



Technical Standards and Safety Authority
 345 Carlingview Drive
 Toronto, Ontario M9W 6N9
 www.tssa.org

Manufacturer's Data Report for Pressure Vessels
Technical Standards and Safety Act
 Boilers and Pressure Vessels Regulation

Partial (If box is checked, send the original form with shipment to site)

NOTE: Upon shipment of a pressure vessel, this form fully and correctly filled in must be submitted to the office of the Chief Inspector in the province of installation in accordance with the Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation governing the construction and installation of pressure vessels.

| | |
|--|--|
| Manufactured and Certified by: (Name and Street Address) | |
| Manufactured For: (Name and Street Address) | |
| Ultimate Owner: (Name and Street Address) | |
| Location of Installation: (Name and Street Address) | |

Pressure Vessel Type:

| | | | |
|--|---|--------------------------------------|--------------------------------------|
| _____ (Horizontal, vertical, etc.) | _____ (Tank, jkt. vessel, heat exch., etc.) | _____ (Manufacturer's Serial Number) | _____ (Canadian Registration Number) |
| _____ (Drawing Number) | _____ (National Board Number) | _____ (Year Built) | _____ (Overall Length) |
| The design, construction, and workmanship of the vessel conforms to CSA B51 and: | ASME Section _____ Div _____ | Edition _____ | Code Case No(s) _____ |

Shell(s):

| Courses | | | Material | Thickness | | Longitudinal Joints | | | Circumferential Joints | | |
|---------|----------|--------|---------------------|-----------|-------|---------------------|------------------|------|------------------------|------------------|------|
| Qty | Diameter | Length | Spec./Grade or Type | Nom. | Corr. | Type | Full, Spot, None | Eff. | Type | Full, Spot, None | Eff. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Appendix A attached (for extra lines)

Body Flanges on Shells:

| Qty | Type | ID | OD | Flange Thk. | Min. Hub Thk. | Material | How Attached | Location | Bolting | | |
|-----|------|----|----|-------------|---------------|----------|--------------|----------|------------|------------------|-----------------|
| | | | | | | | | | Num & Size | Bolting Material | Washer Material |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Appendix A attached (for extra lines)

Head(s):

| Qty | Location (Top, Bottom, Ends) | Material | Thickness | | Radius | | Elliptical Ratio | Conical Apex Angle | Hemi Radius | Flat Diameter | Side to Pressure (convex, concave) | Category A | | |
|-----|------------------------------|---------------------|-----------|-------|--------|---------|------------------|--------------------|-------------|---------------|------------------------------------|------------|------------------|------|
| | | Spec./Grade or Type | Nom. | Corr. | Crown | Knuckle | | | | | | Type | Full, Spot, None | Eff. |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Body Flanges on Heads:

| Qty | Type | ID | OD | Flange Thk. | Min. Hub Thk. | Material | How Attached | Location | Bolting | | |
|-----|------|----|----|-------------|---------------|----------|--------------|----------|------------|------------------|-----------------|
| | | | | | | | | | Num & Size | Bolting Material | Washer Material |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| | |
|------------------------------|--------------------------------------|
| Company Rep. Initial & Date: | Authorized Inspector Initial & Date: |
| | |



| | | | | | | | | | |
|--|--|-----------------|--|---------------------------|--|--|--|--|--|
| Manufactured and Certified by: (Name and Street Address) | | | | | | | | | |
| Manufacturer's Serial No.: | | CRN No.: | | National Board No. | | | | | |

| Tubesheet & Tubes: | | | | | | | | | |
|--------------------|----------|-----------|-------|------------|---------------|----------|-----------|--------|----------------------|
| Tubesheet | | | | | Tubes | | | | |
| Tubesheet material | Diameter | Nom. Thk. | Corr. | Attachment | Tube material | Diameter | Nom. Thk. | Number | Type (straight or U) |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Jacket: | | |
|----------------|----------------|------------|
| Type of jacket | Jacket closure | Proof test |
| | | |
| | | |
| | | |
| | | |
| | | |

