**INCH-POUND** 

OO-S-236E <u>27 March 2015</u> SUPERSEDING OO-S-236D 10 February 1989

# FEDERAL SPECIFICATION

# SAW , CIRCULAR, TABLE TYPE, WOODWORKING, SINGLE TILTING ARBOR, FLOOR MOUNTED

The General Services Administration has authorized the use of this federal specification by all federal agencies.

- 1. SCOPE AND CLASSIFICATION
- 1.1 <u>Scope</u>. This specification covers electric motor driven, tilting arbor, table type, circular saws.
- 1.2 Classification.
- 1.2.1 Types and sizes. The saw shall be of the following types and sizes as specified (see 6.2)

Type I - Direct driven tilting arbor

	Saw blade		
<u>Size</u>	diameter, inches		
12	12		
14	14		
16	16		
18	18		
20	20		

Type II - Belt driven tilting saw arbor

Size	<u>Saw blade</u> <u>diameter, inches</u>
10	10
12	12
14	14

Comments, suggestions, or questions on this document should be addressed to DLA Troop Support – Industrial Hardware Division (ATTN: Code FHTE), 700 Robbins Avenue, Philadelphia, PA 19111-5096 or email <a href="mailto:trpsptspecspa@dla.mil">trpsptspecspa@dla.mil</a>. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <a href="https://assist.dla.mil">https://assist.dla.mil</a>.

AMSC/NA FSC 3220

#### 2. APPLICABLE DOCUMENTS

# 2.1 Government documents .

2.1.1 <u>Specifications, standards. and handbooks</u>. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those Listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2)

# Federal Regulation:

A-Occupational Safety and Health (OSHA) 29 CFR 1910

(The Code of Federal Regulations (CFR) and the Federal Register (FR) are for sale on subscription basic "by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. When reinstated, reprints of certain regulations may be obtained from the Federal agency responsible for issuance thereof.)

Copies of OSHA standard and the standards which are incorporated by reference may be examined at the National Office of the Occupational Safety and Health Administration, U.S. Department of Labor, Washington, DC 20210.

#### Federal Standards:

FED-STD-H28 - Screw Thread Standards for Federal Services

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, Commercial Item Descriptions, and Handbooks as outlined under General Information in the Index of Federal Specifications, Standards and Commercial Item Descriptions. The Index, which includes cumulative bimonthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

(Single copies of this specification, and other Federal specifications and commercial item descriptions required by activities outside the Federal Government for bidding purposes are available without charge from General Services Administration Business Service Centers in Boston, MA; New York, NY; Philadelphia, PA; Washington, DC; Atlanta, GA; Chicago, IL; Kansas C1ty, MJ; Fort Worth, TX; Houston, TX; Denver, CO; San Francisco, CA; Los Angeles, CA; and Seattle, WA.)

(Federal Government activities may obtain copies of Federal standardization documents as the Index of Federal Specifications, Standards and Commercial Item Descriptions from established distribution points in their agencies.)

# Military Standards:

MIL-STD-461 - Electromagnetic Emission and Susceptibility Requirements for the Control of Electromagnetic Interference

(Copies of these documents are available online at <a href="http://quicksearch.dla.mil/">http://quicksearch.dla.mil/</a> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein. Unless otherwise specified herein, the issues are those cited in the solication.

CODE OF FEDERAL REGULATIONS (CFR)

U. S. DEPARTMENT OF LA80R, OCCUPATIONAL SAFETY ANO HEALTH ADMINISTRATION (OSHA)

29 CRF 1910 - Occupational Safety and Health Standards.

(Application for copies should be addressed to the Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402-0001.)

(Copies of specifications, standards, handbooks, drawings, publications, and other Government documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 <u>Non-Government publications</u>. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not 1isted in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

# AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI 01.1 - Safety Requirements for Woodworking Machinery. (DOD adopted)

(Copies of these documents are available from the American National Standards Institute, ATTN: Sales Dept., 25 West 43<sup>rd</sup> Street, 4<sup>th</sup> Floor, New York, NY 10036 or <a href="http://www.ansi.org">http://www.ansi.org</a>.)

