

REVIEW ACTIVITIES: DLA-CS
USER ACTIVITIES: NAVY-MC

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FED. SUP CLASS 2540																							
<p>REQUIREMENTS:</p> <ol style="list-style-type: none"> 1. MATERIAL: STEEL FORGING 4140H, 4340 PER MIL-S-46172, GRADE OPTIONAL. WAIVE MECHANICAL PROPERTY REQUIREMENTS OF SPECIFICATION. 2. HEAT TREATMENT: QUENCH AND TEMPER TO ROCKWELL HRC 28-32. 3. SURFACE HARDEN AS SHOWN, 1/16 MIN TO 3/16 MAX DEPTH. CHECK TO BE MADE AT LOCATIONS MARKED "A" (9 PLACES). HARDNESS RANGE ROCKWELL HRC 48-52, MIL-S-12515 (360° SURFACE HARDEN OPTIONAL). 4. CLEAN AND TREAT TYPE 1, TT-C-490; PRIME PER MIL-P-52192, MIL-P-53030 OR MIL-P-53022, 0.08-1.2 MILS THICK; TOPCOAT COLOR, GREEN 383 PER MIL-C-46148 OR MIL-C-53039, 1.8 MILS THICK MINIMUM. 5. OPTIONAL MATERIAL: STEEL CASTING, SAND OR PRECISION, GRADE 150-135 (0.37% MIN CARBON), QQ-S-681. RADIOGRAPHIC INSPECTION IN ACCORDANCE WITH ASTM E142 AND TO THE FOLLOWING SEVERITY LEVELS PER ASTM E446: <table border="1"> <thead> <tr> <th>CRITERION</th> <th>SEVERITY LEVEL</th> </tr> </thead> <tbody> <tr> <td>GAS POROSITY</td> <td>A-2</td> </tr> <tr> <td>SAND AND INCLUSIONS</td> <td>B-2</td> </tr> <tr> <td>SHRINKAGE</td> <td></td> </tr> <tr> <td>TYPE 1</td> <td>CA-2</td> </tr> <tr> <td>TYPE 2</td> <td>CB-2</td> </tr> <tr> <td>TYPE 3</td> <td>CC-2</td> </tr> <tr> <td>TYPE 4</td> <td>CD-2</td> </tr> <tr> <td>CRACKS</td> <td>NOT ACCEPTABLE</td> </tr> <tr> <td>HOT TEAR</td> <td>NOT ACCEPTABLE</td> </tr> <tr> <td>INTERNAL CHILL, UNFUSED CHAPLETS, INSERTS</td> <td>NOT ACCEPTABLE</td> </tr> </tbody> </table> 6. MUST BE FREE OF BURRS, SHARP CORNERS, LOOSE SCALE, LAPS, COLD SHUTS, AND ANY INDICATION OF OVERHEATING OR BURNING. 7. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES; TOLERANCES: $\pm 1/32$ ON FRACTIONS; $\pm .005$ ON DECIMALS; $\pm 5^\circ$ ON ANGULAR DIMENSIONS. 8. SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. 9. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130. 		CRITERION	SEVERITY LEVEL	GAS POROSITY	A-2	SAND AND INCLUSIONS	B-2	SHRINKAGE		TYPE 1	CA-2	TYPE 2	CB-2	TYPE 3	CC-2	TYPE 4	CD-2	CRACKS	NOT ACCEPTABLE	HOT TEAR	NOT ACCEPTABLE	INTERNAL CHILL, UNFUSED CHAPLETS, INSERTS	NOT ACCEPTABLE
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<p>MILITARY STANDARD MS 51337 SHEET 1 OF 2</p>																							

FED. SUP CLASS
2540

NOTES:

1. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
2. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
3. APPLICABLE PROVISIONS OF ASCC AIR STD 11/8, STANAG 4101 AND QSTAG 264 ARE MARKED *.
4. THE USE OF RECYCLED MATERIALS WHICH MEET THE REQUIREMENTS OF THE APPLICABLE MATERIAL SPECIFICATIONS WITHOUT JEOPARDIZING THE INTENDED USE OF THE ITEM SHALL BE ENCOURAGED.

CERTAIN PROVISIONS OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENTS ASCC AIR STD 11/8, STANAG 4101, AND QSTAG-264. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

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APPROVED 9 JANUARY 1961 REVISED (F) SEE SHEETS 1&2 FOR CHANGES

P.A. Other.Cust	TITLE COUPLER, DRAWBAR, RING: HEAVY DUTY, 120,000 LB GVW	MILITARY STANDARD
		MS 51337
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET 2 OF 2