

I. SCOPE:

THIS SPECIFICATION DEFINES MINIMUM REQUIREMENTS FOR COATINGS APPLIED TO FASTENERS. THESE COATINGS PROVIDE VARIOUS DEGREES OF CORROSION PROTECTION AND TORQUE-TENSION RELATIONSHIPS IN A BOLTED JOINT. THIS IS A MULTIPLE VARIATION SPECIFICATION (SEE ARTICLE III).

II. APPLICATION:

- A. PRIMARILY INTENDED TO BE CALLED OUT ON INDIVIDUAL PART DRAWINGS FOR BOLTS, NUTS, AND WASHERS.
- B. INQUIRIES REGARDING INTERPRETATION OR APPLICATION OF THIS SPECIFICATION SHALL BE DIRECTED TO:

AGCO CORPORATION – JACKSON OPERATIONS
 202 INDUSTRIAL PARK
 JACKSON, MN 56143
 ATTN: STANDARDS & SPECIFICATIONS ENGINEERING

III. DRAWING DESIGNATIONS:

DESIGNATION	APPLICATION	COATING	REQUIREMENTS
CPS 5035A	BOLT	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035B	NUT	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035C	WASHER	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035D	BOLT	CHROME-FREE INORGANIC DIP-SPIN FINISH	ARTICLE IV B
CPS 5035E	NUT		
CPS 5035F	WASHER		
CPS 5035G	1170 MPa BOLT	GEOMET PLUS L	ARTICLE IV C
CPS 5035H	LOCKNUT	CHROME-FREE INORGANIC DIP-SPIN FINISH WITH OPTIONAL FRICTION MODIFIER.	ARTICLE IV D
CPS 5035I	BOLT, NUT, OR WASHER	OIL W/RUST INHIBITOR	ARTICLE IV E
CPS 5035J	NON-METALLIC INSERT LOCKNUTS	LOW BAKE-TEMP CHROME-FREE INORGANIC DIP-SPIN FINISH	ARTICLE IV F

FIGURE 1 - DRAWING DESIGNATIONS (RoHS COMPLIANT)

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.		AGCO CORP CONFIDENTIAL	Page 1 of 12	DATE 1-SEP-23
COATING-FASTENER		ORIGINAL ISSUE DATE D1-APR-03	CHG NO 6	NUMBER CPS 5035

IV. REQUIREMENTS:
A. CPS 5035A, B, OR C (PHOSPHATE AND OIL).

PARTS SPECIFYING CPS 5035A, B, OR C SHALL HAVE A HEAVY CRYSTALLINE ZINC-IRON PHOSPHATE CONVERSION COATING AND A LUBRICANT THAT MEET THE FOLLOWING REQUIREMENTS:

1. COATING WEIGHT 11 - 27 g/m²
2. COATING THICKNESS 8 - 15 µm
3. SALT SPRAY (ASTM B117) 72h MINIMUM TO RED RUST TEST IS PERFORMED BY SUPPLIER AND IS NOT INTENDED AS AN AGCO ACCEPTANCE TEST. NO EVIDENCE OF CORROSION MAY BE SEEN ON SIGNIFICANT SURFACES (EXCLUDES EDGES) WHEN OBSERVED WITH THE UNAIDED EYE AT A DISTANCE OF 1 m.
4. COEFFICIENT of FRICTION (K) 0.15±0.03 (SEE ARTICLE V)
5. APPEARANCE: COATING SHALL APPEAR AS A DARK GRAY, CRYSTALLINE MATERIAL FREE FROM STREAKS, STAINS, OR OTHER EVIDENCE OF NONUNIFORMITY.
6. THE SPECIFIC LUBRICANT SHALL BE AT THE SUPPLIER'S OPTION EXCEPT THAT LUBRICANTS CONTAINING SILICONE ARE PROHIBITED, SURFACES SHALL NOT BE TACKY, AND THE COEFFICIENT OF FRICTION SHALL MEET THE REQUIREMENTS OF ARTICLE IV.A.4.

