat No | RESISTENCIA T. Strength | RESISTENCIA Y. Strength | RESISTENCIA P. Strength | ALARGAM. Elongation | ESTRUCION. Fib. Area | RESILIENCIA Impact Test | DUREZA Hardness |
|--------------|-------------------|---------------------------|-----------------------|------------------|-------------------------|-------------------------|-------------------------|---------------------|----------------------|-------------------------|-----------------|
| | | | | | | | | | | | |
| 3 | 383 | BLIND 2.160LB RF A105N | NE | 377A9 | 518 | 312 | 29.00 | 53.30 | 150 | 150 | |
| 74 | 24 | BLIND 10.600LB RF A105N | NE | 20A0 | 514 | 310 | 28.80 | 52.40 | 148 | 156 | |
| 79 | 180 | WIN 2.600LB S180 RF A105N | NE | 377A9 | 518 | 311 | 30.80 | 57.00 | 150 | 157 | |

| COLADA N Heat No | COMPOSICION QUIMICA - STEEL MARKER'S LADLE ANALYSIS - ANALYSE CHIMIQUE | | | | | | | | | | | | | | |
|------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | C % | Si % | Mn % | P % | S % | Cr % | Ni % | Mo % | Nb % | V % | Cu % | Al % | Ti % | N % | CEq % |
| 20A0 | 0.180 | 0.280 | 0.840 | 0.014 | 0.001 | 0.100 | 0.080 | 0.040 | 0.007 | 0.001 | 0.250 | 0.024 | 0.000 | 0.000 | 0.380 |
| 27A0 | 0.210 | 0.280 | 0.860 | 0.010 | 0.001 | 0.070 | 0.120 | 0.060 | 0.007 | 0.001 | 0.310 | 0.026 | 0.000 | 0.000 | 0.403 |
| 377A9 | 0.210 | 0.250 | 0.860 | 0.026 | 0.010 | 0.150 | 0.120 | 0.040 | 0.007 | 0.008 | 0.280 | 0.024 | 0.000 | 0.000 | 0.420 |

EL INSPECTOR
 Works Inspector - L'Inspecteur

ULMA FORJA S.COOP.
 3 años de garantía de calidad
 Quality Assurance Dept.

CERTIFIED BY:
 FILTER SOLUTIONS INC.

THIS MATERIAL MEETS ASME
 SECTION II PART A
 2007 EDITION
 Po 9588
 W012041
 ITEM# 10

NORMALIZED AT 900 C AND ALLOWED TO COOL IN STILL AIR

ADDENDA

Observations:
 Remarks
 Observations

(*) OBSERVACIONES:
 Remarks
 Observations

Las dimensiones y la condición superficial se hallaron satisfactorias.
 Dimension and surface condition were found acceptable.
 Les dimensions et l'état de surface sont satisfaisants.

Los materiales citados cumplen las normas aplicables.
 Manufacturing requirements are satisfied.
 Les normes applicables sont respectées.

CLIENTE / Customer / Client

CERTIFICADO DE INSPECCION

Inspection Certificate - Certificat de Réception



ULMA FORJA, S.COOP.



Bº Zubillaga, 3 - Apto. 1º
20560 ONATI (Gipuzkoa) SPAIN
Tel.: 34 - 943 790552
Fax: 34 - 943 781882
E-mail: ulma@ulmapiping.com

77933

Certified acc. PED 97/23EC-AD2000-WK
by TÜV Rheinland
N.º 01 202/EQ 02 7443

MARCA DEL FABRICANTE
Mark of factory
Marque du fabricant



DEPARTAMENTO QUALITY ASSURANCE

Department

HOJA: 2
Page: 2

FECHA: 06/07/2010
Date:

N.º 132241
No.

DE 19/05/2010
of. de

SU PEDIDO N.º 051910AES - EDMONTON
Your Order No.

