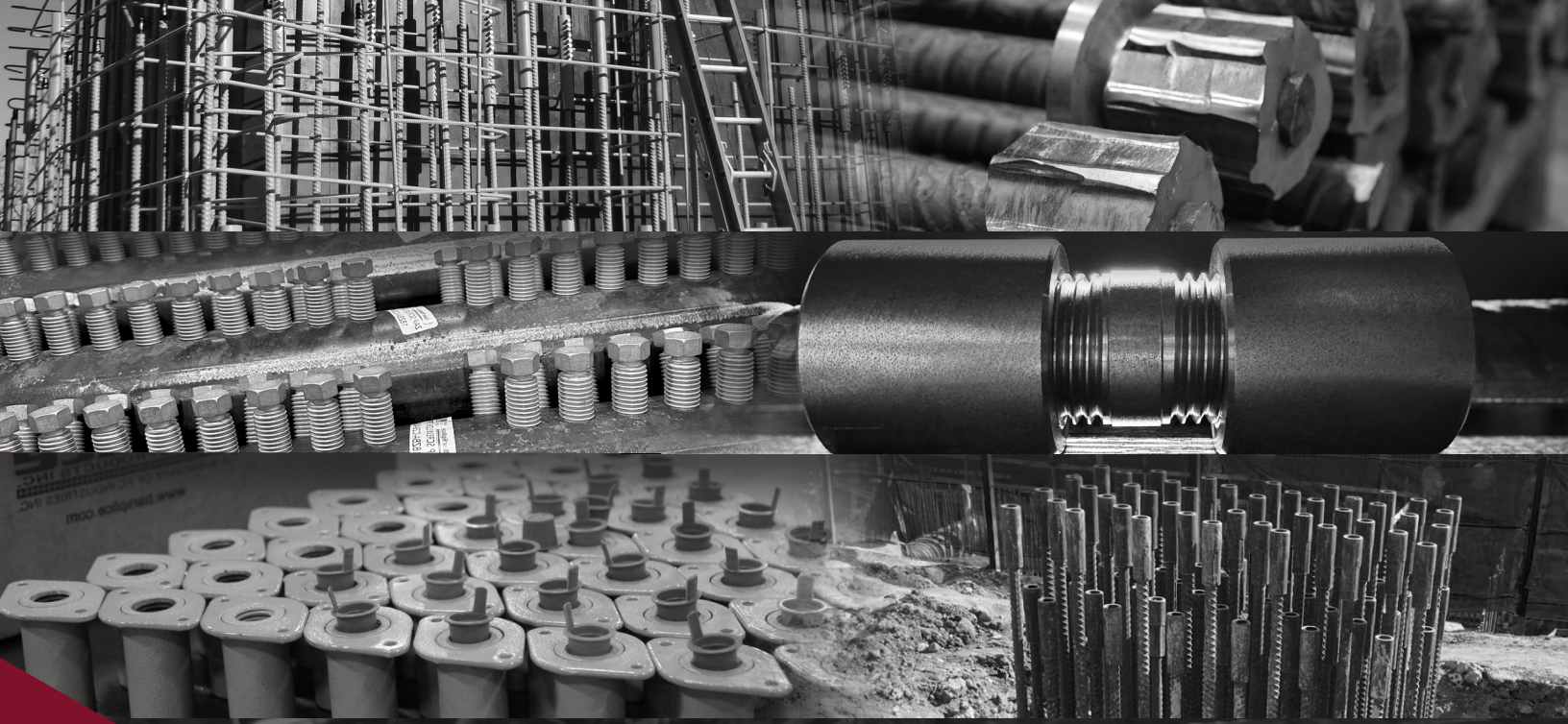


BarSplice PRODUCTS INC.

