McMASTER-CARR®
330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Certificate

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1571267	5/4/2026	Jonathan Wood	6778267-01	1

Line		Product	Ordered	Status	Certificate
2	92245A805	Mil. Spec. Hex Head Screw, US Origin, 18-8 Stainless Steel, 5/8"-11 Full Thread, 1-1/2" Long	12 packs	12 packs deliver May 5	339–6507

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

ROBBINS MANUFACTURING CO., INC.

1200 AIRPORT ROAD • FALL RIVER, MA 02720 • 508-675-2555 • FAX 508-677-0494 • robbinsmfgfasteners.com

MANUFACTURERS OF STAINLESS STEEL, NON-FERROUS BOLTS, SCREWS, NUTS & SPECIAL COLD FORMED PARTS

PHYSICAL PROPERTIES TEST REPORT

10/21/25

STAR STAINLESS SCREW NJ
30 WEST END ROAD
P.O. BOX 288 *
TOTOWA
NJ 07511

CUSTOMER NO. 02902605
PURCHASE ORDER NO. G4625
LINE ITEM NO.

THREAD CLASS UNC 2A **REPORT/CERTIFICATE NO.** 70012T **DATE OF MFG.:** 10/06/25

COMPANY NO. 01
ROBBINS ITEM NO. MS35307-462A
ITEM 5/8-11 X 1-1/2 HEX CAP "3SS" *
ROBBINS LOT NO. L64140 **SHOP ORDER NO.** C143828

MATERIAL 302HQ STAINLESS
HEAT NO. 762330
QUANTITY SHIPPED 1,750

SPECIFICATION(S) INVOKED:

THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL, AND RELATES ONLY TO THE ITEM(S) TESTED.

MATERIAL	ASTM-F-593-02 302
MECH. PROP.	FF-S-85D
DIMENSIONAL	NASM35307 REV.2
NDT TESTING	N/A
NDT ACCEPTANCE	N/A

HEAD MARKINGS RADIAL LINES & R
COMMENTS
PASS PER AMS2700D METH 1 CL 4
MS35307-462 MAG PERM.<2.0
DFAR COMPLIANT
MELTED & MFG IN THE U.S.A.

	REDUCED SPECIMEN TEST RESULTS				FULL SIZE TEST RESULTS					
	UTS PSI	YIELD PSI	ELONG %	R/A %	10 DEG. WEDGE LBS.	AXIAL/ PROOF LOAD LBS.	UTS PSI	YIELD PSI	ROCKWELL HARDNESS C	
1		90,088	48.0	72.0	24,191		107,042		24	1
2		91,144	47.0	71.0	24,265		107,365		23	2
3		90,225	48.0	72.0	24,174		106,966		24	3
4		90,474	47.0	72.0	24,173		106,959		24	4
5		91,144	47.0	72.0	24,328		107,647		24	5
6		95,558	48.0	71.0	24,160		106,902		24	6
7		90,088	47.0	72.0	24,371		107,836		24	7
8		91,474	48.0	72.0	24,191		107,042		24	8

VISUAL AND DIMENSIONAL INSPECTIONS WERE PERFORMED AND THE RESULTS WERE FOUND SATISFACTORY. ALL RAW MATERIAL USED WAS RECEIVED WITH MERCURY-FREE CERTIFICATION AND WAS NOT SUBJECT TO MERCURY WHILE IN OUR POSSESSION

I CERTIFY THE ABOVE RESULTS AND/OR DATA TO BE CORRECT AS CONTAINED IN THE RECORDS OF THIS COMPANY.

LEVEL II SIG: Michael J Barboza Michael J. Barboza

Q.A. REPRESENTATIVE / NDT INSPECTOR

ROBBINS MANUFACTURING CO., INC.

1200 AIRPORT ROAD • FALL RIVER, MA 02720 • 508-675-2555 • FAX 508-677-0494 • robbinsmfgfasteners.com

MANUFACTURERS OF STAINLESS STEEL, NON-FERROUS BOLTS, SCREWS, NUTS & SPECIAL COLD FORMED PARTS

CERTIFICATE OF COMPLIANCE - GENERAL

10/21/25

STAR STAINLESS SCREW NJ
30 WEST END ROAD
P.O. BOX 288 *
TOTOWA
NJ 07511

CUSTOMER NO. 02902605
PURCHASE ORDER NO. G4625
LINE ITEM NO.

THREAD CLASS UNC 2A **REPORT/CERTIFICATE NO.** 70012G **DATE OF MFG.:** 10/06/25

COMPANY NO. 01
ROBBINS ITEM NO. MS35307-462A
ITEM 5/8-11 X 1-1/2 HEX CAP "3SS" *
ROBBINS LOT NO. L64140 **SHOP ORDER NO.** C143828

MATERIAL 302HQ STAINLESS
HEAT NO. 762330
QUANTITY SHIPPED 1,750

SPECIFICATION(S) INVOKED:

THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL, AND RELATES ONLY TO THE ITEM(S) TESTED.

