



BOTHWELL STEEL FITTINGS CO., LTD.

NO.302, REN-SIH ROAD, REN-WU DISTRICT, KAHSIUNG CITY TAIWAN R.O.C.(81460)
TEL : (886)7-3711536, 3710497, 3720260 FAX : (886)7-3713864, 3713868
WEB SITE : <http://www.bothwell.com.tw> E-Mail : box@bothwell.com.tw



MILL TEST & INSPECTION CERTIFICATE

ACCORDING TO EN 10204 3.1

CUSTOMER :
CUST NO : 142215
ORDER NO : 9026-04492

INVOICE NO : 0200001523
L/O NO :

PAGE : 37
DATE : 07/29/2014
ORIGIN : TAIWAN

ITEM	BAR DEPT NO. HEAT CHAR	QTY	DESIGNATION OR SPECIFICATION NO. (CHEMICAL COMPOSITION) MECHANICAL PROPERTIES SUPPLIER
31	0620011 N2682 ✓	560 PCS	FULL CPLE F304L 1/2" 3000# NPT C:0.023 S:0.29 NI:11.80 P:0.034 S:0.020 CR:19.29 NI:8.71 NO: 0.032 N:0.08 TS(KS):550.0 IN 0.20(AS):42.4 EL(2):84.2 R.A.(S):76.0 HARDNESS1(HBW):170 HARDNESS2(HBW):168

REMARK

THE MATERIAL MENTIONED IDENTIFIED AS ASTM A312 18, ASME SA312 2015D 304/F304L
THE FITTINGS SUPPLIED IDENTIFIED AS ASME B16.11 - 2011
THE PRODUCT SUPPLIED WAS INSPECTED IN ACCORDANCE WITH SPECIFICATION SURFACE & DIMENSIONS
FULLY FILLED AND FINE GRAIN PRACTICE

ITEM	QTY	TEST	RESULT	UNIT	REMARK
31	560	TS	550	MPa	
31	560	EL	84.2	%	
31	560	RA	76.0	%	
31	560	HBW	168		

HEAT TREATMENT / SOLUTION : 1000C (1940 F) 1 H
STEEL HEATING PROCESS : ELECTRIC FURNACE
CONFORMS TO SA312 AND F304L/304L-12
POSITIVE MATERIAL IDENTIFICATION (PMI) SATISFACTORY

WE CERTIFY THE ABOVE MENTIONED FITTINGS HAVE BEEN MANUFACTURED
SAMPLED, TESTED, AND INSPECTED IN ACCORDANCE WITH THE
SPECIFICATIONS BELOW

C.C. Huang
INSPECTOR

C.L. Ko
INSPECTOR