# **ASTM International**

ASTM D 3951 - Commercial Packaging, Standard Prattice for.

(Copies of these documents are available from <a href="http://www.astm.org">http://www.astm.org</a> or ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

# NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION (NEMA)

NEMA MG 1 - Motors and Generators. (DOD adopted)

NEMA ICS 1 - Industrial Control and Systems. (DOD adopted)

NEMA ICS 6 - Enclosures for Industrial Controls and Systems. (DOO adopted)

(Copies of these documents are available from <a href="http://wwwnema.org">http://wwwnema.org</a> or the National Electrical Manufacturers' Association, 1300 North 17<sup>th</sup> Street, Suite 900, Arlington VA 22209)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through 1 ibraries or other informational services.)

2.3 <u>Order of precedence</u>. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

#### 3. REQUIREMENTS

- 3.1 <u>First article</u>. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.4.
- 3.2 <u>Design</u>. The saw shall be new (not a prototype) and one of the manufacturer's current production models capable of operations in accordance with the requirements herein. The saw shall include all components, parts, and features necessary to meet the performance requirements specified herein. All parts subject to wear, breakage, or distortion shall be readily accessible for adjustment, replacement, and repair.
- 3.2.1 <u>Measuring and indicating device calibrations</u>. Measuring and indicating devices shall be graduated in inch-pound (see 6.4.1), metric (see 6.4.2), or dual (inch-pound and metric) units as specified by the procuring activity (see 6.2). Regardless of the measurement system used, all measuring and indicating devices on the saw shall be graduated in the same system.
- 3.2.1.1 <u>Dials</u>. All dials used to indicate machine axes position or tool movement shall be graduated in increments not larger than .025 inch. Dial and handwheel circumferences shall be permanently and legibly engraved or etched on a nonglare background with graduations that can be read from the operator's normal position. All feed dials shall have independent zero adjustments and shall be calibrated in such a manner that the last dial graduation progresses into and is continuous with the first dial graduation as the dial is rotated through the zero position.

- 3.2.2 <u>Reclaimed materials</u>. The machine may contain reclaimed materials to the maximum extent possible provided such materials will not jeopardize the intended use, performance, or design life of the machine. Reclaimed materials shall have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the used or rebuilt products are allowed under this specification.
- 3.2.3 <u>Energy efficiency</u>. The saw and its components that directly consume energy in normal operation shall be designed and constructed for energy efficiency as governed by the developments available within the industry.
- 3.2.4 <u>Controls</u>. All mechanical, hydraulic, and pneumatic operating controls shall be located convenient to the operator's work station(s).
- 3.2.5 <u>Safety and health retirements</u>. All parts, components, mechanisms, and assemblies furnished on the saw, whether or not specifically required herein, shall conform to all requirements of OSHA 29 CFR 1910 and ANSI 01.1. If a conflict arises between 29 CFR 1910 and ANSI 01.1, 29 CFR 1910 shall apply. Additional safety and health requirements shall be as specified (see 6.2). Covers, guards, or other safety devices normally furnished as standard on the manufacturer's commercial saw supplied to the commercial market shall be provided for the point of operation and all other parts of the saw that present safety hazards. Additional guarding dependent on workpiece size and configuration shall be provided when specified and fully described by the procuring activity (see 6.2).
- 3.2.6 <u>Mercury restriction</u>. The saw shall not contain mercury or mercury compounds nor be exposed to free mercury during manufacture.
- 3.2.7 <u>Asbestos restriction</u>. Asbestos and materials containing asbestos shall not be used on or in the saw.
- 3.2.8 <u>Environmental Protection</u>. During operation, service, transportation, or storage of the machine, it shall not emit materials hazardous to the ecological system as prohibited by Federal, state, or local statutes in effect at the point of installation.
- 3.2.9 <u>Lubrication</u>. Means shall be provided to ensure adequate lubrication for all moving parts. Recirculating lubrication systems shall include a filter which is cleanable or replaceable and shall have a low lubrication level warning light that is in clear view of the operator's normal work station. An automatic lubrication system shall be provided for all ways and axis screws. Each lubricant reservoir shall have at least a 24 hour capacity and means for determining fluid level. All oil holes, grease fittings, and filler caps shall be readily accessible.