B. CPS5035D, E, F, OR H (CHROME-FREE INORGANIC DIP-SPIN FINISH) THE FOLLOWING REQUIREMENTS MUST BE MET.

1. COATING THICKNESS 8 µm [MINIMUM]
MINIMUM THICKNESS REQUIRED ON SIGNIFICANT SURFACES ONLY, THOSE SURFACES THAT CAN BE TOUCHED BY A 13 mm DIAMETER SPHERE. ADDITIONALLY, EDGES, CORNERS, HOLES, & THREADS ARE EXCLUDED FROM THICKNESS REQUIREMENTS
2. COEFFICIENT OF FRICTION: 0.15+/-0.03
3. COLOR: UNLESS OTHERWISE SPECIFIED
COATING SHALL BE SILVER-LIGHT GRAY MATTE IN APPEARANCE. FOR EXAMPLE, IN-CAB PARTS ARE TYPICALLY BLACK, AND MUST BE SPECIFIED BY A NOTE ON THE DRAWING OF THE FASTENER.

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.	AGCO CORP CONFIDENTIAL Page 2 of 12 DATE 1-SEP-23
COATING-FASTENER	ORIGINAL ISSUE DATE D1-APR-03 CHG NO 6 NUMBER CPS 5035

4. SALT SPRAY (ASTM B117) 96 h MINIMUM TO WHITE CORROSION.

5. APPROVED COATINGS FOR CPS 5035D,E,F,OR H:

a. MAGNI INDUSTRIES (DETROIT, MI) – 501

b. CURTIS METAL FINISHING (STERLING HTS, MI) – ZnCOAT

REPLACEMENT COATINGS FOR CHROME-FREE INORGANIC DIP SPIN FINISH SHALL MEET THE SAME MINIMUM CORROSION RESISTANCE REQUIREMENTS. REPLACEMENT COATINGS SHALL PRODUCE PARTS THAT ARE FREE OF HYDROGEN EMBRITTLEMENT, EITHER INHERENTLY OR BY POST-PROCESS BAKING. ANY PROCESS THAT MAY CAUSE HYDROGEN EMBRITTLEMENT OR THAT IS EMPLOYED TO RELIEVE HYDROGEN EMBRITTLEMENT SHALL BE SUBMITTED TO THE PARTIES MENTIONED IN SECTION II.B FOR WRITTEN PRE-APPROVAL. APPROVED PROCESS[ES] SHALL BE DOCUMENTED IN PRODUCTION WITH LOT TRACEABILITY.

CORROSION RESISTANCE TESTING IS PERFORMED BY SUPPLIER AND IS NOT INTENDED AS AN AGCO ACCEPTANCE TEST. NO EVIDENCE OF WHITE CORROSION MAY BE SEEN ON SIGNIFICANT SURFACES (EXCLUDES EDGES) WHEN OBSERVED WITH THE UNAIDED EYE AT A DISTANCE OF 1 m.

C. CPS 5035G (GEOMET PLUS L)

PARTS SPECIFYING CPS 5035G SHALL HAVE TWO COATS MINIMUM OF GEOMET FOLLOWED BY ONE COAT OF PLUS L.

GEOMET:

1. COATING WEIGHT 28 g/m²

2. COATING THICKNESS 9 µm MINIMUM

MINIMUM THICKNESS REQUIRED OF SIGNIFICANT SURFACES ONLY, THOSE SURFACES THAT CAN BE TOUCHED BY A 13 mm DIAMETER SPHERE. ADDITIONALLY, EDGES, CORNERS, HOLES, AND THREADS ARE EXCLUDED FROM THE THICKNESS REQUIREMENTS.

3. SALT SPRAY (ASTM B117) 240 h MINIMUM TO RED CORROSION

PARTS SHALL BE IMMERSSED AND AGITATED IN A 3±1 VOLUME PERCENT SURFACTANT SOAP AT ROOM TEMPERATURE FOR 60 s. PARTS SHALL THEN BE RINSED, DRIED, AND PLACED IN

THE SALT SPRAY CABINET. TEST IS PERFORMED BY SUPPLIER AND IS NOT INTENDED AS AN AGCO ACCEPTANCE TEST. NO EVIDENCE OF CORROSION MAY BE SEEN ON SIGNIFICANT SURFACES (EXCLUDES EDGES) WHEN OBSERVED WITH THE UNAIDED EYE AT A DISTANCE OF 1 m.