| Nozzles and Openings: | | | | | | | | | | | |
|-----------------------|---------|------------|------|----------|--------|------------------|-------|------------------------|--------------------|--------|-----------------------|
| Qty | Purpose | Dia./ size | Type | Material | | Nozzle Thickness | | Reinforcement Material | Attachment details | | Location (Insp. open) |
| | | | | Nozzle | Flange | Nom. Thk. | Corr. | | Nozzle | Flange | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Appendix A attached (for extra lines)

| Pressure Vessel Data: | |
|--|--|
| Maximum Allowable Working Pressure (Shell Side): _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa (Internal) (External) | <input type="checkbox"/> Hydrostatic <input type="checkbox"/> Pneumatic <input type="checkbox"/> Combination Test Pressure (Shell Side): @ _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa Proof Test _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa |
| Maximum Allowable Working Pressure (Tube Side): _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa (Internal) (External) | <input type="checkbox"/> Hydrostatic <input type="checkbox"/> Pneumatic <input type="checkbox"/> Combination Test Pressure (Tube Side): @ _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa Proof Test _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa |
| Maximum Temperature: _____ <input type="checkbox"/> °F <input type="checkbox"/> °C _____ <input type="checkbox"/> °F <input type="checkbox"/> °C (Internal) (External) | Minimum Design Metal Temperature: _____ <input type="checkbox"/> °F <input type="checkbox"/> °C @ _____ <input type="checkbox"/> psi <input type="checkbox"/> kPa |
| Impact Test: _____ at a test temperature of _____ <input type="checkbox"/> °F <input type="checkbox"/> °C | Post Weld Heat Treatment: Item(s): _____ Time: _____ Temperature: _____ |
| Safety Valve Outlets: Number _____ Dimension _____ Location _____ | Supports: Skirt <input type="checkbox"/> Yes <input type="checkbox"/> No Lugs _____ Legs _____ Other _____ Attached by: _____ |

| | |
|------------------------------|--------------------------------------|
| Company Rep. Initial & Date: | Authorized Inspector Initial & Date: |
| | |



Technical Standards and Safety Authority
 345 Carlingview Drive
 Toronto, Ontario M9W 6N9
 www.tssa.org

Manufacturer's Data Report for Pressure Vessels
Technical Standards and Safety Act
 Boilers and Pressure Vessels Regulation

| | | | | | |
|--|--|-----------------|--|---------------------------|--|
| Manufactured and Certified by: (Name and Street Address) | | | | | |
| Manufacturer's Serial No.: | | CRN No.: | | National Board No. | |

| Manufacturer's Partial Data Report(s): | | | |
|---|--------------|--------------------|-------------------|
| Manufacturer's partial data reports properly identified and signed by Authorized Inspectors have been furnished for the following items of the report and attached to this report | | | |
| Item Number | Name of Part | Manufacturers Name | Identifying Stamp |
| | | | |
| | | | |
| | | | |
| | | | |

| Remarks: |
|-----------------|
| |

Appendix A attached (for extra lines)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial registered design below and the requirements of the CSA B51 Standard.

Certificate of Authorization Number: _____ Expiry _____ Provincial Registered Design CRN _____
(mm/dd/yyyy)

Manufacturer _____ Date _____
(mm/dd/yyyy)

Name _____ Signature _____
(Manufacturer's Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector employed by _____ of _____ have inspected the above vessel and state that to the best of my knowledge and belief, the manufacturer has constructed the vessel in accordance with the Provincial registration CRN _____ and the requirements of the CSA B51 Standard.

Date _____ Authorized Inspector Signature _____ Number _____
(mm/dd/yyyy)

CERTIFICATE OF COMPLIANCE FIELD WORK

We certify that the field inspection of all parts of the vessel conforms with the requirements of Provincial regulations.

Certificate of Authorization Number _____ Expiry _____
(mm/dd/yyyy)

Date _____ Installer Name _____ Signature _____
(mm/dd/yyyy) (Installer's Representative)

CERTIFICATE OF FIELD INSPECTION

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector employed by _____ of _____ have inspected the items not covered by the Shop Inspection Certificate and the installation of the items and state that to the best of my knowledge and belief, the construction and assembly of the items are in accordance with Provincial regulations.

