



AL RASHED FASTENERS TEST CERTIFICATE (AS PER EN 10204 - 3.1 / ISO 10474 - 3.1B)



25-Aug-17

TEST CERTIFICATE NO: 228393

OA NO 17810656

PT NO 179959

Certificate No. : 044 100 960157-001

CUSTOMER NAME : TECNICAS REUNIDAS INT.

PO. NO : 0225007720 Suppl.08

STOCK NO : NIL

CUST. ITEM NO : 28

PRODUCT CODE : 10029119

PRODUCT : STUD BOLT

PRODUCT SPEC. : ASTM A 193-2014b

SIZE : ϕ 1-1/4"-8UN X 7-1/2"

GR_CL_TYPE : GR. B7

THREAD : ANSI B1.1 - 2A

TOTAL QUANTITY : 930

CHEMICAL COMPOSITION :

MILL HEAT NO:	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	B	Ti	SOL	OTHER
	X 100			X 1000			X 100			X 10,000		X 1,000	
611781	4	2	5	1	2	0	8	20			0		

SAMPLE FOR ILLUSTRATION PURPOSE ONLY

MECHANICAL PROPERTIES :

LTR NO: 66979

TEMPERING TEMP: 630°C

< CHEMICAL TESTS > < REQUIRED > << OBSERVATIONS >>

HARDNESS [HR]	C35 (MAX)	C28 - C29	C29 - C30
TENSILE STRENGTH [KSI] / [N/mm ²]	125.00 (MIN)	139.05	
YIELD STRENGTH [KSI] / [N/mm ²]	105.00 (MIN)	128.53	
ELONGATION [%]	16.00 (MIN)	19.00	
REDUCTION OF AREA [%]	50.00 (MIN)	56.00	
PROOF LOAD [lbf] / [KN]	N/A (MIN)		
MACROETCH EXAMINATION	O.K.	O.K.	O.K.

SURFACE COATING : NATURAL FINISH

COATING SPECN : N/A

COATING THICKNESS : 0 MICRONS (AVERAGE

DIMNAL . INSPN . : SATISFACTORY

VISUAL INSPECTION : SATISFACTORY

IDENTIFICATION " -N - B7 "

MACHINED SPECIMEN TESTED AND THE RESULTS ARE FOUND SATISFACTORY.



The Information on Chemical Composition is based on the Test Certificates received from the Steel Mills OR Supplier . Material described in this document has been inspected under the parameters setforth and found to be in conformance with the Physical Requirement

WE CERTIFY THE ABOVE PRODUCT MEETS SPECIFIED REQUIREMENT OF CONTRACT



[Signature]

FF - QC - 09 Rev . 05

Authorised Signatory
QC Department