



- Learn common terminology.
- Learn how to request a quote.
- Learn how to measure critical fitting dimensions.
- Learn about different common surface finishes.

## Common Terminology

- Common terminology reduces the risk of miscommunication on your special wire rope fitting needs.
- Ensures efficient, clean communications.
- NO MISTAKES!

### Common Terminology BUTTON OR FERRULE

- Specify if you are giving before swage or after swage dimensions.
- Wire rope size, O.D. and length.
- Specify material and surface finish.

Example:

"Button for 1/8" wire rope and an after swage dimension of .75" O.D. and 2" long. Hot dip galvanized"

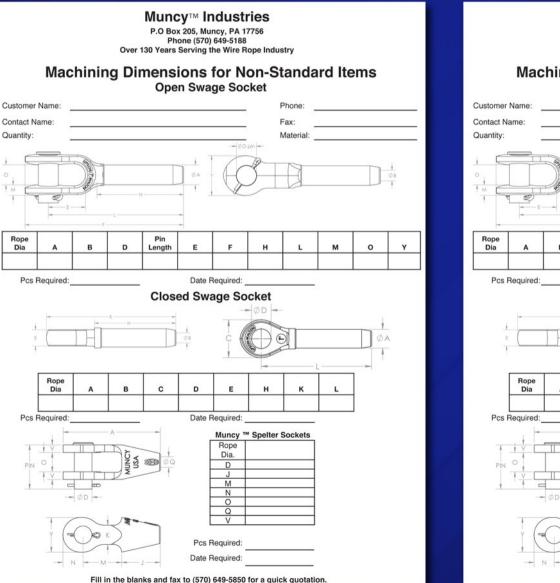
### Common Terminology THREADED STUDS

- Specify if you are giving before swage or after swage dimensions.
- Wire rope size, shank O.D., thread length, thread O.D., whether coarse or fine threads and if you need wrench flats – and where.
- Specify material and surface finish.
- Specify but and washer, if required.

Example:

"Threaded stud for 7/8" wire rope with an after swage O.D. of 1.75" and 5" of 1-3/4" National Course threads. Mechanical Zinc plated. Furnish one nut and one washer."

## **Muncy Specials "Cheat Sheet"**



P.O Box 205, Muncy, PA 17756-0205 Phone (570) 649-5188 Over 130 Years Serving the Wire Rope Industry Machining Dimensions for Non-Standard Items **Open Swage Socket** Phone: Fax: Material -ODD Pin в D F н м 0 Y Length 1 Date Required: **Closed Swage Socket** - OD OA в С D E н κ L Date Required: Muncy <sup>™</sup> Spelter Sockets

The Upson-Walton Company



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## **Measuring in a Nut Shell**





- Zeroing
- Calibrations
- Measure outside diameter.
- Measure inside diameter.
- Measure hole depths.

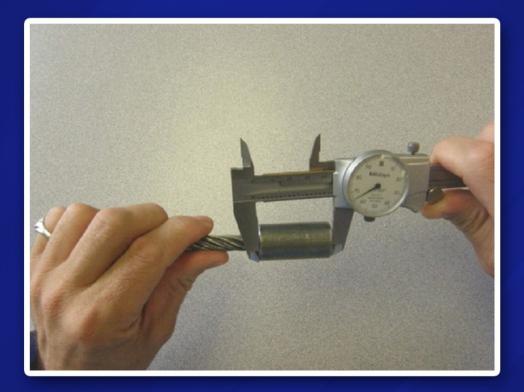


## Measuring O.D.



Measure the O.D. taking an average to account for flashing from the swaging process.

## **Measuring Length**



Measure the O.D. taking an average to account for flashing from the swaging process.

#### Measuring Thread Overview





- Determining thread O.D.
- Determining thread Length
- Determining thread pitch. (National Coarse or Fine)

## **Measuring Thread**





Measure thread outside diameter with caliper or with a nut that you know the size of.

### Measuring Threads THREAD LENGTH



Thread length is measured to the end of a nut that is secured all the way up the threaded stud.

### Measuring Threads – THREAD PITCH



- Thread pitch can be determined by using a pitch gage or with nuts that you know the size and pitch of.
- You can also measure a one inch section and count the number of threads.