ASME B16.5-09

FLANGES

NORMAS APLICABLES
Requirements - Normes Applicables:

MATERIAL CORRESPONDIENTE
ASTMA105N-07
ASTME SA105N-07

MODO DE FUSION (*)
Steel Making - Elaboration de l'acier
E = Elec. Y = Origéno básico

NACE MR-01-75/ISO15166-2-05 & MR-01-03/03
CAN/CSA-Z246.12
Gr.248 CAT1

| PARTIDA Item Poste | CANTIDAD Quantity Quantité | DESCRIPCION Description Description | LOTE | OBSERVACIONES Remarks Observations | COLADA N. Heat No N.º Coule | RESISTENCIA T. Strength Tensile Rupt N/mm2 | LIMITE ELAST. Y Strength 0.2 % N/mm2 | ALARGAM. Elongation At Break Lc. % | ESTRICCION Red. Area Striction % | RESILIENCIA Impact Test Resilience Joules | MEDIA Average Moynne | | DUREZA Hardness Dureté HB |
|--------------------------|----------------------------------|---|------|--|-----------------------------------|---|---|---|---|--|----------------------------|----------------|------------------------------------|
| | | | | | | | | | | | MECA Mechanics | TEMP. Temp. | |
| 40 | 99 | BLIND 4 150LB RF A105N | 1680 | NE | 212V0 | 508 | 307 | 34,00 | 61,90 | | | 145 156 | |
| 41 | 36 | BLIND 6 600LB RF A105N | 1600 | NE | 204V0 | 508 | 313 | 32,80 | 61,00 | | | 147 155 | |
| 55 | 300 | WN 2 800LB S160 RF A105N X | 1740 | NE | 275V0 | 527 | 341 | 27,90 | 52,80 | | | 153 155 | |

COMPOSICION QUIMICA - STEEL MAKER'S LADLE ANALYSIS - ANALYSE CHIMIQUE

| COLADA N. Heat No N.º Coule | C % | Si % | Mn % | P % | S % | Cr % | Ni % | Mo % | Nb % | V % | Cu % | Al % | Ti % | N % | CEq % |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 204V0 | 0,200 | 0,230 | 0,870 | 0,011 | 0,001 | 0,080 | 0,100 | 0,040 | 0,008 | 0,001 | 0,240 | 0,025 | 0,000 | 0,000 | 0,392 |
| 212V0 | 0,210 | 0,250 | 0,850 | 0,010 | 0,001 | 0,080 | 0,090 | 0,030 | 0,005 | 0,003 | 0,220 | 0,022 | 0,000 | 0,000 | 0,395 |
| 275V0 | 0,200 | 0,240 | 0,840 | 0,008 | 0,004 | 0,080 | 0,090 | 0,030 | 0,008 | 0,001 | 0,240 | 0,040 | 0,000 | 0,000 | 0,384 |

- Les dimensions y la condition superficial se hallaron satisfactoria
- Dimension and surface condition were found acceptable
- Les dimensions et états de surface sont satisfaisants
- Los metáneos citados cumplen las normas aplicables:
- Manufacturing requirements are satisfied
- Les normes applicables sont respectées

EL INSPECTOR
Works Inspector - L'Inspecteur



(*) OBSERVACIONES:
Remarks
Observations

CERTIFIED BY:

FILTER SOLUTIONS INC.
THIS MATERIAL MEETS ASME

PO # 2588 WO 12041 Item 10

SECTION II PART A

2007 EDITION

ADDENDA

Aug



**BOILERS AND PRESSURE VESSELS
SAFETY DIVISION**
3300 Bloor Street West
4th Floor, West Tower
Toronto, Ontario
CANADA M8X 2K4

Show Symbolic of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

A U

**STATUTORY DECLARATION
Registration of Fittings**

ATTN:

I, **M^o LUJSA ORUETA - QUALITY MANAGER**

(Name & Position, e.g. President, Plant Manager, Chief Engineer)

of **ULMA FORJA S.COOP.**

(Name of Manufacturer)

Located at:

(Plant Address)

(Telephone #)

(Fax #)

I do solemnly declare that the fittings listed hereunder, which are subject to the Technical Standards and Safety Act, 2000, and Regulations for Boilers and Pressure Vessels comply with all of the requirements of

ASME B16.5

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of **ISO 9001:2000** which has been verified by the following authority, **LLOYD S REGISTER QUALITY ASSURANCE**. The items covered by this declaration, for which I seek registration, are category **B** type fittings. In support of this application, the following information and/or test data are attached as follows:

CATALOGUE

Declared before me at **ORATE** in the name of **ULMA FORJA S.COOP.**
the **15th** day of **July** **AD-20 03**

Commissioner for Oaths:

ROBERTO OLIVER PUERTOLAS.
(Printed name)

