

Clinch stud having exceeded weld stud.

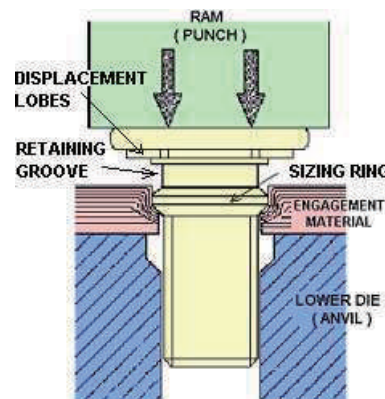
# CLINCH STUD® Strux

Why don't you use **Strux** instead of ordinary clinch studs, weld studs and swaged bolts?

## Strux's outline

Strux Clinch Studs offer a highly reliable, high-production part superior to other types of studs.

They can be installed with simple, easily-maintained equipment.



- High Rotation Resistance due to Displacement Lobes.
- High Push-Out Force due to Sizing ring.
- Joint power is demonstrated only by applying pressure to a head due to Retaining groove and Displacement lobes.

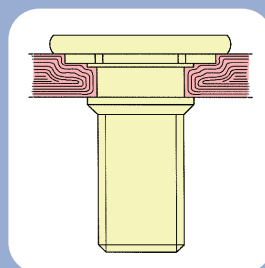
## Special features

- Cost saving
- High push-out and Rotation resistance
- No need plating after assemble
- Combination with nonweldable materials can be performed.
- Highly reliable

## Application

Ordinary clinch studs and weld studs can be substituted by Strux.

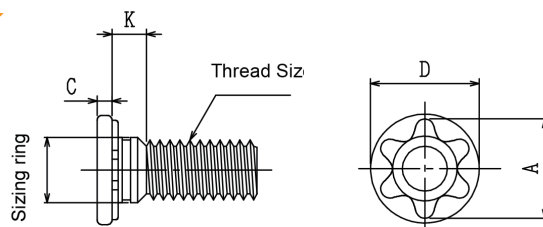
- Seatbelt
- Tractor
- Break of car
- Bumper
- Refrigerator etc.



Strux Clinch Studs are fed into punched or drilled holes by hand or automatic feeding equipment. The sizing ring automatically rounds and sizes to hole to specified diameter.

As pressure is applied, displacement lobes are seated, forcing the engagement material into the retaining groove for a solid, rotation-resistant assembly. The configuration of the stud remains unchanged.

## Dimensional & Performance Data



(All Dimensions in Millimeters)

| Thread Size | A<br>(Ref.) | Sizing<br>Ring<br>+0.06<br>-0.08 | K<br>(Ref.) | C<br>±0.13 | D<br>±0.25 | Engagement<br>Material<br>Thickness | Recommended<br>Hole Size |       | Approx.<br>Staking<br>Force<br>(ton) | Push-Out<br>Force<br>(N) | Rotation<br>Resistance<br>Torque<br>(N•m) |  |  |
|-------------|-------------|----------------------------------|-------------|------------|------------|-------------------------------------|--------------------------|-------|--------------------------------------|--------------------------|---|--|--|
|             |             |                                  |             |            |            |                                     | Min.                     | Max.  |                                      |                          |   |  |  |
| M4X0.7      | 7.3         | 4.62                             | 1.5         | 1.40       | 8.75       | 1.0                                 | 4.42                     | 4.53  | 1.6                                  | 882                      | 5.0                                       |  |  |
|             |             |                                  | 2.4         |            |            | 1.6                                 |                          |       | 2.0                                  | 1813                     |   |  |  |
| M5X0.8      | 7.8         | 5.62                             | 1.5         | 1.75       | 9.35       | 1.0                                 | 5.42                     | 5.53  | 2.0                                  | 1176                     | 7.9                                       |  |  |
|             |             |                                  | 2.4         |            |            | 1.6                                 |                          |       | 2.4                                  | 2303                     |   |  |  |
|             |             |                                  | 3.4         |            |            | 2.3                                 |                          |       | 3.3                                  | 4900                     |   |  |  |
| M6          | 9.2         | 6.62                             | 1.5         | 2.10       | 11.00      | 1.0                                 | 6.42                     | 6.53  | 2.3                                  | 1274                     | 10.6                                      |  |  |
|             |             |                                  | 2.4         |            |            | 1.6                                 |                          |       | 2.7                                  | 2303                     | 18.0                                      |  |  |
|             |             |                                  | 3.4         |            |            | 2.3                                 |                          |       | 3.3                                  | 5194                     |   |  |  |
|             |             |                                  | 4.6         |            |            | 3.0                                 |                          |       | 3.6                                  | 6958                     |   |  |  |
| M8          | 12.7        | 8.62                             | 1.5         | 2.80       | 15.25      | 1.0                                 | 8.42                     | 8.53  | 3.0                                  | 1470                     | 18.0                                      |  |  |
|             |             |                                  | 2.4         |            |            | 1.6                                 |                          |       | 3.5                                  | 2401                     | 36.9                                      |  |  |
|             |             |                                  | 3.4         |            |            | 2.3                                 |                          |       | 4.8                                  | 5733                     | 44.0                                      |  |  |
|             |             |                                  | 4.6         |            |            | 3.0                                 |                          |       | 7.6                                  | 10486                    |   |  |  |
| M10X1.25    | 16.4        | 10.62                            | 3.6         | 3.50       | 19.75      | 2.3                                 | 10.42                    | 10.53 | 5.9                                  | 6566                     | 85.9                                      |  |  |
| M10         |             |                                  | 4.6         |            |            | 3.0                                 |                          |       | 8.9                                  | 11956                    |   |  |  |
|             |             |                                  | 5.1         |            |            | 4.0                                 |                          |       | 10.8                                 | 16954                    |   |  |  |
| M12X1.25    | 18.2        | 12.62                            | 3.7         | 3.80       | 20.00      | 2.3                                 | 12.42                    | 12.53 | 9.8                                  | 6958                     | 104.9                                     |  |  |
| M12         |             |                                  | 4.8         |            |            | 3.0                                 |                          |       | 10.8                                 | 12495                    |   |  |  |
|             |             |                                  | 5.1         |            |            | 4.0                                 |                          |       | 12.8                                 | 17934                    |   |  |  |

Performance data shown are typical result obtained under laboratory test conditions. Test were conducted after staking studs into low carbon steel with heat treatment. For other than standard sizes or shapes of studs, or for other types and thickness of panel materials, please consult our engineer.

# NITTOSEIKO CO., LTD.