# Wrench Flats



### Wrench Flats AT THE NOSE



- Located at the nose of the fitting.
- Cheapest way to add a wrench flat.
- Wrench flat does not disappear when swaged.
- Avoids accidental thread damage on installation.
- Does not weaken the fitting.

### Wrench Flats BETWEEN THREADS AND SHANKS



- May degrade ultimate strength of stud.
- Accidental damage to threads on installation may occur.
- Wrench flats may distort or disappear during swaging.

### Wrench Flats At the end of the threads



- Most costly way to add threads.
- Accidental damage to threads on installation.
- Will not distort or disappear during swaging.
- Threads at the wrench flat area have reduced tensile strength.

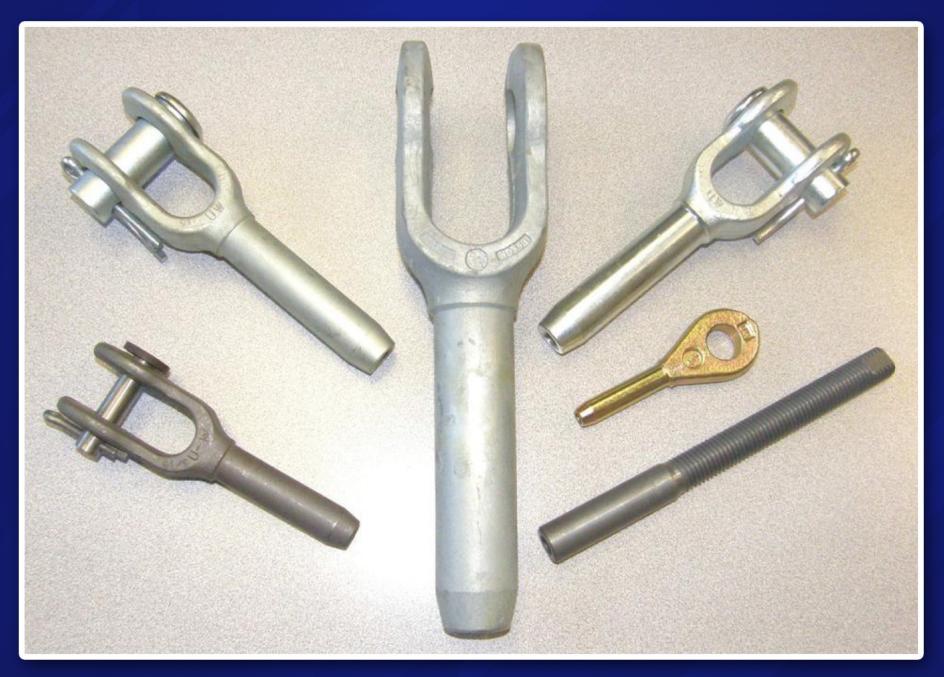
## "Odd Ball" Applications





- Our niche is the "Odd Ball" fitting.
- We make to your specifications.
- We stock over 250 tons of steel.
- Our goal is to have your non-standard studs and buttons out the door in 2 – 4 working days.
- Specialty items not from bar-stock may take longer.

## **Surface Finishes**



### Surface Finishes ELECTRO PLATED - CLEAR



- Shiny metallic finish.
- Rated to 12 hours in salt fog cabinet.
- Roughly 1 2 years of corrosion resistance.
- Does not alter dimensions.

### <u>Surface Finishes</u> ELECTRO PLATED - YELLOW CHROMATE



- Shiny metallic finish.
- Rated to 96 hours in salt fog cabinet.
- Does not alter dimensions.

### Surface Finishes CADMIUM PLATING



- Dull smooth metallic finish
- Rated to 244 hours in salt fog cabinet.
- Does not alter any dimensions.

### Surface Finishes HOT DIP GALVANIZED



- Dull, smooth, or rough metallic finish.
- Corrosion resistant for decades,
  50 100 years is not uncommon.
- Depends on where the galvanized part is located (i.e. city, rural, submerged.)
- Slightly alters dimensions.





Thank you for your time.

Any questions?