

## **REFERENCE CHARTS**



Automotive

Chemicals

Cutting Tools/ Abrasives Electrical

**Fasteners** 

Fluid Power

Safety/ Material Handling Shop Supplies/ Hand Tools Welding

## **Lawson Hex Head Capscrew Torque Chart**

All torque values are in Foot-Pounds (Ft.-Lbs.)
All torque values are based on 75% of Rated Proof Load

Diameter/	Grade	Grade	Standard	Tuff-
Pitch	2	5	Grade 8	Torq®
1/4–20	5	8	12	9
1/4–28	6	10	14	10
5/16–18	11	17	25	18
5/16–24	12	19	27	20
3/8–16	20	31	44	33
3/8–24	23	35	49	37
7/16–14	32	49	70	52
7/16–20	36	55	78	58
1/2–13	49	75	106	80
1/2–20	55	85	120	90

Dia./	Grade	Grade	Standard	Tuff-
Pitch	2	5	Grade 8	Torq®
9/16–12	70	109	154	115
9/16–18	79	121	171	128
5/8–11	97	150	212	159
5/8–18	110	170	240	180
3/4–10	172	267	376	282
3/4–16	192	297	420	315
7/8–9	167	429	606	455
7/8–14	184	474	669	502
1–8	250	644	909	772
1–14	280	722	1,020	867

The above torque values are based on mathematical calculations and experimental data. The values are valid only when a matching system is used. Since the torque values are derived using dry components, the use of lubrication will significantly alter the above recommendations. For torque values when using locknuts, refer to Lawson Products Fastener Torque Book (E-546). Since all applications differ, it is suggested that the above torque recommendations be used as a guideline and that only through actual in-place testing can the true torque-tension value be generated.