Date _____ Authorized Inspector Signature _____ Number _____
(mm/dd/yyyy)



| | | | |
|--|--|----------------------------|--|
| Manufactured and Certified by: (Name and Street Address) | | | |
| Manufacturer's Serial No.: | | CRN No.: | |
| | | National Board No.: | |

| Shell(s): | | | | | | | | | | | | | | |
|-----------|----------|--------|---------------------|--|-----------|-------|---------------------|------------------|--|------------------------|------|------------------|--|------|
| Courses | | | Material | | Thickness | | Longitudinal Joints | | | Circumferential Joints | | | | |
| Qty | Diameter | Length | Spec./Grade or Type | | Nom. | Corr. | Type | Full, Spot, None | | Eff. | Type | Full, Spot, None | | Eff. |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| Body Flanges on Shells: | | | | | | | | | | | |
|-------------------------|------|----|----|-------------|---------------|----------|--------------|----------|------------|------------------|-----------------|
| | | | | | | | | | Bolting | | |
| Qty | Type | ID | OD | Flange Thk. | Min. Hub Thk. | Material | How Attached | Location | Num & Size | Bolting Material | Washer Material |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Nozzles and Openings: | | | | | | | | | | | |
|-----------------------|---------|------------|------|----------|--------|------------------|-------|------------------------|--------------------|--------|-----------------------|
| Qty | Purpose | Dia./ size | Type | Material | | Nozzle Thickness | | Reinforcement Material | Attachment details | | Location (Insp. open) |
| | | | | Nozzle | Flange | Nom. Thk. | Corr. | | Nozzle | Flange | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Additional Remarks | |
|------------------------------|---------|
| Data Report Item Description | Remarks |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| | |
|------------------------------|--------------------------------------|
| Company Rep. Initial & Date: | Authorized Inspector Initial & Date: |
| | |



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Manufacturer's Data Report for Pressure Vessels
Technical Standards and Safety Act
Boilers and Pressure Vessels Regulation

1 Partial (If box is checked, send the original form with shipment to site)

NOTE: Upon shipment of a pressure vessel, this form fully and correctly filled in must be submitted to the office of the Chief Inspector in the province of installation in accordance with the Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation governing the construction and installation of pressure vessels.

Manufactured and Certified by: 2
(Name and Street Address)

Manufactured For: 3
(Name and Street Address)

Ultimate Owner: 4
(Name and Street Address)

Location of Installation: 5
(Name and Street Address)

Pressure Vessel Type:

6 (Horizontal, vertical, etc.) 7 (Tank, jkt. vessel, heat exch., etc.) 8 (Manufacturer's Serial Number) 9 (Canadian Registration Number)

10 (Drawing Number) 11 (National Board Number) 12 (Year Built) 13 (Overall Length)

The design, construction, and workmanship of the vessel conforms to CSA B51 and: ASME Section 14 Div. Edition 15 Code Case No(s) 16

| Courses | | | Material | | Thickness | | Longitudinal Joints | | | Circumferential Joints | | | | |
|-----------|-----------|-----------|---------------------|-----------|-----------|-----------|---------------------|-----------|-----------|------------------------|-----------|------|------|------|
| Qty | Diameter | Length | Spec./Grade or Type | Nom. | Corr. | Type | Full | Spot | None | Eff. | Full | Spot | None | Eff. |
| <u>17</u> | <u>18</u> | <u>19</u> | <u>20</u> | <u>21</u> | <u>22</u> | <u>23</u> | <u>24</u> | <u>25</u> | <u>26</u> | <u>27</u> | <u>28</u> | | | |

29 Appendix A attached (for extra lines)

| Body Flanges on Shells: | | Boiling | | | | | | | | | |
|-------------------------|-----------|-----------|-----------|-------------|---------------|-----------|--------------|-----------|------------|------------------|-----------------|
| Qty | Type | ID | OD | Flange Thk. | Min. Hub Thk. | Material | How Attached | Location | Num & Size | Boiling Material | Washer Material |
| <u>30</u> | <u>31</u> | <u>32</u> | <u>33</u> | <u>34</u> | <u>35</u> | <u>36</u> | <u>37</u> | <u>38</u> | <u>39</u> | <u>40</u> | <u>41</u> |