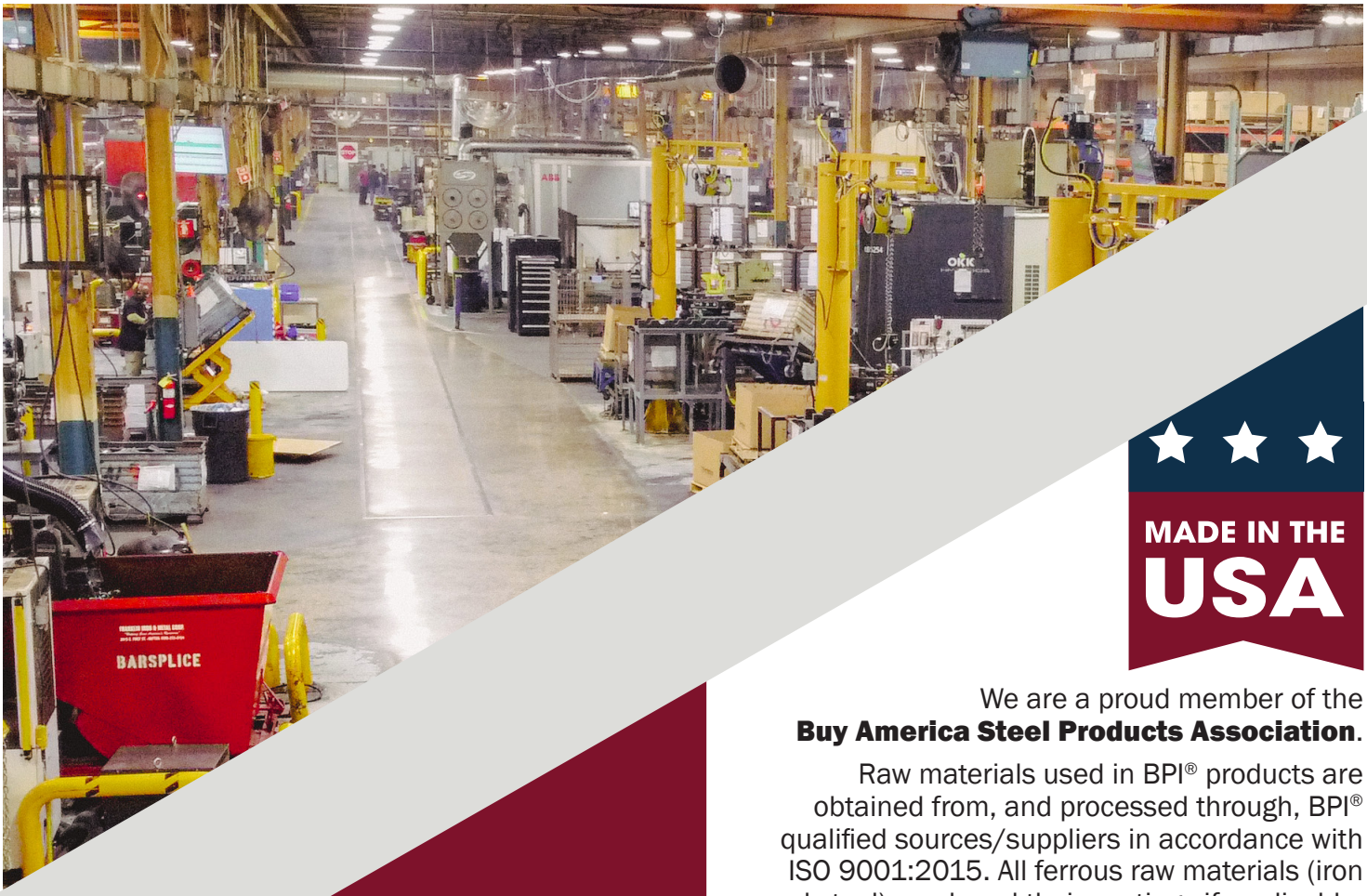
HIGH QUALITY MECHANICAL SPLICE AND HEADED BAR REINFORCEMENT SOLUTIONS

REINFORCING YOUR PROJECT WITH PROVEN EXPERTISE

CONTENTS

ABOUT US

BarSplice Products, Inc. (BPI®) offers a broad range of engineered, mechanical splicing systems for the reinforced concrete construction industry. We are a subsidiary of FC Industries, Inc., a family of leading manufacturing companies, based in Dayton, Ohio USA. Established in 1972, each of our sister companies benefits from shared expertise and multi-industry knowledge partnering under one roof.



MADE IN THE USA

We are a proud member of the **Buy America Steel Products Association**.

