



**Bram Bens**  
**Brabetech**



**Henk v.d. Veen**  
**SLB Group**



**SLB Group**



**BRABETECH**

Technical solutions & innovations

**Vind je weg in de wereld van normen**





# Programma:

- **Introductie Brabetech en SLB Group**
- **Project in een Notendop**
- **Aanpak**
- **Tips**
- **Afsluiting & Vragen**



# Over Brabetech



**Bram Bens**



**Hightech Campus Eindhoven**



## Missie

**Deel uit maken  
van het versnellen  
van de energie  
transitie**



## Historie

**11 jaar ervaring in  
design, bouwen en  
verkopen van  
grote installaties**



## Technologie

**Gefocust op hitte  
techniek. Expert in  
gesmolten zout  
oplossingen**

# Over SLB Group



**Henk van de Veen**



**Industrie terrein Uden**



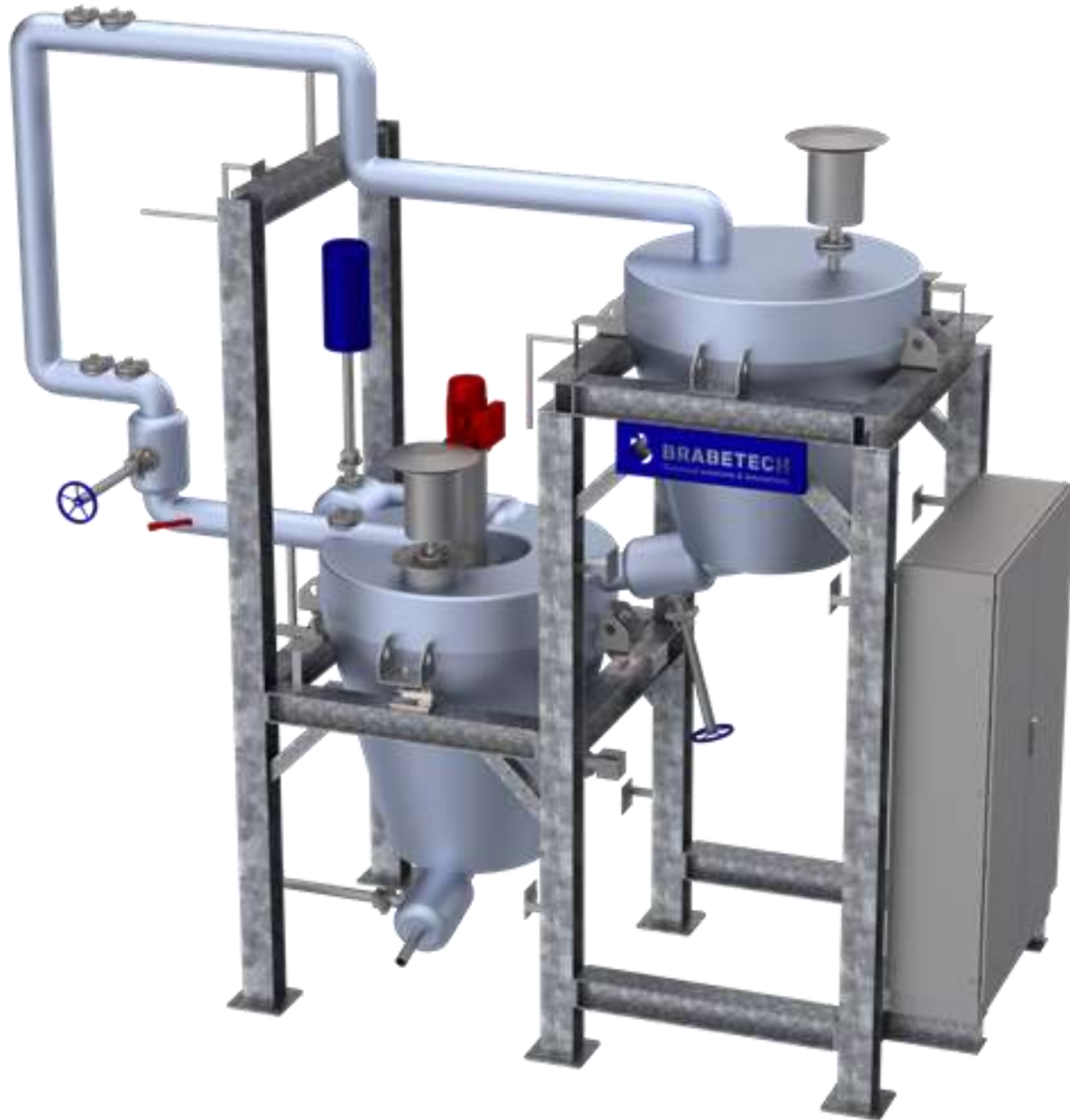
**Complexe lassamenstellingen in food, chemie en milieu**



