

# QUALITY CERTIFICATE

CUSTOMER: 7TMW INC

DATE: AUG 10 2023

PRODUCT: A325 bolt + 2H nut + F436 FW

CONTRACT NO: 19MPT062

CLASS: A325

INVOICE NO.: 19MPT0716

SIZE: 7/8-9X3

CODE:

MARKING: F A325

QUANTITY: 20000 pcs

## DIMENSIONS OF SPEC:

INSPECTION ITEMS	STANDARD	RESULT
VISUAL APPEARANCE		ok
BODY DIAMETER	22.73-21.64	21.95-22.02
THREAD	GO NO GO	
WIDTH ACROSS FLATS	36.53-35.41	35.5-35.7
WIDTH ACROSS CORNERS	42.16-40.36	40.8-41.1
MAJOR DIAMETER	22.18-21.82	22.07-22.10
HEAD HEIGHT	14.3-13.49	13.9-14.1
SCREW LENGTH	73.16-76.17	74.9-75.06
THREAD LENGTH	FTL	FT

## MECHANICAL PROPERTIES

CHARACTERISTICS	STANDARD	RESULT
Hardness [HR]	max 34	28-30
Wedge Strength [N/mm <sup>2</sup> ]	min 826	996-1012
Yield Strength [N/mm <sup>2</sup> ]	min 635	735-764
Elongation [%]	min 14	15.3-16.5
Reduction pf area [%]	min 35	52.5-54.6
Proof Load [KN]	174.6	174.6
Thickness [UM]	min 53	54-68

## CHEMICAL COMPOSITION(%)

MILL HEAT	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	B
331208520	0.41	0.22	0.77	0.013	0.006	0.98				

Surface coating: HDG

Dimmil Inspn: COMPLYING WITH THE STANDARD OF A325

The information on chemical composition is based on the test certificate received from the steel mill or supplier

Material described in this document has been inspected under the parameters set forth and found to be in conformance with the physical requirement

We certify the above product meets specific requirement thereof.

Quality Control Supervisor

Quality Control Manager