

| 1. Repair / Alteration Company | | | | |
|--------------------------------|----------------|-----------|-----------------------------|-------------|
| Full Legal Company Name | | | Mailing Address | |
| Contact Person | E-mail Address | Telephone | Certificate of Authority No | Expiry Date |

| 2. Boiler / Pressure Vessel Owner | | | |
|-----------------------------------|----------------|-----------------|--|
| Full Legal Company Name | | Company Address | |
| Contact Person | E-mail Address | Telephone | Installation Address (If different than Company) |

| 3. Boiler / Pressure Vessel Details | | | |
|-------------------------------------|------------|-----------------|---------------|
| Vessel Description | | Manufactured By | Code Built to |
| CRN | MB Unit No | Serial No | Other No |

| 4. Defects that resulted in the Repair / Alteration: (Reference and attach copy of NDE reports) |
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| 5. (Reference all docs such as Drawings, PWHT, Weld Procedures, Welder ID and attach to your submission) |
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| 6. Material: (List material used for repair/alteration AND any material welded on. MTR, PO and/or Data Reports for material listed below shall be attached.) | | | | | | | |
|--|----------------------------------|---------------|---------------|-------------------|-----------------------------------|---------------|---------------|
| Item | ANSI/ASME Material Specification | Thickness(in) | Diameter (in) | Item | ANSI /ASME Material Specification | Thickness(in) | Diameter (in) |
| Shell / Drum | | | | Heads / Ends | | | |
| Tube Sheet | | | | Tubes | | | |
| Nozzles | | | | Flange / Fittings | | Class | |

| 7. Required Testing: (If Pressure test cannot be performed, include justification for alternative testing. Reference Company performing Non Destructive Examination (NDE).) |
|---|
| Pressure Test |
| NDE |

TEMPORARY APPROVAL BY ITS INSPECTOR

ITS Inspector may grant a temporary approval of the above repair/alteration in an emergency condition. This shall be used only when the pressure vessel or boiler or pressure piping is required in the continued operation of the heating or processing plant. Fully completed form and signed copy of the pre-approval below shall forwarded next business day to the Design Surveyors for review and approval.

Inspector: _____

(Name)

(Signature)

(Date)

CERTIFICATE OF REGISTRATION

Notes:

1. ITS Registration Stamp authorizes that the repair or alteration can start.
2. Repairs and Alterations are subject to final inspection and approval by the Inspector.

CERTIFICATE OF COMPLIANCE

I, _____ certify that the statements made in this report are correct and that all design, material, construction and workmanship on this repair/alteration conform to the requirements of the Manitoba Steam and Pressure Plants Act and Regulations in accordance with the adopted codes and standards therein.

Company Name: _____ Certificate of Authority No. _____ Expires: _____

Authorized Representative Signature: _____ Date: _____

CERTIFICATE OF INSPECTION

I, _____ the undersigned, have inspected the above unit and state that to the best of my knowledge, the Repair and/or Alteration described in this report has been completed in accordance with the Manitoba Steam and Pressure Plants Act and Regulation with the adopted codes and standards therein.

Inspector Signature: _____

Date: _____

*****Note: Once this form is completed in full and signed off. Repair/Alteration Company is responsible for distributing a copy to the owner of the vessel. *****

Repair and Alteration Report Form Instructions

Below are instructions on how to fill out certain items on the Report form. The Manitoba Steam and Pressure Plants Regulation 108/87 ITS adopts the Latest Edition of The National Board Inspection Code Part 3 for Repairs and Alterations. ITS assess the repairs and alteration methods based on NBIC and the referenced code of construction for the vessel.