42 Appendix A attached (for extra lines)

| Head(s): | | | | | | | | | | | | | | |
|-----------|------------------------------|-----------|-----------|-----------|-----------|-----------|------------------|--------------------|-------------|---------------|------------------------------------|------------|-----------|-----------|
| Qty | Location (Top, Bottom, Ends) | Material | Thickness | | Radius | | Elliptical Ratio | Conical Apex Angle | Hemi Radius | Flat Diameter | Side to Pressure (convex, concave) | Category A | | |
| | | | Nom. | Corr. | Crown | Knuckle | | | | | | | | |
| <u>43</u> | <u>44</u> | <u>45</u> | <u>46</u> | <u>47</u> | <u>48</u> | <u>49</u> | <u>50</u> | <u>51</u> | <u>52</u> | <u>53</u> | <u>54</u> | <u>55</u> | <u>56</u> | <u>57</u> |

| Body Flanges on Heads: | | Boiling | | | | | | | | | |
|------------------------|-----------|-----------|-----------|-------------|---------------|-----------|--------------|-----------|------------|------------------|-----------------|
| Qty | Type | ID | OD | Flange Thk. | Min. Hub Thk. | Material | How Attached | Location | Num & Size | Boiling Material | Washer Material |
| <u>58</u> | <u>59</u> | <u>60</u> | <u>61</u> | <u>62</u> | <u>63</u> | <u>64</u> | <u>65</u> | <u>66</u> | <u>67</u> | <u>68</u> | <u>69</u> |

PV 09118 (03/25) Page 72 of 72

Company Rep. Initial & Date: 70 Authorized Inspector Initial & Date: 71

Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Manufacturer's Data Report for Pressure Vessels
Technical Standards and Safety Act
Boilers and Pressure Vessels Regulation

Manufactured and Certified by: 2
(Name and Street Address)

Manufacturer's Serial No.: 8 CRN No.: 9 National Board No. 11

| Tubesheet & Tubes: | | | | | | | | | |
|--------------------|-----------|-----------|-----------|------------|---------------|-----------|-----------|-----------|----------------------|
| Tubesheet material | Tubesheet | | | | Tubes | | | | |
| | Diameter | Nom. Thk. | Corr. | Attachment | Tube material | Diameter | Nom. Thk. | Number | Type (straight or U) |
| <u>73</u> | <u>74</u> | <u>75</u> | <u>76</u> | <u>77</u> | <u>78</u> | <u>79</u> | <u>80</u> | <u>81</u> | <u>82</u> |

| Type of jacket | | Jacket: | | Proof test | |
|----------------|--|----------------|--|------------|--|
| | | jacket closure | | | |
| <u>83</u> | | <u>84</u> | | <u>85</u> | |

| Nozzles and Openings: | | | | | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|------------------|-----------|------------------------|--------------------|-----------|----------------------|
| Qty | Purpose | Dia./Size | Type | Material | | Nozzle Thickness | | Reinforcement Material | Attachment details | | Location (see notes) |
| | | | | Nozzle | Flange | Nom. Thk. | Corr. | | Nozzle | Flange | |
| <u>86</u> | <u>87</u> | <u>88</u> | <u>89</u> | <u>90</u> | <u>91</u> | <u>92</u> | <u>93</u> | <u>94</u> | <u>95</u> | <u>96</u> | <u>97</u> |

98 Appendix A attached (for extra lines)

Pressure Vessel Data:

Maximum Allowable Working Pressure (Shell Side): 101 Hydrostatic Pneumatic Combination Test Pressure (Shell Side):
99 psi kPa (Internal) 100 psi kPa (External) @ 102 psi kPa Proof Test 103 psi kPa

Maximum Allowable Working Pressure (Tube Side): 106 Hydrostatic Pneumatic Combination Test Pressure (Tube Side):
104 psi kPa (Internal) 105 psi kPa (External) @ 107 psi kPa Proof Test 108 psi kPa

Maximum Temperature: 109 °F °C (Internal) Minimum Design Metal Temperature: 110 °F °C (External) 111 °F °C @ 112 psi kPa

