



# Model XXI 1 Bolt Load Chart ASTM A193 GRADE B7 STUD

<b>LoaDISC WASHER*</b> <b>BOLT LOAD (LBS)</b>						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10	18,252	1,150	21,060	1,310	24,570	1,520
7/8 x 9	25,189	1,780	29,074	2,040	33,920	2,350
1x 8	33,057	2,590	38,143	2,960	44,500	3,420
1-1/8 x 8	43,137	3,700	49,773	4,195	58,069	4,810
1-1/4 x 8	54,566	4,990	62,949	5,705	73,441	6,550
1-3/8 x 8	67,315	6,590	77,671	7,460		
1-1/2 x 8						
1-5/8 x 8						
1-3/4 x 8						
1-7/8 x 8						
2 x 8						

\* NUT LUBRICANT: TS801 MOLYCOTE SPRAY

<b>CLAMP**</b> <b>BOLT LOAD (LBS)</b>						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10	18,252	2,220	21,060	2,585	24,570	3,040
7/8 x 9	25,189	2,920	29,074	3,425	33,920	4,150
1x 8	33,057	3,930	38,143	4,650	44,500	5,700
1-1/8 x 8	43,137	4,450	49,773	5,270	58,069	6,380
1-1/4 x 8	54,566	6,060	62,949	7,190	73,441	8,850
1-3/8 x 8	67,315	7,530				
1-1/2 x 8						
1-5/8 x 8						
1-3/4 x 8						
1-7/8 x 8						
2 x 8						

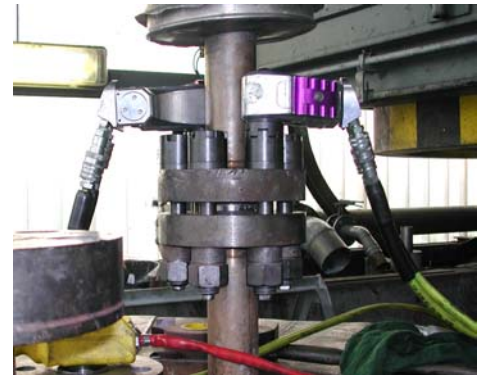
\*\* NUT LUBRICANT: DOW CORNING P37

NOTE:  
 - VALUES IN TABLE ARE TO BE USED AS A GUIDELINE ONLY  
 - RECOMMENDED BOLT SIZES BASED ON UP TO 80% OF TOOL CAPACITY  
 - PERCENT YIELDS GIVEN ARE COMMONLY USED INDUSTRY STANDARD



## XXI TENSIONING TOOL Optimization of Bolting!

- \* Get Parallel Joint Closure  
In less passes, In less time
- \*Gasket and tool preserving
- \*Make up Leak-free flanges



## UPGRADE your bolting to Precise Tensioning!

Improve bolt load accuracy and safety & reduce human error!

## XXI High Speed TENSIONER

- \* Backup Wrench-Free
- \*Reaction Arm-Free
- \*Side Load-Free
- \*Bolt Relaxation-Free
- \*Hands-Free even inverted

*Always a few Revolutions ahead!*



# Model XXI 3 Bolt Load Chart ASTM A193 GRADE B7 STUD

<b>LoaDISC WASHER*</b> BOLT LOAD (LBS)						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10						
7/8 x 9						
1 x 8						
1-1/8 x 8						
1-1/4 x 8	54,566	1,900	62,949	2,175	73,441	2,520
1-3/8 x 8	67,315	2,540	77,671	2,915	90,616	3,385
1-1/2 x 8	81,413	3,315	93,938	3,810	109,595	4,420
1-5/8 x 8	96,815	4,240	111,751	4,865	130,376	5,675
1-3/4 x 8	113,628	5,325	131,109	6,170	152,960	7,245
1-7/8 x 8	131,477	6,665	152,103	7,715		
2 x 8						