- 3.2.10 <u>Interchangeability</u>. To provide for replacement of worn parts, all parts shall be manufactured to definite dimensions and tolerances that will permit installation of replacement parts without modification of the part or machine.
- 3.3 <u>Construction</u>. The saw shall be constructed of parts which are new, without defects, and free of repairs. The structure shall withstand all forces encountered during operation of the saw to its maximum rating and capacity without permanent distortion.
- 3.3.1 <u>Castings and forgings</u>. All castings and forgings shall be free of defects, scale, and mismatching. No processes such as welding, peening, plugging, or filling with solder or paste shall be used for reclaiming any defective part. Such processes may be used only for enhancing surface finish and appearance.
- 3.3.2 <u>Fastening devices</u>. All fasteners shall be installed to prevent change of tightness. Fastening devices subject to removal or adjustment shall not be permanently installed.
- 3.3.3 <u>Surfaces</u>: All surfaces shall be clean and free of harmful or extraneous materials. All edges shall be either rounded or beveled unless sharpness is required to perform a necessary function. Except as otherwise specified herein, the condition and finish of all surfaces shall be in accordance with the manufacturer's commercial practice.
- 3.3.4 <u>Welding, brazing.</u> or <u>soldering</u>. Welding, brazing, or soldering shall be employed only where specified in the original design. None of these operations shall be employed as a repair measure for any defective part.
- 3.3.5 <u>Painting</u>. Unless otherwise specified (see 6.2), the saw shall be painted in accordance with the manufacturer's commercial practice and color.
- 3.3.6 <u>Threads</u>. All threaded parts used on the saw and its related attachments accessories shall conform to FED-STD-H28 and the applicable "Detailed Standard" section referenced therein.
- 3.3.7 <u>Electromagnetic interference control</u>. When specified (see 6.2), equipment furnished under this specification shall comply with MIL-STD-461. The equipment and subsystem(s) class and the emission and susceptibility requirements shall be as specified.
- 3.4 <u>Components</u>. Saws covered herein shall consist of a frame supporting the saw blade arbor and its elevating and tilting mechanisms, driven system, table, and such other components necessary to meet the requirements stated herein