Impact Test: 113 Post Weld Heat Treatment: Item(s): 115
 at a test temperature of 114 °F °C Time: 116
 Temperature: 117

Safety Valve Outlets: Number: 118 Dimension: 119 Location: 120 Skirt Yes No Lugs: 122 Legs: 123 Other: 124
 Attached by: 125

PV 09118 (03/25) Page 72 of 72

Company Rep. Initial & Date: 70 Authorized Inspector Initial & Date: 71

Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Manufacturer's Data Report for Pressure Vessels
Technical Standards and Safety Act
Boilers and Pressure Vessels Regulation

Manufactured and Certified by: 2
(Name and Street Address)

Manufacturer's Serial No.: 8 CRN No.: 9 National Board No. 11

Manufacturer's Partial Data Report(s):

| Item Number | Name of Part | Manufacturer's Name | Identifying Stamp |
|-------------|--------------|---------------------|-------------------|
| <u>126</u> | <u>127</u> | <u>128</u> | <u>129</u> |

Remarks:
130

131 Appendix A attached (for extra lines)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial registered design below and the requirements of the CSA B51 Standard.

Certificate of Authorization Number: 132 Expiry: 133 Provincial Registered Design CRN: 9
 (mm/dd/yyyy)

Manufacturer: 134 Date: 135
 (mm/dd/yyyy)

Name: 136 Signature: 137
 (Manufacturer's Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector employed by 138 of 139 have inspected the above vessel and state that to the best of my knowledge and belief, the manufacturer has constructed the vessel in accordance with the Provincial registration CRN 9 and the requirements of the CSA B51 Standard.

Date: 140 Authorized Inspector Signature: 141 Number: 142
 (mm/dd/yyyy)

CERTIFICATE OF COMPLIANCE FIELD WORK

We certify that the field inspection of all parts of the vessel conforms with the requirements of Provincial regulations.

Certificate of Authorization Number: 132 Expiry: 133
 (mm/dd/yyyy)

Date: 143 Installer Name: 144 Signature: 145
 (mm/dd/yyyy) (Installer's Representative)

CERTIFICATE OF FIELD INSPECTION

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector employed by 138 of 139 have inspected the items not covered by the Shop Inspection Certificate and the installation of the items and state that to the best of my knowledge and belief, the construction and assembly of the items are in accordance with Provincial regulations.

Date: 146 Authorized Inspector Signature: 147 Number: 148
 (mm/dd/yyyy)

PV 09118 (03/25) Page 72 of 72



Guideline for completing the Manufacturer's Data Report for Pressure Vessels

| Item # | Description | Example |
|--------|---|----------------------------|
| 1 | Check if the pressure vessel will be completed in the field. | |
| 2 | Provide the name and address of the manufacturer who is certifying the pressure vessel as listed on the Certificate of Authorization. | |
| 3 | Provide the name and address of the company that the pressure vessel has been manufactured for (if known). If unknown, state "Unknown", "Built for stock", etc. | |
| 4 | Provide the name and address of the ultimate owner of the pressure vessel (if known). If unknown, state "Unknown", "Built for stock", etc. | |
| 5 | Provide the address of installation of the pressure vessel (if known). If unknown, state "Unknown", "Built for stock", etc. | |
| 6 | Type of installation intended (orientation of the pressure vessel). | Horizontal, vertical, etc. |
| 7 | Description or application of pressure vessel. | Heat Exchanger, tank, etc. |
| 8 | Manufacturer's serial number as shown on the nameplate of the pressure vessel. | |
| 9 | Canadian Registration Number of the pressure vessel. | 12345.5 |
| 10 | Indicate the drawing number of the pressure vessel, including revision level. | |
| 11 | The National Board Number (if applicable). | |
| 12 | The year the pressure vessel was manufactured. | 2025 |
| 13 | The overall length of the pressure vessel. | 36 inches, 200 cm, etc. |
| 14 | Indicate the ASME Code Section and Division the pressure vessel was designed and constructed to. | VIII Div 1 |
| 15 | State the Edition year of the ASME Code the pressure vessel was designed and constructed to. | 2023 |
| 16 | List all Code Case Number(s) and revisions used for construction must be listed. If more room is required, state in the "Remarks" section 130. | 2055 |
| 17 | The quantity of shell courses that include the same line information. | |
| 18 | The diameter of the shell course (specify ID or OD). | 24" OD |
| 19 | The length of the shell course. | 36" |
| 20 | State the complete ASME material specification number and grade of the shell course. | SA516-70 |
| 21 | Nominal thickness of the shell course. | 0.25" |
| 22 | Corrosion allowance of the shell course. | 0.065" |
| 23 | Type of shell course longitudinal joint (for ASME Section VIII Division 1, per Table UW-12). | Type 1 |
| 24 | Identify the degree of radiography or ultrasonic examination required for the shell course longitudinal joint (for ASME Section VIII Division 1, per Table UW-12). | Spot, None, etc. |
| 25 | State the efficiency of the shell course longitudinal joint (for ASME Section VIII Division 1, per Table UW-12). | 0.85, 0.70, etc. |
| 26 | Type of shell course circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | Type 1 |
| 27 | Identify the degree of radiography or ultrasonic examination required for the shell course circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | Spot, None, etc. |
| 28 | State the efficiency of the shell course circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | 0.85, 0.70, etc. |
| 29 | Select box if Appendix A is attached for extra lines. | |
| 30 | The quantity of shell body flanges that include the same line information. | |
| 31 | Type of body flange on the shell. | RFSO, etc. |
| 32 | The internal diameter of the body flange on the shell. | 23.5" |