Signature

FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the Technical Standards and Safety Act, 2000, and Regulations for Boilers and Pressure Vessels and CSA Standard B51 and is accepted for registration in Category **B**

CRN: **088853.5**

Registered by: **K. Barron**

Dated: **AUG 27/03**

NOTE: This registration expires on **AUG 27/2013**

Pressure Vessels
Safety Division

REGISTERED

CRN: **088853.5**

Signed: **K. Barron**
AUG 27/03

Document Form: TSSA Statutory Declaration Form, Aug 21, 2003 Rev. 01.doc

**NATURAL DIMENSIONS IS LIMITED TO
ASME/ANSI B16.5 ONLY**

8-724808

信盛(姜堰)五金锻造有限公司



SHINSEI (JIANGYAN) STEEL FLANGES CO., LTD.

江苏省姜堰市经济开发区天目路688号(邮编: 225500)

NO.688, TIANMU ROAD, JIANGYAN ECONOMIC DEVELOPMENT ZONE,

JIANGYAN CITY, JIANGSU, CHINA (225500)

TEL:0523-88206028

FAX:0523-88206058

E-mail:shinsei@ssflanges.com.cn

SSWJ/QD8.2.4A-04

ACCORDING TO EN10204-3.1/2004

MILL TEST & INSPECTION CERTIFICATE

CUSTOMER:

CERT NO: 09030017

ORDER NO: AG0049

INVOICE NO:SS08120008

L/C NO:

DATE:03/12/09

PAGE:3

| ITEM | RAW MATERIAL HEAT NO. | SHINSEI HT. CD. | DESCRIPTION | QUANTITY | SPECIFICATION: ASTM /ASME SA105N - 2005 |
|------|-----------------------|-----------------|------------------------------|----------|--|
| 009 | 08-1-1100 | A241 | FLANGE WNRF S/120 8" 600Lb | 20 PCS | DIMENSION: ASME/ANSI B16.5-2003 SURFACE: BY VISUAL...GOOD |
| 010 | 08-2-0780 | A194 | FLANGE WNRF S/160 2" 600Lb ← | 365 PCS | |
| 010 | 08-2-0780 | A194 | FLANGE WNRF S/160 2" 600Lb | 35 PCS | |
| 011 | 08-2-0780 | A194 | FLANGE WNRF XXS 2" 600Lb | 30 PCS | |
| 012 | 1303-22124 | A154 | FLANGE BLRF 5" 150Lb | 15 PCS | |
| 013 | 2301-05641 | A071 | FLANGE BLRF 14" 150Lb | 10 PCS | |
| 014 | 1203-17932 | A070 | FLANGE BLRF 2" 300Lb | 35 PCS | |

| ITEM | CHEMICAL COMPOSITION (%) | | | | | | | | | | | |
|------|--------------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|
| | C | Si | Mn | P | S | Cu | Cr | Ni | Mo | V | Cb(Nb) | CE |
| Min | - | 0.100 | 0.600 | - | - | - | - | - | - | - | - | - |
| Max | 0.350 | 0.350 | 1.050 | 0.035 | 0.040 | 0.400 | 0.300 | 0.400 | 0.120 | 0.080 | - | 0.430 |
| 009 | 0.190 | 0.170 | 0.980 | 0.011 | 0.009 | 0.090 | 0.060 | 0.030 | 0.013 | 0.003 | 0.002 | 0.377 |
| 010 | 0.190 | 0.150 | 0.920 | 0.018 | 0.007 | 0.100 | 0.110 | 0.040 | 0.011 | 0.002 | 0.002 | 0.377 |
| 010 | 0.190 | 0.150 | 0.920 | 0.018 | 0.007 | 0.100 | 0.110 | 0.040 | 0.011 | 0.002 | 0.002 | 0.377 |
| 011 | 0.190 | 0.150 | 0.920 | 0.018 | 0.007 | 0.100 | 0.110 | 0.040 | 0.011 | 0.002 | 0.002 | 0.377 |
| 012 | 0.210 | 0.240 | 0.950 | 0.018 | 0.011 | 0.030 | 0.040 | 0.010 | 0.0042 | 0.0052 | 0.0014 | 0.381 |
| 013 | 0.210 | 0.260 | 0.960 | 0.021 | 0.010 | 0.030 | 0.040 | 0.010 | 0.005 | 0.002 | 0.001 | 0.382 |
| 014 | 0.190 | 0.210 | 0.900 | 0.016 | 0.004 | 0.020 | 0.050 | 0.010 | 0.004 | 0.002 | 0.0006 | 0.353 |