**RVS NON FERRO**  
food handling equipment

**RIJKERS**  
process technology

**SLB HIGHTECH**  
welding solutions



# De opdracht

## Warmte overdracht systeem

Zoals voorbeeld

**Voorbeeld project: Industrial heat Transfer**



# De opdracht

**Warmte overdracht systeem**

**Specifieke productienormen  
en certificeringen**



**Partnership met gedeelde  
kennis en ervaring**







**Algemeen:**

**NEN-EN-ISO 9001:2015**

**EN-ISO 3834-2-2021**

**Design**

**EN 13445-3:2021**

**PED volgens**

**2014/68/EU Module G**

**Materiaal & Lasdraad:**

**EN 10204 3.1/3.2**

**EN 10204:2004 3.1**

**WPQR volgens:**

**NEN-EN-ISO 15614-1**

**NEN-EN-ISO 15614-8**

**WPQ volgens:**

**NEN-EN-ISO 9606-1**

**NEN-EN-ISO 9606-4**

**Pressure-test en leakage -test:**

**Lloyds requirements**

**Procedure SLB**

**Visuele inspectie & inspecteur:**

**NEN-EN-ISO 5817-C**

**ISO 9712:2012 level II**

**Laskantvoorbereiding:**

**NEN-EN-ISO 9692-1**

**Toleranties**

**EN-ISO 13920 A/E**

**Tekening lasaanduidingen:**

**EN 22553**

**WPA volgens:**

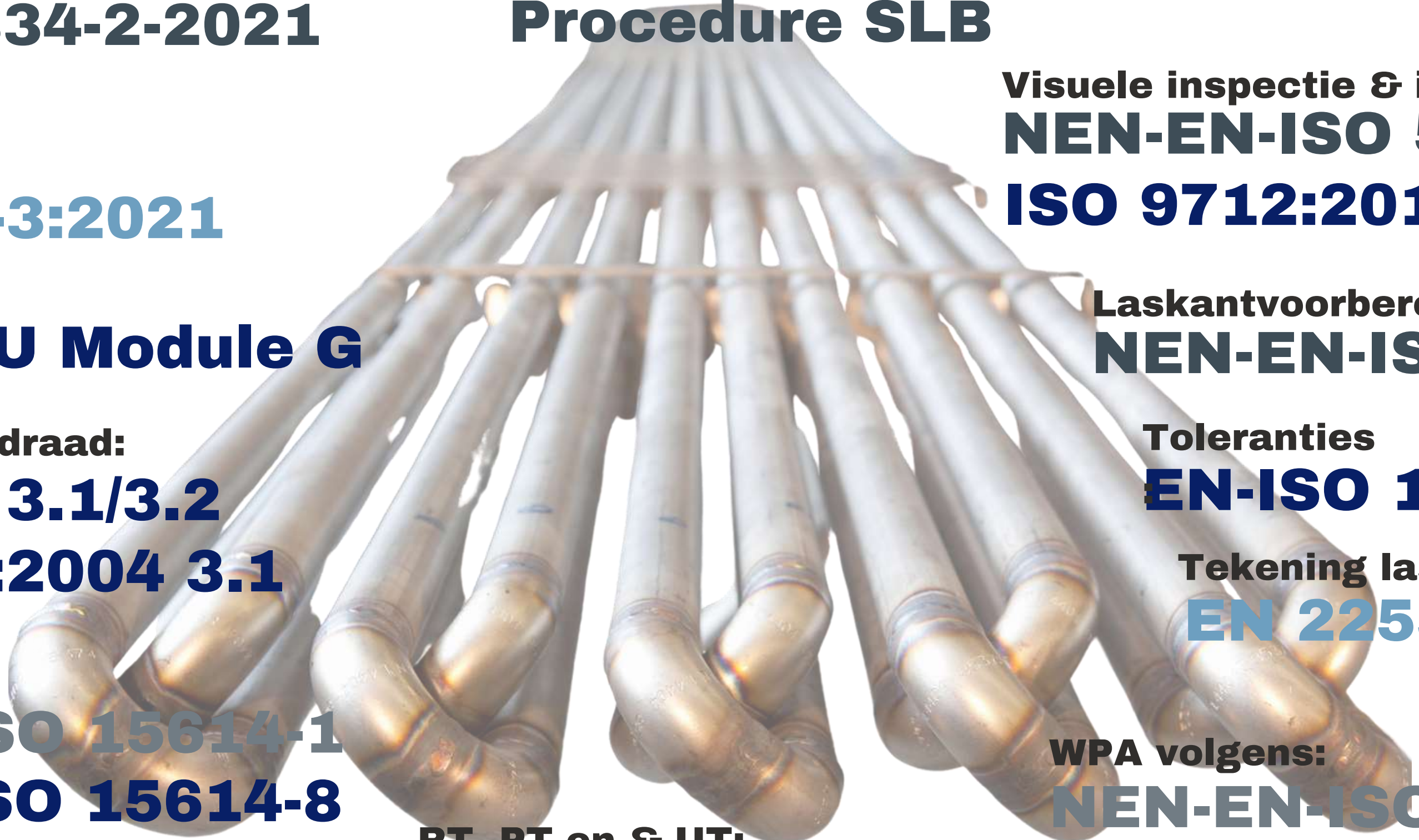
**NEN-EN-ISO 15609-1**

**RT, PT en & UT:**

**NEN-EN-ISO 10675-1**

**NEN-EN-ISO 23277 level II**

**ISO 22825:2017 ISO 11666 level III**







# Kwaliteitsplan ITP Warmtewisselaar

## Inhoud:

- Code en specificatie
- Lasprocedures
- Lasser kwalificaties
- Lasplan
- Hydrotest
- Materialen en coating





SLB Group B.V.

Document Number: QCP/ITP

Revision: 0

