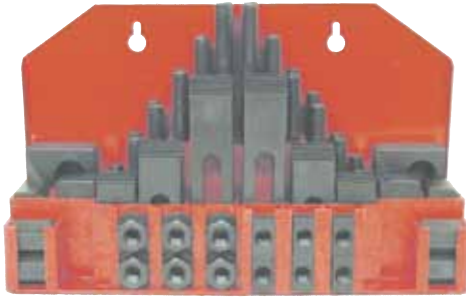


**CLAMPING KITS**  
SERIES 436:



52 pc. set in fitted rack suitable for hanging  
50 pc. set with fitted wooden container



**INCLUDES**

- 24 Studs (4 each: 3", 4", 5", 6", 7", 8")
- 4 Coupling nuts
- 6 Flange nuts (4 in wooden set)
- 6 T-Slot nuts
- 6 Step clamps
- 6 Pair Step blocks (1" wide)

| Model No. | Stud Size | Table Slot | Order No. |          | Price |
|-----------|-----------|------------|-----------|----------|-------|
|           |           |            | In Wood   | In Steel |       |
| CS001     | 3/8-16    | 7/16       | -         | 7800001  |       |
| CS002     |           | 1/2        | -         | 7800002  |       |
| CS003     |           | 9/16       | -         | 7800003  |       |
| CM001     | 1/2-13*   | 9/16       | -         | 7801001  |       |
| CM002     |           | 5/8        | -         | 7801002  |       |
| CM003     |           | 11/16      | -         | 7801003  |       |
| CL001     | 5/8-11    | 11/16      | -         | 7802001  |       |
| CL002     |           | 3/4        | -         | 7802002  |       |
| CL003     |           | 13/16      | -         | 7802003  |       |
| CEL01     | 3/4-10    | 13/16      | 7753001   | -        |       |
| CEL02     |           | 7/8        | 7753002   | -        |       |
| CEL03     |           | 1          | 7753003   | -        |       |

\*For Bridgeport® and similar machines.

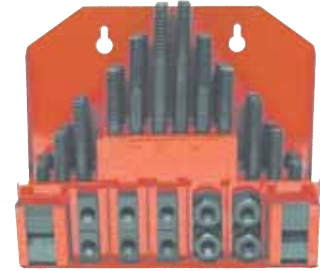
**T-NUT AND STUD SETS**  
SERIES 438:



38 pc. set in fitted rack suitable for hanging  
38 pc. set with fitted wooden container.

**INCLUDES**

- 24 studs (4 each: 3", 4", 5", 6", 7", 8")
- 4 Coupling nuts
- 4 Flange nuts
- 6 T-Slot nuts



| Model No. | Stud Size | Table Slot | Order No. |          | Price |
|-----------|-----------|------------|-----------|----------|-------|
|           |           |            | In Wood   | In Steel |       |
| TS001     | 3/8-16    | 7/16       | -         | 7900001  |       |
| TS002     |           | 1/2        | -         | 7900002  |       |
| TS003     |           | 9/16       | -         | 7900003  |       |
| TM001     | 1/2-13*   | 9/16       | -         | 7901001  |       |
| TM002     |           | 5/8        | -         | 7901002  |       |
| TM003     |           | 11/16      | -         | 7901003  |       |
| TL001     | 5/8-11    | 11/16      | -         | 7902001  |       |
| TL002     |           | 3/4        | -         | 7902002  |       |
| TL003     |           | 13/16      | -         | 7902003  |       |
| TEL01     | 3/4-10    | 13/16      | 7853001   | -        |       |
| TEL02     |           | 7/8        | 7853002   | -        |       |
| TEL03     |           | 1          | 7853003   | -        |       |

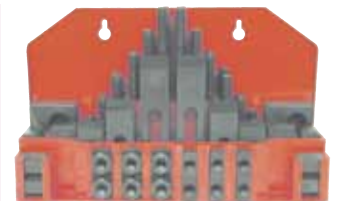
\*For Bridgeport® and similar machines.

**METRIC CLAMPING KITS - 58 PC.**  
SERIES 436:



M10 through M18 sets include a fitted rack suitable for hanging.

| Table Slot | Stud Size | Order No. | Price |
|------------|-----------|-----------|-------|
| M10        | M8-1.25   | 4013008   |       |
| M12        | M10-1.25  | 4013010   |       |
| M14        | M12-1.75  | 4013012   |       |
| M15.7      |           | 4013112   |       |
| M16        | M14-2.0   | 4013014   |       |
| M18        | M16-2.0   | 4013016   |       |
| M20        | M18-2.5   | 4013018*  |       |
| M22        | M20-2.5   | 4013020*  |       |



\* Packed with wooden container.

**Quality Clamping Kits**



**The Choice Is Yours!!!**

**T-SLOT BOLTS**  
SERIES 711:

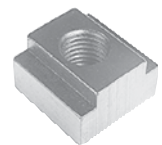
- Forged from selected steel.
- Cannot twist or jam in slots.
- National Coarse cut threads.



**T-SLOT NUTS**  
SERIES 674:



- Case Hardened Steel
- Black Oxide Finish



| Length Under Head | 3/8-16    |       | 1/2-13    |       | 5/8-11    |       | 3/4-10    |       |
|-------------------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
|                   | Order No. | Price | Order No. | Price | Order No. | Price | Order No. | Price |
| 1-1/2             | 7112415   |       | -         |       | -         |       | -         |       |
| 2                 | 7112420   |       | 7113220   |       | 7114020   |       | -         |       |
| 3                 | 7112430   |       | 7113230   |       | 7114030   |       | 7114830   |       |
| 4                 | 7112440   |       | 7113240   |       | 7114040   |       | 7114840   |       |
| 5                 | 7112450   |       | 7113250   |       | 7114050   |       | 7114850   |       |
| 6                 | 7112460   |       | 7113260   |       | 7114060   |       | 7114860   |       |
| 8                 | -         |       | 7113280   |       | 7114080   |       | 7114880   |       |
| 10                | -         |       | -         |       | -         |       | 7114890   |       |

| Table Slot | Thread Size | Order No. | Price |
|------------|-------------|-----------|-------|
| 7/16       | 3/8-16      | 6740437   |       |
| 1/2        |             | 6740500   |       |
| 9/16       |             | 6740560   |       |
| 9/16       | 1/2-13      | 6740562   |       |
| 5/8        |             | 6740625   |       |
| 11/16      |             | 6740680   |       |
| 11/16      | 5/8-11      | 6740687   |       |
| 3/4        |             | 6740750   |       |
| 13/16      |             | 6740800   |       |
| 13/16      | 3/4-10      | 6740812   |       |
| 7/8        |             | 6740875   |       |
| 1          |             | 6740102   |       |

## COUPLING NUTS

SERIES 674:



## STEP BLOCKS (1" WIDE)

SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

Couple any number of studs together to make a stud of any desired length.

| Model No. | Thread Size | Order No. | Price |
|-----------|-------------|-----------|-------|
| CN38      | 3/8-16      | 6742024   |       |
| CN12      | 1/2-13      | 6742032   |       |
| CN58      | 5/8-11      | 6742040   |       |
| CN34      | 3/4-10      | 6742048   |       |

- Case Hardened Steel
- Black Oxide Finish

One step block consists of 2 pieces.



| Height Range  | Order No. | Price |
|---------------|-----------|-------|
| 3/4 - 1-5/8   | 6744000   |       |
| 1-1/8 - 2-1/2 | 6744001   |       |
| 2-1/2 - 6     | 6744002   |       |

## STEP CLAMPS

SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

Teeth will match any step block.

| Model No. | Stud Size | Overall Lgth | Order No. | Price |
|-----------|-----------|--------------|-----------|-------|
| SC3825    | 5/16,3/8  | 2-1/2        | 6743242   |       |
| SC384     | 5/16,3/8  | 4            | 6743244   |       |
| SC386     | 5/16,3/8  | 6            | 6743246   |       |
| SC1225    | 1/2       | 2-1/2        | 6743322   |       |
| SC124     | 1/2       | 4            | 6743324   |       |
| SC126     | 1/2       | 6            | 6743326   |       |
| SC5825    | 5/8       | 2-1/2        | 6743402   |       |
| SC584     | 5/8       | 4            | 6743404   |       |
| SC586     | 5/8       | 6            | 6743406   |       |
| SC344     | 3/4       | 4            | 6743484   |       |
| SC346     | 3/4       | 6            | 6743486   |       |
| SC348     | 3/4       | 8            | 6743488   |       |

## HEAVY DUTY HEX NUTS

SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

| Model No. | Hex Size | Thread Size | Order No. | Price |
|-----------|----------|-------------|-----------|-------|
| HN14      | 1/2      | 1/4-20      | 6747016   |       |
| HN56      | 9/16     | 5/16-18     | 6747020   |       |
| HN38      | 11/16    | 3/8-16      | 6747024   |       |
| HN12      | 7/8      | 1/2-13      | 6747032   |       |
| HN58      | 1-1/16   | 5/8-11      | 6747040   |       |
| HN34      | 1-1/4    | 3/4-10      | 6747048   |       |
| HN78      | 1-7/16   | 7/8-9       | 6747056   |       |
| HN10      | 1-5/8    | 1-8         | 6747064   |       |

## FLANGE NUTS

SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

| Model No. | Thread Size | Order No. | Price |
|-----------|-------------|-----------|-------|
| FN38      | 3/8-16      | 6741024   |       |
| FN12      | 1/2-13      | 6741032   |       |
| FN58      | 5/8-11      | 6741040   |       |
| FN34      | 3/4-10      | 6741048   |       |

## CLAMPING STUDS

SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

| Overall Lgth | 3/8-16    |       | 1/2-13    |       | 5/8-11    |       | 3/4-10    |       |
|--------------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
|              | Order No. | Price | Order No. | Price | Order No. | Price | Order No. | Price |
| 3            | 6745243   |       | 6745323   |       | 6745403   |       | 6745483   |       |
| 4            | 6745244   |       | 6745324   |       | 6745404   |       | 6745484   |       |
| 5            | 6745245   |       | 6745325   |       | 6745405   |       | 6745485   |       |
| 6            | 6745246   |       | 6745326   |       | 6745406   |       | 6745486   |       |
| 7            | 6745247   |       | 6745327   |       | 6745407   |       | 6745487   |       |
| 8            | 6745248   |       | 6745328   |       | 6745408   |       | 6745488   |       |

**MACHINE STRAP CLAMPS**  
SERIES 673:



- Drop Forged Steel
- Ideal for holding down all types of work on every type of machine.
- Proper strength and stiffness to handle all types of clamping jobs.

**“U” CLAMPS**



| Overall Lgth | Width | Thickness | Width of Slot | Order No. | Price |
|--------------|-------|-----------|---------------|-----------|-------|
| 4            | 1-3/4 | 3/4       | 11/16         | 6730004   |       |
| 6            | 2     | 7/8       | 11/16         | 6730006   |       |
| 8            | 2-3/8 | 1-1/8     | 13/16         | 6730008   |       |
| 10           | 2-3/4 | 1-1/4     | 15/16         | 6730010   |       |
| 12           | 3-1/4 | 1-3/8     | 1-1/16        | 6730012   |       |

**GOOSE NECK CLAMPS**



| Overall Lgth | Width | Thickness | Width of Slot | Order No. | Price |
|--------------|-------|-----------|---------------|-----------|-------|
| 4            | 1-3/8 | 3/4       | 11/16         | 6731004   |       |
| 6            | 1-3/4 | 7/8       | 11/16         | 6731006   |       |
| 8            | 2-1/8 | 1-1/8     | 13/16         | 6731008   |       |

**PLAIN CLAMPS**



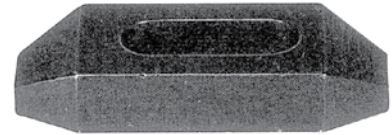
| Overall Lgth | Width | Thickness | Width of Slot | Order No. | Price |
|--------------|-------|-----------|---------------|-----------|-------|
| 4            | 1-5/8 | 3/4       | 11/16         | 6732004   |       |
| 6            | 1-3/4 | 7/8       | 11/16         | 6732006   |       |
| 8            | 2-1/8 | 1-1/8     | 13/16         | 6732008   |       |

**FINGER CLAMPS**



| Overall Lgth | Width | Thick-ness | Width of Slot | Order No. | Price |
|--------------|-------|------------|---------------|-----------|-------|
| 4            | 1-3/8 | 3/4        | 11/16         | 6733004   |       |
| 6            | 1-3/4 | 7/8        | 11/16         | 6733006   |       |
| 8            | 2-1/8 | 1-1/8      | 13/16         | 6733008   |       |

**PLAIN CLAMPS**  
SERIES 674:



- Case Hardened Steel
- Black Oxide Finish

| Stud Size | Overall Lgth | Order No. | Price |
|-----------|--------------|-----------|-------|
| 5/16, 3/8 | 2-1/2        | 6746242   |       |
| 5/16, 3/8 | 4            | 6746244   |       |
| 5/16, 3/8 | 6            | 6746246   |       |
| 1/2       | 2-1/2        | 6746322   |       |
| 1/2       | 4            | 6746324   |       |
| 1/2       | 6            | 6746326   |       |
| 5/8       | 2-1/2        | 6746402   |       |
| 5/8       | 4            | 6746404   |       |
| 5/8       | 6            | 6746406   |       |
| 3/4       | 4            | 6746484   |       |
| 3/4       | 6            | 6746486   |       |
| 3/4       | 8            | 6746488   |       |

**T-SLOT CLEANER**  
SERIES 674:



- Black Oxide Finish

|                   |       |        |
|-------------------|-------|--------|
| Order No. 6740000 | Price | \$4.00 |
|-------------------|-------|--------|

**T-SLOT BRUSH**

An easy way to clean chips from T-Slot tables.



|                   |       |        |
|-------------------|-------|--------|
| Order No. 6000044 | Price | \$6.85 |
|-------------------|-------|--------|

**Quality Clamping Tools**



**The Choice Is Yours!!!**



## CLAMPING & SET-UP COMPONENTS



SERIES 803:

### SUPER CLAMP KITS

**Kit Contains:**

- 1 Step Block and Clamp Kit which includes:
  - 6 Step Blocks
  - 6 Serrated End Clamps
- 1 T-Nut and Stud Kit which includes:
  - 4 Coupling Nuts
  - 4 Flange Nuts
  - 4 T-Slot Nuts
  - 1 T-Slot Cleaner
  - 24 studs - 4 each of



**English Kits** - 3", 4", 5", 6", 7" and 8" long

**Metric Kits** -

No. 68101: 80, 110, 125, 150, 175, & 200mm long.  
 Nos. 68102 - 06 & 68110 -12: 80, 110, 140, 150, 175 & 200mm long.  
 Nos. 68107-08 & 68113-15: 80, 110, 150, 175, 200, & 250mm long

