PURCHASER:	NSS FASTENERS(PTY) LTD	CERT NO:	609265	Report Code:	
ADDRESS:	140 North Reef Road, Elandsfontein Germi	CUST P/N:	SM293120100	PO# NO:	445222
SIZE:	M20-2.5 X 100	MATERIAL TYPE:	A2(304)	ITEM NO:	4820
MARKING:	A2-70 THE	SHIP QTY:	810 Z2	HEAT NO:	160405W01
		COMMODITY:	DIN931-1987	LOT NO:	Z201607130006
MFR.DATE:	2016/07/07	Product Name:	Hex Head Bolts with Shank		
Sampling Date:	2016/07/13	Test Date:	2016/07/13	Sample Plan spec:	ANSI/ASME B18.18.2M - 1987

DIMENSIONAL INSPECTIONS — SAMPLE STANDARD: DIN931-1987

CHARACTERISTICS	SPECIFICATION	ACTUAL RESULT	SAMPLE DETERMINANT
Width Across Flats	29.67 <---> 30	29.69 <---> 29.75	Qualified
Across Corner	33.53 min	34.1 <---> 34.18	Qualified
Head Height	12.28 <---> 12.72	12.7 <---> 12.72	Qualified
Body Diameter	19.67 <---> 20	19.7 <---> 19.72	Qualified
Length of Thread	46 <---> 58	47.1 <---> 47.2	Qualified
Nominal Length	99.3 <---> 100.7	99.8 <---> 99.85	Qualified
Major Diameter	19.623 <---> 19.958	19.7 <---> 19.76	Qualified
Pitch Diameter(GO/NOGO)	18.164 <---> 18.334	PASSED	Qualified

MECHANICAL PROPERTIES — SAMPLE STANDARD: ISO3506-1:2009

CHARACTERISTICS	SPECIFICATION	ACTUAL RESULT	SAMPLE DETERMINANT
Tensile Strength(N/mm^2)	700 min	819 <---> 825	Qualified
Yield Strength(N/mm^2)	450 min	667 <---> 670	Qualified
Elongation(mm)	8 min	9 <---> 9.5	Qualified

CHEMICAL COMPOSITION%

Heat Number	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	SAMPLE DETERMINANT
160405W01	0.031	0.36	0.76	0.03	0.002	8.06	18.24	0.1	0.7	Qualified

Jiajuan.shen — Authorization

he yun. chen — Verification

yuchao.shu — Sampler

2017/01/18 — Date

INSPECTION RESULT:SAMPLES TESTED CONFORM TO ALL OF SPECIFICATION AS ABOVE THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL. WHENEVER TESTING DISCREPANCIES ARE DETECTED OR DEPARTURES FROM DOCUMENTED POLICIES AND PROCEDURE OCCUR, THEY WILL BE SHOWN IN REMARK.

1、HRC for Screw & Bolt with partial thread;HRB(S) for Nut、Thread rod and Bolt & Screw with full thread.