MATERIAL	ASTM-F-593-02 302
MECH. PROP.	FF-S-85D
DIMENSIONAL	NASM35307 REV.2
NDT TESTING	N/A
NDT ACCEPTANCE	N/A

HEAD MARKINGS RADIAL LINES & R
COMMENTS MS35307-462

THE UNDERSIGNED HEREBY CERTIFIES THAT:

ALL ITEMS FURNISHED IN THIS SHIPMENT ARE IN FULL COMPLIANCE WITH ALL PURCHASE ORDER AND SPECIFICATIONS REQUIREMENTS.

WHEN THE ABOVE CITED PURCHASE ORDER REQUIRES MATERIAL TEST REPORTS, THE UNDERSIGNED FURTHER CERTIFIES THAT:

THE TEST REPORTS SUPPLIED REPRESENT THE ACTUAL ATTRIBUTES OF THE ITEMS FURNISHED AND THE TEST RESULTS ARE IN FULL COMPLIANCE WITH ALL APPLICABLE SPECIFICATIONS AND PURCHASE ORDER REQUIREMENTS.

NO WELD REPAIR.

VISUAL AND DIMENSIONAL INSPECTIONS WERE PERFORMED AND THE RESULTS WERE FOUND SATISFACTORY. ALL RAW MATERIAL USED WAS RECEIVED WITH MERCURY-FREE CERTIFICATION AND WAS NOT SUBJECT TO MERCURY WHILE IN OUR POSSESSION.

I CERTIFY THE ABOVE RESULTS AND/OR DATA TO BE CORRECT AS CONTAINED IN THE RECORDS OF THIS COMPANY.

LEVEL II SIG: Michael J Barboza Michael J. Barboza

Q.A. REPRESENTATIVE / NDT INSPECTOR

CARPENTER TECHNOLOGY

Certification ID: 001370112

CARPENTER TECHNOLOGY CORP.
READING OPERATIONS (PA)
HARTMAN & SOFIANOS STS GATE
#6
READING PA 19601

Certificate of Tests

Ship To
ROBBINS MFG CO 1200 AIRPORT RD FALL RIVER MA 02720

Cert To
ROBBINS MFG CO 1200 AIRPORT RD FALL RIVER MA 02720

Sales Order Information	
Sales Order/Item:	144027/10
Customer PO/Item:	41003-A remake 2

Delivery Information	
Delivery:	80468940
Picked Date:	04/24/2025
Quantity Shipped:	3,510 LB

Production Information	
Production Order:	W86428-2
Heat Number:	762330

The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under federal statues including federal law, Title 18, Chapter 47.
The values and other technical data represent the results of analyses and tests made on samples collected from the total lot. Original data records can be traced by reference to the Carpenter order number.
During the manufacturing process, this material has not come in direct contact with Mercury or any of its compounds. The material has not come in contact with any radioactive sources, Cobalt 60, Radium or Alpha-Source nor devices employing a single boundary of containment. Material is also weld free.
This document shall not be reproduced, except in full, without the written consent of Carpenter Technology Corporation.
Material has been melted in USA or qualifying country to DFARS requirements 252.225-7014 with alternate 1 for qualifying country 225.872.1, superseded by DFARS requirements DFARS 252.225-7008 and 252.225-7009.
This order was manufactured in accordance with Carpenter Specialty Alloys Operations Quality Program Manual, Revision 38 dated 08/21/2022.
Carpenter Technology Corporation is registered to Quality Management System Standards: ISO 9001, AS9120 and AS9100.
This certificate of test is Type 3.1 prepared in accordance with EN 10204 (DIN 50049).
We certify this material to have been manufactured, inspected, and tested; and found the results to conform to all drawing and/or specification requirements and order requirements as applicable.
Carpenter Technology third party accreditation certificates are available on the company website: https://www.carpentertechnology.com/quality-certifications
Decision Rule: Unless otherwise specified in a customer/industry specification, Carpenter Technology Corporation will determine acceptability of any test result by comparison of the result with the specification limits, without any additional consideration of the measurement uncertainty. When requested, Carpenter Technology Corporation will provide uncertainty budgets for any test result that is not addressed by the industry standard. When a Decision Rule is defined in a customer/industry specification it will supersede the Corporate Decision Rule.
This material was made in the USA at one or more of the following plants: Athens, AL; Clearwater, FL; Elyria, OH; Franklin, PA; Hartsville, SC; Latrobe, PA; Orwigsburg, PA; Reading, PA; Washington, PA; Waseon, OH. To Carpenter's knowledge no iron or steel of Russian origin was used, or processing/sub-processing was conducted in Russia, in the manufacture of the products as required by Article 3g (1) of Regulation (EU) No 833/2014.
*Ingot(s) Shipped represents the ingots that were shipped on the specified delivery. The material produced and certified may include additional ingots that were not shipped.