- 1 Holder (wooden base and metal tray). \*Holders are all wooden.
- Bridgeport® type milling machines use Part Nos. 20206, 20212.

| Order No.                            | Price    | Step Blk. & Clamp Kit No. | Table T-Slot Size | Stud Size  | T-Slot & Stud Kit No. |
|--------------------------------------|----------|---------------------------|-------------------|------------|-----------------------|
| <b>With 1" Thick Step Blocks</b>     |          |                           |                   |            |                       |
| 20201                                |          | 21001                     | 3/8               | 5/16-18    | 20601                 |
| 20202                                |          | 21001                     | 7/16              | 3/8-16     | 20602                 |
| 9920203                              |          | 21001                     | 1/2               | 3/8-16     | 20603                 |
| 20204                                |          | 21001                     | 9/16              | 3/8-16     | 20604                 |
| 9920205                              |          | 21002                     | 9/16              | 1/2-13     | 20605                 |
| 9920206                              |          | 21002                     | 5/8               | 1/2-13     | 20606                 |
| 9920207                              |          | 21002                     | 11/16             | 1/2-13     | 20607                 |
| 9920208                              |          | 21003                     | 11/16             | 5/8-11     | 20608                 |
| 9920209                              |          | 21003                     | 3/4               | 5/8-11     | 20609                 |
| 9920210                              |          | 21003                     | 13/16             | 5/8-11     | 20610                 |
| <b>With 1-1/2" Thick Step Blocks</b> |          |                           |                   |            |                       |
| 9920211                              |          | 21004                     | 9/16              | 1/2-13     | 20605                 |
| 9920212                              |          | 21004                     | 5/8               | 1/2-13     | 20606                 |
| 9920213                              |          | 21004                     | 11/16             | 1/2-13     | 20607                 |
| 9920214                              |          | 21005                     | 11/16             | 5/8-11     | 20608                 |
| 9920215                              |          | 21005                     | 3/4               | 5/8-11     | 20609                 |
| 9920216                              |          | 21005                     | 13/16             | 5/8-11     | 20610                 |
| 9920217                              |          | 21006                     | 13/16             | 3/4-10     | 20611                 |
| 9920218                              |          | 21006                     | 7/8               | 3/4-10     | 20612                 |
| 9920219                              |          | 21006                     | 1                 | 3/4-10     | 20613                 |
| 9920222                              |          | 21006                     | 1-1/16            | 3/4-10     | 20618                 |
| <b>With 2" Thick Step Blocks</b>     |          |                           |                   |            |                       |
| *9920220                             | \$202.45 | 21007                     | 1                 | 7/8-9      | 20614                 |
| *20221                               | \$196.35 | 21007                     | 1-1/16            | 1-8        | 20617                 |
| <b>With 25mm Thick Step Blocks</b>   |          |                           |                   |            |                       |
| 68101                                |          | 21001M                    | 10mm              | M8 x 1.25  | 68201                 |
| 68102                                |          | 21001M                    | 12mm              | M10 x 1.5  | 68202                 |
| 68103                                |          | 21001M                    | 14mm              | M10 x 1.5  | 68203                 |
| 68104                                |          | 21002M                    | 14mm              | M12 x 1.75 | 68204                 |
| 68105                                |          | 21002M                    | 16mm              | M12 x 1.75 | 68205                 |
| 68106                                |          | 21002M                    | 17mm              | M12 x 1.75 | 68206                 |
| 68107                                |          | 21003M                    | 18mm              | M16 x 2.0  | 68207                 |
| 68108                                |          | 21003M                    | 20mm              | M16 x 2.0  | 68208                 |
| <b>With 38mm Thick Step Blocks</b>   |          |                           |                   |            |                       |
| 68110                                |          | 21004M                    | 14mm              | M12 x 1.75 | 68204                 |
| 68111                                |          | 21004M                    | 16mm              | M12 x 1.75 | 68205                 |
| 68112                                |          | 21004M                    | 17mm              | M12 x 1.75 | 68206                 |
| 68113                                |          | 21005M                    | 18mm              | M16 x 2.0  | 68207                 |
| 68114                                |          | 21005M                    | 20mm              | M16 x 2.0  | 68208                 |
| 68115                                |          | 21006M                    | 22mm              | M20 x 2.5  | 68209                 |

### MACHINIST CLAMP KITS

**Kit Contains:**

- 4 Coupling Nuts
- 6 Flange Nuts
- 6 T-Slot Nuts
- 1 T-Slot Cleaner
- 24 Studs - 4 Each of :



**English Kits** - 3", 4", 5", 6", 7" and 8" long.

**Metric Kits** - 80mm, 110mm, 125mm, 150mm, 175mm and 200mm long

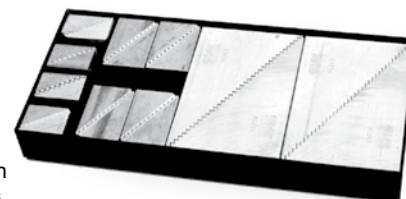
- 1 Step Block and Clamp Kit which includes: 6 Step Blocks, 6 Serrated End Clamps, 1 Metal Holder
- Bridgeport® type milling machines use Part No. 20402 or Part No. 9920402.

| Order No.                          | Price | Table T-Slot Size | Stud Size  | Step Block & Clamp Kit No. | T-Slot Nut No. |
|------------------------------------|-------|-------------------|------------|----------------------------|----------------|
| <b>With 1" Thick Step Blocks</b>   |       |                   |            |                            |                |
| 20412                              |       | 7/16              | 3/8-16     | 21001                      | 41404          |
| 20413                              |       | 1/2               | 3/8-16     | 21001                      | 41405          |
| 20414                              |       | 9/16              | 3/8-16     | 21001                      | 41406          |
| 20401                              |       | 9/16              | 1/2-13     | 21002                      | 41409          |
| 20402                              |       | 5/8               | 1/2-13     | 21002                      | 41410          |
| 9920402*                           |       | 5/8               | 1/2-13     | 20402                      | 41410          |
| 20403                              |       | 11/16             | 1/2-13     | 21002                      | 41412          |
| 20404                              |       | 5/8               | 1/2-13     | 21002                      | 41411          |
| 20415                              |       | 11/16             | 5/8-11     | 21003                      | 41415          |
| 20416                              |       | 3/4               | 5/8-11     | 21003                      | 41416          |
| 20417                              |       | 13/16             | 5/8-11     | 21003                      | 41417          |
| <b>With 25mm Thick Step Blocks</b> |       |                   |            |                            |                |
| 68001                              |       | 12mm              | M10 x 1.5  | 21001M                     | 61404          |
| 68002                              |       | 14mm              | M10 x 1.5  | 21001M                     | 61405          |
| 68003                              |       | 14mm              | M12 x 1.75 | 21002M                     | 61406          |
| 68004                              |       | 16mm              | M12 x 1.75 | 21002M                     | 61407          |
| 9968005                            |       | 17mm              | M12 x 1.75 | 21002M                     | 61408          |
| 68006                              |       | 18mm              | M16 x 2.0  | 21003M                     | 61409          |
| 68007                              |       | 20mm              | M16 x 2.0  | 21003M                     | 61410          |

\* In Plastic Holder

### STEP BLOCK KITS

- **Kit Contains:**
- 10 Steel Step Blocks
- 1 Holder



- See page 590 for dimensional data.
- Blocks work in conjunction with Serrated End Clamps.
- **Two halves = One Block.**

**INCH**

| Order No. | Price | 4 Each | 4 Each | 2 Each |
|-----------|-------|--------|--------|--------|
| 20801     |       | 40102  | 40103  | 40104  |
| 20805     |       | 40105  | 40106  | 40107  |
| 20807     |       | 40108  | 40109  | 40110  |

**METRIC**

| Order No. | Price | 4 Each | 4 Each | 2 Each |
|-----------|-------|--------|--------|--------|
| 9920801M  |       | 40102M | 40103M | 40104M |
| 9920805M  |       | 40105M | 40106M | 40107M |
| 9920807M  |       | 40108M | 40109M | 40110M |



# CLAMPING & SET-UP COMPONENTS

SERIES 803:



## T-NUT & STUD KITS

Kit Contains:

- 4 Coupling Nuts, 4 Flange Nuts, 4 T-Slot Nuts, 1 T-Slot Cleaner, 24 Studs - 4 ea. of English Kits: 3", 4", 5", 6", 7" and 8" long

**Metric Kits:** Kit No. 68201-06: 80mm, 110mm, 140mm, 150mm, 175mm and 200mm long.

Kit No. 68207-09: 80mm, 110mm, 150mm, 175mm, 200mm, and 250mm long

- 1 Holder (wooden base and metal tray). Bridgeport® type milling machines use Part No. 20606.

Inch

| Order No. | Price | T-Slot Nut No. | Table T-Slot Size | Stud Size |
|-----------|-------|----------------|-------------------|-----------|
| 20601     |       | 41403          | 3/8               | 5/16-18   |
| 20602     |       | 41404          | 7/16              | 3/8-16    |
| 20603     |       | 41405          | 1/2               | 3/8-16    |
| 20604     |       | 41406          | 9/16              | 3/8-16    |
| 20605     |       | 41409          | 9/16              | 1/2-13    |
| 20606     |       | 41410          | 5/8               | 1/2-13    |
| 20607     |       | 41412          | 11/16             | 1/2-13    |
| 20608     |       | 41415          | 11/16             | 5/8-11    |
| 20609     |       | 41416          | 3/4               | 5/8-11    |
| 20610     |       | 41417          | 13/16             | 5/8-11    |
| 20611     |       | 41418          | 13/16             | 3/4-10    |
| 20612     |       | 41419          | 7/8               | 3/4-10    |
| 20613     |       | 41420          | 1                 | 3/4-10    |
| 20618     |       | 41422          | 1-1/16            | 3/4-10    |
| 20614     |       | 41423          | 1                 | 7/8-9     |
| 20615     |       | 41424          | 1-1/16            | 7/8-9     |
| 20616     |       | 41425          | 1-1/8             | 7/8-9     |
| 20617     |       | 41426          | 1-1/16            | 1-8       |

Metric

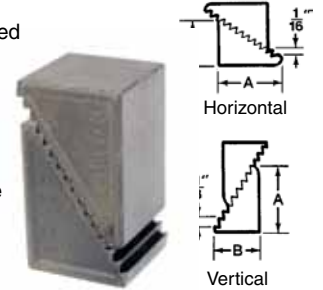
| Order No. | Price | T-Slot Nut No. | Table T-Slot Size | Stud Size  |
|-----------|-------|----------------|-------------------|------------|
| 68201     |       | 61403          | 10mm              | M8 x 1.25  |
| 68202     |       | 61404          | 12mm              | M10 x 1.5  |
| 68203     |       | 61405          | 14mm              | M10 x 1.5  |
| 68204     |       | 61406          | 14mm              | M12 x 1.75 |
| 68205     |       | 61407          | 16mm              | M12 x 1.75 |
| 68206     |       | 61408          | 17mm              | M12 x 1.75 |
| 68207     |       | 61409          | 18mm              | M16 x 2.0  |
| 68208     |       | 61410          | 20mm              | M16 x 2.0  |
| 68209     |       | 61411          | 22mm              | M20 x 2.5  |



## STEP BLOCKS

- Larger sizes have chamfered holes for ease of use.
- Blocks work in conjunction with Serrated End Clamps.
- **Two halves = One Block.**

\* Indicates chamfered hole



| Order No.                       | Price | Height Adj. Range | A       | B       |
|---------------------------------|-------|-------------------|---------|---------|
| <b>1" Thick Step Blocks</b>     |       |                   |         |         |
| 9940102                         |       | 3/4 to 1-5/8      | 1-1/16  | 11/16   |
| 40103                           |       | 1-1/8 to 2-1/2    | 1-39/64 | 1-1/16  |
| 40104*                          |       | 2-1/2 to 6        | 3-3/4   | 2-15/32 |
| <b>1-1/2" Thick Step Blocks</b> |       |                   |         |         |
| 9940105                         |       | 1-3/4 to 4        | 2-17/32 | 1-43/64 |
| 40106*                          |       | 2-1/2 to 6        | 3-3/4   | 2-15/32 |
| 40107*                          |       | 3-1/2 to 9        | 5-21/64 | 3-7/16  |
| <b>2" Thick Step Blocks</b>     |       |                   |         |         |
| 40108                           |       | 1-3/4 to 4        | 2-17/32 | 1-43/64 |
| 40109*                          |       | 2-1/2 to 6        | 3-3/4   | 2-15/32 |
| 40110*                          |       | 3-1/2 to 9        | 5-21/64 | 3-7/16  |
| <b>25mm Thick Step Blocks</b>   |       |                   |         |         |
| 8040102                         |       | 19mm to 41mm      | 1-1/16  | 11/16   |
| 9040103                         |       | 29mm to 64mm      | 1-39/64 | 1-1/16  |
| 8040104                         |       | 64mm to 152mm     | 3-3/4   | 2-15/32 |
| <b>38mm Thick Step Blocks</b>   |       |                   |         |         |
| 8040105                         |       | 45mm to 102mm     | 2-17/32 | 1-43/64 |
| 8040106                         |       | 64mm to 152mm     | 3-3/4   | 2-15/32 |
| 9040107                         |       | 89mm to 229mm     | 5-21/64 | 3-7/16  |
| <b>51mm Thick Step Blocks</b>   |       |                   |         |         |
| 8040108                         |       | 45mm to 102mm     | 2-17/32 | 1-43/64 |
| 8040109                         |       | 64mm to 152mm     | 3-3/4   | 2-15/32 |
| 8040110                         |       | 89mm to 229mm     | 5-21/64 | 3-7/16  |

## STEP BLOCK & CLAMP KITS

Kit Contains:

- 6 Steel Step Blocks, 6 Serrated End Clamps, 1 Holder



Inch

| Order No.                            | Price | Step Blocks 2 Each | Stud Size | Serrated End Clamps 2 Each |
|--------------------------------------|-------|--------------------|-----------|----------------------------|
| <b>With 1" Thick Step Blocks</b>     |       |                    |           |                            |
| 21001                                |       | 40102              | 5/16      | 30501                      |
|                                      |       | 40103              | or        | 30502                      |
|                                      |       | 40104              | 3/8       | 30503                      |
| 21002                                |       | 40102              | 1/2       | 30504                      |
|                                      |       | 40103              |           | 30505                      |
|                                      |       | 40104              |           | 30506                      |
| 21003                                |       | 40102              | 5/8       | 30507                      |
|                                      |       | 40103              |           | 30508                      |
|                                      |       | 40104              |           | 30509                      |
| <b>With 1-1/2" Thick Step Blocks</b> |       |                    |           |                            |
| 21004                                |       | 40105              | 1/2       | 30504                      |
|                                      |       | 40106              |           | 30505                      |
|                                      |       | 40107              |           | 30506                      |
| 21005                                |       | 40105              | 5/8       | 30507                      |
|                                      |       | 40106              |           | 30508                      |
|                                      |       | 40107              |           | 30509                      |
| 21006                                |       | 40105              | 3/4       | 30510                      |
|                                      |       | 40106              |           | 30511                      |
|                                      |       | 40107              |           | 30512                      |
| <b>With 2" Thick Step Blocks</b>     |       |                    |           |                            |
| 21007                                |       | 40108              | 7/8       | 30513                      |
|                                      |       | 40109              | or        | 30514                      |
|                                      |       | 40110              | 1         | 30515                      |

\*Kit furnished with flat board holder

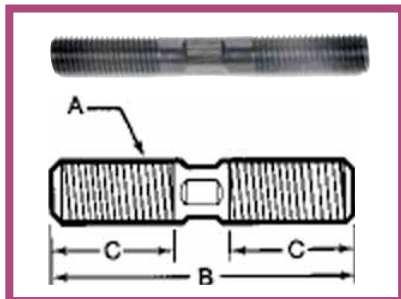
Metric

| Order No.                          | Step Blocks 2 Each | Stud Size  | Serrated End Clamps 2 Each | Price |
|------------------------------------|--------------------|------------|----------------------------|-------|
| <b>With 25mm Thick Step Blocks</b> |                    |            |                            |       |
| 8021001                            | 40102M             | M10 x 1.5  | 30501M                     |       |
|                                    | 40103M             |            | 30502M                     |       |
|                                    | 40104M             |            | 30503M                     |       |
| 8021002                            | 40102M             | M12 x 1.75 | 30504M                     |       |
|                                    | 40103M             |            | 30505M                     |       |
|                                    | 40104M             |            | 30506M                     |       |
| 8021003                            | 40102M             | M16 x 2.0  | 30507M                     |       |
|                                    | 40103M             |            | 30508M                     |       |
|                                    | 40104M             |            | 30509M                     |       |
| <b>With 38mm Thick Step Blocks</b> |                    |            |                            |       |
| 8021004                            | 40105M             | M12 x 1.75 | 30504M                     |       |
|                                    | 40106M             |            | 30505M                     |       |
|                                    | 40107M             |            | 30506M                     |       |
| 8021005                            | 40105M             | M16 x 2.0  | 30507M                     |       |
|                                    | 40106M             |            | 30508M                     |       |
|                                    | 40107M             |            | 30509M                     |       |
| 8021006                            | 40105M             | M20 x 2.5  | 30510M                     |       |
|                                    | 40106M             |            | 30511M                     |       |
|                                    | 40107M             |            | 30512M                     |       |



WORK HOLDING DEVICES - CLAMPS

### DRIVER STUDS (INCH)



- Black Oxide Finish
- Tensile Strength: 125,000 p.s.i. min. Medium Carbon Steel
- Most studs have wrench flats
- Special lengths and sizes will be quoted upon request

| Order No. | Price | Thread A | B     | C     | Flats |
|-----------|-------|----------|-------|-------|-------|
| 40301     |       | 1/4-20   | 1-1/2 | 1/2   | NO    |
| 40302     |       | 1/4-20   | 2     | 3/4   | NO    |
| 40303     |       | 1/4-20   | 2-1/2 | 1     | NO    |
| 40304     |       | 1/4-20   | 3     | 1     | NO    |
| 40305     |       | 1/4-20   | 3-1/2 | 1     | NO    |
| 40306     |       | 1/4-20   | 4     | 1     | NO    |
| 40307     |       | 1/4-20   | 4-1/2 | 1     | NO    |
| 40308     |       | 1/4-20   | 5     | 1     | NO    |
| 40309     |       | 1/4-20   | 5-1/2 | 1     | NO    |
| 40310     |       | 1/4-20   | 6     | 1     | NO    |
| 40311     |       | 1/4-20   | 6-1/2 | 1     | NO    |
| 40312     |       | 1/4-20   | 7     | 1     | NO    |
| 40313     |       | 1/4-20   | 7-1/2 | 1     | NO    |
| 40314     |       | 1/4-20   | 8     | 1     | NO    |
| 40401     |       | 5/16-18  | 1-1/2 | 1/2   | NO    |
| 40402     |       | 5/16-18  | 2     | 3/4   | NO    |
| 40403     |       | 5/16-18  | 2-1/2 | 1     | NO    |
| 40404     |       | 5/16-18  | 3     | 1-1/8 | NO    |
| 40405     |       | 5/16-18  | 3-1/2 | 1-1/8 | NO    |
| 40406     |       | 5/16-18  | 4     | 1-1/8 | NO    |
| 40407     |       | 5/16-18  | 4-1/2 | 1-1/8 | NO    |
| 40408     |       | 5/16-18  | 5     | 1-1/8 | NO    |
| 40409     |       | 5/16-18  | 5-1/2 | 1-1/8 | NO    |
| 40410     |       | 5/16-18  | 6     | 1-1/8 | NO    |
| 40411     |       | 5/16-18  | 6-1/2 | 1-1/8 | NO    |
| 40412     |       | 5/16-18  | 7     | 1-1/8 | NO    |
| 40413     |       | 5/16-18  | 7-1/2 | 1-1/8 | NO    |
| 40414     |       | 5/16-18  | 8     | 1-1/8 | NO    |
| 40501     |       | 3/8-16   | 1-1/2 | 1/2   | NO    |
| 40502     |       | 3/8-16   | 2     | 3/4   | NO    |
| 40503     |       | 3/8-16   | 2-1/2 | 1     | NO    |
| 40504     |       | 3/8-16   | 3     | 1     | YES   |
| 40505     |       | 3/8-16   | 3-1/2 | 1-1/4 | YES   |
| 40506     |       | 3/8-16   | 4     | 1-1/4 | YES   |
| 40507     |       | 3/8-16   | 4-1/2 | 1-1/4 | YES   |
| 40508     |       | 3/8-16   | 5     | 1-1/4 | YES   |
| 40509     |       | 3/8-16   | 5-1/2 | 1-1/4 | YES   |
| 40510     |       | 3/8-16   | 6     | 1-1/4 | YES   |
| 40511     |       | 3/8-16   | 6-1/2 | 1-1/4 | YES   |

| Order No. | Price | Thread A | B     | C     | Flats |
|-----------|-------|----------|-------|-------|-------|
| 40512     |       | 3/8-16   | 7     | 1-1/4 | YES   |
| 40513     |       | 3/8-16   | 7-1/2 | 1-1/4 | YES   |
| 40514     |       | 3/8-16   | 8     | 1-1/4 | YES   |
| 40601     |       | 7/16-14  | 1-1/2 | 1/2   | NO    |
| 40602     |       | 7/16-14  | 2     | 3/4   | NO    |
| 40603     |       | 7/16-14  | 2-1/2 | 1     | NO    |
| 40604     |       | 7/16-14  | 3     | 1     | YES   |
| 40605     |       | 7/16-14  | 3-1/2 | 1-1/4 | YES   |
| 40606     |       | 7/16-14  | 4     | 1-3/8 | YES   |
| 40607     |       | 7/16-14  | 4-1/2 | 1-3/8 | YES   |
| 40608     |       | 7/16-14  | 5     | 1-3/8 | YES   |
| 40609     |       | 7/16-14  | 5-1/2 | 1-3/8 | YES   |
| 40610     |       | 7/16-14  | 6     | 1-3/8 | YES   |
| 40611     |       | 7/16-14  | 6-1/2 | 1-3/8 | YES   |
| 40612     |       | 7/16-14  | 7     | 1-3/8 | YES   |
| 40613     |       | 7/16-14  | 7-1/2 | 1-3/8 | YES   |
| 40614     |       | 7/16-14  | 8     | 1-3/8 | YES   |
| 40701     |       | 1/2-13   | 1-1/2 | 1/2   | NO    |
| 40702     |       | 1/2-13   | 2     | 3/4   | NO    |
| 40703     |       | 1/2-13   | 2-1/2 | 1     | NO    |
| 40704     |       | 1/2-13   | 3     | 1     | YES   |
| 40705     |       | 1/2-13   | 3-1/2 | 1-1/4 | YES   |
| 40706     |       | 1/2-13   | 4     | 1-1/2 | YES   |
| 40707     |       | 1/2-13   | 4-1/2 | 1-1/2 | YES   |
| 40708     |       | 1/2-13   | 5     | 1-1/2 | YES   |
| 40709     |       | 1/2-13   | 5-1/2 | 1-1/2 | YES   |
| 40710     |       | 1/2-13   | 6     | 1-1/2 | YES   |
| 40711     |       | 1/2-13   | 6-1/2 | 1-1/2 | YES   |
| 40712     |       | 1/2-13   | 7     | 1-1/2 | YES   |
| 40713     |       | 1/2-13   | 7-1/2 | 1-1/2 | YES   |
| 40714     |       | 1/2-13   | 8     | 1-1/2 | YES   |
| 40715     |       | 1/2-13   | 9     | 1-1/2 | YES   |
| 40716     |       | 1/2-13   | 10    | 1-1/2 | YES   |
| 40717     |       | 1/2-13   | 12    | 1-1/2 | YES   |
| 40718     |       | 1/2-13   | 14    | 1-1/2 | YES   |
| 40719     |       | 1/2-13   | 16    | 1-1/2 | YES   |
| 40801     |       | 5/8-11   | 1-1/2 | 1/2   | NO    |
| 40802     |       | 5/8-11   | 2     | 3/4   | NO    |
| 40803     |       | 5/8-11   | 2-1/2 | 1     | NO    |
| 40804     |       | 5/8-11   | 3     | 1     | YES   |
| 40805     |       | 5/8-11   | 3-1/2 | 1-1/4 | YES   |
| 40806     |       | 5/8-11   | 4     | 1-1/2 | YES   |
| 40807     |       | 5/8-11   | 4-1/2 | 1-3/4 | YES   |
| 40808     |       | 5/8-11   | 5     | 1-3/4 | YES   |
| 40809     |       | 5/8-11   | 5-1/2 | 1-3/4 | YES   |
| 40810     |       | 5/8-11   | 6     | 1-3/4 | YES   |
| 40811     |       | 5/8-11   | 6-1/2 | 1-3/4 | YES   |
| 40812     |       | 5/8-11   | 7     | 1-3/4 | YES   |
| 40813     |       | 5/8-11   | 7-1/2 | 1-3/4 | YES   |
| 40814     |       | 5/8-11   | 8     | 1-3/4 | YES   |
| 40815     |       | 5/8-11   | 9     | 1-3/4 | YES   |
| 40816     |       | 5/8-11   | 10    | 1-3/4 | YES   |
| 40817     |       | 5/8-11   | 12    | 1-3/4 | YES   |
| 40818     |       | 5/8-11   | 14    | 1-3/4 | YES   |
| 40819     |       | 5/8-11   | 16    | 1-3/4 | YES   |
| 40820     |       | 5/8-11   | 18    | 1-3/4 | YES   |
| 40821     |       | 5/8-11   | 20    | 1-3/4 | YES   |
| 40822     |       | 5/8-11   | 22    | 1-3/4 | YES   |
| 40823     |       | 5/8-11   | 24    | 1-3/4 | YES   |

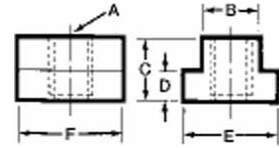
| Order No. | Price | Thread A | B     | C     | Flats |
|-----------|-------|----------|-------|-------|-------|
| 40901     |       | 3/4-10   | 3     | 1     | YES   |
| 40902     |       | 3/4-10   | 3-1/2 | 1-1/4 | YES   |
| 40903     |       | 3/4-10   | 4     | 1-1/2 | YES   |
| 40904     |       | 3/4-10   | 4-1/2 | 1-3/4 | YES   |
| 40905     |       | 3/4-10   | 5     | 2     | YES   |
| 40906     |       | 3/4-10   | 5-1/2 | 2     | YES   |
| 40907     |       | 3/4-10   | 6     | 2     | YES   |
| 40908     |       | 3/4-10   | 6-1/2 | 2     | YES   |
| 40909     |       | 3/4-10   | 7     | 2     | YES   |
| 40910     |       | 3/4-10   | 7-1/2 | 2     | YES   |
| 40911     |       | 3/4-10   | 8     | 2     | YES   |
| 40912     |       | 3/4-10   | 9     | 2     | YES   |
| 40913     |       | 3/4-10   | 10    | 2     | YES   |
| 40914     |       | 3/4-10   | 12    | 2     | YES   |
| 40915     |       | 3/4-10   | 14    | 2     | YES   |
| 40916     |       | 3/4-10   | 16    | 2     | YES   |
| 40917     |       | 3/4-10   | 18    | 2     | YES   |
| 40918     |       | 3/4-10   | 20    | 2     | YES   |
| 40919     |       | 3/4-10   | 22    | 2     | YES   |
| 40920     |       | 3/4-10   | 24    | 2     | YES   |
| 41001     |       | 7/8-9    | 3     | 1     | YES   |
| 41002     |       | 7/8-9    | 3-1/2 | 1-1/4 | YES   |
| 41003     |       | 7/8-9    | 4     | 1-1/2 | YES   |
| 41004     |       | 7/8-9    | 4-1/2 | 1-3/4 | YES   |
| 41005     |       | 7/8-9    | 5     | 2     | YES   |
| 41006     |       | 7/8-9    | 5-1/2 | 2-1/4 | YES   |
| 41007     |       | 7/8-9    | 6     | 2-1/4 | YES   |
| 41008     |       | 7/8-9    | 6-1/2 | 2-1/4 | YES   |
| 41009     |       | 7/8-9    | 7     | 2-1/4 | YES   |
| 41010     |       | 7/8-9    | 7-1/2 | 2-1/4 | YES   |
| 41011     |       | 7/8-9    | 8     | 2-1/4 | YES   |
| 41012     |       | 7/8-9    | 9     | 2-1/4 | YES   |
| 41013     |       | 7/8-9    | 10    | 2-1/4 | YES   |
| 41014     |       | 7/8-9    | 12    | 2-1/4 | YES   |
| 41015     |       | 7/8-9    | 14    | 2-1/4 | YES   |
| 41016     |       | 7/8-9    | 16    | 2-1/4 | YES   |
| 41017     |       | 7/8-9    | 18    | 2-1/4 | YES   |
| 41018     |       | 7/8-9    | 20    | 2-1/4 | YES   |
| 41019     |       | 7/8-9    | 22    | 2-1/4 | YES   |
| 41020     |       | 7/8-9    | 24    | 2-1/4 | YES   |
| 41101     |       | 1-8      | 3     | 1     | YES   |
| 41102     |       | 1-8      | 3-1/2 | 1-1/4 | YES   |
| 41103     |       | 1-8      | 4     | 1-1/2 | YES   |
| 41104     |       | 1-8      | 4-1/2 | 1-3/4 | YES   |
| 41105     |       | 1-8      | 5     | 2     | YES   |
| 41106     |       | 1-8      | 5-1/2 | 2-1/4 | YES   |
| 41107     |       | 1-8      | 6     | 2-1/2 | YES   |
| 41108     |       | 1-8      | 6-1/2 | 2-1/2 | YES   |
| 41109     |       | 1-8      | 7     | 2-1/2 | YES   |
| 41110     |       | 1-8      | 7-1/2 | 2-1/2 | YES   |
| 41111     |       | 1-8      | 8     | 2-1/2 | YES   |
| 41112     |       | 1-8      | 9     | 2-1/2 | YES   |
| 41113     |       | 1-8      | 10    | 2-1/2 | YES   |
| 41114     |       | 1-8      | 12    | 2-1/2 | YES   |
| 41115     |       | 1-8      | 14    | 2-1/2 | YES   |
| 41116     |       | 1-8      | 16    | 2-1/2 | YES   |
| 41117     |       | 1-8      | 18    | 2-1/2 | YES   |
| 41118     |       | 1-8      | 20    | 2-1/2 | YES   |
| 41119     |       | 1-8      | 22    | 2-1/2 | YES   |
| 41120     |       | 1-8      | 24    | 2-1/2 | YES   |