| ITEM | MECHANICAL TEST | | | | | Remark: HEAT TREATMENT:NORMALIZE AT 860°C MATERIAL IN ACC. WITH NACE MR. 01.75/03(ONLY HARDNESS) MERCURY FREE ISO9001:2000 & PED97/23/EC CERTIFIED AD2000-MERKBLATT WO CERTIFIED |
|------|------------------------|----------------------|----------------|------------|---------------|---|
| | Tensile Strength (KSI) | Yield Strength (KSI) | Elongation (%) | R of A (%) | Hardness (HB) | |
| Min | 70.0 | 36.0 | 22.0 | 30.0 | - | |
| Max | - | - | - | - | 187.0 | |
| 009 | 72.8 | 44.7 | 31.2 | 61.4 | 137.0 | |
| 010 | 74.7 | 48.5 | 34.0 | 59.4 | 137.0 | |
| 010 | 74.7 | 48.5 | 34.0 | 59.4 | 137.0 | |
| 011 | 74.7 | 48.5 | 34.0 | 59.4 | 137.0 | |
| 012 | 71.5 | 40.4 | 32.0 | 64.8 | 137.0 | |
| 013 | 72.9 | 49.9 | 28.8 | 65.5 | 137.0 | |
| 014 | 74.3 | 40.9 | 35.0 | 67.4 | 140.0 | |

WE CERTIFY THE ABOVE MENTIONED FLANGES HAVE BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN

刘永强

沙小梅

Q.C. MANAGER

INSPECTOR

CERTIFIED BY:

接下页

PO # 9588

WO12041 Item 10

FILTER SOLUTIONS INC.

THIS MATERIAL MEETS ASME

SECTION II PART A

2007 EDITION

ADDENDA

7/13



TECHNICAL STANDARDS & SAFETY AUTHORITY
 14th Floor, Centre Tower
 3300 Bloor Street West
 Toronto, Ontario
 Canada M8X 2X4

Show details of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

STATUTORY DECLARATION
Registration of Fittings

I, LOW ANN KOK, Quality Manager
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Shinsei (Jiangyan) Steel Flanges Co., Ltd. - No 688 Tianmu West Road, Jiangyan Economic Development Zone
(Name of Manufacturer)

Located at Jiangyan City, Jiangsu, China (225500) 86 523 88206028 86 523 88206058
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the *Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation*, comply with all of the requirements of ASME B 16.5, ASME B16.47
(Title of recognized North American Standard)
 which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service.

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001:2000 which has been verified by the following authority, TUV

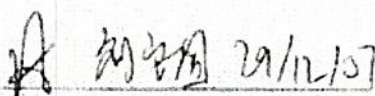
The items covered by this declaration, for which I seek registration, are category B- Pipe flanges type fittings. In support of this application, the following information and/or test data are attached as follows:
 Catalog of materials, dimensions and pressure class ratings. TUV certificate notification.
(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____
 the _____ day of _____ AD 20____.

Commissioner for Oaths:

(Printed name)

(Signature)


(Signature of Declarer)

| | |
|---|--|
| <p style="text-align: center;">FOR OFFICE USE ONLY</p> <p>To the best of my knowledge and belief, the application meets the requirements of the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i>, CSA Standard B61 and is accepted for registration in Category <u>B</u></p> <p>CRN: <u>0B2121.75</u></p> <p>Registered by: <u>NORMAN NGAI</u></p> <p>Dated: <u>MAR. 20, 2008</u></p> <p>NOTE: This registration expires on <u>JAN. 17, 2018</u></p> | <p>Technical Standards and Safety Authority</p> <p>Boilers and Pressure Vessels Safety Program</p> <p>REGISTERED</p> <p>CRN: <u>0B2121.75</u></p> <p>Signed: <u>Norman Ngai</u></p> <p>Date: <u>MAR. 20, 2008</u></p> |
|---|--|



