

MECHF i t Test Report

I. General Information

Specimen: Mass Production model "MECHFit"

Pipe Type: BARBI PEX-AL-PEX Pipe

II. Evaluation Test result (ISO15875-5)

● Pull-out test

Size		16		20		25	
Number of test pieces		3	3	3	3	3	3
Application class		2	2	2	2	2	2
Temperature (°C)		23	90	23	90	23	90
Pull-out force (N)		302	201	471	314	737	491
Test period (h)		1	1	1	1	1	1
Test result	Brass type	OK	OK	OK	OK	OK	OK
	Plastic type	OK	OK	OK	OK	OK	OK

※ OK = no Pull-out

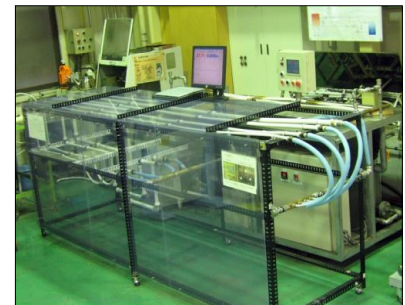
Size		32	
Number of test pieces		3	3
Application class		2	2
Temperature (°C)		23	90
Pull-out force (N)		1206	804
Test period (h)		1	1
Test result	Brass type	OK	OK
	Plastic type	—	—

※ OK = no Pull-out



● Thermal cycling test

Size	16	20	25	32	
Highest test temperature (°C)	90	90	90	90	
Lowest test temperature (°C)	20	20	20	20	
Test Pressure (bar)	10	10	10	10	
Number of test cycles	5000	5000	5000	5000	
Test result	Brass type	—	—	—	OK
	Plastic type	OK	OK	OK	—



● Pressure cycling test

Size	16	20	25	32	
Number of test pieces	3	3	3	3	
Temperature (°C)	23	23	23	23	
Test Pressure Upper limit (bar)	15	15	15	15	
Test Pressure Lower limit (bar)	0.5	0.5	0.5	0.5	
Number of test cycles	10000	10000	10000	10000	
Test result	Brass type	OK	OK	OK	OK
	Plastic type	OK	OK	OK	—

※ OK = no leak & no Pull-out



● **Leaktightness under vacuum**

Size	16	20	25	32	
Number of test pieces	3	3	3	3	
Temperature (°C)	23	23	23	23	
Test Pressure (bar)	-0.8	-0.8	-0.8	-0.8	
Test duration (h)	1	1	1	1	
Test result	Brass type	OK	OK	OK	OK
	Plastic type	OK	OK	OK	—

※ OK = Change in vacuum pressure < 0.05bar



● **Internal pressure test**

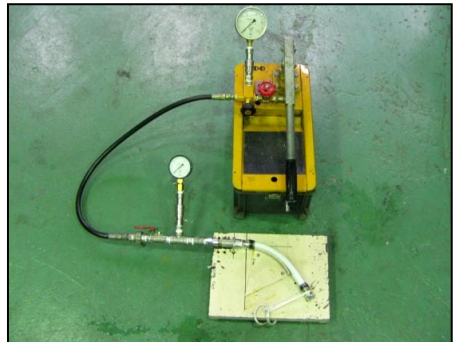
Size	16	20	25	32	
Number of test pieces	3	3	3	3	
Temperature (°C)	95	95	95	95	
Test Pressure (bar)	12.5	12.5	12.5	12.5	
Test duration (h)	1000	1000	1000	1000	
Test result	Brass type	OK	OK	OK	OK
	Plastic type	OK	OK	OK	—



● **Bending test**

Size	16	20	25	32	
Number of test pieces	3	3	3	3	
Application class	2	2	2	2	
Temperature (°C)	20	20	20	20	
Test Pressure (bar)	3.39	3.39	3.39	3.39	
Test duration (h)	1	1	1	1	
Test result	Brass type	OK	OK	OK	OK
	Plastic type	OK	OK	OK	—

※ OK = no leak



III. **Evaluation test result (COCOMECH original abuse test)**

● **Tensile Test**

Under the normal temp. excessive tensile against the specimen is loaded
(Over the yield point of load)

Size	16	20	25	32	
Number of test pieces	more than 3	more than 3	more than 3	more than 3	
Test result	Brass type	OK	OK	OK	OK
	Plastic type	OK	OK	OK	—

※ OK = no defect



● **Tensile fatigue Test**

At internal pressure at 3MPa equivalent axis load, 1million times pulsati

Size	16	20	25	32	
Number of test pieces	2	2	2	2	
Test result	Brass type	—	—	—	OK
	Plastic type	OK	OK	OK	—

※ OK = no defect