# CLAMPING & SET-UP COMPONENTS



SERIES 803:



## DRIVER STUDS (METRIC)

| Order No. | Thread A   | B   | C  | Price |
|-----------|------------|-----|----|-------|
| 60201     | M6 x 1.0   | 50  | 20 |       |
| 60202     | M6 x 1.0   | 65  | 20 |       |
| 60203     | M6 x 1.0   | 80  | 27 |       |
| 60204     | M6 x 1.0   | 95  | 27 |       |
| 60206     | M6 x 1.0   | 110 | 31 |       |
| 60208     | M6 x 1.0   | 140 | 35 |       |
| 60210     | M6 x 1.0   | 150 | 35 |       |
| 60211     | M6 x 1.0   | 175 | 35 |       |
| 60213     | M6 x 1.0   | 200 | 35 |       |
| 60301     | M8 x 1.25  | 50  | 20 |       |
| 60302     | M8 x 1.25  | 65  | 20 |       |
| 60303     | M8 x 1.25  | 80  | 27 |       |
| 60304     | M8 x 1.25  | 95  | 31 |       |
| 60306     | M8 x 1.25  | 110 | 31 |       |
| 60308     | M8 x 1.25  | 140 | 35 |       |
| 60310     | M8 x 1.25  | 150 | 35 |       |
| 60311     | M8 x 1.25  | 175 | 35 |       |
| 60313     | M8 x 1.25  | 200 | 35 |       |
| 60401     | M10 x 1.5  | 50  | 20 |       |
| 60402     | M10 x 1.5  | 65  | 20 |       |
| 60403     | M10 x 1.5  | 80  | 27 |       |
| 60404     | M10 x 1.5  | 95  | 31 |       |
| 60406     | M10 x 1.5  | 110 | 35 |       |
| 60407     | M10 x 1.5  | 125 | 35 |       |
| 60408     | M10 x 1.5  | 140 | 35 |       |
| 60410     | M10 x 1.5  | 150 | 35 |       |
| 60411     | M10 x 1.5  | 175 | 35 |       |
| 60413     | M10 x 1.5  | 200 | 35 |       |
| 60501     | M12 x 1.75 | 50  | 20 |       |
| 60502     | M12 x 1.75 | 65  | 20 |       |
| 60503     | M12 x 1.75 | 80  | 27 |       |
| 60504     | M12 x 1.75 | 95  | 31 |       |
| 60506     | M12 x 1.75 | 110 | 39 |       |
| 60507     | M12 x 1.75 | 125 | 39 |       |
| 60508     | M12 x 1.75 | 140 | 39 |       |
| 60510     | M12 x 1.75 | 150 | 39 |       |
| 60511     | M12 x 1.75 | 175 | 39 |       |
| 60513     | M12 x 1.75 | 200 | 39 |       |
| 60603     | M16 x 2.0  | 80  | 21 |       |
| 60604     | M16 x 2.0  | 95  | 31 |       |
| 60606     | M16 x 2.0  | 110 | 47 |       |
| 60607     | M16 x 2.0  | 125 | 47 |       |
| 60609     | M16 x 2.0  | 150 | 47 |       |
| 60611     | M16 x 2.0  | 175 | 47 |       |
| 60613     | M16 x 2.0  | 200 | 47 |       |
| 60615     | M16 x 2.0  | 250 | 47 |       |
| 60616     | M16 x 2.0  | 300 | 47 |       |
| 60703     | M20 x 2.5  | 80  | 27 |       |
| 60704     | M20 x 2.5  | 95  | 31 |       |
| 60706     | M20 x 2.5  | 110 | 47 |       |
| 60707     | M20 x 2.5  | 125 | 55 |       |
| 60709     | M20 x 2.5  | 150 | 55 |       |
| 60711     | M20 x 2.5  | 175 | 55 |       |
| 60713     | M20 x 2.5  | 200 | 55 |       |
| 60715     | M20 x 2.5  | 250 | 55 |       |
| 60716     | M20 x 2.5  | 300 | 55 |       |
| 60805     | M24 x 3.0  | 100 | 39 |       |
| 60807     | M24 x 3.0  | 125 | 55 |       |
| 60809     | M24 x 3.0  | 150 | 63 |       |
| 60811     | M24 x 3.0  | 175 | 63 |       |
| 60813     | M24 x 3.0  | 200 | 63 |       |
| 60815     | M24 x 3.0  | 250 | 63 |       |
| 60816     | M24 x 3.0  | 300 | 63 |       |

## T-SLOT NUTS

- Black Oxide Finish
- Case Hardened
- 1018 Material
- The last thread is incomplete on T-Slot Nuts to prevent the stud from turning through the bottom of the nut.
- Many sizes conform to TCMAI standards

| Order No. | Price | Thread A   | English* Table Slot B | Metric** Table Slot  | C     | D     | E     | F     |
|-----------|-------|------------|-----------------------|----------------------|-------|-------|-------|-------|
| 41401     |       | 1/4-20     | 5/16                  | 8                    | 1/4   | 3/16  | 9/16  | 9/16  |
| 41402     |       | 1/4-20     | 3/8                   | 10                   | 3/8   | 15/64 | 9/16  | 9/16  |
| 41403     |       | 5/16-18    | 3/8                   | 10                   | 3/8   | 1/4   | 5/8   | 7/8   |
| 41433     |       | 5/16-18    | 7/16                  | 12                   | 1/2   | 7/32  | 11/16 | 7/8   |
| 41434     |       | 5/16-18    | 1/2                   | 13                   | 1/2   | 9/32  | 7/8   | 7/8   |
| 41404     |       | 3/8-16     | 7/16                  | 12                   | 1/2   | 7/32  | 11/16 | 7/8   |
| 41405     |       | 3/8-16     | 1/2                   | 12                   | 1/2   | 9/32  | 7/8   | 7/8   |
| 41406     |       | 3/8-16     | 9/16                  | 15                   | 5/8   | 11/32 | 7/8   | 1-1/8 |
| 41407     |       | 7/16-14    | 1/2                   | 13                   | 1/2   | 9/32  | 7/8   | 7/8   |
| 41408     |       | 7/16-14    | 1/2                   | 13                   | 3/8   | 7/32  | 3/4   | 7/8   |
| 41409     |       | 1/2-13     | 9/16                  | 15                   | 5/8   | 11/32 | 7/8   | 1-1/8 |
| 41410     |       | 1/2-13     | 5/8                   | 16                   | 5/8   | 11/32 | 1     | 1-1/8 |
| 41411     |       | 1/2-13     | 5/8                   | 16                   | 3/4   | 3/8   | 1-1/8 | 1-1/8 |
| 41412     |       | 1/2-13     | 11/16                 | 18                   | 3/4   | 7/16  | 1-1/8 | 1-1/4 |
| 41413     |       | 1/2-13     | 3/4                   | 20                   | 3/4   | 15/32 | 1-1/4 | 1-1/4 |
| 41415     |       | 5/8-11     | 11/16                 | 18                   | 3/4   | 7/16  | 1-1/8 | 1-1/4 |
| 41416     |       | 5/8-11     | 3/4                   | 20                   | 3/4   | 15/32 | 1-1/4 | 1-1/4 |
| 41417     |       | 5/8-11     | 13/16                 | 21                   | 1     | 9/16  | 1-1/4 | 1-1/2 |
| 41418     |       | 3/4-10     | 13/16                 | 21                   | 1     | 9/16  | 1-1/4 | 1-1/2 |
| 41419     |       | 3/4-10     | 7/8                   | 23                   | 1     | 9/16  | 1-1/2 | 1-1/2 |
| 41420     |       | 3/4-10     | 1                     | 26                   | 1     | 5/8   | 1-5/8 | 1-3/4 |
| 41421     |       | 3/4-10     | 1                     | 26                   | 1-1/2 | 3/4   | 1-3/4 | 1-3/4 |
| 41422     |       | 3/4-10     | 1-1/16                | 27                   | 1-1/8 | 11/16 | 1-5/8 | 2     |
| 41423     |       | 7/8-9      | 1                     | 26                   | 1     | 5/8   | 1-5/8 | 1-3/4 |
| 41424     |       | 7/8-9      | 1-1/16                | 27                   | 1-1/8 | 11/16 | 1-5/8 | 2     |
| 41425     |       | 7/8-9      | 1-1/8                 | 28                   | 1-1/2 | 3/4   | 1-3/4 | 2     |
| 41429     |       | 7/8-9      | 1-5/16                | 34                   | 1-1/4 | 15/16 | 2     | 2     |
| 41426     |       | 1-8        | 1-1/16                | 27                   | 1-1/8 | 11/16 | 1-5/8 | 2     |
| 41427     |       | 1-8        | 1-1/8                 | 32                   | 1-1/2 | 3/4   | 1-3/4 | 2     |
| 41428     |       | 1-8        | 1-1/4                 | 32                   | 1-1/4 | 7/8   | 2     | 2     |
| 41430     |       | 1-8        | 1-5/16                | 34                   | 1-1/4 | 15/16 | 2     | 2     |
| 41432     |       | 1-1/4-7    | 1-3/8                 | 36                   | 1-3/4 | 1-1/8 | 2-1/2 | 2-1/2 |
| Order No. | Price | Thread A   | Metric* Table Slot B  | English** Table Slot | C     | D     | E     | F     |
| 61401     |       | M6 x 1.0   | 8                     | 5/16                 | 10    | 6     | 14    | 19    |
| 61402     |       | M6 x 1.0   | 10                    | 7/16                 | 11    | 6     | 16    | 22    |
| 61403     |       | M8 x 1.25  | 10                    | 7/16                 | 11    | 6     | 16    | 22    |
| 61404     |       | M10 x 1.5  | 12                    | 1/2                  | 13    | 7     | 19    | 22    |
| 61405     |       | M10 x 1.5  | 14                    | 9/16                 | 16    | 9     | 22    | 29    |
| 61406     |       | M12 x 1.75 | 14                    | 9/16                 | 16    | 9     | 22    | 29    |
| 61407     |       | M12 x 1.75 | 16                    | 5/8                  | 16    | 9     | 25    | 29    |
| 61408     |       | M12 x 1.75 | 17                    | 11/16                | 19    | 11    | 29    | 32    |
| 61409     |       | M16 x 2.0  | 18                    | 3/4                  | 19    | 11    | 29    | 32    |
| 9961410   |       | M16 x 2.0  | 20                    | 13/16                | 25    | 14    | 32    | 38    |
| 61411     |       | M20 x 2.5  | 22                    | 7/8                  | 25    | 14    | 35    | 38    |
| 61412     |       | M24 x 3.0  | 27                    | 1-1/16               | 29    | 18    | 41    | 51    |
| 61413     |       | M24 x 3.0  | 33                    | 1-5/16               | 32    | 24    | 51    | 51    |

\* T-Slot Nuts are undersized to fit machine table slot.

\*\* English T-Slot Nut will fit this size metric machine T-slot



While we show only the most popular **TE-CO** items we can supply their entire range of products; please inquire.