| | | |
|----|---|------------------------|
| 33 | The outside diameter of the body flange on the shell. | 24" |
| 34 | The flange thickness of the body flange on the shell. | 1-1/2" |
| 35 | The minimum hub thickness of the body flange on the shell. | 1/2" |
| 36 | State the complete ASME material specification number and grade of the body flange on the shell. | SA-105N |
| 37 | State how the body flange on the shell is attached. | Welded, etc. |
| 38 | The location of the body flange on the shell. | Shell course 1 |
| 39 | State the number and size of bolts used to secure the removable part of the pressure vessel. | 20/1" |
| 40 | State the complete ASME material specification number and grade of the bolts used to secure the removable part of the pressure vessel. | A193-B7 |
| 41 | State the complete ASME material specification number and grade of the washers used to secure the removable part of the pressure vessel. | F436 |
| 42 | Select box if Appendix A is attached for extra lines. | |
| 43 | The quantity of heads that include the same line information. | |
| 44 | Location of the head. | Top, Bottom, etc. |
| 45 | State the complete ASME material specification number and grade of the head. | SA516-70 |
| 46 | Nominal thickness of the head. | 0.25" |
| 47 | Corrosion allowance of the head. | 0.065" |
| 48 | Indicate the crown radius (inside or outside) for torispherical heads. | 24" ID, N/A, etc. |
| 49 | Indicate the knuckle radius (inside or outside) for torispherical or toriconical heads. | 2.4", N/A, etc. |
| 50 | Indicate the elliptical ratio of the head. | 2:1, N/A, etc. |
| 51 | Indicate the conical apex angle of the head. | 30°, N/A, etc. |
| 52 | Indicate the hemispherical radius of the head. | 23.5", N/A, etc. |
| 53 | Indicate the flat diameter of the head. | 24", N/A, etc. |
| 54 | Side to pressure of the head. | Convex, Concave, etc. |
| 55 | Type of head circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | Type 1 |
| 56 | Identify the degree of radiography or ultrasonic examination required for the head circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | Full, Spot, None, etc. |
| 57 | State the efficiency of the head circumferential joint (for ASME Section VIII Division 1, per Table UW-12). | 0.85, 0.70, etc. |
| 58 | The quantity of head body flange(s) that include the same line information. | |
| 59 | Type of body flange on the head. | RFSO, etc. |
| 60 | The internal diameter of the body flange on the head. | 23.5" |
| 61 | The outside diameter of the body flange on the head. | 24" |
| 62 | The flange thickness of the body flange on the head. | 1-1/2" |
| 63 | The minimum hub thickness of the body flange on the head. | 1/2" |
| 64 | State the complete ASME material specification number and grade of the body flange on the head. | SA-105N |
| 65 | State how the body flange on the head is attached. | Welded, etc. |
| 66 | The location of the body flange on the head. | Top head, etc. |
| 67 | State the number and size of bolts used to secure removable head or heads of the pressure vessel. | 20/1 |
| 68 | State the complete ASME material specification number and grade of the bolts used to secure removable head or heads of the pressure vessel. | A193-B7 |
| 69 | State the complete ASME material specification number and grade of the washers used to secure removable head or heads of the pressure vessel. | F436 |
| 70 | To be initialed and dated by the company representative. | |
| 71 | To be initialed and dated by the Authorized Inspector. | |
| 72 | Include page count for all pages. | |