- 3.4.1 <u>Frame</u>. The frame shall have sufficient strength and rigidity to support the working parts of the saw. The frame shall support and maintain alignment of the arbor with the table and provide both vertical and tilting arbor adjustments in relation to the workpiece support surface of the table. The frame shall have provisions on its base for attaching to the floor or foundation. The frame of type 1 saws shall allow disposal of sawdust and chips through and exhaust outlet shaped for connection to a pneumatic conveyor system. Type II saw frames shall include a clean-out door for sawdust and chip removal.
- 3.4.2 <u>Table</u>. The stationary table shall be mounted to the frame, providing a horizontal workpiece support surface 3 feet, ± 2 inches above the frame base mounting surface. The table top surface shall be flat within .005 inch per foot and have a finish not rougher than 65 microinches. The table shall be fitted with removable throat plates or other provisions, as necessary, to limit side clearances on each side of the saw blade to x inch or less. And facilitate mounting of arbor attachments. The table shall have parallel slots on each side of the saw blade to accept a miter attachment. The slots shall span the complete table length and be parallel to the sides of the saw blade within .005 inch per foot. Each table shall have a linear scale graduated in increments not greater than 1/16 inch. Each quarter inch scale graduation shall be longer than the others and each inch graduation shall be numbered. The scale shall indicate the distance between the saw blade side and the face of the fence. Table dimensions shall conform to table 1. Special tables and table dimensions shall be as specified (see 6.2).
- 3.4.3 Elevating and tilting mechanisms. The saw shall have elevating and tilting mechanisms to support and provide manual control for depth and angle of the saw blade cutting through workplaces hand-fed across the table. The elevating mechanism shall provide adjustment of the saw blade to the cutting depth specified in table 1. The tilting mechanism shall provide a tilt range for the saw blade for vertical position, 90 degrees to the table workpiece support surface, through 45 degrees tilt. When the saw blade is manually positioned, by a handwheel control, the tilting and elevating mechanisms shall secure the blade in a set position through sawing operations. The manual control handwheel shall adjust the elevating mechanism and the tilting mechanism, or a separate handwheel shall be provided for each function. The tilting mechanism shall include a graduated scale, in degrees, to indicate the degree of a saw blade tilt. The scale shall be accurate to plus or minus one degree, with each five degrees bearing a number, corresponding to the angle of saw blade tilt. The elevating and tilting mechanisms shall have provisions for adjustments to maintain component alignment and working tolerances.
- 3.4.4 <u>Blade guard, material spreader, and anti-kickback device</u>. The exposed portion of the saw blades above the table shall be covered by a guard. The guard shall automatically adjust to the thickness of workplaces being hand-fed cross the table, and remain in contact with the workpiece at all times to prevent accidental physical contact with the blade. The guard shall resist blows and strains incidental to sawing operations, in order to protect the operator from flying splinters and broken saw teeth. The blade guard shall be mounted so that its operation shall be positive and alignment with the saw is maintained through the entire elevation and tilt ranges. The mounting shall be such that it will adequately resist reasonable side thrust or other force which would disrupt alignment. Each saw shall have a material spreader of a size which is slightly thinner than the saw kerf. Each saw shall have an anti-kickback device. The material spreader and anti-kickback device shall be constructed and located on the saw in such a manner that their alignment with the blade is constant. The blade guard, material spreader, and anti-kickback, device shall either swing clear or be easily removable to facilitate dado operations. Once these operations are completed, the blade guard, material spreader, and anti-kickback device shall either swing back into aligned position with the blade or be easily mounted on the saw in an aligned position with blade.