## CLAMPING & SET-UP COMPONENTS

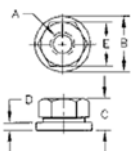


SERIES 803:

### SERRATED END CLAMPS

### FLANGE NUTS

- When used with Spherical Washers  
Flange Nuts will equalize thread loads  
Black Oxide Finish  
Case Hardened  
12L14 Material



- Available in Coarse or Fine Threads
- Many sizes conform to TCMAI standards

#### INCH

| Order No. | Price | Thread A | B     | C     | D    | E       |
|-----------|-------|----------|-------|-------|------|---------|
| 41601     |       | 1/4-20   | 5/8   | 5/16  | 3/32 | 1/2     |
| 41602     |       | 5/16-18  | 3/4   | 3/8   | 1/8  | 9/16    |
| 41603     |       | 3/8-16   | 7/8   | 1/2   | 1/8  | 11/16   |
| 41604     |       | 7/16-14  | 1     | 9/16  | 5/32 | 3/4     |
| 41605     |       | 1/2-13   | 1-1/8 | 11/16 | 3/16 | 7/8     |
| 41606     |       | 5/8-11   | 1-3/8 | 13/16 | 3/16 | 1-1/16  |
| 41607     |       | 3/4-10   | 1-5/8 | 1     | 1/4  | 1-1/4   |
| 41608     |       | 7/8-9    | 1-3/4 | 1-1/8 | 1/4  | 1-7/16  |
| 41609     |       | 1-8      | 2     | 1-1/4 | 1/4  | 1-5/8   |
| 41611     |       | 1-1/4-7  | 2-1/2 | 1-1/4 | 1/4  | 1-13/16 |
| 41701     |       | 1/4-28   | 5/8   | 5/16  | 3/32 | 1/2     |
| 41702     |       | 5/16-24  | 3/4   | 3/8   | 1/8  | 9/16    |
| 41703     |       | 3/8-24   | 7/8   | 1/2   | 1/8  | 11/16   |
| 41704     |       | 7/16-20  | 1     | 9/16  | 5/32 | 3/4     |
| 41705     |       | 1/2-20   | 1-1/8 | 11/16 | 3/16 | 7/8     |
| 41706     |       | 5/8-18   | 1-3/8 | 13/16 | 3/16 | 1-1/16  |
| 41707     |       | 3/4-16   | 1-5/8 | 1     | 1/4  | 1-1/4   |
| 41708     |       | 7/8-14   | 1-3/4 | 1-1/8 | 1/4  | 1-7/16  |
| 41709     |       | 1-14     | 2     | 1-1/4 | 1/4  | 1-5/8   |

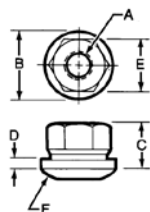
#### METRIC

| Order No. | Thread A   | B  | C  | D   | E  | Price |
|-----------|------------|----|----|-----|----|-------|
| 61601     | M6 x 1.0   | 16 | 8  | 2   | 10 |       |
| 61602     | M8 x 1.25  | 19 | 10 | 2.5 | 13 |       |
| 61603     | M10 x 1.5  | 22 | 13 | 3   | 17 |       |
| 61604     | M12 x 1.75 | 27 | 17 | 4   | 19 |       |
| 61605     | M16 x 2.0  | 33 | 21 | 5   | 24 |       |
| 61606     | M20 x 2.5  | 40 | 25 | 6   | 30 |       |
| 61607     | M24 x 3.0  | 49 | 32 | 7   | 36 |       |

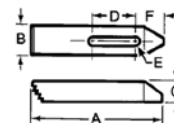
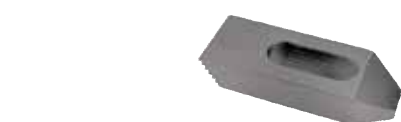
### SPHERICAL FLANGE NUTS

Black Oxide Finish  
Case Hardened  
12L14 Material

- Many sizes conform to TCMAI standards
- When used with spherical washers flange nuts will equalize thread loads.



| Order No. | Price | Thread A | B     | C     | D    | E       | F     |
|-----------|-------|----------|-------|-------|------|---------|-------|
| 41801     |       | 1/4-20   | 5/8   | 5/16  | 3/32 | 1/2     | 3/4   |
| 41802     |       | 5/16-18  | 3/4   | 3/8   | 1/8  | 9/16    | 1-1/4 |
| 41803     |       | 3/8-16   | 7/8   | 1/2   | 1/8  | 11/16   | 1-1/4 |
| 41804     |       | 7/16-14  | 1     | 9/16  | 5/32 | 3/4     | 1-1/2 |
| 41805     |       | 1/2-13   | 1-1/8 | 11/16 | 3/16 | 7/8     | 1-1/2 |
| 41806     |       | 5/8-11   | 1-3/8 | 13/16 | 3/16 | 1-1/16  | 1-3/4 |
| 41807     |       | 3/4-10   | 1-5/8 | 1     | 1/4  | 1-1/4   | 2-1/4 |
| 41808     |       | 7/8-9    | 1-3/4 | 1-1/8 | 1/4  | 1-7/16  | 2-1/2 |
| 41809     |       | 1-8      | 2     | 1-1/4 | 1/4  | 1-5/8   | 2-3/4 |
| 41811     |       | 1-1/4-7  | 2-1/2 | 1-1/4 | 1/4  | 1-13/16 | 3     |



| Order No. | Price | A     | B     | C     | D       | Stud Size E | F       |
|-----------|-------|-------|-------|-------|---------|-------------|---------|
| 30501     |       | 2-1/2 | 1     | 1/2   | 13/16   | 5/16 or 3/8 | 27/32   |
| 30502     |       | 4     | 1     | 5/8   | 1-7/16  | 5/16 or 3/8 | 1-1/32  |
| 30503     |       | 6     | 1-1/8 | 3/4   | 2-3/16  | 5/16 or 3/8 | 1-5/32  |
| 30504     |       | 2-1/2 | 1-1/8 | 1/2   | 11/16   | 1/2         | 29/32   |
| 30505     |       | 4     | 1-1/4 | 3/4   | 1-5/16  | 1/2         | 1-5/32  |
| 30506     |       | 6     | 1-1/4 | 7/8   | 2-1/16  | 1/2         | 1-9/32  |
| 30507     |       | 2-1/2 | 1-1/4 | 5/8   | 9/16    | 5/8         | 31/32   |
| 30508     |       | 4     | 1-1/2 | 3/4   | 1-3/16  | 5/8         | 1-9/32  |
| 30509     |       | 6     | 1-1/2 | 7/8   | 1-15/16 | 5/8         | 1-13/32 |
| 30510     |       | 4     | 1-1/2 | 3/4   | 1-1/16  | 3/4         | 1-11/32 |
| 30511     |       | 6     | 1-1/2 | 1     | 1-15/16 | 3/4         | 1-15/32 |
| 30512     |       | 8     | 1-3/4 | 1-1/8 | 2-3/16  | 3/4         | 1-29/32 |
| 30513     |       | 6     | 2     | 1-1/4 | 1-11/16 | 7/8 or 1    | 1-27/32 |
| 30514     |       | 8     | 2     | 1-3/8 | 1-15/16 | 7/8 or 1    | 2-1/32  |
| 30515     |       | 10    | 2     | 1-1/2 | 2-15/16 | 7/8 or 1    | 2-1/32  |

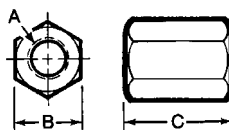
| Order No. | A   | B  | C  | D  | Stud Size E | F  | Price |
|-----------|-----|----|----|----|-------------|----|-------|
| 8030501   | 64  | 25 | 13 | 21 | M6-M8-M10   | 21 |       |
| 8030502   | 102 | 25 | 16 | 37 | M6-M8-M10   | 26 |       |
| 8030503   | 152 | 29 | 19 | 56 | M6-M8-M10   | 29 |       |
| 8030504   | 64  | 29 | 13 | 18 | M12         | 23 |       |
| 8030505   | 102 | 32 | 16 | 33 | M12         | 29 |       |
| 8030506   | 152 | 32 | 19 | 52 | M12         | 29 |       |
| 8030507   | 64  | 32 | 16 | 14 | M16         | 25 |       |
| 8030508   | 102 | 38 | 19 | 30 | M16         | 31 |       |
| 8030509   | 152 | 38 | 22 | 49 | M16         | 34 |       |
| 8030510   | 102 | 38 | 19 | 27 | M20         | 33 |       |
| 8030511   | 152 | 38 | 25 | 49 | M20         | 37 |       |
| 8030512   | 203 | 45 | 29 | 56 | M20         | 48 |       |
| 9030513   | 152 | 51 | 32 | 43 | M24         | 44 |       |
| 8030514   | 203 | 51 | 35 | 49 | M24         | 52 |       |
| 9030515   | 254 | 51 | 38 | 75 | M24         | 52 |       |

### COUPLING (EXTENSION) NUTS

#### METRIC

- Black Oxide Finish  
Case Hardened  
1117 Material  
Coupling Nuts can be used to join two or more studs for a desired length
- Many sizes conform to TCMAI standards

| Order No. | Price | Thread A   | B  | C  |
|-----------|-------|------------|----|----|
| 61501     |       | M6 x 1.00  | 13 | 16 |
| 61502     |       | M8 x 1.25  | 14 | 19 |
| 9961503   |       | M10 x 1.5  | 16 | 24 |
| 61504     |       | M12 x 1.75 | 22 | 32 |
| 61505     |       | M16 x 2.0  | 27 | 40 |
| 61506     |       | M20 x 2.5  | 32 | 51 |
| 9961507   |       | M24 x 3.0  | 38 | 64 |



#### INCH

| Order No. | Price | Thread A | B      | C     |
|-----------|-------|----------|--------|-------|
| 41501     |       | 1/4-20   | 1/2    | 5/8   |
| 41502     |       | 5/16-18  | 9/16   | 7/8   |
| 41503     |       | 3/8-16   | 11/16  | 1     |
| 41504     |       | 7/16-14  | 3/4    | 1-1/4 |
| 41505     |       | 1/2-13   | 7/8    | 1-1/4 |
| 41506     |       | 5/8-11   | 1-1/16 | 1-5/8 |
| 41507     |       | 3/4-10   | 1-1/4  | 1-7/8 |
| 41508     |       | 7/8-9    | 1-7/16 | 2-1/4 |
| 41509     |       | 1-8      | 1-5/8  | 2-1/2 |





# CLAMPING & SET-UP COMPONENTS



SERIES 803:

## HEAVY HEX NUTS

Black Oxide Finish Case Hardened  
 High Grade Alloy Steel  
 Will outlast ordinary Hex Nuts when used in repetitive operations

| Order No. | Price | Thread Size | Wdth Acs Flats | Thick-ness |
|-----------|-------|-------------|----------------|------------|
| 42101     |       | 1/4-20      | 1/2            | 15/64      |
| 42102     |       | 5/16-18     | 9/16           | 19/64      |
| 42103     |       | 3/8-16      | 11/16          | 23/64      |
| 42104     |       | 7/16-14     | 3/4            | 27/64      |
| 42105     |       | 1/2-13      | 7/8            | 31/64      |
| 42106     |       | 5/8-11      | 1-1/16         | 39/64      |
| 42107     |       | 3/4-10      | 1-1/4          | 47/64      |
| 42108     |       | 7/8-9       | 1-7/16         | 55/64      |
| 42109     |       | 1-8         | 1-5/8          | 63/64      |



42101

## HEAVY HEX JAM NUTS

Black Oxide Finish Case Hardened  
 High Grade Alloy Steel  
 Will outlast ordinary Hex Jam Nuts when used in repetitive operations

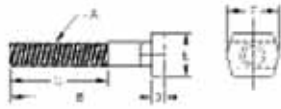
| Order No. | Price | Thread Size | Wdth Acs Flats | Thick-ness |
|-----------|-------|-------------|----------------|------------|
| 42201     |       | 1/4-20      | 1/2            | 11/64      |
| 42202     |       | 5/16-18     | 9/16           | 13/64      |
| 42203     |       | 3/8-16      | 11/16          | 15/64      |
| 42204     |       | 7/16-14     | 3/4            | 17/64      |
| 42205     |       | 1/2-13      | 7/8            | 19/64      |
| 42206     |       | 5/8-11      | 1-1/16         | 23/64      |
| 42207     |       | 3/4-10      | 1-1/4          | 27/64      |
| 42208     |       | 7/8-9       | 1-7/16         | 31/64      |
| 42209     |       | 1-8         | 1-5/8          | 35/64      |



42201

## TUGGER® T-SLOT BOLTS

Black Oxide Finish  
 Medium Carbon Steel  
 T-Slot Bolt head dimension "D" is undersized to fit machine table slot  
 Thread Class 2A UNC



| Order No. | Price | Thread A | B     | C     | D     | E     | F      | Table Slot |
|-----------|-------|----------|-------|-------|-------|-------|--------|------------|
| 45203     |       | 3/8-16   | 1-1/2 | 1     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45205     |       | 3/8-16   | 2     | 1-1/2 | 3/16  | 11/16 | 13/16  | 3/8        |
| 45207     |       | 3/8-16   | 2-1/2 | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45209     |       | 3/8-16   | 3     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45210     |       | 3/8-16   | 3-1/2 | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45211     |       | 3/8-16   | 4     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45212     |       | 3/8-16   | 4-1/2 | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45213     |       | 3/8-16   | 5     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45214     |       | 3/8-16   | 5-1/2 | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45215     |       | 3/8-16   | 6     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45216     |       | 3/8-16   | 7     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45217     |       | 3/8-16   | 8     | 2     | 3/16  | 11/16 | 13/16  | 3/8        |
| 45402     |       | 1/2-13   | 1-1/2 | 1     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45404     |       | 1/2-13   | 2     | 1-1/2 | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45406     |       | 1/2-13   | 2-1/2 | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45408     |       | 1/2-13   | 3     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45409     |       | 1/2-13   | 3-1/2 | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45410     |       | 1/2-13   | 4     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45411     |       | 1/2-13   | 4-1/2 | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45412     |       | 1/2-13   | 5     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45413     |       | 1/2-13   | 5-1/2 | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45414     |       | 1/2-13   | 6     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45415     |       | 1/2-13   | 7     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45416     |       | 1/2-13   | 8     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45417     |       | 1/2-13   | 9     | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45418     |       | 1/2-13   | 10    | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45419     |       | 1/2-13   | 12    | 2     | 1/4   | 7/8   | 1-3/16 | 1/2        |
| 45501     |       | 5/8-11   | 1-1/2 | 1     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45502     |       | 5/8-11   | 2     | 1-1/2 | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45504     |       | 5/8-11   | 2-1/2 | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45506     |       | 5/8-11   | 3     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45507     |       | 5/8-11   | 3-1/2 | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45508     |       | 5/8-11   | 4     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45509     |       | 5/8-11   | 4-1/2 | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45510     |       | 5/8-11   | 5     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45511     |       | 5/8-11   | 5-1/2 | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45512     |       | 5/8-11   | 6     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45513     |       | 5/8-11   | 7     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45514     |       | 5/8-11   | 8     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45515     |       | 5/8-11   | 9     | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45516     |       | 5/8-11   | 10    | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45517     |       | 5/8-11   | 12    | 2     | 11/32 | 1-1/8 | 1-5/16 | 5/8        |
| 45601     |       | 3/4-10   | 2     | 1-1/2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45602     |       | 3/4-10   | 2-1/2 | 2     | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45603     |       | 3/4-10   | 3     | 2     | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45604     |       | 3/4-10   | 3-1/2 | 2     | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45605     |       | 3/4-10   | 4     | 2     | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45606     |       | 3/4-10   | 4-1/2 | 2     | 15/32 | 1-1/4 | 1-9/16 | 3/4        |

## T-SLOT CLEANER

|                  |       |  |
|------------------|-------|--|
| Order No. 950101 | Price |  |
|------------------|-------|--|

- T-Slot Cleaner allows for easy removal of chips from the machine table
- T-Slot Cleaners are made of steel for durability