| | | |
|-----|--|--------------------------|
| 73 | State the complete ASME material specification number and grade of the tubesheet. | SA240-316/L |
| 74 | Indicate the diameter of the tubesheet. | 23" |
| 75 | Nominal thickness of the tubesheet. | 1-1/2" |
| 76 | Corrosion allowance of the tubesheet. | 0.065" |
| 77 | State how the tubesheet is attached. | Welded, etc. |
| 78 | State the complete ASME material specification number and grade of the tubes. | SA312-316/L |
| 79 | Diameter of the tubes (specify inside ID or outside OD). | 1" OD |
| 80 | Nominal thickness of the tubes. | 0.065" |
| 81 | Total number of tubes. | 100 |
| 82 | Indicate the type of tubes. | Straight, U, etc. |
| 83 | Note the type of jacket (for ASME Section VIII Division 1, per Figure 9-2). | Type 1 |
| 84 | Indicate the type of jacket closure (for ASME Section VIII Division 1, per Figure 9-5). | Figure 9-5(a) |
| 85 | State any proof testing that was performed on the jacket design. Indicate the fitting registration number associated with the design (if applicable). | CRN 54321.5 |
| 86 | The quantity of nozzles that include the same line information. | |
| 87 | List the purpose of the nozzle. | Inlet, outlet, etc. |
| 88 | Indicate nozzle by size (NPS) and inspection openings by inside dimensions. | 2", 1-1/2" ID, etc. |
| 89 | Indicate the type of nozzle. | Cl. 150 flg., etc. |
| 90 | State the complete ASME material specification number and grade of the nozzle. | SA106 Grade B |
| 91 | State the complete ASME material specification number and grade of the flange. | SA105N |
| 92 | Nominal thickness of the nozzle. | 0.25", Sch 40, etc. |
| 93 | Corrosion allowance of the nozzle. | 0.065", none, etc. |
| 94 | State the complete ASME material specification number and grade of the reinforcement material (pad). | SA516-70 |
| 95 | Describe how the nozzle is attached with description acceptable to the Authorized Inspector (for ASME Section VIII Division 1, per Figure UW-16.1). | Welded, UW-16.1(a), etc. |
| 96 | Describe how the flange is attached to the nozzle with description acceptable to the Authorized Inspector (for ASME Section VIII Division 1, per Figure UW-21). | Welded, UW-21(1), etc. |
| 97 | Location of the nozzle. | Top head, Shell #1, etc. |
| 98 | Select box if Appendix A is attached for extra lines. | |
| 99 | Indicate the maximum allowable internal working pressure of the pressure vessel (or shell side). Select if units are in psi or kPa. | 100 psi, etc. |
| 100 | Indicate the maximum allowable external working pressure of the pressure vessel (or shell side). Select if units are in psi or kPa. | 25 psi, etc. |
| 101 | Select the type of pressure test conducted on the pressure vessel (or shell side). | |
| 102 | Indicate the test pressure of the pressure vessel (or shell side). | 130 psi, etc. |
| 103 | If proof testing is required by Code, indicate the proof test pressure performed on the pressure vessel (or shell side of the heat exchanger). Subsequent Data Reports shall be indicated in the Remarks section 130 and shall include the test date, type, and acceptance date by the Authorized Inspector. | 200 psi, N/A, etc. |
| 104 | Indicate the maximum allowable internal working pressure of the tube side. Select if units are in psi or kPa. | 100 psi, N/A, etc. |
| 105 | Indicate the maximum allowable external working pressure of the tube side. Select if units are in psi or kPa. | 25 psi, N/A, etc. |
| 106 | Select the type of pressure test conducted on the tube side. | |