4. COATING SHALL APPEAR AS A LIGHT GRAY, FREE FROM STREAKS, STAINS, OR OTHER EVIDENCE OF NONUNIFORMITY.
5. PROCESS
 - a. CLEANING - DIRT AND OIL SHALL BE REMOVED BY ALKALINE WASHING (AND RINSING) OR VAPOR DEGREASING. SCALE AND DRAWING COMPOUNDS SHALL BE REMOVED BY DRY HONING OR ABRASIVE BLASTING. ACID PICKLING IS NOT ALLOWED.
 - b. COATING - THE ACCEPTABLE COATING METHOD FOR GEOMET ON FASTENERS IS DIP SPINNING.
 - c. BAKING - PARTS SHALL BE BAKED AT 177 °C TO 204 °C (METAL TEMPERATURE) FOR A MINIMUM OF TEN MINUTES.
 - d. COATING - A SECOND COATING OF GEOMET SHALL BE APPLIED BY DIP SPINNING; THIS WILL COVER CONTACTING MARKS FROM THE FIRST APPLICATION AND WILL BUILD THICKNESS.
 - e. CURING - PARTS SHALL BE BAKED AT 302 °C TO 321 °C (METAL TEMPERATURE) FOR A MINIMUM OF TEN MINUTES.
 - f. TOPCOATING - PARTS SHALL BE DIP SPUN IN A PLUS L SOLUTION. ONE COAT IS SUFFICIENT.
 - g. CURING - PARTS SHALL BE BAKED AT A MINIMUM OF 120 °C (METAL TEMPERATURE) FOR A MINIMUM OF TEN MINUTES.
6. APPROVED MANUFACTURERS:

NOF METAL COATINGS NORTH AMERICA (CHARDON, OH, U.S.A.)

MAGNI INDUSTRIES (DETROIT, MI)

DACRAL S.A. (PARIS, FRANCE)

NIPPON DACRO SHAMROCK CO., LTD (YOKOHAMA CITY, JAPAN)

NOF METAL COATINGS SOUTH AMERICA, INDUSTRIA E COMERCIO, LTD. SAO PAULO, BRAZIL

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.	AGCO CORP CONFIDENTIAL	Page 4 of 12	DATE 1-SEP-23
COATING-FASTENER	ORIGINAL ISSUE DATE D1-APR-03	CHG NO 6	NUMBER CPS 5035

D. CPS 5035H – FOR ALL-METAL LOCKNUTS

NUTS SPECIFYING CPS 5035H SHALL HAVE A CHROME-FREE INORGANIC DIP-SPIN FINISH WITH OPTIONAL FRICTION MODIFIER FINAL COATING WHICH MEETS THE FOLLOWING REQUIREMENTS

1. ALL CPS 5035E REQUIREMENTS. (SEE ARTICLE IV B).
2. SALT SPRAY (ASTM B117) -96 h MINIMUM TO WHITE CORROSION.
3. A TOP COATING [IF APPLIED] SHALL BE DRY TO THE TOUCH.
4. LOCKNUTS ARE TO MEET THE PREVAILING TORQUE SPECIFIED REQUIREMENTS FOR LOCKNUTS. TEST BOLTS AND WASHERS ARE TO BE PLATED TO CPS 5035D AND CPS 5035F REQUIREMENTS AND WITHOUT ANY TOP COATING.
5. COEFFICIENT OF FRICTION, K, IS TO BE WITHIN A SIX SIGMA RANGE OF 0.14 TO 0.18. (SEE ARTICLE V).

E. CPS 5035I (OIL WITH RUST INHIBITOR).

PARTS SPECIFYING CPS 5035I SHALL HAVE AN OIL COATING WHICH CONTAINS A RUST INHIBITOR. INTENDED PRIMARILY FOR CORROSION PROTECTION BETWEEN TIME OF MANUFACTURE AND RECEIPT OF THESE PARTS INTO AGCO FACILITIES. THE SPECIFIC COATING PRODUCT SHALL BE AT THE SUPPLIER'S OPTION.