UNITED STATES STEEL

TUBULAR PRODUCTS

DATE: 02/21/08
TIME: 04:15:30
SERIAL NO: L0021511

CERTIFIED TEST REPORT

(IN ACCORDANCE WITH ISO 10474/EN10204/DIN50049 "Type 3.1")

| | | | |
|---|-------------------------|---|--------------------------|
| MILL ORDER ITEM NO TT02839 06 | SHIPPER'S NO. T62900 | P.O. NUMBER G1610865 | VEHICLE ID PW9688_ONT |
| SOLD TO ADDRESS COMCO PIPE & SUPPLY CO. RR#3 KERR INDUSTRIAL PARK ABERFOYLE GUELPH ON N1H 6H9 | | MAIL TO ADDRESS VENDOR USS TUBULAR PRODUCTS 2199 EAST 28TH ST. LORAIN, OH 44055 | |

SPECIFICATION AND GRADE

PIPE CARBON SMLS STD PIPE API 5L-43RD EDITION DATED 3/04 PSL-1 GRADE B AND GRADE X42 ASTM A53-06A
ASTM A106-06A GRADE B QUAD STENCIL ASME SA53-2004 EDITION 2006 ADDENDUM ASME SA106-2004 EDITION
GRADE B BLK REG MILL COAT PE BEV 30 DEG MEETING ALL THE APPLICABLE REQUIREMENTS OF NACE STANDARD
MR-01-75 *:2003

| MATERIAL COND. | AS ROLLED | TENSILE | | TEST COND. | GAUGE WIDTH IN | YIELD MIN MAX | TENSILE PSI MIN MAX | ELONG % (IN 2") MIN MAX | HARDNESS SCALE: HRB MIN MAX | MIN HYDRO PSI | n (in/in) DWELL(SEC) |
|----------------|-----------|----------------------------|------------------------------|------------|---------------------------|---------------------|------------------------------|----------------------------------|--------------------------------------|------------------|-------------------------|
| | | YIELD PSI MIN MAX | TENSILE PSI MIN MAX | | | | | | | | |
| A60357 | STRIP/L/B | AR | 0.750 | AR | 0.750 | 42000 | 70000 | 24.0 | 99.0 | 3000 | 5 |
| B65571 | STRIP/L/B | AR | 0.750 | AR | 0.750 | 48000 | 76500 | 39.0 | 80.8 | 3000 | 5 |
| | | ** | END OF DATA THIS SHEET ** | ** | END OF DATA THIS SHEET ** | | | 36.0 | 81.3 | 3000 | 5 |

| PRODUCT IDENTIFICATION | TYPE | L - LONGITUDINAL U-UPSET | | | | | | | | | | B - BODY | | | | | | | | | | W - WELD | C.E.* MAX | | |
|------------------------|------|-----------------------------------|---------------------------|------|---------------------------|-----|--|-----|-----|-----|------|----------------|-----|-------|------|------|----------|--|--|--|--|----------|--------------|--|-----|
| | | T - TRANSVERSE NM - NORMALIZED | | | | | QT - QUENCH & TEMPERED SR - STRESS RELIEVED | | | | | AR - AS ROLLED | | | | | B - BODY | | | | | | | | |
| | | C | MN | P | S | SI | CU | NI | CR | MO | AL | N | V | B | TI | CB | CO | | | | | | | | |
| A60357 | HEAT | :19 | 1.06 | 0.07 | 0.05 | .21 | .03 | .07 | .06 | .02 | .028 | | .00 | 0.001 | .002 | .001 | | | | | | | | | .50 |
| A60357 | PROD | :22 | 1.08 | 0.06 | 0.05 | .22 | .03 | .07 | .06 | .02 | .034 | | .00 | 0.000 | .004 | .003 | | | | | | | | | .39 |
| A60357 | PROD | :19 | 1.11 | 0.07 | 0.05 | .24 | .03 | .07 | .06 | .02 | .045 | | .00 | 0.000 | .004 | .002 | | | | | | | | | .42 |
| B65571 | HEAT | :19 | 1.09 | 0.07 | 0.01 | .20 | .03 | .02 | .06 | .02 | .021 | | .00 | 0.001 | .002 | .001 | | | | | | | | | .43 |
| B65571 | PROD | :20 | 1.08 | 0.07 | 0.02 | .20 | .03 | .02 | .06 | .02 | .028 | | .00 | 0.002 | .003 | .002 | | | | | | | | | .39 |
| B65571 | PROD | :20 | 1.09 | 0.08 | 0.02 | .20 | .03 | .02 | .06 | .02 | .026 | | .00 | 0.002 | .004 | .002 | | | | | | | | | .40 |
| | | ** | END OF DATA THIS SHEET ** | ** | END OF DATA THIS SHEET ** | | | | | | | | | | | | | | | | | | | | .40 |

CERTIFIED BY:

C.E. IS BASED ON THE FOLLOWING EQUATION(S): CE=C+(MN/6)+(CR+MO+V)/5+(NI+CU)/15

FILTER SOLUTIONS INC.