## TUGGER® T-SLOT BOLTS (Continued)

| Order No. | Price | Thread A | B     | C | D     | E     | F      | Table Slot |
|-----------|-------|----------|-------|---|-------|-------|--------|------------|
| 45607     |       | 3/4-10   | 5     | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45608     |       | 3/4-10   | 5-1/2 | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45609     |       | 3/4-10   | 6     | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45610     |       | 3/4-10   | 7     | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45611     |       | 3/4-10   | 8     | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45612     |       | 3/4-10   | 9     | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45613     |       | 3/4-10   | 10    | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45614     |       | 3/4-10   | 12    | 2 | 15/32 | 1-1/4 | 1-9/16 | 3/4        |
| 45701     |       | 7/8-9    | 3     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45702     |       | 7/8-9    | 4     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45703     |       | 7/8-9    | 5     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45704     |       | 7/8-9    | 6     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45705     |       | 7/8-9    | 7     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45706     |       | 7/8-9    | 8     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45707     |       | 7/8-9    | 9     | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45708     |       | 7/8-9    | 10    | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45709     |       | 7/8-9    | 12    | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45710     |       | 7/8-9    | 14    | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45711     |       | 7/8-9    | 16    | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45712     |       | 7/8-9    | 18    | 2 | 9/16  | 1-1/2 | 1-3/4  | 7/8        |
| 45801     |       | 1-8      | 3     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45802     |       | 1-8      | 4     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45803     |       | 1-8      | 5     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45804     |       | 1-8      | 6     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45805     |       | 1-8      | 7     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45806     |       | 1-8      | 8     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45807     |       | 1-8      | 9     | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45808     |       | 1-8      | 10    | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45809     |       | 1-8      | 12    | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45810     |       | 1-8      | 14    | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45811     |       | 1-8      | 16    | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |
| 45812     |       | 1-8      | 18    | 2 | 11/16 | 1-3/4 | 2-1/16 | 1          |

WORK HOLDING DEVICES - CLAMPS



## CLAMPING & SET-UP COMPONENTS

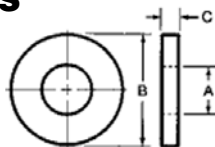


SERIES 803:

### HARDENED FLAT WASHERS

Black Oxide Finish  
Case Hardened  
C1010 Material

- Many sizes conform to TCMAI standards



**INCH**

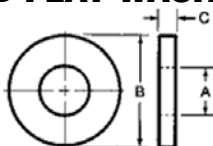
| Order No. | Price | Stud Size | A      | B     | C    |
|-----------|-------|-----------|--------|-------|------|
| 42600     |       | 3/16      | 13/64  | 1/2   | 3/32 |
| 42601     |       | 1/4       | 9/32   | 5/8   | 1/8  |
| 42602     |       | 5/16      | 11/32  | 3/4   | 1/8  |
| 42603     |       | 3/8       | 13/32  | 7/8   | 1/8  |
| 42604     |       | 7/16      | 15/32  | 1     | 1/8  |
| 42605     |       | 1/2       | 17/32  | 1-1/8 | 1/8  |
| 42606     |       | 5/8       | 21/32  | 1-3/8 | 1/8  |
| 42607     |       | 3/4       | 25/32  | 1-5/8 | 5/32 |
| 42608     |       | 7/8       | 29/32  | 1-3/4 | 5/32 |
| 42609     |       | 1         | 1-1/32 | 2     | 3/16 |
| 42610     |       | 1-1/8     | 1-5/32 | 2-1/4 | 7/32 |
| 42611     |       | 1-1/4     | 1-9/32 | 2-1/2 | 9/32 |
| 42612     |       | #4        | 1/8    | 5/16  | 5/64 |
| 42613     |       | #6        | 5/32   | 3/8   | 5/64 |
| 42614     |       | #8        | 3/16   | 7/16  | 5/64 |

**METRIC**

| Order No. | Stud Size | A  | B  | C | Price |
|-----------|-----------|----|----|---|-------|
| 63601     | M6        | 7  | 16 | 3 |       |
| 63602     | M8        | 9  | 19 | 3 |       |
| 63603     | M10       | 11 | 25 | 3 |       |
| 63605     | M12       | 13 | 28 | 3 |       |
| 63606     | M16       | 17 | 35 | 3 |       |
| 63608     | M20       | 22 | 44 | 5 |       |
| 63609     | M24       | 26 | 51 | 4 |       |

### HEAVY DUTY HARDENED FLAT WASHERS

Black Oxide Finish  
Case Hardened  
C1010 Material



**INCH**

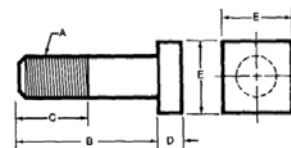
| Order No. | Price | Stud Size | A      | B     | C    |
|-----------|-------|-----------|--------|-------|------|
| 42619     |       | 1/4       | 9/32   | 5/8   | 3/16 |
| 42620     |       | 5/16      | 11/32  | 3/4   | 3/16 |
| 42621     |       | 3/8       | 13/32  | 7/8   | 3/16 |
| 42623     |       | 1/2       | 17/32  | 1-1/8 | 3/16 |
| 42624     |       | 5/8       | 21/32  | 1-3/8 | 3/16 |
| 42625     |       | 3/4       | 25/32  | 1-5/8 | 1/4  |
| 42626     |       | 7/8       | 29/32  | 1-3/4 | 1/4  |
| 42627     |       | 1         | 1-1/32 | 2     | 9/32 |

**METRIC**

| Order No. | Stud Size | A  | B  | C | Price |
|-----------|-----------|----|----|---|-------|
| 963619    | M6        | 7  | 16 | 5 |       |
| 963620    | M8        | 9  | 19 | 5 |       |
| 963621    | M10       | 11 | 25 | 5 |       |
| 63623     | M12       | 13 | 28 | 5 |       |
| 63624     | M16       | 17 | 35 | 5 |       |
| 63626     | M20       | 22 | 44 | 6 |       |
| 63627     | M24       | 26 | 51 | 7 |       |

### TUGGER® T-BOLTS

Black Oxide Finish  
Medium Carbon Steel  
Heat Treated  
Thread class 2A UNC



| Order No. | Price | Thread A | B     | C     | D     | E      | Table Slot |
|-----------|-------|----------|-------|-------|-------|--------|------------|
| 46201     |       | 3/8-16   | 1-1/2 | 1     | 1/4   | 11/16  | 3/8        |
| 46202     |       | 3/8-16   | 2     | 1-1/2 | 1/4   | 11/16  | 3/8        |
| 46203     |       | 3/8-16   | 2-1/2 | 2     | 1/4   | 11/16  | 3/8        |
| 46204     |       | 3/8-16   | 3     | 2     | 1/4   | 11/16  | 3/8        |
| 42605     |       | 3/8-16   | 3-1/2 | 2     | 1/4   | 11/16  | 3/8        |
| 46206     |       | 3/8-16   | 4     | 2     | 1/4   | 11/16  | 3/8        |
| 46207     |       | 3/8-16   | 5     | 2     | 1/4   | 11/16  | 3/8        |
| 46208     |       | 3/8-16   | 6     | 2     | 1/4   | 11/16  | 3/8        |
| 46209     |       | 3/8-16   | 7     | 2     | 1/4   | 11/16  | 3/8        |
| 46210     |       | 3/8-16   | 8     | 2     | 1/4   | 11/16  | 3/8        |
| 46401     |       | 1/2-13   | 1-1/2 | 1     | 5/16  | 7/8    | 1/2        |
| 46402     |       | 1/2-13   | 2     | 1-1/2 | 5/16  | 7/8    | 1/2        |
| 46403     |       | 1/2-13   | 2-1/2 | 2     | 5/16  | 7/8    | 1/2        |
| 46404     |       | 1/2-13   | 3     | 2     | 5/16  | 7/8    | 1/2        |
| 46405     |       | 1/2-13   | 3-1/2 | 2     | 5/16  | 7/8    | 1/2        |
| 46406     |       | 1/2-13   | 4     | 2     | 5/16  | 7/8    | 1/2        |
| 46407     |       | 1/2-13   | 5     | 2     | 5/16  | 7/8    | 1/2        |
| 46408     |       | 1/2-13   | 6     | 2     | 5/16  | 7/8    | 1/2        |
| 46409     |       | 1/2-13   | 7     | 2     | 5/16  | 7/8    | 1/2        |
| 46410     |       | 1/2-13   | 8     | 2     | 5/16  | 7/8    | 1/2        |
| 46411     |       | 1/2-13   | 10    | 2     | 5/16  | 7/8    | 1/2        |
| 46412     |       | 1/2-13   | 12    | 2     | 5/16  | 7/8    | 1/2        |
| 46501     |       | 5/8-11   | 1-1/2 | 1     | 13/32 | 1-1/8  | 5/8        |
| 46502     |       | 5/8-11   | 2     | 1-1/2 | 13/32 | 1-1/8  | 5/8        |
| 46503     |       | 5/8-11   | 2-1/2 | 2     | 13/32 | 1-1/8  | 5/8        |
| 46504     |       | 5/8-11   | 3     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46505     |       | 5/8-11   | 3-1/2 | 2     | 13/32 | 1-1/8  | 5/8        |
| 46506     |       | 5/8-11   | 4     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46507     |       | 5/8-11   | 5     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46508     |       | 5/8-11   | 6     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46509     |       | 5/8-11   | 7     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46510     |       | 5/8-11   | 8     | 2     | 13/32 | 1-1/8  | 5/8        |
| 46511     |       | 5/8-11   | 10    | 2     | 13/32 | 1-1/8  | 5/8        |
| 46512     |       | 5/8-11   | 12    | 2     | 13/32 | 1-1/8  | 5/8        |
| 46601     |       | 3/4-10   | 3     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46602     |       | 3/4-10   | 3-1/2 | 2     | 17/32 | 1-5/16 | 3/4        |
| 46603     |       | 3/4-10   | 4     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46604     |       | 3/4-10   | 5     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46605     |       | 3/4-10   | 6     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46606     |       | 3/4-10   | 7     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46607     |       | 3/4-10   | 8     | 2     | 17/32 | 1-5/16 | 3/4        |
| 46608     |       | 3/4-10   | 10    | 2     | 17/32 | 1-5/16 | 3/4        |
| 46609     |       | 3/4-10   | 12    | 2     | 17/32 | 1-5/16 | 3/4        |



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# CLAMPING & SET-UP COMPONENTS

SERIES 803:



## TUGGER® T-SLOT BOLT KITS



### SHORT SERIES

**Kit Contains:**

- 24 T-Slot Bolts - 4 Each of 1-1/2", 2", 2-1/2", 3", 3-1/2" and 4" Long.
- 8 Flange Nuts
- 1 T-Slot Cleaner
- 1 Holder

For material information see individual components.

| Order No. | Price | Thread Size | Table Slot | 4 Each O.A.L. |
|-----------|-------|-------------|------------|---------------|
| 21330     |       | 3/8-16      | 3/8        | 1-1/2 thru 4  |
| 21332     |       | 1/2-13      | 1/2        | 1-1/2 thru 4  |
| 21334     |       | 5/8-11      | 5/8        | 1-1/2 thru 4  |
| 21331     |       | 3/8-16      | 3/8        | 3 thru 8      |
| 21333     |       | 1/2-13      | 1/2        | 3 thru 8      |
| 21335     |       | 5/8-11      | 5/8        | 3 thru 8      |
| 21336     |       | 3/4-10      | 3/4        | 3 thru 8      |

### LONG SERIES

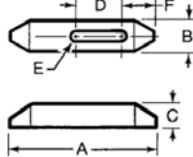
- 1 Holder
- Kit Contains:**
- 24 T-Slot Bolts - 4 Each of 3", 4", 5", 6", 7" and 8" Long
- 8 Flange Nuts
- 1 T-Slot Cleaner

For material information see individual components.

## PLAIN CLAMPS



• Material: 1018 Steel



- Tapered nose allows clamping in small areas.
- Case Hardened
- Black Oxide Finish.

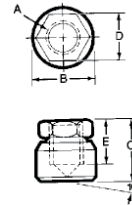
| Order No. | Price | A     | B     | C     | D       | Stud Size E  | F       |
|-----------|-------|-------|-------|-------|---------|--------------|---------|
| 30401     |       | 2-1/2 | 1     | 1/2   | 13/16   | 5/16 and 3/8 | 27/32   |
| 30402     |       | 4     | 1     | 5/8   | 1-7/16  | 5/16 and 3/8 | 1-1/32  |
| 30403     |       | 6     | 1-1/8 | 3/4   | 2-3/16  | 5/16 and 3/8 | 1-5/32  |
| 30404     |       | 2-1/2 | 1-1/8 | 1/2   | 11/16   | 1/2          | 29/32   |
| 30405     |       | 4     | 1-1/4 | 3/4   | 1-5/16  | 1/2          | 1-5/32  |
| 30406     |       | 6     | 1-1/4 | 7/8   | 2-1/16  | 1/2          | 1-9/32  |
| 30407     |       | 2-1/2 | 1-1/4 | 5/8   | 9/16    | 5/8          | 31/32   |
| 30408     |       | 4     | 1-1/2 | 3/4   | 1-3/16  | 5/8          | 1-9/32  |
| 30409     |       | 6     | 1-1/2 | 7/8   | 1-15/16 | 5/8          | 1-13/32 |
| 9930410   |       | 4     | 1-1/2 | 3/4   | 1-1/16  | 3/4          | 1-11/32 |
| 30411     |       | 6     | 1-1/2 | 1     | 1-15/16 | 3/4          | 1-15/32 |
| 30412     |       | 8     | 1-3/4 | 1-1/8 | 2-3/16  | 3/4          | 1-29/32 |
| 30413     |       | 6     | 2     | 1-1/4 | 1-11/16 | 7/8 and 1    | 1-27/32 |
| 30414     |       | 8     | 2     | 1-3/8 | 1-15/16 | 7/8 and 1    | 2-1/32  |
| 30415     |       | 10    | 2     | 1-1/2 | 2-15/16 | 7/8 and 1    | 2-1/32  |

### METRIC

| Order No. | A   | B  | C  | D  | Stud Size E | F  | Price |
|-----------|-----|----|----|----|-------------|----|-------|
| 8030401   | 64  | 25 | 13 | 21 | M6-M8-M10   | 21 |       |
| 8030402   | 102 | 25 | 16 | 37 | M6-M8-M10   | 26 |       |
| 9030403   | 152 | 29 | 19 | 56 | M6-M8-M10   | 29 |       |
| 8030404   | 64  | 29 | 13 | 18 | M12         | 23 |       |
| 9030405   | 102 | 32 | 16 | 33 | M12         | 29 |       |
| 8030406   | 152 | 32 | 19 | 52 | M12         | 29 |       |
| 9030407   | 64  | 32 | 16 | 14 | M16         | 25 |       |
| 8030408   | 102 | 38 | 19 | 30 | M16         | 31 |       |
| 8030409   | 152 | 38 | 22 | 49 | M16         | 34 |       |
| 8030410   | 102 | 38 | 19 | 27 | M20         | 33 |       |
| 8030411   | 152 | 38 | 25 | 49 | M20         | 37 |       |
| 8030412   | 203 | 45 | 29 | 56 | M20         | 48 |       |
| 8030413   | 152 | 51 | 32 | 43 | M24         | 44 |       |
| 8030414   | 203 | 51 | 35 | 49 | M24         | 52 |       |
| 8030415   | 254 | 51 | 38 | 75 | M24         | 52 |       |