F. CPS 5035J (LOW BAKE-TEMP Cr-FREE INORGANIC DIP-SPIN FINISH)

PARTS SPECIFYING CPS 5035J SHALL HAVE A CHROME-FREE INORGANIC DIP-SPIN FINISH WITH OPTIONAL FRICTION MODIFIER FINAL COATING WHICH MEETS THE FOLLOWING REQUIREMENTS:

1. ALL CPS 5035E REQUIREMENTS. (SEE ARTICLE IV.B).
2. SALT SPRAY (ASTM B117) -96 h MINIMUM TO WHITE CORROSION.
3. A TOP COATING [IF APPLIED] SHALL BE DRY TO THE TOUCH.
4. LOCKNUTS SHALL MEET PREVAILING TORQUE REQUIREMENTS FOR THE SPEC CALLED OUT ON THE DRAWING [FOR EXAMPLE ISO 7041]. TEST BOLTS AND WASHERS ARE TO BE PLATED TO CPS 5035D AND CPS 5035F REQUIREMENTS AND WITHOUT ANY TOP COATING. SEE ARTICLE V.
5. BAKE CYCLE[S] [TEMPERATURE AND TIME] FOR CPS5035J COATINGS SHALL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE NON-METALLIC INSERT.

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.		AGCO CORP CONFIDENTIAL		Page 5 of 12	DATE 1-SEP-23
COATING-FASTENER			ORIGINAL ISSUE DATE D1-APR-03	CHG NO 6	NUMBER CPS 5035

ZN-ELECTROPLATE FEEDSTOCK TO THIS PROCESS SHALL BE STRIPPED FREE OF WAX AND/OR TRIVALENT SEALER.

6. APPROVED PRODUCT: A TWO-PASS COAT OF RIE 4018 OR ENGINEERING-APPROVED ALTERNATIVE. REFER TO II.B.

V. TORQUE TENSION REQUIREMENTS:

THE COEFFICIENT OF FRICTION SPECIFIED IN ARTICLE IV SHALL BE DETERMINED BY THE FOLLOWING FORMULA WHEN TESTING UNDER THE FOLLOWING CONDITIONS:

$K = T/DW$ WHERE:

K = COEFFICIENT OF FRICTION (UNITLESS)

T = TORQUE (N-m)

D = NOMINAL THREAD DIAMETER (mm)

W = FASTENER LOAD (kN)

- A. TEST CONDITIONS - WHEN TESTING THE TORQUE TENSION CHARACTERISTICS OF A BOLT, NUT, OR WASHER FOR CPS 5035 A, B, AND C REQUIREMENTS, THE TWO PARTS NOT BEING TESTED SHALL BE COATED TO MEET THE REQUIREMENTS OF CPS 5035D, E, OR F AS APPROPRIATE. TEST BOLTS SHALL MEET THE DIMENSIONAL REQUIREMENTS OF ASME B18.2.1 OR ISO 4014 AND MATERIAL REQUIREMENTS OF SAE J429 GRADE 8 OR ISO 898-1 CLASS 10.9 RESPECTIVELY. TEST NUTS SHALL MEET THE DIMENSIONAL REQUIREMENTS OF CPS 5051 FULL NUTS OR CPS 5052 NUTS AND HAVE A HARDNESS OF ROCKWELL C 24 - 38. TEST WASHERS SHALL MEET THE FOLLOWING REQUIREMENTS:

1. SQUARE WASHERS ARE PREFERRED.
2. DIMENSIONS SHALL CONFORM TO FIGURE 3.
3. MATERIAL SHALL BE A CARBON STEEL WITH A SURFACE HARDNESS OF ROCKWELL 15N 85 - 88 AND A CORE HARDNESS OF ROCKWELL A 73 - 78.
4. WASHERS SHALL BE FREE FROM BURRS AND SHARP EDGES. CORNERS OF SQUARE WASHERS MAY BE ROUNDED TO A MAXIMUM RADIUS EQUAL TO THE MATERIAL THICKNESS.

- B. TESTING - WHEN TESTING A NUT OR BOLT, THE PART BEING TESTED SHALL ABUT A WASHER AND SHALL BE THE PART THAT IS TURNED. WHEN TESTING A WASHER, IT SHALL ABUT A BOLT AND

THE BOLT SHALL BE TURNED. THE WASHER SHALL NOT ROTATE DURING ANY OF THE TESTS.