Raw materials used in BPI® products are obtained from, and processed through, BPI® qualified sources/suppliers in accordance with ISO 9001:2015. All ferrous raw materials (iron and steel) used, and their coatings if applicable, have been domestically sourced, processed and manufactured in the United States of America in full compliance with the following:

- Federal Highway Administration (FHWA) 23 USC § 313 - Buy America, 23 CFR § 635.410
- American Recovery and Reinvestment Act of 2009 Section 1605 - Buy American
- 41 USC § 8302 - Buy America
- American Iron and Steel (AIS) requirements in the EPA State Revolving Fund Programs
- Build America, Buy America (BABA) Act (2 CFR § 184)

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We Are Proud Members of:

aci · CRSI · BUY AMERICA STEEL PRODUCTS ASSOCIATION · RSIC IAAC · NPCA

FACILITY

Barsplice Products, Inc. (BPI®) is headquartered in Dayton, Ohio, where we machine, assemble, and test all products on-site. By keeping every step of the process in-house, we maintain strict quality control and fast response times.

To support increased demand, we recently expanded into a second building on our campus. This additional space increases our production capacity, improves workflow, and allows for new equipment — helping us serve customers more efficiently while maintaining the high standards BPI® is known for.

EQUIPMENT

BPI® swaging equipment is available for lease or purchase. BPI® swaging equipment for the installation of cold swaged coupling sleeves, headed reinforcement devices, and structural connectors consists of a hydraulic PRESS, PUMP and HOSE with suitable swaging DIES. Equipment must be used in accordance with manuals, lease agreements, manufacturers' directions and all safety instructions.

Press model for **shop swaging** is the BP 2600 and is for bars from #3 - #20. The 2600 press is provided with a lifting eye for support. With a simple change of a die set the 2600 is capable of swaging multiple sizes of coupling sleeves and headed reinforcing devices. The 2600 is able to be used with all swaged product lines including the ButtonHead™ and TTGT products. For ease of use dies and products are stamped and color coded to match.

Press models for **field swaging** range in size from the BG 250 for splicing #3 - 5 reinforcement bars (Ø10 - 16 mm), to the BG 1140M for splicing bars up to #18 (Ø57 mm). Each press is provided with a lifting handle and/or lifting eye for support. With a simple change of the die set, each press is capable of swaging multiple sizes of coupling sleeve inclusive of BarGrip XL, XL Transitions and Structural Connectors. For ease of use, dies and coupling sleeves are stamped and color-coded to match. **(FIELD PRESSES ARE NOT TO BE USED ON BUTTONHEAD™ OR TTGT PRODUCTS)**

An electrically-driven hydraulic pump connects to the press by means of a hose with quick-disconnect ends. The equipment operator depresses a foot control to actuate the system. As the ram of the press extends and pushes the dies towards each other, a portion of the coupling sleeve is forced to deform around the rebar and interlock with the bar profile. When each swaging bite has been completed, a pressure switch, built into the pump, automatically stops the process to allow the ram of the press to retract for the next bite. After a coupling sleeve has been fully swaged, the operator simply removes the outer die pin and slides the outer die out of the press for convenient removal of the press from around the spliced rebar.

TESTING

HEADED BAR REINFORCEMENT TESTING

Barsplice Products, Inc. (BPI®) has conducted tension tests on headed bar reinforcement devices, ranging in available sizes #3 through #20 ([10] – [63], 10M – 55M) depending on termination type. The purpose of testing is to ensure that products are not only manufactured to the quality standards of our ISO 9001 Quality System, but also to ensure that they exceed the requirements of various building codes (ACI 318, IBC, etc.), industry standards (ASTM A970 Class A & Class HA, etc.) and Departments of Transportation (DOT) requirements.

All BPI headed devices are available in two head diameter designs, depending on application requirements, and test results exist for both. Heads with a cross-sectional area exceeding 5x the rebar area gross, 4x net, are designated as 5Ab and heads with a cross-sectional area exceeding 10x the rebar area gross, 9x net, are designated as 10Ab.

TENSILE TEST PROCEDURE

Test specimens were loaded monotonically in tension to failure to determine the capability of each headed reinforcement device. The tests were conducted in accordance with ASTM A370 (Standard Test Methods and Definitions for Mechanical Testing of Steel Products) and ASTM A1034 (Standard Test Methods for Testing Mechanical Splices for Steel Reinforcing Bars), and all test loads were applied through the bearing area of the head.