- 3.4.5 Fence. The saw shall have a fence to serve as a guide for the Workpiece as is hand-fed into the saw blade. The fence shall have a height of not less than 2 inches. The fence shall either be double faced or reversible to facilitate its use on either side of the saw blade. The fence support shall allow the fence to be positioned across the entire table width. The fence face, for guiding workpieces, shall be within plus or minus one degree of a right angle to the workpiece support surface of the table. The fence on type I saws shall span from the front edge of the table to not less than 12 inches beyond the saw blade arbor. The fence on type II saws shall span the entire length of the table. Manual controls shall securely lock the fence in adjusted positions. The fence alignment with the side of the saw blade shall be within .005 inch per foot. When specified (see 6.2). The fence on type I saws shall be mounted on extended rails or tables to enable grater ripping capacity, as specified. When specified (see 6.2), the fence shall be of the box type, tilting universal type, or non-tilting universal type with having micrometer adjustment capabilities.
- 3.4.6 <u>Miter attachments</u>. Each saw shall be furnished with a miter attachment. The attachment shall consist of a bar that slides in the table slots parallel to the saw blade. The bar shall support a material rest which has swivel capabilities of not less than 45 degrees right and left of the bar. The adjustment device shall securely lock the material rest in any position within the swivel range. The miter attachment shall have a scale graduated in increments not larger than one degree to indicate the angle to the saw blade to which the material rest is swiveled. Each tenth degrees of the scale shall be numbered. The graduations shall have an accuracy within plus or minus one degree. The miter attachment shall allow the operator to manually feed workplaces into the saw blade. With the material rest secured in adjustment for producing angular and square cuts.
- 3.4.7 <u>Drive</u>. The drive on type I saws shall be the direct drive type. The arbor flanges for driving the circular saw blade shall be mounted directly on the motor shaft. The drive on type II saws shall be of the V-belt type. The circular saw blade arbor flanges and V-belt pulley shall be mounted on the arbor shaft and supported by ball or roller bearings. The arbor shall be driven by V-belts from a pulley mounted on the motor shaft. The V-belt drive shall have means for belt alignment and maintaining belt tension. Saws shall be provided with a means of holding the arbor for removing and replacing saw blade. When specified (see 6.2), the saw shall have brake or other means that will stop the circular saw blade rotation, at maximum no load blade speed, within a time period of 10 seconds.
- 3.4.8 <u>Electrical system</u>. Unless otherwise specified (see 6.2), the electrical system shall be in accordance with this paragraph. The system shall be in accordance with the applicable requirements of National Electrical Manufacturer's Association (NEMA) Standards. Each machine shall draw all of its electrical power from a single 230/460 volt, 3 phase, 60 HZ circuit fed through a fused safety disconnect switch. The machine shall be initially wired for operation on 230 volts. An identified terminal for grounding the machine when installed shall be mounted in or near the disconnect switch. A transformer and nominal 115 volt control circuit shall be provided.
- 3.4.8.1 <u>Motor</u>. Motors shall meet the requirements of 3.4.8. Motors shall be rated for continuous duty and shall have ball or roller bearings of the sealed and permanently lubricated type. Unless otherwise specified (see 6.2), alternating-current (AC) motors shall be designed to operate on 60-Hz. The motor enclosure shall meet the requirements for a dripproof enclosure. All motors shall conform to the requirements of NEMA MG-I.
- 3.4.8.2 <u>Hour meter</u>. When specified (see 6.2), the saw shall be equipped with an hour meter. The hour meter shall be installed to display accumulated operating time of the main drive motor. The meter shall be of the nonresetting type and shall have a range of 0 to 9,999 hours in increments of not greater than 1 hour. The meter shall be sealed to prevent the entrance of dust and moisture and shall be mounted to withstand shock and vibration generated by the saw.

- 3.5 <u>Size and capacity</u>. Unless otherwise specified (see 6.2), the size and capacity of the saw shall be not less than specified in table I for the machine size specified.
- 3.6 <u>Performance</u>. The saw shall be capable of performing ripping and cross operation in wood workplaces having a thickness equal to the capacity specified in table I. The saw shall also be capable of performing angular cuts with the saw blade tilted through a 45 degree angle to the workplaces support surface of the table. The saw shall be capable of ripping workpieces, 1 inch thick being hand fed at a safe even feed rate, averaging 1 to 1-1/2 inches per second. The tilting arbor and the miter attachment shall provide compound mitering capabilities on workplaces. Cuts in workplaces shall be parallel to the guiding surface of the fence, perpendicular to the surface supported by the table to an accuracy of .015 inch per foot.
- 3.7 <u>Standard equipment</u>. All standard equipment normally furnished with the manufacturer's commercial machine shall be furnished.
- 3.7.1 Optional equipment. Optional equipment shall be furnished as manufacturer's commercial machine shall be furnished.
- 3.8 Repair parts. Required repair parts shall be furnished specified and fully described (see 6.2).
- 3.9 <u>Marking on instruments, control panels, charts and plates</u>. All words on instruments, control panels, charts, and plates shall be in the English language. Characters shall permanently marked in boldface on a contrasting background. All plates shall be corrosion resistant.
- 3.9.1 <u>Lubrication plate</u>. When specified (see 6.2), a lubrication plate or chart shall be attached to each machine. If a chart is furnished, it shall be placed in a transparent plastic folder or permanently sealed between clear plastic sheets. Unless otherwise specified (see 6.2), the information provided on the chart or plate shall be as listed below.

