THREADS

ASME B1.1-2019 Unified Inch Screw Threads (UN, UNR, and UNJ Thread Forms)	17
ASME B1.2 1983 (R2017) Gages and Gaging for Unified Inch Screw Threads	69
ASME B1.3-2007 (R2012) Screw Thread Gaging Systems for Acceptability: Inch and Metric Screw Threads (UN, UNR, UNJ, M, and MJ)	80
IFI-301 2008 (R2013) Gage Calibration Requirements and Procedures for Thread Gages	88
BOLTS, STUDS AND THREADED ROD	
DIMENSIONS	
ASME B18.2.1-2012 Square, Hex, Heavy Hex, and Askew Head Bolts and Hex, Heavy Hex, Hex Flange, Lobed Head, and Lag Screws	123
ASME B18.5-2012 (R2017) Round Head Bolts	153
ASME B18.9-2012 (R2017) Plow Bolts	168
ASME B18.10- 2006 (R2016) Track Bolts and Nuts	176
ASME B18.31.2- 2014 Continuous Thread Stud, Studs for Flange Bolting (Stud Bolt), and Double-End Studs (Inch Series)	182
ASME B18.31.3-2014 Threaded Rods	191
ASME B18.31.5-2011 (R2016) Bent Bolts (Inch Series)	196
IFI -111-2014 Hex Flange Screws	209
IFI-115-2014 Flange 12-Point Screws	217
IFI-148-2002 (R2013) Threaded Projection Weld Studs	222
IFI -199-2014 Tap Bolts (Inch Series)	234
MATERIAL AND PHYSICAL	
SAE J429-2014 Mechanical and Material Requirements for Externally Threaded Fasteners	238
ASTM A193/A193M-20 Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications	250
ASTM A307-14e1 Carbon Steel Externally Threaded Standard Fasteners	267
ASTM A320/A320M-18 Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service	276
ASTM A354-17e2 Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners	286

ASTM A394-08 (R2015) Steel Transmission Tower Bolts, Zinc Coated and Bare	298
ASTM A449-14 (R2020) Hex Cap Screw, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use	308
ASTM A540/A540M-15 Alloy-Steel Bolting for Special Applications	320
ASTM A962/A962M-19 Common Requirements for Bolting Intended for Use at Any Temperature from Cryogenic to the Creep Range	329
ASTM A1082/A1082M-16 High Strength Precipitation Hardening and Duplex Stainless Steel Bolting for Special Purpose Applications	348
ASTM F468-16 Nonferrous Bolts, Hex Cap Screws, Socket Head Cap Screws, and Studs for General Use	355
ASTM F593-17 Stainless Steel Bolts, Hex Cap Screws, and Studs	370
ASTM F901-20 Aluminum Transmission Tower Bolts and Nuts	383
ASTM F1554-18 Anchor Bolts, Steel, 36, 55 and 105-ksi Yield Strength	390
SOCKETS	
DIMENSIONS	
ASME B18.3-2012 Socket Cap, Shoulder, Set Screws, and Hex Keys (Inch Series)	407
MATERIAL AND PHYSICAL	
ASTM A574-17 Alloy Steel Socket-Head Cap Screws	452
ASTM F835-20 Alloy Steel Socket Button and Flat Countersunk Head Cap Screws	463
ASTM F837-20 Stainless Steel Socket Head Cap Screws	471
ASTM F879-15 (R2020) Stainless Steel Socket Button and Flat Countersunk Head Cap Screws	482
ASTM F880-12 (R2017) Stainless Steel Socket, Square Head, and Slotted Headless- Set Screws	491
ASTM F912-11 (R2017) Alloy Steel Socket Set Screws	499
STRUCTURAL FASTENERS	
DIMENSIONS	
ASME B18.2.6-2019 Fasteners for Use in Structural Applications	507
MATERIAL AND PHYSICAL	
ASTM F959/F959M-17a Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series	524

ASTM A3125-19e2 High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength	531
ASTM F3148-17a High Strength Structural Bolt Assemblies, Steel and Alloy Steel, Heat Treated, 144ksi Minimum Tensile Strength, Inch Dimensions	553
NUTS	
DIMENSIONS	
ASME B18.2.2-2015 Nuts for General Applications: Machine Screw Nuts, Hex, Square, Hex Flange, and Coupling Nuts (Inch Series)	575
ASME B18.6.9-2010 (R2017) Wing Nuts (Inch Series)	598
ASME B18.16.4-2008 (R2013) Serrated Hex Flange Locknuts: 90,000 psi	607
ASME B18.16.6-2017 Prevailing Torque Locknuts	611
MATERIAL AND PHYSICAL	
SAE J995-2017 Mechanical and Material Requirements for Steel Nuts	627
ASTM A194/A194M-20a Carbon Steel, Alloy Steel and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both	635
ASTM A563-15 Carbon and Alloy Steel Nuts	650
ASTM F467-13 (R2018) Nonferrous Nuts for General Use	661
ASTM F594-09 (R2020) Stainless Steel Nuts	671
IFI-101 2002 (R2013) Torque-Tension Requirements for Prevailing-Torque Type Steel Hex and Hex Flange Nuts	682
IFI-155 2005 (R2013) Test Procedure for the Performance of Nonmetallic Resistant Element Prevailing-Torque Nuts	685
IFI-160-2007 (R2013) Test Procedure for the Performance of Nuts with Pre-Applied Adhesive Coated Threads	689
SCREWS	
ASME B18.6.1-1981 (R2016) Wood Screws	695
ASME B18.6.2-1998 (R2010) Slotted Head Cap Screws	708
ASME B18.6.3-2013 Machine Screws, Tapping Screws, and Metallic Drive Screws	723
ASME B18.6.8-2010 (R2017) Thumb Screws and Wing Screws	803
ASME B18.13-2017 Screw and Washer Assemblies — SEMS	815