The reinforcing steel bars used in all tests met the requirements of the bar being tested including ASTM A615 (Grades 60, 75, 80 & 100), ASTM A706 (Grades 60, 80 & 100), ASTM A1035 (Grade 100) and CSA G30.18 (Grades 400 & 500). Where coated devices and/or bar were tested, the coated bars met the requirements of ASTM A775 (epoxy), or ASTM A767 / ASTM A1094 (galvanized).

All tests were either conducted by an ISO/IEC 17025 accredited independent testing lab, or carried out on one of our two annually calibrated universal test machines (600 kip Forney LT-1000, or 900 kip MTS Exceed), which are located at the Barsplice manufacturing facility in Dayton, Ohio.

MECHANICAL SPLICE TESTING

Barsplice Products, Inc. (BPI®) has conducted various tests on reinforcing bar mechanical splices, ranging in available sizes #3 through #20 ([10] – [63], 10M – 55M) depending on splice type. The purpose of testing is to ensure that products are not only manufactured to the quality standards of our ISO 9001 Quality System, but also to ensure that they exceed the requirements of various building codes (ACI 318, AASHTO LRFD, IBC, etc.), nuclear codes (ACI 349, ASME, etc.) and Departments of Transportation (DOT) requirements. Depending on the splice type, and code or standard being tested, these tests may have included Compression, Tension, Slip Resistance, Fatigue Resistance, Cyclic and Cryogenic.

TEST PROCEDURES

Test specimens were loaded monotonically in tension to failure to determine the capability of the splice system. The tests were conducted in accordance with ASTM A370 (Standard Test Methods and Definitions for Mechanical Testing of Steel Products) and ASTM A1034 (Standard Test Methods for Testing Mechanical Splices for Steel Reinforcing Bars).

The reinforcing steel bars used in all tests met the requirements of the bar being tested including ASTM A615 (Grades 60, 75, 80 & 100), ASTM A706 (Grades 60, 80 & 100), ASTM A1035 (Grade 100) and CSA G30.18 (Grades 400 & 500). Where coated devices and/or bar were tested, the coated bars met the requirements of ASTM A775 (epoxy), or ASTM A767 / ASTM A1094 (galvanized).

All tests were either conducted by an ISO/IEC 17025 accredited independent testing lab, or carried out on one of our two annually calibrated universal test machines (600 kip Forney LT-1000, or 900 kip MTS Exceed), which are located at the Barsplice manufacturing facility in Dayton, Ohio.

Grip-Twist®

ADVANTAGES

TAPER THREADED GRIP-TWIST® (TTGT) is a swaged splicing and anchorage system featuring self-locating taper-threaded couplers for quick field assembly.

With threads on the coupler—not the rebar—full bar strength is preserved, with no loss in cross-sectional area.

Compatible with bar sizes #3-#20 (Ø10-64 mm), it supports straight, bent, or different-sized bars using standard, transition, or position couplers.

Swaging is done in the shop with just 1-2 pressings per coupler half, while field assembly requires only a pipe wrench—no special tools or torque wrench needed.

BP2600 SWAGING SYSTEM

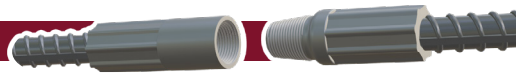
GRIP-TWIST TAPER THREADED POSITION ASSEMBLY

TAPER THREADED GRIP-TWIST ASSEMBLY & INSTALLATION

- **Saves Time** - Taper Threaded Grip-Twist® (TTGT) couplers are pre-installed by cold swaging. With INTERNAL STOPS for easy positioning, there is minimal detailing giving you more design flexibility.
- **No Special Bar End Preparation** - Avoids roughing and thread cutting operation on rebars - No chasers, oils or cutting fluids are required.
- **Self-Locating** - Tapered threads allow for quick assembly, and easy thread alignment, easing bar placement. NO SPECIAL TORQUE is required, and TTGT Position Couplers are available for bent bar installations.
- **No Chemistry Restrictions** - TTGT couplers are compatible with ASTM A615, A706, A996 and equivalent uncoated bars, as well as ASTM A775 (epoxy) and ASTM A767 or A1094 (galvanized) coated bars.
- **Thread Protection** - Color coded plastic plugs and caps, matching the color of swaging dies, come installed, free of charge, on all couplers.
- **High Strength** - Type 2 performance and true structural continuity, with load transfer independent of concrete. ROLLED EXTERNAL THREADS INHERENTLY HAVE HIGH FATIGUE STRENGTH.
- **Full Rebar Cross-Sectional Area** - With TTGT couplers, there is no undercutting of rebar or heat affected zones
- **Code Compliant** - IAPMO-UES ER-0796 approved; meets IBC, IRC, and ACI 318. Available in English and Spanish.
- **DOT & AASHTO Projects** - Exceeds 125% f_y and 135% f_y, and 100% f_u for Grade 60 bars per AASHTO LRFD specs.
- **Coated Bar Compatibility** - Swages over ASTM A775 epoxy-coated and ASTM A767/A1094 galvanized bars with no need for coating removal.
- **Commercial Applications** - Suitable for structural elements like columns, beams, mats, tanks, garages, and more per structural concrete code.