All fields highlighted with a red box are required fields. 

| Item 4: Defect(s) that resulted in the Repair/Alteration: | |
|---|--|
| <p>For Repairs at a minimum:</p> <ul style="list-style-type: none"> - Describe in detail where the failure(s) occurred, - What type of defect: crack, pitting, corrosion, etc. - Size and depth, - If NDE was done Include the name of the NDE Company and their file number. <ul style="list-style-type: none"> o Attach NDE report to your email submission. - For multiple areas needing repair it may be required to | <p>Alteration:</p> <ul style="list-style-type: none"> - Description of the alteration - Justification for the Alteration <ul style="list-style-type: none"> • Why is the alteration needed • What resulted in the need for the alteration, such as defects, poor performance etc. - If NDE was done Include the name of the NDE Company and their file number for the report. Attach a copy of the report. |
| Item 5: Repair / Alteration Procedure: | |
| <p>For Repairs at a minimum:</p> <ul style="list-style-type: none"> - Procedure of repair <ul style="list-style-type: none"> o How is the defect being removed o NDE method to confirm defect was removed for cracks o What is being installed, reference the MTR Heat #, serial number, etc. *If the Heat # or Serial# is not available provide a Purchase order showing the material ordered so that the design surveyor can check materials and their weldability with the stated WPS. o Indicate if welding will be performed or not. Reference weld procedure(s) and welder(s). Attach copy of weld procedure only you do not need to send the PQR and lab tests. o Note Welder(s) and attach copy of welder(s) licenses. o Post Weld Heat Treatment Procedure. Once done, provide inspector with the heat treatment chart for review. | <p>Alteration:</p> <ul style="list-style-type: none"> - Description of the alteration <ul style="list-style-type: none"> o What is being altered o NDE required o What is being installed reference the MTR, serial number, etc. o Indicate if welding will be performed or not. Reference weld procedure and welder. Attach copy of weld procedure first page and copy of welder(s) licences. - Reference the drawing number and attach fully dimensioned drawing showing location of the alteration area and weld details. - Reference and attach calculations in accordance with original code of construction or latest edition. Some calculations may be avoided if nozzles of the same type and material are already present, depending on location may need to provide limits of reinforcement calculations. |
| Item 6: Materials | |
| <p>For Repairs:</p> <ul style="list-style-type: none"> - List all materials being installed and welded on New and Old. <ul style="list-style-type: none"> o Example: list tube material being installed and existing tubesheet being welded on. o Material not welded on does not have to be listed. o Indicate "N/A" for items not welded on or installed. <p>**Note: Unknown materials shall be investigated by the Repair company to determine the weldability through means of chemical testing and hardness testing, or Positive Material Identification Method (PMI). Other means of determining material such as referencing manufacturer's original drawing, calculation package, or data report from a similar unit with the same CRN may be used to determine the material. <i>Ref: NBIC Part 3 Para 3.2.1</i></p> | <p>For Alteration:</p> <ul style="list-style-type: none"> - List all materials being installed and welded on. - Indicate "N/A" for items not welded on or installed. <p>**Note: Unknown materials shall be investigated by the Alteration company to determine the weldability through means of chemical testing and hardness testing, or Positive Material Identification Method (PMI). Other means of determining material such as referencing manufacturer's original drawing, calculation package, or data report from a similar unit with the same CRN may be used to determine the material. <i>Ref: NBIC Part 3 Para 3.2.1</i></p> |
| Item 7: Required Testing | |
| <p>Pressure Test: State the type of pressure test (hydrostatic or pneumatic), the pressure and duration. The duration shall be for a minimum of 10 minutes. If it is not practical to do a pressure test, provide justification as to why and provide details on an alternative method subject to approval by the design surveyor or AI.</p> | |
| <p>NDE: State the NDE method and company doing the procedure. NDE Company shall be CAN/CGSB-48.9712/ISO 9712 or other standards acceptable to ITS in accordance with CSA-B51. If no NDE required write "None".</p> | |

| Signing Page |
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| Temporary Approval: Can only be filled out by ITS inspector under emergency conditions. |
| Certificate of Registration: To be completed by ITS design surveyor, once stamped the contractor is authorized to start the Repair or Alteration. |
| Certificate of Compliance: Is signed once the repair or alteration is completed and inspected. This section is completed by the company doing the repair or alteration and signed by the person having authority designated in the QC manual registered with ITS. |
| Certificate of Inspection: Is completed by the Inspector once they have inspected the repair or alteration and are satisfied with the workmanship. |