C. GAGING & RESISTANCE TO FREE-SPINNING INSTALLATION

1. FASTENERS COATED BY DIP-SPIN PROCESSES MAY EXHIBIT RESISTANCE TO FREE-SPINNING INITIAL INSTALLATION. AFTER COATING, THREADS SHALL BE GAGED BY THE RELEVANT BASIC SIZE GO THREAD RING OR PLUG GAUGE i.e.
 - a. The GO thread ring gage for tolerance position h for external ISO metric threads.
 - b. The GO thread plug gage for tolerance position H for internal ISO metric threads.
 - c. The GO thread ring gage for Class 3A external unified inch screw threads.
 - d. The GO thread plug gage for Class 2B or 3B internal unified screw threads.

2. IF AGCO AND ITS SUPPLIER ARE UNABLE TO REACH AGREEMENT USING GAGING CRITERIA IN 1a, 1b, 1c, OR 1d, AGCO's FASTENER SUPPLIER MAY BE ALLOWED TO USE MATING THREAD CRITERIA FOR FREE SPINNING THREADED COMPONENTS USING THE FORMULAE SHOWN HERE. ULTIMATELY, AGCO's SUPPLIER IS RESPONSIBLE TO DEVELOP APPROPRIATE THREAD DIMENSIONS BEFORE COATING IN ORDER TO ACHIEVE THE PROPER THREAD TOLERANCE CLASS. THREADS MAY BE PRODUCED UNDERSIZED TO ACCOMMODATE THE COATING PROVIDED THE FINISHED PRODUCT MEETS ALL MECHANICAL REQUIREMENTS FOR THAT GRADE OR CLASS OF FASTENER, AND ALL OTHER REQUIREMENTS SHOWN ON THE FASTENER'S DRAWING OR SPECIFICATION TABLE.
 - a. For free spinning metric fastener components, the maximum allowable spin-on input torque in N·m is $0.001 \times D^3$ where D is the nominal thread diameter in mm.
 - b. For free spinning inch fastener components, the maximum allowable spin-on input torque is calculated by the formula shown in 2.a after a direct conversion from inch to metric values is established.

VI. MATERIAL QUALIFICATION:

- A. THE SUPPLIER SHALL ASSURE BY SUITABLE TESTS THAT THE MATERIAL FURNISHED MEETS THIS SPECIFICATION.
- B. THE SUPPLIER SHALL USE THE SAME MATERIAL AND MANUFACTURING PROCESSES FOR PRODUCTION MATERIAL AS FOR APPROVED SAMPLE MATERIAL.
- C. WRITTEN PERMISSION MUST BE OBTAINED FROM AGCO [REF II.B] PRIOR TO ANY CHANGE IN MATERIALS OR PROCESSES.
- D. WHEN REQUESTED BY AGCO, THE SUPPLIER SHALL SUBMIT A CERTIFIED TEST REPORT SHOWING COMPLIANCE WITH THIS SPECIFICATION.

VII. REFERENCES:

AGCO SPECIFICATIONS: CMS 5533, CMS 5534, CMS 5535, CMS 5536, CMS 5540, CMS 5541, CPS 5045, CPS 5049, CPS 5051, CPS 5052

SOCIETY AND INDUSTRIAL SPECIFICATIONS:

ASTM: B117

American Society Of Testing and Materials

100 Barr Harbor Drive, West Conshohocken, PA 19428

ISO STANDARDS: 898-1, 4014, 7041

SAE STANDARDS: J429

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.