TAPER THREADED GRIP-TWIST®

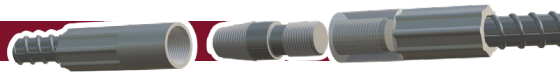
COLD-SWAGED STEEL COUPLER WITH TAPER THREADED ENDS & OPTIONAL FLANGE



- **Type 2 Full Mechanical Splice** - ACI 318–19 Section 18 and 2021 International Building Code. Exceeds specified tensile strength (f_u) ASTM A615 Grades 60, 75 & 80 and A706 Grades 60 & 80 uncoated deformed bars.
- **Nuclear Safety Rated** - Complies with ASME Section III, Division 2, Code Case N-794; exceeds 80,000 psi tensile strength for Grade 60 bars.
- **Seismic Performance** - Withstands strain excursions to 5x strain at rebar yield and stress reversals per ICC AC-133.
- **CALTRANS Approved** - Certified for both “Service” and “Ultimate” categories; meets slip test CT670 and exceeds 80,000 psi for Grade 60 uncoated bars.
- **Masonry Applications** - Meets 125% f_y performance per ACI 530 / TMS 402.
- **Flange Option Available** - Female couplers available with nail-on flanges for formwork. Eliminates drilling and exposed rebar, aiding constructability and safety.
- **Dowel Bar Splicing** - Ideal for dowel replacement—shops can use in-house rebar, including drop pieces.
- **Available in Grip-Twist® Transition** - Ideal where bar size changes are needed—commonly used in columns, walls, parking garages, and condominiums.

PRODUCTS

GRIP-TWIST® POSITION
COLD-SWAGED STEEL COUPLER WITH TAPER THREADED POSITIONING STUDS



- **Application Flexibility** - Ideal for use where bars are bent or too long to rotate—TPA enables non-rotational splicing.
- **Simple Field Assembly** - Pre-assembled stud on Female coupler threads easily into a TTGT Transition Female coupler on site—no bar rotation needed.

GRIP-TWIST® DOUGHNUT™
COLD-SWAGED STEEL HEADED REINFORCEMENT WITH TAPERED THREADS

- **5Ab Head (TDS Series)** - Standard head transmits bond force through head bearing + development length; suitable for most applications.
- **10Ab Head (TDX Series)** - Larger head transmits full bar force by bearing alone; ideal for high-force sections.
- **High Strength** - Exceeds ACI 318-19 Section 25.4 yield strength (f_y) and ASTM A970 tensile strength (f_u) for Grade 60 bars.
- **ASTM A970 Compliant** - Meets all dimensional requirements for Class A and Class HA bearing faces.
- **Caltrans Approved** - TDX = Full Size Head (9x bar area); TDS = Reduced Size Head (4x bar area) for ASTM A706 bar.
- **Replaces Hooks** - Eliminates hook congestion in joints, caps, and confined reinforcement areas—no bend direction required.
- **Key Advantages** - No hooks, no heat or welding, no cracking risks—works with standard rebar grades and chemistries.

Grip-Twist®

TTGT NC BOLT CONNECTOR
COLD-SWAGED BOLT CONNECTOR COUPLER WITH UNC THREADS

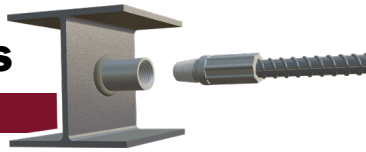
- **Positive Connection Between Reinforcement and Threaded Rods / Bolts**
- **Full Strength of Bar Maintained**
- **For Load Transfer Between Steel Structures and Concrete**
- **Bolt Connectors Made From Weldable Grade of Steel**
- **Precast Panel Construction** - Can be used in conjunction with BPI® BarSplicer XP threaded rebar to easily and safely assemble precast panels.

