

# ARC WELD Studs

## Shear Connector Mild Steel

|   |                   | BODY DIAMETER                |             |             |
|---|-------------------|------------------------------|-------------|-------------|
|   |                   | 3/4                          | 7/8         | 1           |
| Length                                      | 3 3/16            | SCC75-318                    |             |             |
|   | 3 3/8             | SCC75-337                    |             |             |
|   | 3 11/16           |                              | SCC87-368   |             |
|   | 3 7/8             | SCC75-387                    |             |             |
|   | 4 3/16            | SCC75-418                    | SCC87-418   |             |
|   | 4 1/4             | SCC75-425                    |             | SCC1-425    |
|   | 4 3/8             | SCC75-437                    |             |             |
|   | 4 7/8             | SCC75-487                    |             |             |
|   | 5 3/16            | SCC75-518                    | SCC87-518   |             |
|   | 5 1/4             |                              |             | SCC1-525    |
|   | 5 3/8             | SCC75-537                    |             |             |
|   | 5 7/8             | SCC75-587                    |             |             |
|   | 6 3/16            | SCC75-618                    | SCC87-318   |             |
|   | 6 1/4             |                              |             | SCC1-625    |
|   | 7 3/16            | SCC75-718                    | SCC87-718   |             |
|   | 8 3/16            | SCC75-818                    | SCC87-818   |             |
|   | 8 1/4             |                              |             | SCC1-825    |
|   | 9 3/16            | SCC75-918                    |             |             |
|   | 9 1/4             |                              |             | SCC1-925    |
| 10 3/16                                     | SCC75-1018        |                              |             |             |
| 10 1/4                                      |                   |                              | SCC1-1025   |             |
|   | <b>Min Length</b> | 3.187"                       | 3.687"      | 4.25"       |
|   | <b>Max Length</b> | Most Sizes are made to order |             |             |
| Head  | <b>Height</b>     | .38"                         | .38"        | .56"        |
|   | <b>Diameter</b>   | 1.25"                        | 1.38"       | 1.625"      |
| Fillet                                      | <b>Height</b>     | .32 ± .02"                   | .39 ± .02"  | .41 ± .02"  |
|   | <b>Diameter</b>   | .96 ± .02"                   | 1.08 ± .02" | 1.25 ± .02" |
| <b>After Weld Length Reduction (approx)</b> |                   | .19"                         | .19"        | .19"        |

| STANDARD ACCESSORIES            |        |        |        |
|---------------------------------|--------|--------|--------|
| <b>Chuck</b>                    | CS62   | CS87   | CS1    |
| <b>Grip</b>                     | GS62   | GS87   | GS1    |
| <b>Long Grip (inside angle)</b> | GLS62  |        |        |
| <b>Foot</b>                     | FTMS20 | FTLS20 | FTLS20 |
| <b>Ferrule</b>                  | 75F    | 87F    | 1F     |

| MECHANICAL PROPERTIES  |           |           |           |
|--|-----------|-----------|-----------|
| (see appendix for calculation details particularly when comparing different manufacturers) |           |           |           |
| <b>Min Yield Tensile</b>   | 22,089 lb | 30,066 lb | 39,270 lb |
| <b>Min Yield Shear</b>   | 12,746 lb | 17,348 lb | 22,659 lb |

Shear Connectors are specifically designed to effectively tie the concrete to steel beams and to resist shear loadings between the concrete slab and steel beam in composite construction. Shear Connectors can be welded to flat surfaces or in the fillet or heel of angles. They are used in structural applications.

Please note that the standard ferrule is for welding on flat surfaces. If you are going to weld on the fillet or heel of angles, please ask your Image Sales Representative or consult the Factory directly for a different ferrule specification.



### IMAGE INDUSTRIES INC.

382 Balm Court • Wood Dale, IL 60191 USA

Tel: (630) 766-7373 • (800) 722-7883 • Fax: (630) 766-2402

## Shear Connector Stainless Steel

|   | BODY DIAMETER                |            |             |
|---|------------------------------|------------|-------------|
|   | 3/4                          | 7/8        | 1           |
| <b>Example Part No.</b>                     | SCS75-318                    | SCS87-368  | SCS1-425    |
| <b>Min Length</b>                           | 3.187"                       | 3.687"     | 4.25"       |
| <b>Max Length</b>                           | Most Sizes are made to order |            |             |
| <b>Head</b>                                 | <b>Height</b>                | .38"       | .38"        |
|   | <b>Diameter</b>              | 1.25"      | 1.38"       |
| <b>Fillet</b>                               | <b>Height</b>                | .32 ± .02" | .39 ± .02"  |
|   | <b>Diameter</b>              | .96 ± .02" | 1.08 ± .02" |
| <b>After Weld Length Reduction (approx)</b> | .19"                         | .19"       | .19"        |

| STANDARD ACCESSORIES            |        |        |        |
|---------------------------------|--------|--------|--------|
| <b>Chuck</b>                    | CS62   | CS87   | CS1    |
| <b>Grip</b>                     | GS62   | GS87   | GS1    |
| <b>Long Grip (inside angle)</b> | GLS62  |        |        |
| <b>Foot</b>                     | FTMS20 | FTLS20 | FTLS20 |
| <b>Ferrule</b>                  | 75F    | 87F    | 1F     |

| MECHANICAL PROPERTIES  |           |           |           |
|--|-----------|-----------|-----------|
| (see appendix for calculation details particularly when comparing different manufacturers) |           |           |           |
| <b>Min Yield Tensile</b>   | 13,254 lb | 18,040 lb | 23,562 lb |
| <b>Min Yield Shear</b>   | 7,647 lb  | 10,409 lb | 13,595 lb |

