Welded Wire Reinforcement

WWR

Product Catalog
Simplifying Concrete Construction

Insteel Wire Products is one of the nation’s largest manufacturers of steel wire reinforcing products for concrete construction applications. We manufacture and market prestressed concrete strand and welded wire reinforcement, including concrete pipe reinforcement, engineered structural mesh and standard welded wire reinforcement. Our products are sold primarily to manufacturers of concrete products that are used in nonresidential construction.

As one of the largest producers of welded wire reinforcement in North America, we provide the complete concrete reinforcing package by operating from several plants delivering a large variety of products throughout the continent and abroad.

Welded Wire Reinforcement

Welded wire reinforcement produced in all of Insteel’s plants meet or exceed all applicable industry and governmental standards, and more importantly, consistently exceed our customers’ expectations. The WWR products are made to your exact design requirements – no waste because there are no standard wire sizes. We offer a full range of fabrication services...we can shear, bend, or roll the custom designed WWR to meet your needs. And, all Insteel products are produced to meet all requirements of ASTM, AASHTO, and ACI.

Stronger = Less Steel

Compared to grade 60 rebar, WWR’s greater strength (up to 80 ksi yield strength) can reduce the amount of steel required by as much as 25%.

Faster = Less Labor

The welded grid pattern reduces labor by eliminating the need to tie individual rebar together. And, placing time is greatly reduced with WWR sheets. Typically between 100 and 200 square feet of reinforcement are placed at once.

Lighter = Less Freight

Pound per pound, WWR is stronger than rebar resulting in less overall weight for your project. The lighter weight reduces transportation costs and eases placement.
Concrete Bridge Beams

Welded wire reinforcement is used in more applications for beam stirrups in bridge beams every day. Where repetitious use of small rebar can be expensive to place, and tight tolerances difficult to maintain, WWR stirrups can save both time and money.

Precast Concrete Pipe and Concrete Box Culverts

Save time and money by using Welded Wire Reinforcement (WWR) in your precast pipe and box culverts. WWR is a major ingredient of precast concrete pipe and precast concrete box culverts because it provides an economical solution to your drainage problems.

WWR is available in large rolls or individual sheets that are rolled into reinforcing cages. The savings in labor during the assembly of reinforcement plus the ability to meet tight dimensional tolerances in the placing of the reinforcement make the use of WWR the best solution.
Structural Welded Wire Reinforcement

Insteel’s structural welded wire reinforcement is a step beyond standard WWR. The spacing or “grid” of the WWR can be varied in both directions. We offer wire sizes in both plain and deformed wire up to D31 (dia. 0.628 in.). Sheet sizes are made to fit your requirements, up to the width of the welding machine (up to 13-6 in.) and lengths determined by handling limitations. Galvanized or epoxy coatings are available. Let us know your needs and we’ll design the perfect solution for you.

In addition to the WWR products shown, we also offer WWR for tunnel form construction, structural slabs, footings, foundations, PT beams, deck mesh, bridge decks and more.
Advantages of Structural WWR

The advantages of using structural welded wire reinforcement over other types of reinforcement include:

- Proper Steel Required – exact area of steel can be achieved thus eliminating unnecessary over-steeling
- Proper Spacing for Proper Placement – reduces quality control problems and time
- Ease and Speed of Placement – eliminates hand tying individual bars and large areas are covered with each sheet
- Reduces Labor Costs – smaller crews can place and secure reinforcement in less time
- Less Space Required at Job Site – material stacks, no fabrication space required
- Reduces Total Construction Time – speeds placement and pouring cycles; reduces labor and steel required (when using high-yield structural WWR).
Insteel produces a comprehensive line of building mesh in standard sizes and styles in rolls and sheets. When properly placed on concrete slab on grade, building mesh helps reinforce the concrete after cracking. It is an important ingredient in a successful floor slab. The wide range of wire sizes and spacings available make it possible to furnish accurate cross-sectional areas of steel required to reinforce residential and small commercial building floors and sidewalks. Wire sizes range from W1.4 to W/D4.0.
Coils

Insteel produces bright basic wire in either coils or straight and cut lengths. Each plant has multiple wire drawing equipment options and a testing lab which enable us to send you a product that will meet your toughest material and delivery requirements.

Straight and Cut

With tensile and yield strengths higher than rebar, straight and cut deformed wire may be cut to exact lengths and is an alternative to weldable rebar. We also offer pencil rod (dia. 0.250 in.) which is used in many construction applications due to its versatility and ease of use.
Engineering Expertise Delivers Customized WWR Solutions

Insteel Wire Products engineers have decades of experience on some of the most complex construction projects. Our engineers create value by keeping projects under budget and ahead of schedule as they exceed safety and quality requirements. By reviewing each project and developing customized solutions, Insteel engineers provide a complete concrete reinforcing package to meet your project goals.

Because we custom-manufacture every WWR product, our engineers can meet the most stringent building code requirements while satisfying your budgetary parameters. You can rely on Insteel to provide:

- Structural design conversions that incorporate the latest in WWR design efficiencies with just the right steel area and wires spaced precisely to meet your specific requirements
- Custom bent and arch-rolled WWR sheets delivered directly to your job-site
- Custom WWR designs that integrate varying wire diameters, wire lengths and wire spacing all on the same sheet
- Rigorous quality assurance procedures to assure reinforcement is delivered as ordered.

With several plants strategically located across the United States, you can count on Insteel Wire Products for a reliable supply of WWR products near your concrete construction project.

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Your complete resource guide to welded wire reinforcement for both designers and constructors.

www.wire-reinforcement.com