Points of lubricant application
Type of lubrication
Servicing interval
Military specification for each lubricant (if applicable)

3.9.2 <u>Nameplate</u>. A nameplate shall be securely attached to each machine. Unless otherwise specified (see 6.2), the nameplate shall provide the information listed below.

Nomenclature
Manufacturer's name
Manufacturer's model designation
Manufacturer's serial number
Power input (volts, total amps, phase, frequency)
Amp rating of largest motor
Contract Number or Order Number
National Stock Number or Plant Equipment Code
Date of manufacture

3.10 <u>Workmanship</u>. Workmanship of the saw and its accessories shall meet all requirements specified herein and shall be of a quality equal to that prevailing among manufacturers producing equipment of the type covered by this specification.

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# 4. QUALITY ASSURANCE PROVISIONS

- 4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.
- 4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspections set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection. as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submissions of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.
- 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
  - a. First article inspection (see 4.4).
  - b. Quality conformance inspection (see 4.5).
- 4.3 <u>Inspection conditions</u>. Unless otherwise specified (see 6.2), all inspections shall be performed in accordance with the test conditions specified in 4.8.1.
- 4.4 <u>First article inspection</u>. When a first article inspection is required, it shall be applied to the first article submitted in accordance with 3.1. Unless otherwise specified (see 6.2), first article inspection shall consist of the examination in 4.6 and all tests in 4.7. The machine shall pass the first article examination and all tests to be accepted.
- 4.5 <u>Quality conformance inspection</u>. Quality conformance inspection shall be applied to each item prior to being offered for acceptance under the contract. Unless otherwise specified (see 6.2), quality conformance inspection shall consist of the examination in 4.6, the tests in 4.7, and the inspection in 4.8. The machine shall pass the examination, all tests, and the inspection to be accepted.
- 4.6 <u>Examination</u>. The jointer shall be visually examined to determine compliance with all requirements of this specification.

# 4.7 Tests

- 4.7.1 <u>Test conditions</u>. All tests shall be performed in an indoor facility with ambient conditions of 41 degree to 104 degree Fahrenheit and 20 percent to 95 percent relative humidity.
- 4.7.2 Operational test. The saw shall be operated at no load for not less than 15 minutes. Proper operation of all controls, motors, adjusting mechanisms, and accessories shall be verified during the trial period.
- 4.7.3 <u>Performance test</u>. The saw shall be subjected to the following tests. Failure to meet the requirements shall be cause for rejection. at the option of the procuring agency, each machine shall be subjected to tests in accordance with specific requirements designated by the activity in lieu of or in addition to the following tests (see 6.2).
- 4.7.4 <u>Test workpiece material</u>. The type of wood used as test workpiece shall be at the option of the supplier in accomplishing the performance tests.
- 4.7.4.1 <u>Ripping test</u>. A test workpiece of not less than one inch thick and 30 inches in length shall be hand-fed at a feed rate averaging 1 to 1-1/2 inches per second. The circular saw blade shall extend through the top surface of the test workpiece approximately 1/32 inch during the ripping test. The ripped edges of the workpiece shall be straight within.015 inch per linear foot, positioned to the fence.
- 4.7.4.2 <u>Mitering test</u>. Two test workplaces of equal size, having a width not less than 4 inches, a thickness not less than 1 inch, and a length not less than 12 inches, shall be used to perform the mitering test. The saw blade shall be tilted 45 degrees to the workpiece support surface of the table. The material rest on the mitering attachment shall be swiveled to a 45 degree angle to the saw blade side. One of the workplaces shall be placed to the material rest by hand, and a compound miter shall be produced by the saw. The material rest shall be swiveled to 45 degrees in the opposing angle, to the side of the saw blade, and a compound angle shall be produced on the end of the second test workpiece. The two test workplaces shall be placed on the saw table with one edge of each test workpiece aligned to the fence by hand. The two test workplaces shall have a mating compound mitered joint, with the angles proving equal within 2 degrees.
- 4.7.5 <u>Electromagnetic interference control test</u>. Equipment requiring electromagnetic interference control shall be tested for compliance with 3.3.8 using the procedures given in MIL-STD-461.
- 4.8 <u>Packaging inspection</u>. Packaging of each item shall be inspected to determine compliance with the requirements of section 5.
  - 5. PACKAGING.
- 5.1 <u>Packaging requirements</u>. The requirements for packaging shall be in accordance with ASTM D3951.