TTGT XT MECHANICAL SPLICE
COLD-SWAGED STEEL COUPLER WITH TAPER THREADED ENDS & OPTIONAL FLANGE

- **For High Strength, Low Carbon, Chromium Steel Bars, ASTM A1035**
- **Developed Strength** - 1.25 x specified yield strength (f_y) ASTM A1035 Grades 100 & 120.
- **Ultimate Capacity** - ASTM A1035 Grades 100 & 120, equal to 150 ksi.
- **Full Mechanical Splice** - ACI 318-19 Chapter 18 - Exceeds specified tensile strength (f_u) ASTM A615 Grade 100, equal to 115 ksi.

TTGT STRUCTURAL CONNECTOR

COLD-SWAGED STEEL WELDABLE CONNECTOR WITH TAPER THREADS



- **Applications** - Attach rebar to structural steel, liner plates, flat shapes, or use for headed anchorage. TPA can replace Male coupler for positional installations.
- **Nuclear Strength Capacity** - Meets ASME Section III, Division 2 requirements. Minimum joint strength: 75,000 psi (125% × f_y) Average tensile strength: 80,000 psi (100% × f_u) with ASTM A615 Grade 60 bars
- **Certified Weldable Steel** - Conforms to CC-2310(c), ASME Section III, Division 2 Matches AISI 1018 and ASTM A36 chemistry
- **Beveled for Welding** - Pre-cut bevel ensures full weld penetration, strength, and quality. Compatible with E7018 electrodes.
- **Superior to Butt Welds** - Larger outer diameter distributes weld over more area, reducing stress concentrations.


LATHE 3

Zap Screwlok®

ADVANTAGES

ZAP SCREWLOK® is an engineered mechanical splice system whose strength is independent of the concrete which it surrounds.

The Zap Screwlok® method is simplistic, cost effective, and adaptable - making it one of the most popular methods of splicing reinforcing bars on the market.