AGCO CORP
CONFIDENTIAL

Page 8 of 12

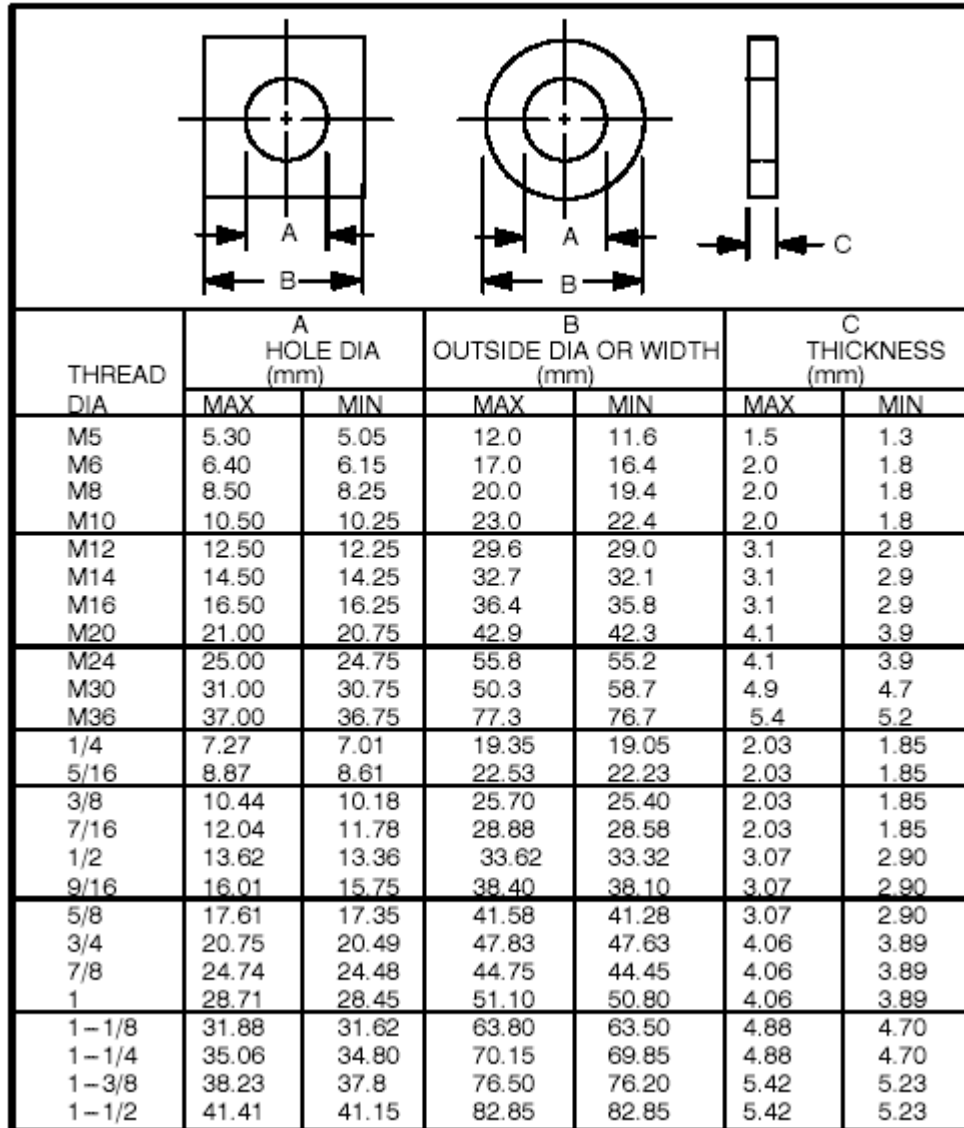
DATE
1-SEP-23

COATING-FASTENER

ORIGINAL ISSUE
 DATE
 D1-APR-03

CHG NO
6

NUMBER
CPS 5035


FIGURE 3 - TEST WASHER DIMENSIONS

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES.
 WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT
 THAT FOR WHICH IT IS LOANED, IS PROHIBITED.

AGCO CORP
CONFIDENTIAL

Page 9 of 12

DATE
1-SEP-23

COATING-FASTENER

ORIGINAL ISSUE
 DATE
 D1-APR-03

CHG NO
6

NUMBER
CPS 5035

VIII. ANNEX:

HISTORIC PURPOSES ONLY, TO BE USED FOR REFERENCE. ANY ENTRIES IN THE ANNEX WILL BE DESIGNATED BY THE ECO/REVISION THAT CAUSED THEM TO MOVE FROM THE ACTIVE TEXT OF THIS STANDARD TO THE ANNEX.

1. THIS TABLE [FIGURE 1A] MOVED TO THE ANNEX IN REV 4, ECO AA246

DESIGNATION	APPLICATION	COATING	REQUIREMENTS
CPS 5035A	BOLT	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035B	NUT	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035C	WASHER	PHOSPHATE & OIL	ARTICLE IV A
CPS 5035D	BOLT	YELLOW ELECTROPLATED ZINC-DICHROMATE	ARTICLE IV B
CPS 5035E	NUT	YELLOW ELECTROPLATED ZINC-DICHROMATE	ARTICLE IV B
CPS 5035F	WASHER	YELLOW ELECTROPLATED ZINC-DICHROMATE or MECHANICAL ZINC-DICHROMATE	ARTICLE IV B
CPS 5035G	1170 MPa BOLT	DACROMAT 320 PLUS L	ARTICLE IV C
CPS 5035H	LOCKNUT	YELLOW ELECTROPLATED ZINC-DICHROMATE & WAX	ARTICLE IV D
CPS 5035I	NUT	OIL W/RUST INHIBITOR	ARTICLE IV E