#### 6. NOTES

- 6.1 <u>Intended use</u>. The saw shall be capable of performing ripping and cross cutting operations in wood workplaces having a thickness equal to the capacity specified in table 1. The saw shall also be capable of performing angular cuts with the saw blade tilted through a 45 degree angle to the workplaces support surface of the table.
  - 6.2 <u>Acquisition requirements</u>. Acquisition documents should specify the following:
    - a. Title, number, and date of this specification.
    - b. Type, class, and size required (see 1.2).
    - c. First article, if required (see 3.1).
    - d. System of units for measuring and indicating devices (see 3.2.1).
    - e. Additional safety and health requirements, if required (see 3.2.4).
    - f. Specify configuration of additional point-of-operation (guarding, if required (see 3.2.4).
    - g. Painting, if different (see 3.3.5).
    - h. If electromagnetic interference control is required, specify the equipment and subsystem class and the emission and susceptibility required (see 3.3.8).
    - i. Describe special table and specify table dimensions, if required (see 3.4.2).
    - j. Extended rails for grater ripping capacity, if required (see 3.4.5).
    - k. Fence, if different (see 3.4.5).
    - I. Brake, if required(see 3.4.7).
    - m. Electrical system, if different (see 3.4.8)
    - n. Initial voltage, if different (see 3.4.8).
    - o. Motors, if different (see, 3.4.8.1).
    - p. Hour meter, if required (see 3.4.8.2).
    - r. Size and capacity, if different (see 3.5).
    - s. Specify and fully describe optional equipment, if required (see 3.7.1).
    - t. Specify applicable repair parts, if required (see 3.9).
    - u. Lubrication plate, if required (see 3.10.1).
    - v. Information to be provided on lubrication plate, if different (see 3.10.1).
    - w. Nameplate, if different (see 3.10.2).
    - x. Inspection conditions, if different (see 4.3).
    - y. First article inspection, if different (see 4.4).
    - z. Quality conformance inspection, if different (see 4.5).

6.2.1 <u>Consideration of data requirements</u>. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DIDs) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the DIDs and tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

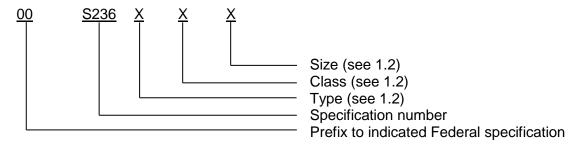
# Reference Paragraph DID Number DID Title Suggested Tailoring

- 6.2.1.1 <u>Technical data</u>. All technical data ordered using a DD Form 1423 should be written in the English Language.
- 6.3 <u>First article</u>. When first article inspection is required, the contracting officer should provide specific guidance to offerors whether the item(s) should be a pre-production sample, a first article sample, a first production item, a sample selected from the first \_\_\_\_\_ production items, a standard production item from the contractor's current inventory (see 3.\_\_\_\_), and the number of items to be tested as specified in 4.\_\_. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

