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檢測實驗室接受委託試驗報告表 TESTING REPORT

委託者: Vee-Lok Co., Ltd

Applicant

取樣者: Vee-Lok Co., Ltd

Sampler

工程名稱: Witness of Tube Fitting Pressure

檢測編號: 10107044-1

Source of Sample Test and Burst Test

Application No.

來樣日期: 2012/07/27

簽發日期: 2012/08/09

Sample Received date

Date Issued

來文文號: N/A

Incoming Dispatch No.

試驗結果

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Result:

1. Testing Item : Tube Fitting Pressure Test and Burst Test

2. Test Products (Tube Fitting) :

Table-1

No.	Tubing O.D. x Wall thickness (mm)	Material	Part No. of Samples Tested	
1	1/8"O.D. X 0.89mm	316 S.S.	FC2-6	CP2
2	1/4"O.D. X 0.89mm	316 S.S.	FC4-4	CP4
3	3/8"O.D. X 0.89mm	316 S.S.	FC6-4	CP6
4	1/2"O.D. X 1.24mm	316 S.S.	FC8-4	CP8
5	3/4"O.D. X 1.65mm	316 S.S.	FC12-12	CP12
6	1"O.D. X 2.11mm	316 S.S.	FC16-12	FC16-8
7	1/2"O.D. X 0.89mm	316 S.S.	MC8-4	

Note : Only No.7 made a Burst Test without Pressure Test.

3. Test Date and Place : 2012/07/27 ; 3F. No.3, Lane 551, Sec.1, Wanshou Rd.,
Gueishan Township, Taoyuan County 333, Taiwan

4. Test Condition :

4.1 Pressure Test (psi) : Table-2

No.	Working Pressure (psi)	Test Pressure (psi)	No.	Working Pressure (psi)	Test Pressure (psi)
1	10,900	15000	2	5,100	15,000
3	3,300	10000	4	3,700	10,000
5	3,300	10000	6	3,100	10,000

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技檢組組長:
Laboratory Chief

報告簽署人:

Report Authorized Person

檢驗員:

Inspector

Max Chang

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4.2 Burst Test (psi) : Impose pressure until the tube fitting (No.7) rupture and record the pressure value.

5. Pressure Gauge : Comparison by the *standard pressure gauge* before testing.
 Table-3

Pressure Value (psi)	Standard Pressure Gauge (psi)	Pressure Gauge #1 (psi)
5,000	5,000	4,500
10,000	10,000	9,500
15,000	15,000	14,000

Note : ① Between 5,000 to 10,000 psi, the Pressure Gauge's(#1) Value was read 500 psi less than Standard Pressure Gauge ; At 15,000 psi, it was read 1,000 psi less than Standard Pressure Gauge.

② All tube fittings' pressure test value shown by "Gauge #1".

③ The Burst Test Device's Pressure Gauge without Comparison by *Standard Pressure Gauge*.

6. Test Method :

6.1 Test Fluid : Water

6.2 Test Pressure : Follow the Table-2 (Test Pressure)

6.3 Holding Time : 5 min

7. Test Result

Tube Fitting Pressure Test :

No.	Part No. of Samples Tested		Test Pressure (psi)	Result
1	FC2-6	CP2	15,000	No Leakage
2	FC4-4	CP4	15,000	No Leakage
3	FC6-4	CP6	10,000	No Leakage
4	FC8-4	CP8	10,000	No Leakage
5	FC12-12	CP12	10,000	No Leakage
6	FC16-12	FC16-8	10,000	No Leakage

Tube Fitting Burst Test :

No.	Tubing O.D. x Wall thickness (mm)	Material	Part No. of Samples Tested	Result
7	1/2"O.D. X 0.89mm	316 S.S.	MC8-4	Rupture occurs when pressure reaches 9,600 psi

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8. Test Figure

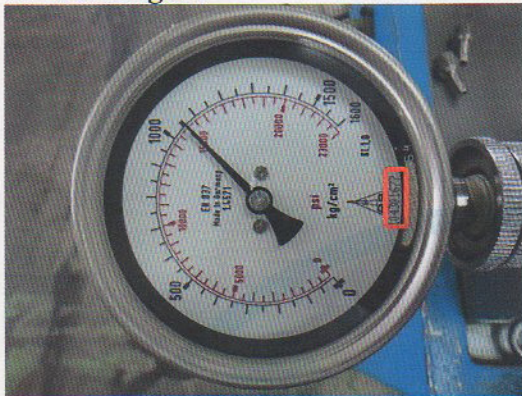


Fig-01 "Standard Pressure Gauge"



Fig-02 Pressure Gauge #1



Fig-03 No.1 Tube Fitting on test



Fig-04 No.1 Pressure Test 14,000 psi



Fig-05 No.3 Tube Fitting on test



Fig-06 No.03 Pressure Test 9,500 psi

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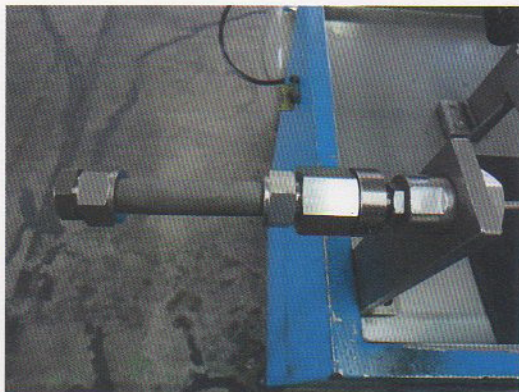