FIGURE 1A - DRAWING DESIGNATIONS (NON RoHS COMPLIANT)

2. THIS SPACE RESERVED FOR FUTURE ENTRIES.

REVISION HISTORY

CHANGE	DESCRIPTION
1	Changed the header to read Jackson Operations In section II: changed to Jackson Operations and changed to Jackson address. Changed entire spec from zinc-dichromate coating to zinc+trivalent chromium or chrome free sealer. This change affected Figure 1, section IV paragraph B, and section IV paragraph D.
2	Figure 1. CPS 5035G coating GEOMET PLUS L was DACROMET 320 PLUS L In section III: In paragraph C the coating GEOMET PLUS L was DACROMET 320 PLUS L. The coating weight 28 g/m² was 20 g/m² and the coating thickness 9 µm MINIMUM was 5 µm MINIMUM.
3	In section IV: Added figure 1A and "USE WHICHEVER TABLE IS MORE COST EFFECTIVE." In section IV: In paragraph B part 3, removed the date required by paragraph. Added hexavalent chromium and dacromet back into the spec.
4	Section II.B: Replaced "PURCHASING DEPARTMENT" with "STANDARDS & SPECIFICATIONS ENGINEERING" Section III: FIG I, in APPLICATION column, next to CPS 5035I, added BOLT & WASHER FIG 1, CPS5035F, Deleted "or Mechanical zinc + trivalent chromium or chrome free sealer" FIG 1, CPS5035D,E,F Deleted "Electroplated zinc + trivalent chromium or chrome free sealer" FIG 1, CPS5035H Deleted "Electroplated zinc + trivalent chromium or chrome free sealer & wax" FIG 1A, moved to this document's Annex. Section IV.B: Completely rewritten to reflect the changes referenced in FIG 1.

AGCO CORPORATION - JACKSON OPERATIONS

CORPORATE PROCESS SPECIFICATION

4 [continued]

IV.B.4 and FIG 2 [Hydrogen embrittlement relief] deleted from this document and replaced with salt spray test performance requirement of 96 hours.

IV.B.5 [Mechanical Zinc surface criteria] deleted and replaced with criteria for replacement coatings.

Section IV.C.6 All references to Dacromet Deleted.

Section IV.C.6 NOF Metal Coatings North America, was Metal Coatings Int'l Inc; NOF Metal Coatings South America was Metal Coatings Int'l.

Section V.A – ASME B18.2.1 was CMS 5534. ISO 4014 was CMS 5537

Added Section VIII: ANNEX.

Entire Spec: Updated to latest CPS Format.

5

IV.A.4 "Coefficient of Friction" was "Torque Coefficient"

IV.A.6 "Coefficient of Friction" was "Torque Coefficient"

IV.B.2 "Coefficient of Friction" was "Torque Coefficient"

IV.B.5 Added approved products.

IV.D.5 "Coefficient of Friction" was "Torque Coefficient"

V – Heading & first paragraph, "Coefficient of Friction" was "Torque Coefficient"

Added category CPS 5035J to FIGURE 1 for non-metallic insert locknuts, described in Article IV.F.

VII – Added ISO & SAE Standards, deleted CMS5537 from AGCO section.

6

IV.B.2 "COEFFICIENT OF FRICTION: 0.15+/-0.03" was "COEFFICIENT OF FRICTION: 0.18+/-0.03"

THE INFORMATION HEREON IS THE PROPERTY OF AGCO CORP AND/OR ITS SUBSIDIARIES. WITHOUT WRITTEN PERMISSION, ANY COPYING, TRANSMITTAL TO OTHERS, AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED, IS PROHIBITED.

AGCO CORP
CONFIDENTIAL

Page 12 of 12

DATE
1-SEP-23

COATING-FASTENER

ORIGINAL ISSUE
DATE
D1-APR-03

CHG NO
6

NUMBER
CPS 5035