\* NUT LUBRICANT: TS801 MOLYCOTE SPRAY

<b>CLAMP**</b> BOLT LOAD (LBS)						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10						
7/8 x 9						
1 x 8						
1-1/8 x 8						
1-1/4 x 8	54,566	2,290	62,949	2,750	73,441	3,330
1-3/8 x 8	67,315	3,365	77,671	4,210	90,616	5,665
1-1/2 x 8	81,413	4,920	93,938	5,835	109,595	6,960
1-5/8 x 8	96,815	6,340	111,751	7,560		
1-3/4 x 8	113,628	7,975				
1-7/8 x 8						
2 x 8						

\*\* NUT LUBRICANT: DOW CORNING P37

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## XXI TENSIONING TOOL

### Optimization of Bolting!

- \* Get Parallel Joint Closure  
In less passes, In less time
- \*Gasket and tool preserving
- \*Make up Leak-free flanges



Replace your current nut with CLAMP,  
 Mechanical Tensioner and  
**UPGRADE your bolting to Precise Tensioning!**



Place a LoaDISC WASHER underneath  
 regular nut and  
**UPGRADE your bolting to Precise Tensioning!**

Improve bolt load accuracy and safety &  
 reduce human error!

## XXI High Speed TENSIONER

- \* Backup Wrench-Free
- \*Reaction Arm-Free
- \*Side Load-Free
- \*Bolt Relaxation-Free
- \*Hands-Free even inverted

**Always a few Revolutions ahead!**



# Model XXI 5 Bolt Load Chart ASTM A193 GRADE B7 STUD

<b>LoaDISC WASHER*</b> <b>BOLT LOAD (LBS)</b>						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10						
7/8 x 9						
1x 8						
1-1/8 x 8						
1-1/4 x 8						
1-3/8 x 8						
1-1/2 x 8						
1-5/8 x 8						
1-3/4 x 8	113,628	3,130	131,109	3,590	152,960	4,155
1-7/8 x 8	131,477	3,850	152,103	4,425	177,348	5,115
2 x 8	151,200	4,670	174,462	5,350	203,538	6,210

\* NUT LUBRICANT: TS801 MOLYCOTE SPRAY

<b>CLAMP**</b> <b>BOLT LOAD (LBS)</b>						
BOLT SIZE	@ 52% YIELD	Pressure in PSI	@ 60% YIELD	Pressure in PSI	@ 70% YIELD	Pressure in PSI
3/4 x 10						
7/8 x 9						
1x 8						
1-1/8 x 8						
1-1/4 x 8						
1-3/8 x 8						
1-1/2 x 8						
1-5/8 x 8						
1-3/4 x 8	113,628	3,985	131,109	4,660	152,960	5,520
1-7/8 x 8	131,477	4,680	152,103	5,685	177,348	7,240
2 x 8	151,200	5,780	174,462	6,775		

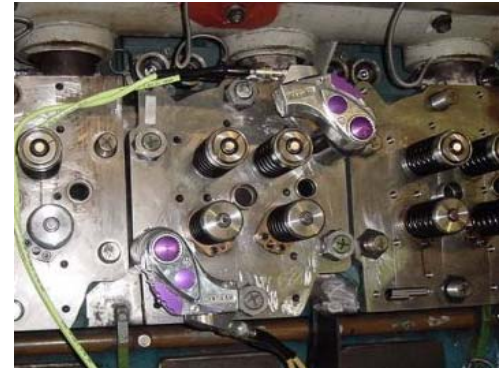
\*\* NUT LUBRICANT: DOW CORNING P37

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## XXI TENSIONING TOOL Optimization of Bolting!

- \* Get Parallel Joint Closure
- In less passes, In less time
- \*Gasket and tool preserving
- \*Make up Leak-free flanges



## UPGRADE your bolting to Precise Tensioning!

Improve bolt load accuracy and safety & reduce human error!

## XXI High Speed TENSIONER

- \* Backup Wrench-Free
- \*Reaction Arm-Free
- \*Side Load-Free
- \*Bolt Relaxation-Free
- \*Hands-Free even inverted

**Always a few Revolutions ahead!**