Fig-07 No.5 Tube Fitting on test



Fig-08 No.05 Pressure Test 9,500 psi



Fig-09 No.6 Tube Fitting on test



Fig-10 Pressure Test Device



Fig-11 Burst Test

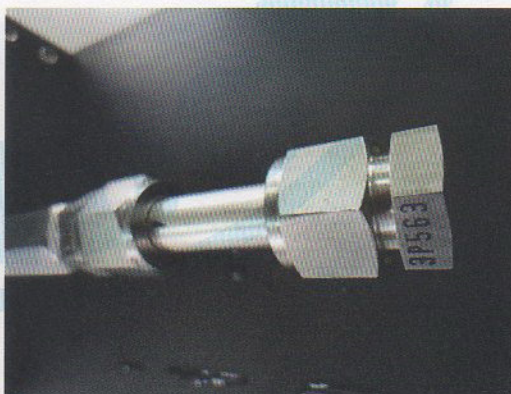


Fig-12 No.7 Tube Fitting on Burst Test

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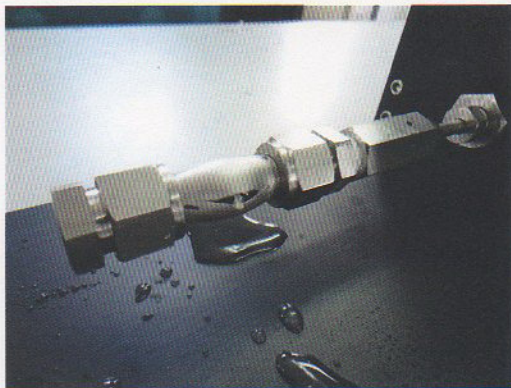


Fig-13 Tube Rupturing

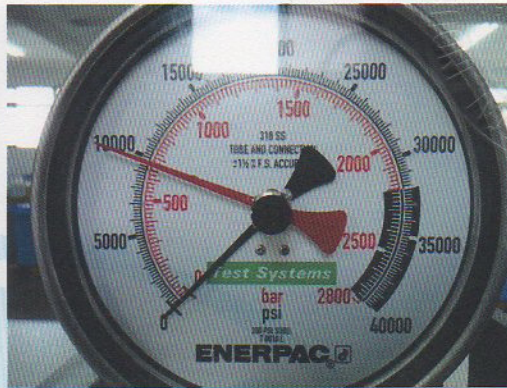


Fig-14 Pressure reaches 9,600 psi (Rupturing)



Fig-15 Calibration Tag (Standard Gauge)

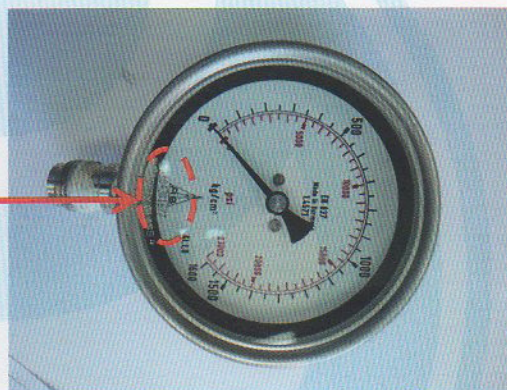


Fig-16 Serial Number-104301677

9. Standard Pressure Gauge's Calibration Report at Annex-1.

10. This Report total has 7 pages.

-----The End-----

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Annex-1

SGS

Calibration Report

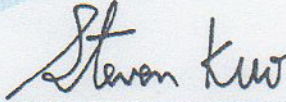
Calibration & Measurement Laboratory-Taipei

		Report No : ECAC1100212		1 of 2	
Applicant		VEE-LOK CO., LTD.			
Equipment		Pressure Gauge			
Manufacturer	WIKA	Model	ENS37	Serial No	104301677
Procedure used	GENP-EC-P001-P003	Received Date	2012/5/23	Calibration Date	2012/5/29
Operator	Polo Chen	Temperature(°C)	23.0 °C±2.0 °C	Relative Humidity(%)	50.0 %±10.0 %
Add.-Customer	2F., No.2, Lane 551, Sec. 1, Xinyi Rd., Gueishan Township, Taichung County 433, Taiwan (R.O.C.)				Location
Add.-On-Site	Laboratory				

SGS Standards

Equipment	Manufacturer	Model	Calibration Date
Pressure Calibrator	FLUKE	717 30G	2012/4/3
Pressure Module	FLUKE	700P31	2012/1/6
Serial Number	Traceability	Report No.	Due Date
8956005	SGS(KAO)	EKAC0257012	2013/4/3
89203102	SGS(KAO)	EKAC0022712	2013/1/6

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Calibration Results

RptNo : ECAC1100212

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Pressure Item :

Measured Value (psi)	Actual Value (psi)	Deviation (psi)
5000	5100	-100
6000	6117	-117
7000	7148	-148
8000	8131	-131
9000	9126	-126

Calibration Explanation :

- 1.Deviation = Measured - Actual
 - 2.Deviation % = $[(\text{Measured} - \text{Actual}) \div \text{Actual}] * 100$
 - 3.Measured : The value recorded under testing from item- tested.
 - 4.Actual : The value indicated by traceable standard.
 - 5.The uncertainty claimed is for a confidence probability about 95%,This is calculated using a coverage factor approximately k=2 at 95% level of confidence.
 - 6.Expanded uncertainty : 500 psi
 - 7.The expanded uncertainty included measurement system variances and item-tested variance.
- THE END --

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