

Certificate of Design Verification 1808626R3

4/207 Derrimut Drive Derrimut VIC 3030 Office: + 61 3 9394 5900 ABN 83 135 172 922

| Description: | 50HL FV-D1650 Fermenter – (6,300 Litres) – Jacketed in two sections with Dimple Plate. | | | |
|--------------------------------|---|------------|--------------|--------------|
| Drawing numbers: | 50HL FV-D1650 V1.0 | | | |
| Calculation number: | Dated 24 July 2018 | | | |
| Designer: | Yolong Industrial Co., Ltd. | | | |
| Design codes: | ASME Section VIII, Div 1, edition 2017 | | | |
| Non-destructive examination: | None | | | |
| Design pressure: | Shell: 200kPa Jacket: 200kPa | | | |
| Test Pressure: | Shell: 260kPa Jacket: 260kPa | | | |
| Design temperature range: | Shell and Jacket = 40° C to -5° C | | | |
| Corrosion allowance: | 0mm | | | |
| AS4343:2014 Hazard rating: | Shell :Gas Beer and Co Shell: Hazard level value: B | D2 (NHG) | 12,600 | MPa.L |
| | Jacket :Fluid Glycol (VHL Jacket: Hazard level value: I | | 200 | MPa.L |
| AS/NZS1170.2:2011 Wind: | Not assessed. | | | |
| AS1170.4:2007 Seismic: | Not assessed. | | | |
| Comments: | The above item of plant has been assessed and it is deemed compliant within the constraints of the nominated design parameters based upon the information provided. | | | |
| Rev 3: | Updated calculations with new lug detail and changed the designer details. This certificate replaces 1808626R2. | | | |
| | Safety devices have not been a part of this verification. | | | |
| Design Verifier: Melissa Yates | | Date of ve | erification: | 24 July 2018 |
| CMIS Signatory Signature: | Cardy | Date of is | sue: | 25 July 2018 |



Accredited for compliance with ISO/IEC 17020. ACCREDITATION No.14969

AS/NZS ISO 9001:2015 Design Verification and Manufacturing Inspection of Pressure Equipment to AS 3920