The certification is made to the customer printed on the form. Carpenter neither makes, nor assumes responsibility for any representation or certification to other parties.(Form E2-366)

CERTIFICATE OF TESTS — ABNAHMEPRUEFZEUGNIS — CERTIFICAT DE CONTROLE

Certification ID:001370112

CARPENTER
Carpenter Technology Corporation
101 West Bern Street, Reading, Pa. 19601
Tel: (610) 208-2000 (800) 338-4592

- THE RECORDING OF FALSE, FICTICIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

04/23/25

CUSTOMER / BESTELLER / CLIENT
REFER TO PAGE 1

SELLER / VERKÄUFER / VENDEUR PAGE 2 OF 4
REFER TO PAGE 1

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
REFER TO PAGE 1	W86428 - 2	SEE PG 1	SEE PG 1

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE : 762330

PRODUCT DESCRIPTION: 302 HQ SFQ HOT FINISH ANNEALED PICKLED H HDG CL A1
UNCOATED
PART NUMBER: 10015901

SPECIFICATION: ASTM-A493-25 UNS S30200 (03/01/25)
QQ-S-763F CHEMISTRY ONLY (06/27/96)
AMS-QQ-S-763 (MOD TENSILE) REV D STABILIZED (03/ /15)
ASTM-A262-15 PRACTICE A (REAPPROVED 2021)

SIZE 0.630000 IN.(16.00 MM) RD ROD

HEAT CHEMISTRY(WT%): (TEST METHOD IS SHOWN IN PARENTHESIS)

C (COM)	MN(XRF)	SI(XRF)	P (XRF)	S (COM)	CR(XRF)
0.01	1.52	0.28	0.022	LT .001	18.1

NI(XRF)	MO(XRF)	CU(XRF)	CO(XRF)	N (FUS)	C+2N
9.5	0.27	3.8	0.58	0.016	0.046

CAPABLE OF PASSING INTERGRANULAR CORROSION TEST PER ASTM-A262 - PRACTICE E.
INTERGRANULAR CORROSION TESTED TO ASTM-A262, PRACTICE A - ACCEPTABLE.
ANNEALED MICROSTRUCTURE FREE FROM CONTINUOUS GRAIN BOUNDARY CARBIDE PRECIPITATION (NETWORK).
NO WELD AND NO WELD REPAIR WAS PERFORMED DURING PROCESSING OF THIS MATERIAL.
THIS HEAT MELTED BY THE ELECTRIC ARC/AOD PROCESSES

TENSILE AS SHIPPED, KSI(MPA) 71.5(493)
-- -------
*-->TESTED AT HARTSVILLE

FORM 52-366

CONTINUED ON NEXT PAGE

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

CERTIFICATE OF TESTS **ABNAHMEPRUEFZEUGNIS** **CERTIFICAT DE CONTROLE**

Certification ID:001370112

CARPENTER
Carpenter Technology Corporation
101 West Bern Street, Reading, Pa. 19601
Tel: (610) 208-2000 (800) 338-4592

- THE RECORDING OF FALSE, FICTICIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

04/23/25

CUSTOMER / BESTELLER / CLIENT
REFER TO PAGE 1

SELLER / VERKÄUFER / VENDEUR
REFER TO PAGE 1

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
REFER TO PAGE 1	W86428 - 2	SEE PG 1	SEE PG 1

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE : 762330
ADDRESS OF TESTING LOCATIONS:
HARTSVILLE - 205 TALLEY METALS LANE, MCBEE, SC 29101

MATERIAL HAS BEEN MELTED AND MANUFACTURED IN THE USA WHICH IS A QUALIFYING COUNTRY TO DFARS REQUIREMENTS 252.225-7014 WITH ALTERNATE 1 FOR QUALIFYING COUNTRY 225.872.1, SUPERSEDED BY DFARS REQUIREMENTS DFARS 252.225-7008 AND 252.225-7009.

