NELSON STUD WELDING

SPECIFICATION: H4L Headed Concrete Anchors (HCA)

Nelson headed concrete anchors deliver code specified embedded tension and shear strength values between steel and concrete. These anchors meet requirements of the following codes and are also USNRC approved:

AWS D1.1 Structural Welding Code – Steel
AWS D1.6 Structural Welding Code – Stainless Steel
AWS D1.5 Bridge Welding Code / AASHTO Standard Specification for Highway Bridges
ISO-13918 Welding – Studs for Arc Stud Welding
Canadian Standards Association W59 – Welded Steel Construction
International Building Code Section 19

See also: ICBO Evaluation Report ER-2614 Nelson Shear Connectors

Headed anchors are widely used in precast, cast-in-place or composite steel construction for miscellaneous embedded plates, frames, curbing, attachments and connections. Options for Welding Through Metal Deck are available for this stud.

For similar function studs, see Nelson S3L Shear Connectors and D2L Deformed Bar Anchors.

**When ordering, specify Type, Diameter, Before Weld Length, Material, Quantity, and Part Number**

*Example: H4L 1/2 x 4-1/8”; Mild Steel; 5000 pieces; #101053003*

<table>
<thead>
<tr>
<th>Stud Diameter</th>
<th>Burn Off</th>
<th>A</th>
<th>H</th>
<th>Ferrule to Flat</th>
<th>Required Standard Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 6 mm</td>
<td>0.125</td>
<td>0.187</td>
<td>0.500</td>
<td>100101067</td>
<td>Chuck: 500001014; Foot: 502002001; Grip: 501003007</td>
</tr>
<tr>
<td>3/8 10 mm</td>
<td>0.125</td>
<td>0.281</td>
<td>0.750</td>
<td>100101099</td>
<td>Chuck: 500001018; Foot: 502002001; Grip: 501003009</td>
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<tr>
<td>1/2 13 mm</td>
<td>0.125</td>
<td>0.312</td>
<td>1.000</td>
<td>100101114</td>
<td>Chuck: 500001085; Foot: 502002002; Grip: 501003010</td>
</tr>
<tr>
<td>5/8 16 mm</td>
<td>0.187</td>
<td>0.312</td>
<td>1.250</td>
<td>100101187</td>
<td>Chuck: 500001088; Foot: 502002002; Grip: 501003014</td>
</tr>
</tbody>
</table>

* Feet 502002001 and 502002002 are used with Nelson’s heavy duty gun. Feet 502002045 and 502002046 is used with Nelson’s standard duty gun.

**MATERIALS:** Studs are available in Low Carbon Mild Steel and 316L Stainless Steel. For specific grade information and physical and chemical properties, conforming standards, and information on stud plating and heat treating, please see General Material Specifications. Certified Material Test Reports (CMTR) and Certificates of Compliance (COC) are available and must be requested at time of order.

For ferrules and grips used in welding at an angle to plate, welding to angles, and welding to a vertical base plate, see the Special Applications section of the Ferrule Specifications.

**FLUX:** All Nelson concrete anchors have a solid flux load.