**INSPECTION & TEST PLAN**  
Heat Exchanger – PO2200576

Page 5 of 6

Document Type: ITP

System :

Discipline: QA

No.	Description	Reference	Manufacturer data book	Inspection Method	Inspection Point	Remarks
8.	VTw-II inspector certificate	Certificate	Manufacturer data book	RTV		
9.	Visual Inspection after welding including pictures	Flange ,bracket , tube connections NEN-EN-ISO 5817-C Surface porosity and end craters according to class B	Manufacturer data book	RTV		Inspection executed by VTW-II
10.	Weld records	Registration document	Manufacturer data book	RTV		NoBo / Third Party
11.	NDT	10% of all Longitudinal weld joints 10% of all Circumferential Weld Joints NEN-EN-ISO 10675-1	Manufacturer data book	HP		
12.	Hydrostatic pressure test, 8.7 bar (Shell with Inconel tubes 1e time)	See pressure test report	Manufacturer data book	HP		
13.	Dye penetrant inside and outside	10% PT on all nozzle welds EN-ISO 23277 level 2X	Manufacturer data book	HP		
14.	Dimensional check	According Rijkers drawings	Manufacturer data book	HP		NoBo / Third Party
15.	Hydrostatic pressure test, 5.8 bar (pipe ends with Inconel tubes 2e time)	See pressure test report	Manufacturer data book	HP		



Tips





Ga niet domweg  
aan de slag



Verdiep je in de  
materie





Toon Lef!



Ga voor open  
communicatie



**Bram Bens**  
**Brabetech**  
**+31850027782**



**Henk v.d. Veen**  
**SLB Group**  
**06 28746445**



**SLB Group**



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# Vragen & Afsluiting