

**1.0 Scope**

**1.1** This standard covers carbon steel, cold heading quality, round wire intended for the manufacture of blind rivet bodies.

**1.2** In case of conflict, the requirements in the purchase order, on the drawing, in the purchaser's specification, and in this general standard shall prevail in the sequence named.

**1.3** The values stated in inch-pound units are to be regarded as standard.

**2.0 Applicable Documents**

**2.1 ASTM Standards**

A510 – Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel  
A700 – Recommended Practices for Packaging, Marking and Loading Methods for Steel Products for Domestic Shipment  
E29 – Recommended Practice for Indicating Which Places of Figures are to be Considered Significant in Specified Limiting Values  
E112 – Estimating the Average Grain Size of Metals

**3.0 General Requirements for Delivery**

**3.1** Material furnished to this standard shall conform to the applicable requirements of the current edition of ASTM A510.

**4.0 Ordering Information**

**4.1** Orders for wire to this specification may include the following items to adequately describe the material:

**4.1.1** Quantity (weight),

**4.1.1.1** Total order,

**4.1.1.2** Weight of individual coil,

**4.1.2** Name of material (carbon steel cold heading wire for blind rivet bodies),

**4.1.3** Dimensions,

**4.1.3.1** Wire diameter (see 9.1),

**4.1.3.2** Coil diameter, stating minimum inside diameter and maximum outside diameter,

**4.1.4** Thermal treatment (see 5.3),

**4.1.5** Steel grade (see Table 1),

**4.1.6** Mechanical Requirements,

|                                                                                      |                                                     |                               |
|--------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------|
| <b>IFI<br/>STANDARD ®</b>                                                            | <b>CARBON STEEL WIRE FOR<br/>BLIND RIVET BODIES</b> | <b>IFI-132</b><br>Page 1 of 5 |
| Published and issued by the<br>Industrial Fasteners Institute<br>of Independence, OH |                                                     | Issued: July 1983<br>Revised: |

All standards and specifications are advisory only. Their use by anyone is entirely voluntary. Reliance thereon for any purpose by anyone is at the sole risk of that person or the user of the product, and the IFI is not responsible for any loss, claim, or damage arising therefrom. In formulating and approving standards and specifications, the IFI has not investigated and will not investigate patents which may apply to the subject matter. Prospective users of the standards and specifications are responsible for advising themselves of and protecting themselves against any patent infringement liability which may arise out of such use. © INDUSTRIAL FASTENERS INSTITUTE 1983

- 4.1.6.1 Tensile strength range (psi),
- 4.1.6.2 Wire break load range (lbs),
- 4.1.7 Coating, type and thickness,
- 4.1.8 Grain size, if desired (see 7.1),
- 4.1.9 Cast or heat analysis, if desired (see 6.2),
- 4.1.10 Packaging (see 11.1),
- 4.1.11 IFI designation and date of issue,
- 4.1.12 Special requirements, if any,
- 4.1.13 Delivery date requested,
- 4.1.14 Desired freight mode and delivery instructions

**Table 1 Chemical Composition Requirements (a)**

| UNS Designation (b) | AISI Grade | Carbon %    | Manganese % | Phosphorus (c) max % | Sulfur (c) max % |
|---------------------|------------|-------------|-------------|----------------------|------------------|
| G10060              | 1006       | 0.08 max    | 0.25 – 0.40 | 0.040                | 0.050            |
| G10080              | 1008       | 0.10 max    | 0.30 – 0.50 | 0.040                | 0.050            |
| G10100              | 1010       | 0.08 – 0.13 | 0.30 – 0.60 | 0.040                | 0.050            |
| G10120              | 1012       | 0.10 – 0.15 | 0.30 – 0.60 | 0.040                | 0.050            |
| G10150              | 1015       | 0.13 – 0.18 | 0.30 – 0.60 | 0.040                | 0.050            |
| G10160              | 1016       | 0.13 – 0.18 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10180              | 1018       | 0.15 – 0.20 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10190              | 1019       | 0.15 – 0.20 | 0.70 – 1.00 | 0.040                | 0.050            |
| G10210              | 1021       | 0.18 – 0.23 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10220              | 1022       | 0.18 – 0.23 | 0.70 – 1.00 | 0.040                | 0.050            |
| G10260              | 1026       | 0.22 – 0.28 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10300              | 1030       | 0.28 – 0.34 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10350              | 1035       | 0.32 – 0.38 | 0.60 – 0.90 | 0.040                | 0.050            |
| G10380              | 1038       | 0.35 – 0.42 | 0.60 – 0.90 | 0.040                | 0.050            |

**NOTES:**

- a) Killed steels, when specified, may be ordered as aluminum killed or silicon killed. Silicon may be specified as 0.10% max, 0.10 to 0.20%, or 0.15 to 0.30%.
- b) Designation established in accordance with ASTM E527. Recommended Practice for Numbering Metals and Alloys (UNS).
- c) Ordinarily furnished phosphorus 0.035% max and sulfur 0.045% max.

|                                                                                      |                                                     |                               |
|--------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------|
| IFI<br>STANDARD ®                                                                    | <b>CARBON STEEL WIRE FOR<br/>BLIND RIVET BODIES</b> | <b>IFI-132</b><br>Page 2 of 5 |
| Published and issued by the<br>Industrial Fasteners Institute<br>of Independence, OH |                                                     | Issued: July 1983<br>Revised: |

All standards and specifications are advisory only. Their use by anyone is entirely voluntary. Reliance thereon for any purpose by anyone is at the sole risk of that person or the user of the product, and the IFI is not responsible for any loss, claim, or damage arising therefrom. In formulating and approving standards and specifications, the IFI has not investigated and will not investigate patents which may apply to the subject matter. Prospective users of the standards and specifications are responsible for advising themselves of and protecting themselves against any patent infringement liability which may arise out of such use. © INDUSTRIAL FASTENERS INSTITUTE 1983