UNLESS OTHERWISE STATED, THE TEST WERE PERFORMED TO THE LATEST REVISION OF THE STANDARDS LISTED BELOW: 1) BEND TEST - ASTM E290, 2) CHARPY IMPACT - ASTM E23, 3)COEFFICIENT OF LINEAR THERMAL EXPANSION - ASTM E228, 4)FRACTURE TOUGHNESS - ASTM E399, 5) BRINELL HARDNESS - ASTM E10, 6)ROCKWELL HARDNESS-ASTM E18, 7)MICRO VICKERS HARDNESS-ASTM E92, 8)KNOOP HARDNESS-ASTM E92, 9)MACRO VICKERS HARDNESS-ASTM E92, 10)STRESS RUPTURE/CREEP RUPTURE-ASTM E139, 11)STRESS RUPTURE(COMBINATION)-ASTM E292, 12)ROOM TEMPERATURE TENSILE-ASTM E8, 13)ELEVATED ROOM TEMPERATURE TENSILE-ASTM E21, 14)DECARBURIZATION-ASTM E1077 15)DELTA FERRITE AMS 2315, 16)GRAIN SIZE-ASTM E112, 17)INCLUSION CONTENT/MICROCLEANLINESS-ASTM E45, 18) INTERGRANULAR ATTACK - ASTM A262, 19)INTERGRANULAR CORROSION-ASTM A262, 20)MACRO ETCH&TESTING - ASTM A604/E381, 21)PITTING CORROSION - ASTM A923, 22)CREVICE CORROSION-ASTM G48, 23) HARDNESS CONVERSIONS - ASTM E140, 24)XRF-ASTM E572/E1085/E2465, 25) OES - ASTM E415/E1086, 26)COM - ASTM E1019, 27)FUS - ASTM E1019, 28)MS - CARPENTER METHODS 206.8500/206.8530 29)CHEMISTRY RESULTS ARE ROUNDED IN ACCORDANCE WITH ASTM A751 WHICH CONFORMS TO ASTM E29 WITH ONE SPECIAL EXCEPTION
THIS ORDER WAS MANUFACTURED IN ACCORDANCE WITH CARPENTER SPECIALTY ALLOYS OPERATIONS QUALITY PROGRAM MANUAL, REVISION 38 DATED 08/21/2022.

CARPENTER'S QUALITY MANAGEMENT SYSTEM IS REGISTERED TO ISO 9001, AS9100, AND AS9120. THIS CERTIFICATION OF TEST IS TYPE 3.1 PREPARED IN ACCORDANCE WITH EN 10204 (DIN 50049). WE HEREBY CERTIFY THAT THE ABOVE TEST DATA ARE IN ACCORDANCE WITH THE PURCHASE ORDER AND SPECIFICATION REQUIREMENTS, AS DOCUMENTED IN THIS CERTIFICATE OF TESTS.

TEST METHODS ARE PER THE ASTM STANDARDS ON FILE AND IN EFFECT AT TIME OF ORDER ACCEPTANCE, STANDARD PRACTICES, OR AS AGREED UPON BETWEEN CARPENTER & CUSTOMER.

THE ABSENCE OF A REPORTED TEST TEMPERATURE INDICATES THAT THE TEST WAS COMPLETED AT ROOM TEMPERATURE.

FORM F2-366

CONTINUED ON NEXT PAGE

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

CERTIFICATE OF TESTS
Certification ID:001370112

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE

CARPENTER
Carpenter Technology Corporation
101 West Bern Street, Reading, Pa. 19601
Tel: (610) 208-2000 (800) 338-4592

◇ THE RECORDING OF FALSE, FICTICIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
◇ THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
◇ MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
◇ THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

04/23/25

CUSTOMER / BESTELLER / CLIENT
REFER TO PAGE 1

SELLER / VERKÄUFER / VENDEUR PAGE 4 OF 4
REFER TO PAGE 1

CUSTOMER ORDER NO./BESTELL-NR./N° DE COMMANDE	CARPENTER NO./WERKS-NR./N° DE REFERENCE INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/POIDS
REFER TO PAGE 1	W86428 - 2	SEE PG 1	SEE PG 1

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE : 762330

DECISION RULE: UNLESS OTHERWISE SPECIFIED IN A CUSTOMER/INDUSTRY SPECIFICATION, CARPENTER TECHNOLOGY CORPORATION WILL DETERMINE ACCEPTABILITY OF ANY TEST RESULT BY COMPARISON OF THE RESULT WITH THE SPECIFICATION LIMITS, WITHOUT ANY ADDITIONAL CONSIDERATION OF THE MEASUREMENT UNCERTAINTY. WHEN REQUESTED, CARPENTER TECHNOLOGY CORPORATION WILL PROVIDE UNCERTAINTY BUDGETS FOR ANY TEST RESULT THAT IS NOT ADDRESSED BY THE INDUSTRY STANDARD.

DIGITALLY SIGNED BY GARY BROWN
MANAGER - SPECIFICATIONS/CERTIFICATIONS
CARPENTER TECHNOLOGY CORPORATION

Gary Brown

FORM E2-366

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est imprimé sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.