### 6.4 Definitions.

- 6.4.1 <u>Inch-pound units</u>. Inch-pound units are a system of basic measures defined by the United States of America and defined by the National Bureau of Standards. Inch-pound units having the same names in other countries may differ in magnitude.
- 6.4.2 <u>Metric units</u>. Metric units are a system of basic measures defined by the International System of Units based on "Le Systeme International D'Unites (SI)," of the International Bureau of Weights and Measures. These units are described in ASTM E 380 and IEEE 26B (MIL-STD-961).
- 6.5 <u>Measurement system</u>. In this specification, all measurements, dimensions, sizes, and capacities are given in inch-pound units. These measurements may be converted to metric units through the use of the conversion factors and methods specified in FED-STD-376.
- 6.7 <u>Changes from previous issues</u>. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.
- 6.8 <u>Safety and health requirements</u>. 29 CFR 1910 limits only the total hazard level (noise, radiation, electromagnetic emissions, noxious vapors, air contaminants, and heat) of the environment in which a machine will operate. It does not limit the hazard level of individual machines in an operating environment. The procuring activity should analyze the existing hazard level in the proposed operating environment and specify additional requirements necessary to integrate this new machine into its future environment.
- 6.9 <u>Training</u>. Training required by the procuring activity should be provided as specified in the contract.

- 6.10 <u>Warranty</u>. Warranty requirements should be as specified by the procuring activity in the contract.
- 6.11 <u>Inspection location</u>. The contractor should identify in his response to the solicitation the location where inspection and tests are to be performed.
- 6.12 Part or Identifying Number (PIN). The PIN to be used for machines acquired to this specification are created as follows:



# 6.13 Subject term (keyword) listing.

Electric motor
Direct driven
Belt driven
MIL-STD-461
Electromagnetic interference control

TABLE 1. Sizes and capacities.

# TYPE I

Characteristic	Size 12	Size 14	Size 16	<u>Size 18</u>	Size 20
			<u></u>	<u> </u>	<u> </u>
Largest diameter blade	12	14	16	18	20
accommodated, inches	20724	201/24	20V40	407/44	407/44
Table diameter, inches	32X34	32X34	36X40	40X44	40X44
Arbor diameter, inches	1	1	1	1	1
Depth of cut, blade inches,		2.44			- 4/0
90 degrees	2-1/4	3-1/4	4	4-3/4	5-1/2
45 degrees	1-1/2	1-1/2	2-1/2	3	3-1/2
Rip capacity (blade to face of					
fence), inches					
Right	20	20	24	24	24
Left	12	12	15	15	15
Cut off capacity, blade to front edge					
of table, inches	14	14	17	17	17
Dado width, inches	2	2	2	3	
Motor horsepower					
Standard	2	2	5	5	5
Optional	3 or 5	3 or 5	7-1-2 or	7-1-2 or	7-1-2 or
•			10	10	10
Arbor RPM	3600	3600	3600	3600	3600
	0000	0000	0000	0000	

Note: Requirements are not less than those shown.

TABLE 1. Sizes and capacities. Con't

TYPE II							
Characteristic	Size 10	Size 12	<u>Size 14</u>				
Largest diameter blade accommodated, inches	10	12	14				
Table diameter, inches	27X36	38X48	38X48				
Arbor diameter, inches Depth of cut, blade inches,	5/8	5/8	1				
90 degrees	3-1/8	4-1/8	5-1/8				
45 degrees	2-1/8	2-7/8	3-5/8				
Rip capacity (blade to face of fence), inches							
Right	25	30	30				
Left	15	20	20				
Cut off capacity, blade to front edge							
of table, inches	12-1/4	16	16				
Dado width, inches	13/16	13/16	1				
Motor horsepower							
Standard	1-1/2	3	5				
Optional	2 or 3	5	7-1-2				
Arbor RPM	4000	3750	3750				

Note: Requirements are not less than those shown.

Custodian:

Army – CR4 Navy - SH Air Force - 99 Preparing Activity: DLA - IS

(Project 3220-2013-004)

Review Activity: Navy – MC, OS, YD

NOTE: The activities listed above were interested in this document as of the date of document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <a href="https://assist.dla.mil">https://assist.dla.mil</a>.