## TOGGLE PADS

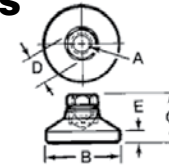
- Material: 12L14 Steel
- Black oxide finish
- Case Hardened
- Many sizes conform to TCMAI standards
- Pad swivels 10 degrees from vertical in any direction.
- Assures positive gripping
- Use when high clamping pressures are required



| Order No. | Price | Thread A | B     | C       | D      | E     |
|-----------|-------|----------|-------|---------|--------|-------|
| 44302     |       | 1/4-20   | 5/8   | 5/8     | 1/2    | 13/32 |
| 44303     |       | 5/16-18  | 11/16 | 11/16   | 9/16   | 7/16  |
| 44304     |       | 3/8-16   | 3/4   | 3/4     | 5/8    | 1/2   |
| 44305     |       | 1/2-13   | 7/8   | 1       | 3/4    | 17/32 |
| 44306     |       | 5/8-11   | 1     | 1-1/16  | 7/8    | 9/16  |
| 44307     |       | 3/4-10   | 1-1/4 | 1-5/16  | 1-1/16 | 3/4   |
| 44308     |       | 1-8      | 1-5/8 | 1-11/16 | 1-3/8  | 1     |

## LEVELING PADS

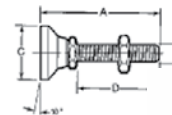
- Material: 12L14 Steel
- Black oxide finish
- Case hardened
- Many sizes conform to TCMAI standards
- Pad swivels 10 degrees from vertical in any direction.
- Large pad diameter provides solid support
- Use as a foot for machine tools, benches, electronic racks, etc.
- Special sizes quoted on request.



| Order No. | Price | Thread A | B     | C     | D      | E    | Load Limits |
|-----------|-------|----------|-------|-------|--------|------|-------------|
| 44401     |       | 3/8-16   | 1-1/4 | 7/8   | 5/8    | 3/16 | 3750 lbs.   |
| 44402     |       | 1/2-13   | 1-7/8 | 1-1/8 | 3/4    | 1/4  | 5000 lbs.   |
| 44403     |       | 5/8-11   | 2-1/2 | 1-1/4 | 7/8    | 5/16 | 6000 lbs.   |
| 44404     |       | 3/4-10   | 3     | 1-1/2 | 1-1/16 | 1/2  | 7200 lbs.   |

## LEVELING PAD & STUD ASSEMBLY

- Material: 12L14 Steel with Zinc Plating
- Zinc coating deters rust
- Integral stud and hardened ball swivels 10 degrees from vertical in any direction
- Swivel action facilitates leveling of machine tools, benches, electronic racks, etc. - even on rough surfaces.



| Order No. | Price | A     | Thread B | C     | Load D  | Limits |
|-----------|-------|-------|----------|-------|---------|--------|
| 44450     |       | 2-7/8 | 3/8-16   | 1-1/4 | 2-1/32  | 3750   |
| 44451     |       | 3-1/8 | 1/2-13   | 1-7/8 | 1-31/32 | 5000   |
| 44452     |       | 3-1/4 | 5/8-11   | 2-1/2 | 1-15/16 | 6000   |
| 44453     |       | 3-1/2 | 3/4-10   | 3     | 1-31/32 | 7200   |

WORK HOLDING DEVICES - CLAMPS



## CLAMPING & SET-UP COMPONENTS

SERIES 803

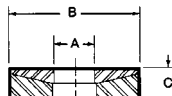


### SPHERICAL WASHERS

Black Oxide Finish  
Case Hardened  
Material: 12L14 steel  
Tops and bottoms also sold separately  
Reduces stress on threads  
Bottom Washer can be used with Spherical Flange Nuts



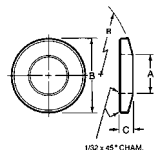
- Compensates for slight misalignment between the workpiece and strap clamp.
- Many sizes conform to TCMAI standards.



### ASSEMBLIES

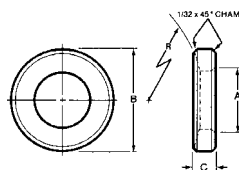
| Steel Part No. | Price | A Male Part No. | B Female Part No. | Stud Size    | C    | Total Deg. Rotation |
|----------------|-------|-----------------|-------------------|--------------|------|---------------------|
| 42701          |       | 42721           | 42741             | 3/16 and 1/4 | 3/16 | 8 and 5             |
| 42702          |       | 42722           | 42742             | 5/16 and 3/8 | 1/4  | 5 and 3             |
| 42703          |       | 42723           | 42743             | 7/16 and 1/2 | 5/16 | 4 and 2             |
| 42704          |       | 42724           | 42744             | 5/8          | 5/16 | 2                   |
| 42705          |       | 42725           | 42745             | 3/4          | 3/8  | 3                   |
| 42706          |       | 42726           | 42746             | 7/8          | 3/8  | 3                   |
| 42707          |       | 42727           | 42747             | 1            | 1/2  | 3                   |
| 42708          |       | 42728           | 42748             | 1-1/8        | 1/2  | 3                   |
| 42709          |       | 42729           | 42749             | 1-1/4        | 1/2  | 3                   |
| 42710          |       | 42730           | 42750             | 1-1/2        | 1/2  | 3                   |

### Male (TOP) SPHERICAL WASHERS



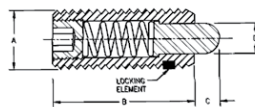
| Steel Order No. | Stud Size    | A      | B     | +0.000<br>-0.005<br>C | Rad.<br>R | Price |
|-----------------|--------------|--------|-------|-----------------------|-----------|-------|
| 42721           | 3/16 and 1/4 | 9/32   | 5/8   | .120                  | 3/4       |       |
| 42722           | 5/16 and 3/8 | 13/32  | 7/8   | .130                  | 1-1/4     |       |
| 42723           | 7/16 and 1/2 | 17/32  | 1-1/8 | .188                  | 1-1/2     |       |
| 42724           | 5/8          | 21/32  | 1-3/8 | .188                  | 1-3/4     |       |
| 42725           | 3/4          | 25/32  | 1-5/8 | .219                  | 2-1/4     |       |
| 42726           | 7/8          | 15/16  | 1-3/4 | .240                  | 2-1/2     |       |
| 42727           | 1            | 1-1/16 | 2     | .330                  | 2-3/4     |       |
| 42728           | 1-1/8        | 1-3/16 | 2-1/4 | .281                  | 3         |       |
| 42729           | 1-1/4        | 1-5/16 | 2-1/2 | .312                  | 3         |       |
| 42730           | 1-1/2        | 1-9/16 | 2-7/8 | .350                  | 3         |       |

### FEMALE (BOTTOM) SPHERICAL WASHERS



| Steel Order No. | Stud Size    | A     | B     | +0.000<br>-0.005<br>C | Rad.<br>R | Price |
|-----------------|--------------|-------|-------|-----------------------|-----------|-------|
| 42741           | 3/16 and 1/4 | 5/16  | 5/8   | .120                  | 3/4       |       |
| 42742           | 5/16 and 3/8 | 7/16  | 7/8   | .156                  | 1-1/4     |       |
| 42743           | 7/16 and 1/2 | 9/16  | 1-1/8 | .188                  | 1-1/2     |       |
| 42744           | 5/8          | 11/16 | 1-3/8 | .219                  | 1-3/4     |       |
| 42745           | 3/4          | 13/16 | 1-5/8 | .265                  | 2-1/4     |       |
| 42746           | 7/8          | 1     | 1-3/4 | .240                  | 2-1/2     |       |
| 42747           | 1            | 1-1/8 | 2     | .290                  | 2-3/4     |       |
| 42748           | 1-1/8        | 1-1/4 | 2-1/4 | .350                  | 3         |       |
| 42749           | 1-1/4        | 1-3/8 | 2-1/2 | .375                  | 3         |       |
| 42750           | 1-1/2        | 1-5/8 | 2-7/8 | .390                  | 3         |       |

### STANDARD SPRING PLUNGERS Heavy End Forces



- Steel Plunger has Carbon, Case Hardened Nose and Black Oxide finish on bodies.
- Nylon Locking element is standard on all sizes.
- Many sizes conform to TCMAI standards.

### INCH

| Steel Order No. | Price | End Force lbs. |       | Thread A | B       | C     | +0.000<br>-0.001<br>D |
|-----------------|-------|----------------|-------|----------|---------|-------|-----------------------|
|                 |       | Initial        | Final |          |         |       |                       |
| 52001           |       | 1.5            | 4.5   | 6-32     | 17/32   | 0.062 | 0.046                 |
| 9952002         |       | 1.0            | 1.6   | 6-32     | 3/8     | 0.062 | 0.046                 |
| 52003           |       | 2.7            | 7.3   | 8-32     | 5/8     | 0.093 | 0.070                 |
| 52004           |       | 2.9            | 11.1  | 10-32    | 3/4     | 0.125 | 0.093                 |
| 52005           |       | 3.0            | 13.0  | 1/4-20   | 1       | 0.187 | 0.119                 |
| 52006           |       | 3.0            | 13.0  | 1/4-28   | 1       | 0.187 | 0.119                 |
| 52007           |       | 2.0            | 9.0   | 1/4-20   | 3/4     | 0.125 | 0.119                 |
| 52008           |       | 3.0            | 15.0  | 5/16-18  | 1       | 0.187 | 0.135                 |
| 52009           |       | 5.5            | 14.5  | 3/8-16   | 1-1/8   | 0.187 | 0.186                 |
| 52010           |       | 6.6            | 17.4  | 1/2-13   | 1-1/4   | 0.250 | 0.248                 |
| 52011           |       | 10.5           | 25.5  | 5/8-11   | 1-1/2   | 0.312 | 0.310                 |
| 9952012         |       | 6.7            | 37.3  | 3/4-10   | 1-3/4   | 0.312 | 0.374                 |
| 52013           |       | 16.0           | 68.0  | 1-8      | 2-13/32 | 0.500 | 0.499                 |

### METRIC

| Steel Part No. | End Force N* (lbs.) |             | Thread A   | B mm | C mm | +0.000mm<br>-0.025mm<br>D | Price |
|----------------|---------------------|-------------|------------|------|------|---------------------------|-------|
|                | Initial             | Final       |            |      |      |                           |       |
| 9963701        | 18 (4.05)           | 50 (11.24)  | M6 x 1.0   | 20   | 2.5  | 2.7                       |       |
| 63702          | 25 (5.62)           | 70 (15.74)  | M8 x 1.25  | 22   | 3    | 3.5                       |       |
| 63703          | 25 (5.62)           | 70 (15.74)  | M10 x 1.50 | 22   | 3    | 4                         |       |
| 9963704        | 45 (10.12)          | 110 (24.73) | M12 x 1.75 | 28   | 4    | 6                         |       |
| 9963705        | 7 (1.57)            | 20 (4.5)    | M6 x 1.0   | 20   | 2.5  | 2.7                       |       |
| 63706          | 9 (2.02)            | 35 (7.87)   | M8 x 1.25  | 22   | 3    | 3.5                       |       |
| 9963707        | 9 (2.02)            | 35 (7.87)   | M10 x 1.50 | 22   | 3    | 4                         |       |
| 9963708        | 10 (2.25)           | 55 (12.36)  | M12 x 1.75 | 28   | 4    | 6                         |       |

\* Newton

### SPRING AND BALL PLUNGER WRENCHES



- Designed to eliminate excessive spring compression during installation and removal of spring and ball plungers.

| Order No. | Price | Inches  | mm  |
|-----------|-------|---------|-----|
| 9953001   |       | 6-32    |     |
| 53002     |       | 8-32    | M4  |
| 9953003   |       | 10-32   | M5  |
| 9953004   |       | 1/4-20  | M6  |
| 9953005   |       | 5/16-18 | M8  |
| 53006     |       | 3/8-16  | M10 |
| 53007     |       | 1/2-13  | M12 |
| 53008     |       | 5/8-11  |     |
| 53009     |       | 3/4-10  |     |
| 53010     |       | 1-8     |     |

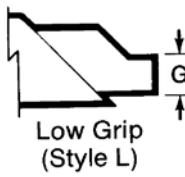


# CLAMPING & SET-UP COMPONENTS

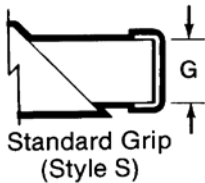
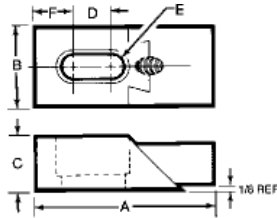
SERIES 803



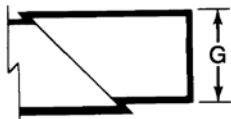
## NUZZLER® EDGE CLAMPS



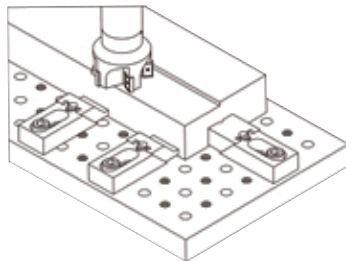
Low Grip  
(Style L)



Standard Grip  
(Style S)



High Grip  
(Style H)



- Clamp material: 1018 steel
- Black oxide finish
- Edge Clamps feature a double action, adjustable nose which exerts clamping pressures both downward and inward through a 45° angle.
- Noses have serrations for better gripping of non-finished or semi-finished workpieces.
- Tapered slots prevent clamp from sliding off the workpiece during tightening.
- Length "A" is calculated with nose raised 1/8".
- The Low Profile Nose provides a greater machining clearance.
- Optional removable aluminum nose cap prevents damage to your workplace.

