

# SHAHIN MAFSAL

**High Voltage Laboratory** 

#### **TEST REPORT**

APPLICANT NAME: SHAHIN MAFSAL CO.

PRODUCT NAME: 1KV RESINE JOINT (\$120-\$50)

PRODUCER NAME: SHAHIN MAFSAL CO.



#### SH.M High Voltage Laboratory

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#### SH.M High Voltage Laboratory

1KV RESINE JOINT (S120-S50) BS7888-3 (1998)

## 1. General information

Test operator: Mr. AlirezaSoleymanifar Test manager: Ms. Samin Sarraf

Test date: Summer 2017

Laboratory name: HighVoltage Laboratory of ShahinMafsal Co.

Address: Morchekhort Industrial Area, Isfahan Iran

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Website: <u>WWW.shahinmafsal.com</u>

Applicant name: ShahinMafsal Co.

Request Date: 2017/JUN/8

Request No.: 17-122

Standard No.: BS788-3

Test Method: Standard

Test Report No.: TH92108

Sample Inscription Code: STH92108-1 \_ STH92108-2

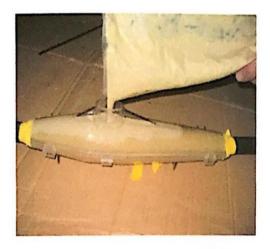
Applicant / producer: Shahin Mafsal Co.

Model: S120 (3× 120 + 70)-S50(3 × 50 + 70)



# 2. Tag & Characteristic









# 3. Mechanical properties of test sample

Surface area of sample STH92108-1 (mm²)	$3 \times 120 + 70$
Surface area of sample STH92108-2 (mm <sup>2</sup> )	$3 \times 50 + 25$



#### 4. Total Consideration

Customer has right to object the results and test methods, if the objection is proved in a way that the test is influenced, the test must repeat for free. Test samples kept by laboratory only for 6 months, then the laboratory is not responsible for any objection from customer. Samples are selected by customers, so the laboratory is not responsible for sample selection.

# 5. Summary of test methods & results

#### a. Power Frequency Stability Voltage (in air)

The High Voltage Laboratory Condition				
Temperature T= 12.1 °C				
Air Pressure P=853.1 hPa				
Humidity R=36.3 %				

The test has done with Power Frequency transformer (CS200-0.25\_HEAFELY TRENCH Co.)

Sample code	Applied Voltage to phase	Earth connection to Phases	applied voltage (kV)	Applied voltage duration (s)
STH 92108-1	R	ST-N	4	60
STH 92108-1	S	TR-N	4	60
STH 92108-1	Т	RS-N	4	60
STH 92108-2	R	ST-N	4	60
STH 92108-2	S	TR-N	4	60
STH 92108-2	Т	RS-N	4	60

Confirmation Criteria
The joint must tolerate applied voltage for 1 minute.

Results
Test result is correspondent to the standard.



# b. Insulation Resistance (in air)

The High Voltage Laboratory Condition
Temperature T= 12.1 °C
Air Pressure P=853.1 hPa
Humidity R=36.3 %

The test has done with mega Ohm meter (C.A 6543\_CHAUVIN ARNOUX Co.)

Sample code	Applied Voltage to phase	Earth connection to Phases	applied voltage (kV)	Applied voltage duration (s)
STH 92108-1	R	ST-N	1	313
STH 92108-1	S	TR-N	1	422
STH 92108-1	Т	RS-N	1	460
STH 92108-2	R	ST-N	1	465
STH 92108-2	S	TR-N	1	425
STH 92108-2	T	RS-N	1	362

Confirmation Criteria	
The measured resistance must not be lower than $50 \mathrm{M}\Omega$	

Results
Test result is correspondent to the standard.

**❖** The resistance must be measured 1 minute after applying voltage.



## c. Power Frequency Stability Voltage (in water)

The High Voltage Laboratory Condition
Temperature T= 12.1 °C
Air Pressure P=853.1 hPa
Humidity R=36.3 %

The test has done with Power Frequency transformer (CS200-0.25 \_HEAFELY TRENCH Co.) Joint floated in a tank full of water. Joint take place in 1 meter depth of tank and another side of cable locate out of water.

Sample code	Applied Voltage to phase	Earth connection to Phases	applied voltage (kV)	Applied voltage duration (s)
STH 92108-1	R	ST-N, water	4	60
STH 92108-1	S	TR-N, water	4	60
STH 92108-1	Т	RS-N, water	4	60
STH 92108-2	R	ST-N, water	4	60
STH 92108-2	S	TR-N, water	4	60
STH 92108-2	Т	RS-N, water	4	60

Confirmation Criteria	
The joint must tolerate applied voltage for 1 minute.	

Results	
Test result is correspondent to the standard	.k



## d. Insulation Resistance (in water)

The High Voltage Laboratory Condition
Temperature T= 12.1 °C
Air Pressure P=853.1 hPa
Humidity R=36.3 %

The test has done with mega Ohm meter (C.A 6543\_CHAUVIN ARNOUX Co. ) Joint floated in a tank full of water. Joint take place in 1 meter depth of tank and another side of cable locate out of water.

Sample code	Applied Voltage to phase	Earth connection to Phases	applied voltage (kV)	Applied voltage duration (s)
STH 92108-1	R	ST-N, water	1	198
STH 92108-1	S	TR-N, water	1	273
STH 92108-1	Т	RS-N, water	1	193
STH 92108-1	RST-N	Water	1	132
STH 92108-2	R	ST-N, water	1	443
STH 92108-2	S	TR-N, water	1	363
STH 92108-2	T	RS-N, water	1	328
STH 92108-2	RST-N	water	1	295

Confirmation Criteria	
The measured resistance must not be lower than $50 \mathrm{M}\Omega$	

Results
Test result is correspondent to the standard.

**❖** The resistance must be measured 1 minute after applying voltage.