



## **SUPERLOK Advantage**

### **To whom it may concern,**

Please let me explain more about the strength of SUPERLOK products as follows;

#### **1. SUPERLOK liability with intermixed SWAGELOK, PARKER, etc**

All of SUPERLOK Fittings, design and dimensions, are similar to SWAGELOK and Parker, therefore interchangeable with these brands.

The Nut and body threads on SUPERLOK fitting OD are constructed in accordance with ASME B1.1 and the thread tolerances are controlled as specified in ASME B.1.1.

This tolerance ensures consistent make-up every time.

As proof, we have attached the “SGS intermixability & interchangeability burst-test certificate.

INTERMIXABILITY & INTERCHANGEABILITY TEST-BURST TEST CERTIFICATE

Date : Apr. 01, 2010

**Applicant / Manufacturer** : BMT Co., Ltd., Korea.  
**Date and Place of Test** : Feb. 17, 2010 at the manufacturer's premises in Yangsan, Korea  
**Kind of Test** : Witness of Intermixability & Interchangeability Test-Burst Test  
**Test Fitting** : **SUPERLOK & SWAGelok Twin-Ferrule Fitting**  
- Size : 1/2", 316 Stainless Steel  
- Tube : 12.7mm O.D. X 1.24mm WT Seamless Tube

**Test condition** :  
- Test Medium : Water  
- Test Temperature : Room Temperature  
- Configuration of Test Piece

- SU : Superlok, -SW:Swagelok

Test 1	Nut	Back Ferrule	Front Ferrule	Body
1-1	SU	SU	SW	SW
1-2	SW	SW	SU	SU
1-3	SW	SU	SW	SU
1-4	SU	SW	SU	SW

**Burst Pressure** : 15000 PSI at Connection Tube

This is to certify that the Intermixability & Interchangeability Test-Burst Test was performed by the manufacturer under our witness as above, and we confirmed the Burst Pressure of 15000 PSI at Connection Tube.

Note

The details of the test condition and data are as per **Manufacturer's Technical Test Report No. BMT-TR100217**, Which were verified and endorsed by us.

"In accordance with Client's instructions, the Company's involvement has been limited to witnessing/observing a third party's intervention(s) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied the qualifications, actions or omissions of the third party's personnel or the analysis results.

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SGS Korea Co., Ltd.

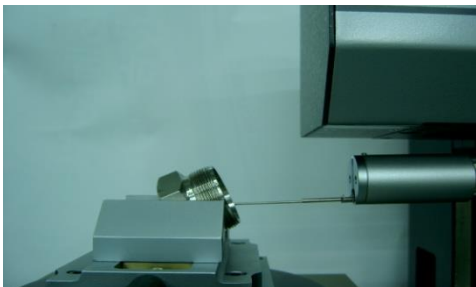
  
S. H. Chun  
Manager, Industrial Division

## 2. Excellent Surface Finish of the Superlok Body

Makes the front ferrule seat easily and properly in sealing area (Superlok Body)

## 3. Smooth inside curved line of products.

Keeps the flow of fluid smoothly flowing without turbulence.



**1 inch SUPERLOK  
UNION LOK  
Surface  
Roughness**

**Superior quality  
than Other  
Competitors'**



**Smooth Curved Line  
in SUPERLOK ELBOW**

**(SUPELOK ELBOW)**



#### 4. Comparison of Interior Surface Roughness.

Item	Spec	SUPERLOK	"P" company	"S" company	Remark
1/2" UNION	Ra 1.6 $\mu\text{m}$	0.43 $\mu\text{m}$	1.18 $\mu\text{m}$	4.06 $\mu\text{m}$	SAMPLE 2EA
		1.03 $\mu\text{m}$	2.02 $\mu\text{m}$	4.10 $\mu\text{m}$	

Item	Spec	SUPERLOK		"P" Company		"S" Company		Remark
1/2" ELBOW	Ra 1.6 $\mu\text{m}$	1.53 $\mu\text{m}$	1.33 $\mu\text{m}$	1.59 $\mu\text{m}$	1.89 $\mu\text{m}$	1.44 $\mu\text{m}$	0.43 $\mu\text{m}$	SAMPLE 2EA
		1.91 $\mu\text{m}$	2.00 $\mu\text{m}$	2.25 $\mu\text{m}$	2.16 $\mu\text{m}$	2.32 $\mu\text{m}$	1.61 $\mu\text{m}$	
		2.07 $\mu\text{m}$	2.77 $\mu\text{m}$	3.89 $\mu\text{m}$	3.54 $\mu\text{m}$	2.82 $\mu\text{m}$	1.86 $\mu\text{m}$	
		2.42 $\mu\text{m}$	3.14 $\mu\text{m}$	4.85 $\mu\text{m}$	4.10 $\mu\text{m}$	2.86 $\mu\text{m}$	2.89 $\mu\text{m}$	