| Order No. | Price | A       | B     | C     | D      | E    | F      | Nose Style | G     | Wrench Size |
|-----------|-------|---------|-------|-------|--------|------|--------|------------|-------|-------------|
| 33817     |       | 1-7/8   | 1     | 5/8   | 1/4    | 5/16 | 13/32  | L          | 1/8   | 5/32        |
| 33819     |       | 2-3/8   | 1     | 5/8   | 3/4    | 5/16 | 5/16   | L          | 1/8   | 5/32        |
| 33821     |       | 2-7/8   | 1     | 5/8   | 1-1/4  | 5/16 | 5/16   | L          | 1/8   | 5/32        |
| 33801     |       | 2-5/16  | 1-1/4 | 5/8   | 3/8    | 3/8  | 7/16   | L          | 1/4   | 3/16        |
| 33890     |       | 2-3/4   | 1-1/4 | 5/8   | 13/16  | 3/8  | 1/2    | L          | 1/4   | 3/16        |
| 33803     |       | 4-1/8   | 1-1/4 | 5/8   | 2      | 3/8  | 11/16  | L          | 1/4   | 3/16        |
| 33892     |       | 4-11/16 | 1-1/4 | 5/8   | 2-3/16 | 3/8  | 15/16  | L          | 1/4   | 3/16        |
| 33805     |       | 3-5/16  | 1-1/2 | 3/4   | 3/4    | 1/2  | 11/16  | L          | 3/8   | 1/4         |
| 33807     |       | 5-3/16  | 1-1/2 | 3/4   | 2-1/2  | 1/2  | 5/8    | L          | 3/8   | 1/4         |
| 33823     |       | 3-7/8   | 1-1/2 | 7/8   | 1-1/4  | 1/2  | 1/2    | L          | 1/4   | 1/4         |
| 33825     |       | 5-5/16  | 1-1/2 | 7/8   | 2      | 1/2  | 7/8    | L          | 1/4   | 1/4         |
| 33827     |       | 7-1/4   | 1-1/2 | 7/8   | 3      | 1/2  | 1-3/8  | L          | 1/4   | 1/4         |
| 33809     |       | 5-13/16 | 1-1/2 | 1-1/4 | 2-1/4  | 1/2  | 1-1/16 | L          | 3/8   | 1/4         |
| 33812     |       | 7-1/8   | 1-1/2 | 1-1/4 | 3-5/16 | 1/2  | 1-3/16 | L          | 3/8   | 1/4         |
| 33710     |       | 3-5/16  | 1-1/2 | 3/4   | 5/8    | 5/8  | 11/16  | L          | 3/8   | 1/4         |
| 33712     |       | 5-3/16  | 1-1/2 | 3/4   | 2-1/2  | 5/8  | 5/8    | L          | 3/8   | 1/4         |
| 33714     |       | 3-7/8   | 1-1/2 | 7/8   | 1-1/4  | 5/8  | 1/2    | L          | 1/4   | 1/4         |
| 33716     |       | 5-5/16  | 1-1/2 | 7/8   | 2      | 5/8  | 7/8    | L          | 1/4   | 1/4         |
| 33829     |       | 5-1/4   | 2     | 1-1/4 | 1-3/8  | 3/4  | 27/32  | L          | 3/8   | 5/16        |
| 33818     |       | 1-7/8   | 1     | 5/8   | 1/4    | 5/16 | 13/32  | S          | 5/8   | 5/32        |
| 33820     |       | 2-3/8   | 1     | 5/8   | 3/4    | 5/16 | 5/16   | S          | 5/8   | 5/32        |
| 33822     |       | 2-7/8   | 1     | 5/8   | 1-1/4  | 5/16 | 5/16   | S          | 5/8   | 5/32        |
| 33802     |       | 2-5/16  | 1-1/4 | 5/8   | 3/8    | 3/8  | 7/16   | S          | 5/8   | 3/16        |
| 33891     |       | 2-3/4   | 1-1/4 | 5/8   | 13/16  | 3/8  | 1/2    | S          | 5/8   | 3/16        |
| 33804     |       | 4-1/8   | 1-1/4 | 5/8   | 2      | 3/8  | 11/16  | S          | 5/8   | 3/16        |
| 33893     |       | 4-11/16 | 1-1/4 | 5/8   | 2-3/16 | 3/8  | 15/16  | S          | 5/8   | 3/16        |
| 33806     |       | 3-5/16  | 1-1/2 | 3/4   | 3/4    | 1/2  | 11/16  | S          | 3/4   | 1/4         |
| 33808     |       | 5-3/16  | 1-1/2 | 3/4   | 2-1/2  | 1/2  | 5/8    | S          | 3/4   | 1/4         |
| 33824     |       | 3-7/8   | 1-1/2 | 7/8   | 1-1/4  | 1/2  | 1/2    | S          | 7/8   | 1/4         |
| 33826     |       | 5-5/16  | 1-1/2 | 7/8   | 2      | 1/2  | 7/8    | S          | 7/8   | 1/4         |
| 33828     |       | 7-1/4   | 1-1/2 | 7/8   | 3      | 1/2  | 1-3/8  | S          | 7/8   | 1/4         |
| 33810     |       | 5-13/16 | 1-1/2 | 1-1/4 | 2-1/4  | 1/2  | 1-1/16 | S          | 3/4   | 1/4         |
| 33813     |       | 7-1/8   | 1-1/2 | 1-1/4 | 3-5/16 | 1/2  | 1-3/16 | S          | 3/4   | 1/4         |
| 933711    |       | 3-5/16  | 1-1/2 | 3/4   | 5/8    | 5/8  | 11/16  | S          | 3/4   | 1/4         |
| 33713     |       | 5-3/16  | 1-1/2 | 3/4   | 2-1/2  | 5/8  | 5/8    | S          | 3/4   | 1/4         |
| 33715     |       | 3-7/8   | 1-1/2 | 7/8   | 1-1/4  | 5/8  | 1/2    | S          | 7/8   | 1/4         |
| 33717     |       | 5-5/16  | 1-1/2 | 7/8   | 2      | 5/8  | 7/8    | S          | 7/8   | 1/4         |
| 33811     |       | 6-1/8   | 1-1/2 | 1-1/4 | 2-1/4  | 1/2  | 1-1/16 | H          | 1     | 1/4         |
| 33814     |       | 7-3/8   | 1-1/2 | 1-1/4 | 3-5/16 | 1/2  | 1-3/16 | H          | 1     | 1/4         |
| 33815     |       | 5-1/4   | 2     | 1-1/4 | 1-3/8  | 3/4  | 27/32  | H          | 1-1/4 | 5/16        |
| 33816     |       | 6-7/16  | 2-1/2 | 1-1/2 | 2      | 7/8  | 15/16  | H          | 1-1/2 | 1/2         |



While we show only the most popular TE-CO items, we can supply their entire range of products. See our website or inquire.



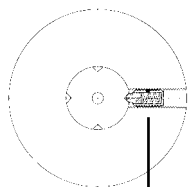
## CLAMPING & SET-UP COMPONENTS

SERIES 803:



### STANDARD BALL PLUNGERS

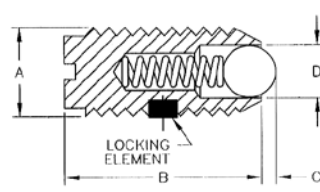
- Stainless Steel Ball
- Bodies are color coded to indicate end forces:  
Zinc = Light Force  
Black = Standard Force  
Gold = Heavy Force
- Nylon locking element is standard on all sizes.
- Many sizes conform to TCMAI Standards.
- It is suggested the tapped installation hole be countersunk 90° by 1/32 larger than major thread diameter to prevent installation damage to locking element.



Ball Plunger

### STAINLESS STEEL BALL PLUNGERS

- Stainless Steel Ball
- Bodies are color coded to indicate end forces:  
Plain Stainless Steel = Light Force  
Black = Standard Force  
Gold = Heavy Force
- Nylon locking element is standard on all sizes.
- Many sizes conform to TCMAI Standards.
- It is suggested the tapped installation hole be countersunk 90° by 1/32 larger than major thread diameter to prevent installation damage to locking element.



INCH

| Order No. | Price | Body Color Type | End Force lbs. |       | Thread A | B     | C     | Ball Dia. D |
|-----------|-------|-----------------|----------------|-------|----------|-------|-------|-------------|
|           |       |                 | Initial        | Final |          |       |       |             |
| 52821     |       | Black           | 0.12           | 0.50  | 4-48     | 3/16  | 0.02  | 0.062       |
| 52822     |       | Black           | 0.25           | 0.75  | 5-40     | 1/4   | 0.02  | 0.062       |
| 52823     |       | Black           | 0.50           | 1.00  | 6-40     | 5/16  | 0.023 | 0.078       |
| 52824     |       | Black           | 0.50           | 1.25  | 8-36     | 11/32 | 0.025 | 0.093       |
| 952825    |       | Black           | .50            | 1.25  | 8-32     | 11/32 | 0.025 | 0.093       |
| 9952801   |       | Zinc            | 0.50           | 1.50  | 10-32    | 33/64 | 0.025 | 0.093       |
| 9952802   |       | Black           | 1.50           | 3.00  | 10-32    | 33/64 | 0.025 | 0.093       |
| 9952803   |       | Gold            | 2.00           | 5.00  | 10-32    | 33/64 | 0.025 | 0.093       |
| 9952804   |       | Zinc            | 2.00           | 4.00  | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 9952805   |       | Black           | 3.00           | 7.00  | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 9952806   |       | Gold            | 4.00           | 12.00 | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 9952807   |       | Zinc            | 2.00           | 4.50  | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 9952808   |       | Black           | 4.00           | 9.00  | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 9952809   |       | Gold            | 6.00           | 17.00 | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 9952810   |       | Zinc            | 2.50           | 5.00  | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 9952811   |       | Black           | 5.00           | 10.00 | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 9952812   |       | Gold            | 6.00           | 21.00 | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 52813     |       | Zinc            | 3.00           | 6.00  | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 52814     |       | Black           | 6.00           | 12.00 | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 52815     |       | Gold            | 6.00           | 30.00 | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 9952816   |       | Zinc            | 4.50           | 9.00  | 5/8-11   | 63/64 | 0.096 | 0.375       |
| 9952817   |       | Black           | 9.00           | 18.00 | 5/8-11   | 63/64 | 0.096 | 0.375       |
| 52818     |       | Gold            | 7.00           | 50.00 | 5/8-11   | 63/64 | 0.096 | 0.375       |

INCH

| Order No. | Price | Body Color Type | End Force lbs. |       | Thread A | B     | C     | Ball Dia. D |
|-----------|-------|-----------------|----------------|-------|----------|-------|-------|-------------|
|           |       |                 | Initial        | Final |          |       |       |             |
| 9952901   |       | Plain           | 0.12           | 0.50  | 4-48     | 3/16  | 0.02  | 0.062       |
| 9952902   |       | Plain           | 0.25           | 0.75  | 5-40     | 1/4   | 0.02  | 0.062       |
| 9952903   |       | Plain           | 0.50           | 1.00  | 6-40     | 5/16  | 0.023 | 0.078       |
| 52904     |       | Plain           | 0.50           | 1.25  | 8-36     | 11/32 | 0.025 | 0.093       |
| 52923     |       | Plain           | 0.50           | 1.25  | 8-32     | 11/32 | 0.025 | 0.093       |
| 52905     |       | Plain           | 0.50           | 1.50  | 10-32    | 33/64 | 0.025 | 0.093       |
| 52906     |       | Black           | 1.50           | 3.00  | 10-32    | 33/64 | 0.025 | 0.093       |
| 9952907   |       | Gold            | 2.00           | 5.00  | 10-32    | 33/64 | 0.025 | 0.093       |
| 9952908   |       | Plain           | 2.00           | 4.00  | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 9952909   |       | Black           | 3.00           | 7.00  | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 52910     |       | Gold            | 4.00           | 12.00 | 1/4-20   | 17/32 | 0.035 | 0.125       |
| 9952911   |       | Plain           | 2.00           | 4.50  | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 9952912   |       | Black           | 4.00           | 9.00  | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 9952913   |       | Gold            | 6.00           | 17.00 | 5/16-18  | 37/64 | 0.04  | 0.156       |
| 52914     |       | Plain           | 2.50           | 5.00  | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 9952915   |       | Black           | 5.00           | 10.00 | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 52916     |       | Gold            | 6.00           | 21.00 | 3/8-16   | 5/8   | 0.048 | 0.187       |
| 9952917   |       | Plain           | 3.00           | 6.00  | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 9952918   |       | Black           | 6.00           | 12.00 | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 52919     |       | Gold            | 6.00           | 30.00 | 1/2-13   | 3/4   | 0.072 | 0.281       |
| 9952920   |       | Plain           | 4.50           | 9.00  | 5/8-11   | 63/64 | 0.096 | 0.375       |
| 52921     |       | Black           | 9.00           | 18.00 | 5/8-11   | 63/64 | 0.096 | 0.375       |
| 52922     |       | Gold            | 7.00           | 50.00 | 5/8-11   | 63/64 | 0.096 | 0.375       |

METRIC

| Order No. | Body Color Type | End Force N* (lbs.) |            | Thread A   | B mm | C mm | D mm | Price |
|-----------|-----------------|---------------------|------------|------------|------|------|------|-------|
|           |                 | Initial             | Final      |            |      |      |      |       |
| 63901     | Black           | 4 (.90)             | 10 (2.25)  | M4 x 0.7   | 9    | .8   | 2.5  |       |
| 63902     | Black           | 9 (2.02)            | 13 (2.92)  | M6 x 1.0   | 14   | 1    | 3.5  |       |
| 63903     | Zinc            | 2 (.45)             | 6 (1.35)   | M6 x 1.0   | 14   | 1    | 3.5  |       |
| 63904     | Gold            | 28 (6.30)           | 40 (9.0)   | M6 x 1.0   | 14   | 1    | 3.5  |       |
| 63905     | Black           | 15 (3.37)           | 30 (6.75)  | M8 x 1.25  | 16   | 1.5  | 5    |       |
| 9963906   | Zinc            | 5 (1.12)            | 10 (2.25)  | M8 x 1.25  | 16   | 1.5  | 5    |       |
| 9963907   | Gold            | 40 (9)              | 60 (13.5)  | M8 x 1.25  | 16   | 1.5  | 5    |       |
| 63908     | Black           | 20 (4.5)            | 35 (7.87)  | M10 x 1.5  | 19   | 2    | 6    |       |
| 63909     | Zinc            | 8 (1.8)             | 15 (3.37)  | M10 x 1.5  | 19   | 2    | 6    |       |
| 9963910   | Gold            | 60 (13.5)           | 90 (20.23) | M10 x 1.5  | 19   | 2    | 6    |       |
| 63911     | Black           | 30 (6.75)           | 55 (12.36) | M12 x 1.75 | 22   | 2.5  | 8    |       |
| 9963912   | Zinc            | 10 (2.25)           | 20 (4.5)   | M12 x 1.75 | 22   | 2.5  | 8    |       |
| 63913     | Gold            | 75(16.86)           | 115(25.85) | M12 x 1.75 | 22   | 2.5  | 8    |       |

\* Newton



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