IFI Update

8th Edition of the IFI Inch Standards Book Available in 2011



The Industrial Fasteners Institute (IFI) is continuing its long tradition of being the premier source for fastener technical data with its release of the 8th Edition IFI Inch Standards Book in early 2011. This will be the first time this book will be offered both in hard cover and as a PDF download.

The book contains more than 1100 pages of fastener standards. Also, the related technical



8th Edition of the IFI Inch Standards Book coler image.

information has been removed from this book and is now published separately in the *IFI Fastener Technology Handbook*. More than 50% of the standards in the book have been updated since the publication of the *7th Edition* in 2003. Some of the most significant revisions are:

- ASME B18.2.1, Square, Hex, Heavy Hex and Askew Head Bolts and Hex, Heavy Hex, Hex Flange, Lobed Head and Lag Screws (Inch Series):
 - Reorganized for easier use.
 - Addition of hex flange head and lobed (six) head screw designs plus the applicable gages.
 - Heavy hex head cap screws extended in size range through six inches.
 - Addition of sizes 1-5/8" and 1-7/8".
 - Redefined lag screw thread to be consistent with the way all other spaced threads are defined.
 - Revised quality references.
- ASME B18.2.2, Square, Hex, Hex Flange, Machine Screw and Coupling Nuts (Inch Series):
 - Reorganized for easier use.
 - Addition of hex flange, regular and small pattern machine screw nuts, and coupling nuts.
 - Revised quality references.
- ASME B18.21.1, Plain, Locking and Fender Washers (Inch Series):
 - This revision combined B18.21.1 and B18.22.1 so that all washers, except structural, are in one standard.
 - Fender washers have been added.
 - The variety of plain washers has been decreased.
 - Revised quality references.
- ASME B18.6.3, Tapping and Machine Screws (Inch Series):
 - ASME B18.6.3 and B18.6.4 have been combined so all small screws are in one standard.
 - Type TRS (thread rolling screws) added.
 - Type ABR (rounded point) has been added.
 - Type VI (6 lobe) recess has been added plus the related gaging information.
 - Hardened carbon steel machine screw grade added
 - References for chemistry for stainless steel and nonferrous screws added.

by:

Joe Greenslade
Director of Engineering Technology
Industrial Fasteners Institute (IFI)
6363 Oak Tree Boulevard
Independence, OH 44131 USA
E-mail: jgreenslade@indfast.org
www.indfast.org



- Revised quality references.
- ASME B18.2.6, Fasteners for Structural Applications:
 - Re-organization for easier use.
 - Correction of errors.
 - Addition of alternate size of 5/8 DTI.
 - Revised quality references.
- ASTM Most ASTM standards have been updated since the 7th Edition, most notably:
 - A193.
 - -A194.
 - A307.
 - A320.
 - A325.
 - A354.A449.
 - A490.
 - A563.
 - F606.
- · First time standards added to the book:
 - ASME B18.2.9, Straightness Gage and Gaging.
 - ASME B18.6.8, Wing and Thumb Screws (Inch Series).
 - ASME B18.6.9, Wing Nuts (Inch Series).
 - ASME B18.16.4, Serrated Hex Flange Nuts .(Inch Series)
 - ASME B18.31.2, Studs (Inch Series).
 - ASME B18.31.3, Threaded Rod (Inch Series).
 - ASME B18.18, Fastener Quality Systems.
 - ASTM F1554, Specification for Anchor Bolts, Steel, 36, 55, 105-ksi Yield Strength.
 - ASTM C954, Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products.
 - ASTM C1002, Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products.
 - ASTM C1513, Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections.
 - IFI 113, Self-drilling Screws (Inch Series).
 - IFI 166, Procedure for the Acceptance of Nicked Threads.
 - IFI 301, Calibration Procedures for Thread Gages.
 - SAE J995, Mechanical and Material Requirements for Steel Nuts.

The complete Table of Contents for the 8th Edition IFI Inch Standards Book is as follows:

THREADS

- ASME B1.1 abstract
- ASME B1.3
- ASME B1.2 abstract

Bolts, Studs, and Threaded Rod Dimensions

• ASME B18.2.1

- ASME B18.5
- ASME B18.9
- ASME B18.10
- IFI 115 (12 pt)
- ASME B18.31.2
- * ASIVIE D 10.31.2
- IFI 148 (weld studs)
- ASME B18.31.3

Material and Physical

- SAE J429
- ASTM A193
- ASTM A307
- ASTM A320
- ASTM A449
- ASTM A354
- ASTM A394
- ASTM F593
- ASTM F1554
- A OTN 1 100
- ASTM F468
- IFI-124
- IFI 125
- MIL-DTL-1222j

SOCKETS

Dimensions

ASME B18.3

Material and Physical

- ASTM A574
- ASTM F835
- ASTM F912
- ASTM F837
- ASTM F879
- ASTM F880

STRUCTURAL FASTENERS

Dimensions

ASME B18.2.6

Material and Physical

- ASTM A325
- ASTM A490
- ASTM F1852
- ASTM F2280
- ASTM F959

NUTS

Dimensions

- ASME B18.2.2
- ASME B18.16.4 (Serrated nut)
- ASME B18.6.9
- IFI 100/107

Material and Physical

- ASME J995
- ASTM A194
- ASTM F467
- ASTM A563
- ASTM F594
- ASTM F901
- IFI 101
- IFI 155IFI 160

SCREWS

- ASME B18.6.3
- ASME B18.6.2
- ASME B18.6.8
- IFI-113 (Self-drilling)
- ASME B18.13 (Sems)ASME B18.6.1 (wood screws)
- ASTM C954
- ASTM C1002
- ASTM C1513

WASHERS

- ASME B18.21.1
- ASTM F436 (see B18.2.6)
- ASTM F2437 (DTI)

RIVETS

- ASME B18.1.2
- ASME B18.1.1
- ASME B18.7
- IFI 110/550
- IFI 114
- IFI 117
- IFI 446
- IFI 119
- IFI 123
- IFI 126
- IFI 130
- IFI 134
- IFI 135
- IFI 137

PINS

- ASME B18.8.1
- ASME B18.8.2

FINISHES

- ASTM F1941
- ASTM B 695
- ASTM F2329

QUALITY

- ASME B18.18
- ASTM F1470
- ASTM F606
- ASTM F788/F788M
- ASTM F812/F812M
- IFI-143
- ASME B18.2.9
- IFI 301
- IFI 166

The 8th Edition IFI Inch Standards Book is available in a secured PDF format, and the hard copy version will be available before the end of February 2011. These books can be ordered on-line at **www.indfast.org/shop**/.

For more info on this publication, other products or activities of the IFI, contact **Rob Harris** at **rharris@indfast.org** or **Joe Greenslade** at **jgreenslade@indfast.org**.

Founded in 1931, the **Industrial Fasteners Institute (IFI)**, Independence, OH, USA, is an association of the leading North American manufacturers of bolts, nuts, screws, rivets and all types of special formed parts. Associate members include suppliers of equipment, materials and services commonly used in fastener manufacture. Whether you are a fastener maker, supplier or end-user, IFI has something of value to offer. **www.indfast.org**

Joe Greenslade has been active in the fastener industry since 1970. He held positions with major fastener producing firms before becoming IFI Director of Engineering Technology. jgreenslade@indfast.org

For info on becoming a Member or Associate Member of the IFI, contact **Rob Harris**, Managing Director, at **+1 216 241 1482** or **rharris@indfast.org**.