| | | |
|-----|--|----------------------------|
| 107 | Indicate the test pressure of the tube side. | 130 psi, N/A, etc. |
| 108 | If proof testing is required by Code, indicate the proof test pressure performed on the pressure vessel (or shell side of the heat exchanger). Subsequent Data Reports shall be indicated in the Remarks section 130 and shall include the test date, type, and acceptance date by the Authorized Inspector. | 200 psi, N/A, etc. |
| 109 | Indicate the maximum internal temperature of the pressure vessel. Select if units are in °F or °C. | 100°F, etc. |
| 110 | Indicate the maximum external temperature of the pressure vessel. Select if units are in °F or °C. | 100°F, etc. |
| 111 | Indicate the minimum design metal temperature of the pressure vessel. Select if units are in °F or °C. | 100°F, etc. |
| 112 | Indicate the Maximum Allowable Working Pressure at the Minimum Design Metal Temperature stated in 111. Select if units are in psi or kPa. | 50 psi, etc. |
| 113 | Indicate any component(s) impact tested on the pressure vessel. | Shell |
| 114 | Indicate the temperature of the impact testing. Select if units are in °F or °C. | |
| 115 | List the item(s) to be post weld heat treated. | Vessel, nozzles, all, etc. |
| 116 | State the length of time the item(s) were post weld heat treated. | 2 hours, etc. |
| 117 | State the temperature the item(s) were post weld heat treated. | 1200°F, etc. |
| 118 | List the number of safety valve outlets. If safety valves are provided by others, state in the Remarks section 130. | 1 |
| 119 | Dimension of the safety valve outlet(s). | 3/4", etc. |
| 120 | Location of the safety valve outlet(s). | Shell, head, etc. |
| 121 | Select if the pressure vessel includes a skirt support. | |
| 122 | State the number of lugs attached to the pressure vessel. | 4, N/A, etc. |
| 123 | State the number of legs attached to the pressure vessel. | 4, N/A, etc. |
| 124 | Describe any other supports attached to the pressure vessel. | |
| 125 | Describe how supports listed in 121, 122, 123 or 124 are attached. | Welded |
| 126 | Indicate the item number of the part fabricated with the Manufacturer's Partial Data Report. | Item 1 |
| 127 | Describe the part fabricated with the Manufacturer's Partial Data Report. | Head |
| 128 | Provide the name of the manufacturer that fabricated the part with the Manufacturer's Partial Data Report. | |
| 129 | Provide the identifying stamp of the part fabricated with the Manufacturer's Partial Data Report. | |
| 130 | Space for additional comments, including any Code restrictions on the pressure vessel, or any other unusual requirements that have been met. | |
| 131 | Select box if Appendix A is attached for extra lines. | |
| 132 | State the Certificate of Authorization number of the manufacturer/installer of the pressure vessel. | |
| 133 | State the expiry date of the Certificate of Authorization. | |
| 134 | State the name of the pressure vessel manufacturer. | |
| 135 | Include the date the report was signed. | |
| 136 | State the name of the manufacturer's representative. | |
| 137 | To be certified and signed by the manufacturer's representative indicated in 136. | |
| 138 | State the employer of the Authorized Inspector. | |
| 139 | State the jurisdiction of the Authorized Inspector. | |
| 140 | Include the date the report was signed. | |
| 141 | To be signed by the Authorized Inspector. | |
| 142 | The Authorized Inspector shall state their Commission Number or Certificate of Competency Number (as applicable). | |
| 143 | Include the date the report was signed. | |
| 144 | State the name of the installer's representative. | |
| 145 | To be certified and signed by the installer's representative. | |



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Manufacturer's Data Report for Pressure Vessels

Guideline

Technical Standards and Safety Act

Boilers and Pressure Vessels Regulation

| | | |
|-----|---|--|
| 146 | Include the date the report was signed. | |
| 147 | To be signed by the field Authorized Inspector. | |
| 148 | The Authorized Inspector shall state their Commission Number or Certificate of Competency Number (as applicable). | |