IFI-113-2015 Steel Self-Drilling Tapping Screws	832
ASTM C954-18 Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness	842
ASTM C1002-18 Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs	848
ASTM C1513-18 Steel Tapping Screws for Cold-Formed Steel Framing Connections	856
WASHERS	
ASME B18.21.1-2009 (R2016) Washers: Helical Spring-Lock, Tooth Lock and Plain Washers (Inch Series)	865
ASTM F436/F436M-19 Hardened Steel Washers Inch and Metric Dimensions	886
ASTM F2437/F2437M-17 Carbon and Alloy Steel Compressible-Washer-Type Direct Tension Indicators for Use with Cap Screws, Bolts, Anchors, and Studs	897
RIVETS	
ASME B18.1.1-1972 (R2016) Small Solid Rivets 7/16 In. Nominal Diameter and Smaller	909
ASME B18.1.2-1972 (R2016) Large Rivets 1/2 In. Nominal Diameter and Larger	921
ASME B18.7-2007 (R2017) General Purpose Semi-Tubular Rivets, Full Tubular Rivets, Split Rivets and Rivet Caps	934
IFI-110-2003 (R2013) Glossary of Terms Relating to Blind Rivets	947
IFI-114-2015 Break Mandrel Blind Rivets	953
IFI-116-2015 Multi-Grip Break Mandrel Blind Rivets	960
IFI-117-2003 (R2013) Pull Through Mandrel Blind Rivets	966
IFI-119-2003(R2013) Structural Flush Break Pull Mandrel Self-Plugging Blind Rivets	972
IFI-123-2003 (R2013) Drive Pin Blind Rivets	979
IFI-126-2003 (R2013) Break Mandrel Closed End Blind Rivets	985
IFI-130-2003 (R2013) Structural Splitting Self-Plugging Pull Mandrel Blind Rivets	991
IFI-134-2015 Multi-Grip Flush Break Pull Mandrel Self-Plugging Blind Rivets	997
IFI-135-2013 Mechanical Testing of Blind Rivets	1002
IFI-137-2003 (R2013) Inspection and Quality Assurance for General Purpose Blind Rivets	1007

PINS

ASME B18.8.1-2014 Clevis Pins and Cotter Pins	1011
ASME B18.8.2-2000 (R2010) Taper Pins, Dowel Pins, Straight Pins, Grooved Pins, and Spring Pins	1020
FINISHES	
ASTM B695-04 (R2016) Coatings of Zinc Mechanically Deposited on Iron and Steel	1063
ASTM F1941/F1941M-16 Electrodeposited Coatings on Mechanical Fasteners, Inch and Metric	1072
ASTM F2329/F2329M-15 Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners	1092
ASTM F3393-20e1 Zinc-Flake Coating Systems for Fasteners	1099
QUALITY	
ASME B18.2.9-2010 (R2017) Straightness Gage and Gaging for Bolts and Screws	1109
ASME B18.18-2017 Quality Assurance for Fasteners	1111
ASTM A370-20 Standard Test Methods and Definitions for Mechanical Testing of Steel Products	1122
ASTM F606/F606M-19 Standard Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators, and Rivets	1158
ASTM F788-20 Surface Discontinuities of Bolts, Screws, Studs, and Rivets, Inch and Metric Series	1185
ASTM F812-12 (R2017) Surface Discontinuities of Nuts, Inch and Metric Series	1193
ASTM F1470-19 Standard Practice for Fastener Sampling for Specified Mechanical Properties and Performance Inspection	1199
ASTM F2282-18 Quality Assurance Requirements for Carbon and Alloy Steel Wire, Rods, and Bars for Mechanical Fasteners	1205
ASTM F2328-17 Standard Test Method for Determining Decarburization and Carburization in Hardened and Tempered Threaded Steel Bolts, Screws, Studs, and Nuts	1229
IFI-124-2002 (R2013) Test Procedure for the Performance of Nonmetallic Resistant Element Prevailing-Torque Screws	1235
IFI-125-2007 (R2013) Test Procedure for the Performance of Adhesive Coated Prevailing-Torque Screws	1241

IFI-143-2002 (R2013) Test for Evaluating the Torque-Tension Relationship on Both Externally and Internally Threaded Fasteners	1245
GRADE MARKINGS	1213
REFERENCES	
Standards References	1255
INDEXES	
Index by Designation	1271
Index by Keyword	1273