품명	조도 Spec	SUPERLOK		"P" Company		"S" Company		비고
1/2" TEE	Ra 1.6 $\mu\text{m}$	0.34 $\mu\text{m}$	0.40 $\mu\text{m}$	3.23 $\mu\text{m}$	1.44 $\mu\text{m}$	0.55 $\mu\text{m}$	0.25 $\mu\text{m}$	SAMPLE 2EA
		0.41 $\mu\text{m}$	0.45 $\mu\text{m}$	5.71 $\mu\text{m}$	2.37 $\mu\text{m}$	0.58 $\mu\text{m}$	0.68 $\mu\text{m}$	
		0.42 $\mu\text{m}$	0.49 $\mu\text{m}$	5.85 $\mu\text{m}$	3.29 $\mu\text{m}$	1.00 $\mu\text{m}$	1.73 $\mu\text{m}$	
		0.57 $\mu\text{m}$	0.56 $\mu\text{m}$	6.25 $\mu\text{m}$	3.38 $\mu\text{m}$	1.15 $\mu\text{m}$	1.77 $\mu\text{m}$	
		1.04 $\mu\text{m}$	0.62 $\mu\text{m}$	7.80 $\mu\text{m}$	4.88 $\mu\text{m}$	1.69 $\mu\text{m}$	2.11 $\mu\text{m}$	



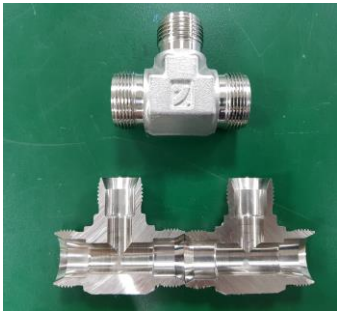
**SUPERLOK**



**P Company**



**S Company**



**SUPERLOK**

**P Company**

**S Company**

-Excellent surface finish inside of SUPERLOK products allows smoother flow of fluid and gases. This prevents pressure loss and protects inside of tubing & pipe, while experiencing an extended lifetime of instrument lines and saving cost.

## **5. Multiple Product lines for support.**

- 6.1 Process Valve
- 6.2 Instrument Fitting
- 6.3 Instrument Valve
- 6.4 UHP Fitting & Valve

**BMT has multiple product lines to support all of the projects in Semiconductor, Oil & Gas, Shipbuilding, Offshore, etc**



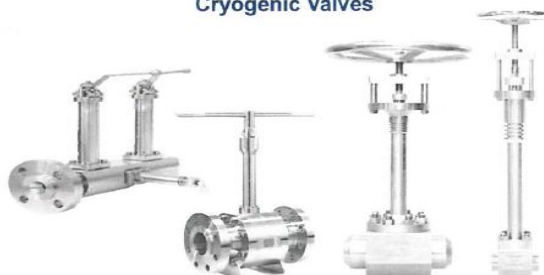
## Process Valve series

### Process Valve series

Block & Bleed Valves



Cryogenic Valves



Ball Valves



Other Specialized Valves



## Instrument Valve and Fitting

### Instrument Valve series

Instrument Ball Valves



High Pressure Valves



Needle Valves



Check Valves



### Instrument Tube Fitting series

SUPERLOK Tube Fittings  
(Compression Type)



Bite Type Tube Fittings  
(STD. JIS B2351)



Bite Type Tube Fittings  
(STD. DIN 2353)



37° Flared Tube Fittings  
(STD. SAE J514)



Instrument Thread Fittings  
(STD. ASME B1.20.1, SAE AS71051,  
ISO 228/1, JIS B0202, ISO 7/1, JIS B0203)



O-ring Face Seal Fittings  
(O-ring Face to Face Design)



High Pressure Fittings  
(Coned & Threaded Connection Design)



## UHP line



BMT Can offer reliability tests for customers upon request.

- Cracking Test
- Leak test
- High-Pressure Gas test
- Impulse & Vibration test
- Cryogenic valve test
- High-Pressure Gas Test
- Helium detect test
- Oil Content Analyzer test
- Particle count test.
- Fire Safety Test
- Fugitive Emission test

Each Superlok instrument Fitting and Valve has passed a stringent visual and dimensional inspection to assure freedom from surface defects, fluid leaks, and possible malfunctions. Every individual valve from production is tested with nitrogen at 1,000 PSI (70bar)

Sample pieces of fittings & Valve are tested to confirm corrosion resistance and mechanical properties such as hardness, impact strength, and tensile strength.