ZAP SCREWLOK INSTALLATION

ZAP SCREWLOK CLOSURE POUR

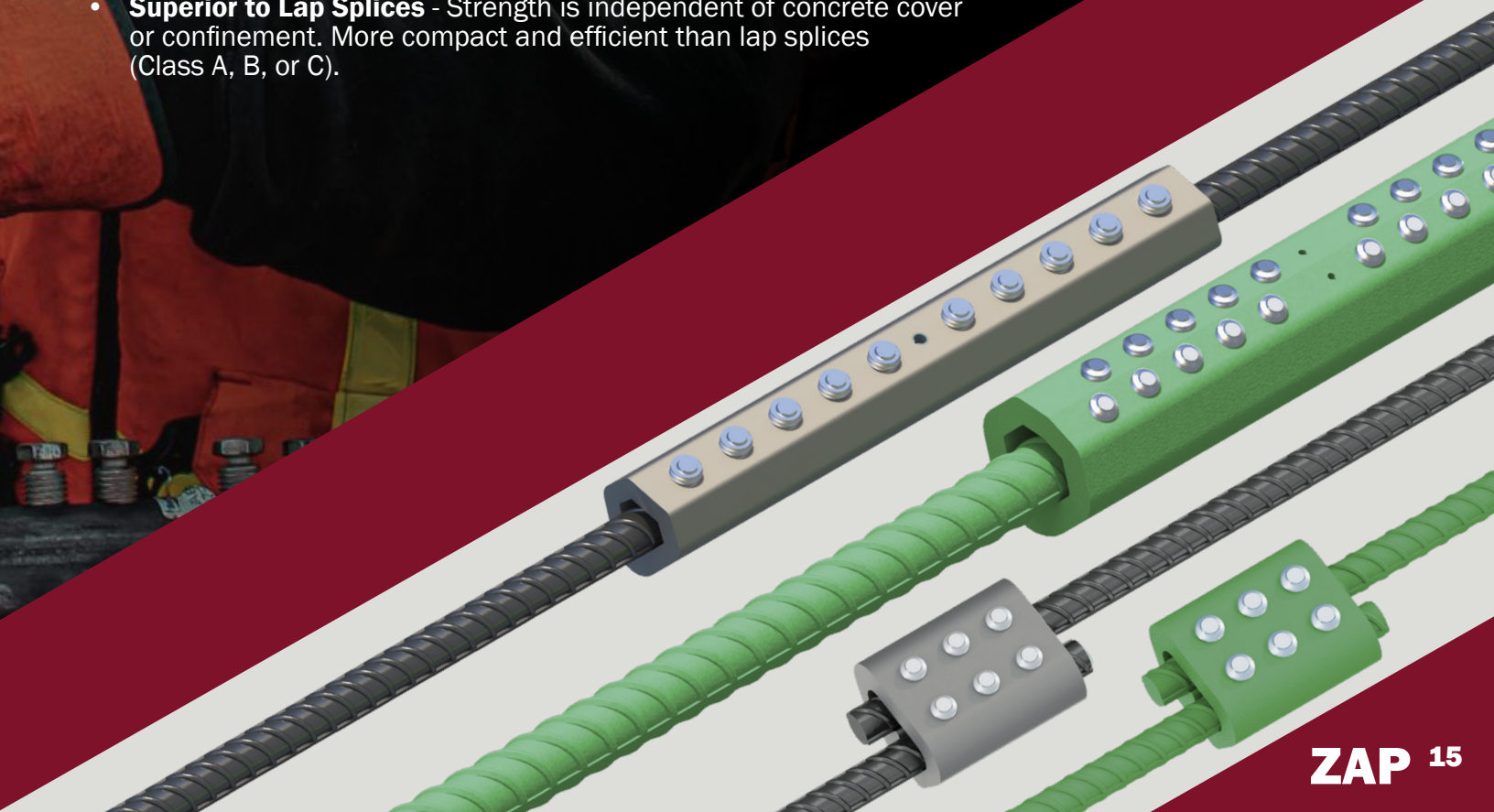
ZAP T-LOK ASSEMBLY

ZAP SCREWLOK DOUBLE BARREL

ZAP SCREWLOK PRODUCT FAMILY

Available in multiple variations, the Zap Screwlok® is ideal for retrofitting structures, eliminating costly rebar welds, and connecting bars across closure pours—offering a versatile solution for complex construction challenges.

- **Repair existing structures**
- **Eliminate expensive rebar-welds**
- **Patch and repair highway projects**
- **Certified & Recognized** - IAPMO-UES ER-0796 - IBC, IRC, ACI 318 compliant. Available in English and Spanish.
- **Versatile Application** - Ideal for new builds, retrofits, or repairs. Tested with Grades 30-50 (square, round, threaded rod) to 125% of f_y.
- **Caltrans "Service" Approved** - Meets CT670 slip test. Exceeds 80,000 psi tensile strength for ASTM A706 uncoated bars.
- **Masonry Applications** - Exceeds 125% of f_y in compliance with ACI 530 / TMS 402.
- **Coated Bar Solutions** - Available in epoxy or hot-dip galvanized finishes. Complies with ASTM A775, A767, A1094. Ideal for harsh environments like bridge decks, garages, and treatment facilities.
- **Superior to Lap Splices** - Strength is independent of concrete cover or confinement. More compact and efficient than lap splices (Class A, B, or C).