DECIMAL POSITIONS FOR ELEMENTS ARE INDICATED BY THE LEFT MARGIN, VERTICAL DOTTED LINE OR DECIMAL POINT. THIS MATERIAL MEETS ASME SECTION II PART A

Wo 12041 Item 11

PO # 7728
2" SCH 160 SA-106B

PAGE SECTION II PART A
2007
ADDENDA



UNITED STATES STEEL

TUBULAR PRODUCTS

CERTIFIED TEST REPORT

(IN ACCORDANCE WITH ISO 10474/EN10204/DIN50049 "type 3.1")

DATE: 02/21/08
TIME: 04:15:30
SERIAL NO: L0021511

| | | | | | | | | | | | | | | | | | |
|--|---------------------------------------|-------------------------|-------------------------|------------------------------|------------------------|----------|----------|------|--------------------------|-------------------------------------|---|---|-----|---|---|---|-----|
| MILL ORDER/ITEM NO TT02839 06 | SHIPPERS NO T62900 | P.O. NUMBER G1610865 | O.D. 2.375 (60.325) | | WALL 0.344 (8.737) | | in (mm) | | | | | | | | | | |
| MATERIAL COND: AS ROLLED | | | | | | | | | | | | | | | | | |
| PRODUCT IDENTIFICATION A60357 B65571 | FLAT | BEND | GRAIN SIZE | MIN COLLAPSE | DIR | TEST LOC | TEMP DEG | SIZE | TEST COND. | CHARTER VANTCH IMPACT TESTING FIFBS | | | | | | | |
| | | | | | | | | | | 1 | 2 | 3 | AVG | 1 | 2 | 3 | AVG |
| | | OK OR | ** | ** END OF DATA THIS SHEET ** | | | | | | | | | | | | | |
| LEGEND | L - LONGITUDINAL | | T - TRANSVERSE | | B - BODY | | W - WELD | | HAZ - HEAT AFFECTED ZONE | | | | | | | | |
| | TESTING / INSPECTION INFORMATION | | | | | | | | | | | | | | | | |
| | RESULTS / COMMENTS | | | | | | | | | | | | | | | | |
| FULL LENGTH VISUAL | X | | | | | | | | | | | | | | | | |
| FULL LENGTH EMI | | | | | | | | | | | | | | | | | |
| FULL LENGTH MPI | OD _____ O.D/D _____ L _____ LT _____ | | | | | | | | | | | | | | | | |
| FULL LENGTH UT | ID _____ O.D/D _____ L _____ LT _____ | | | | | | | | | | | | | | | | |
| END AREA INSPECTION (PLAIN END) | MPI _____ UT _____ | | | | | | | | | | | | | | | | |
| SPECIAL END AREA (SEA) INSP | MPI _____ UT _____ | | | | | | | | | | | | | | | | |
| FULL LENGTH DRIFT | DRIFT MANDREL SIZE _____ | | | | | | | | | | | | | | | | |
| ADDITIONAL NOTES/COMMENTS | | | | | | | | | | | | | | | | | |
| MELTED AND MANUFACTURED IN THE USA. NO REPAIRS BY WELDING. NO MERCURY OR MERCURY COMPOUNDS ARE ADDED TO THE STEEL AND ALL MERCURY BEARING EQUIPMENT IS PROTECTED BY A DOUBLE BOUNDARY OF CONTAINMENT. PIPE ALSO MEET THE REQUIREMENTS OF ASTM A106 GRADE C & ASME SA106 GRADE C | | | | | | | | | | | | | | | | | |

THIS IS TO CERTIFY THAT THE PRODUCT DESCRIBED HEREIN WAS MANUFACTURED, SAMPLED, TESTED AND/OR INSPECTED IN ACCORDANCE WITH THE SPECIFICATION AND FULFILLS THE REQUIREMENTS IN SUCH RESPECTS.

PREPARED BY THE OFFICE OF: J. MAJKRZAK - MANAGER, Q.A.

DATE: 02/21/08