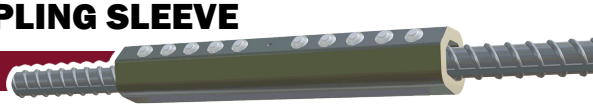


ZAP SCREWLOK® TYPE 2 SERIES

SHEAR SCREW AND WEDGE MECHANICAL SPLICE COUPLING SLEEVE

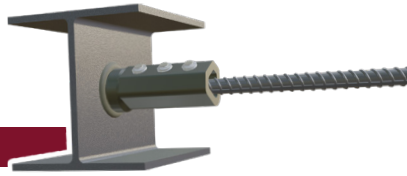
- **Type 2 Full Mechanical Splice -** Meets ACI 318-19 Sec. 18 and 2021 IBC. Exceeds tensile strength (f_u) for ASTM A615/A706 Grade 60 uncoated and epoxy-coated bars.
- **Nuclear Safety Related** - Complies with ASME Section III, Div. 2, Code Case N-791. Exceeds 80,000 psi tensile strength for ASTM A615 Grade 60.
- **Seismic Performance** - Handles plastic strain up to 5x strain at rebar yield and stress reversals per ICC AC-133.
- **Grade 75 Compatible** - Exceeds 125% of f_y for ASTM A615 Grade 75. Develops up to 100,000 psi (f_u).
- **AASHTO & DOT Ready** - Meets/exceeds 125% of f_y and up to 135% of f_y, 100% of f_u for Grade 60 as per AASHTO LRFD specs.
- **Coated Bar Solutions** - Availble with epoxy or hot-dip galvanized finished for use on epoxy coated reinforcement per ASTM A775 or galvanized reinforcement per ASTM A767 or A1094. Ideal for harsh environments like bridge decks, garages, and treatment facilities.
- **Cyclic Loading Performance** - Qualified to DOT protocols - 100 cycles from 5% to 90% of f_y in tension, plus 10,000 full stress reversals.
- **Fatigue Resistance** - Pre-qualified to 18 ksi stress range over 1 million load cycles.
- **Available in Transitions** - Ideal for splicing bars of different sizes, shapes, or configurations—including smooth, square, or threaded bars.

ZAP SCREWLOK® SL SERIES
SHEAR SCREW AND WEDGE MECHANICAL SPLICE COUPLING SLEEVE



- **Full Mechanical Splice** - Per ACI 318-19 Sec. 25: Develops 125% of specified yield strength (f_y) in tension or compression for ASTM A615/A706 Grade 60 deformed bars.
- **Compact, Efficient Design** - Shorter than Type 2 series with fewer screws. Faster installation and ideal for tight-access areas.
- **Standard Rebar Compatibility** - For ASTM A615, A706, A996, and equivalent Grades 40, 50, and 60. Exceeds 125% of f_y (epoxy-coated) and 135% of f_y (uncoated).
- **Coated Bar Solutions** - Availble with epoxy or hot-dip galvanized finished for use on epoxy coated reinforcement per ASTM A775 or galvanized reinforcement per ASTM A767 or A1094.

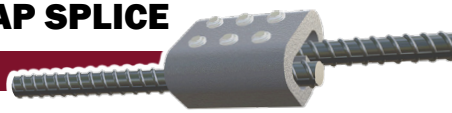
ZAP STRUCTURAL CONNECTOR
SHEAR SCREW AND WEDGE WELDABLE CONNECTOR



- **Strength Rating** - Exceeds 75,000 psi in the rebar — equal to 125% of the specified yield (f_y) for ASTM Grade 60 bars.
- **Reliable Compatibility** - Suitable for ASTM A615 and A706 Grade 60. Consistently exceeds 125% of f_y across all use cases.
- **Versatile Connections** - Ideal for attaching rebar to structural plates, shapes, or for creating headed anchorages. Weldable in the shop or field, before or after placement.
- **Certified Low-Carbon Steel** - Meets ASME Sec. III, Div. 2 (CC-2310c) using AISI Grade 1026 chemistry. Each heat lot includes mill-certified analysis. Compatible with E7018 electrode.
- **Pre-Beveled for Welding** - Includes full-penetration weld bevels for enhanced strength and easy, quality-controlled installation.
- **Reduced Weld Stress** - Larger outer diameter than rebar spreads stress over a greater weld area, improving durability and performance.

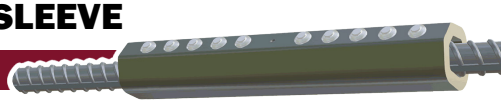
Zap Screwlok®

DOUBLE BARREL ZAP SCREWLOK®
SHEAR SCREW AND DOUBLE WEDGE WELDABLE MECHANICAL LAP SPLICE



- **Proven Strength** - Per ACI 318-19 Section 25. Exceeds 125% of f_y, 135% of f_y, and 100% of f_u for ASTM A615/A706 Grade 60 uncoated bars (in-air tested).
- **Compact Form Factor** - Shorter than mechanical butt-splices and significantly shorter than lap splices. Perfect for space-constrained repairs and construction joints.
- **Available in Transition** - Ideal for splicing different bar sizes or connecting dissimilar bar types (e.g., old-to-new rebar).
- **Coated Bar Solutions** - Available with epoxy or hot-dip galvanized finished for use on epoxy coated reinforcement per ASTM A775 or galvanized reinforcement per ASTM A767 or A1094.

ZAP SCREWLOK® FX SERIES SPLICES
SHEAR SCREW AND WEDGE MECHANICAL SPLICE COUPLING SLEEVE

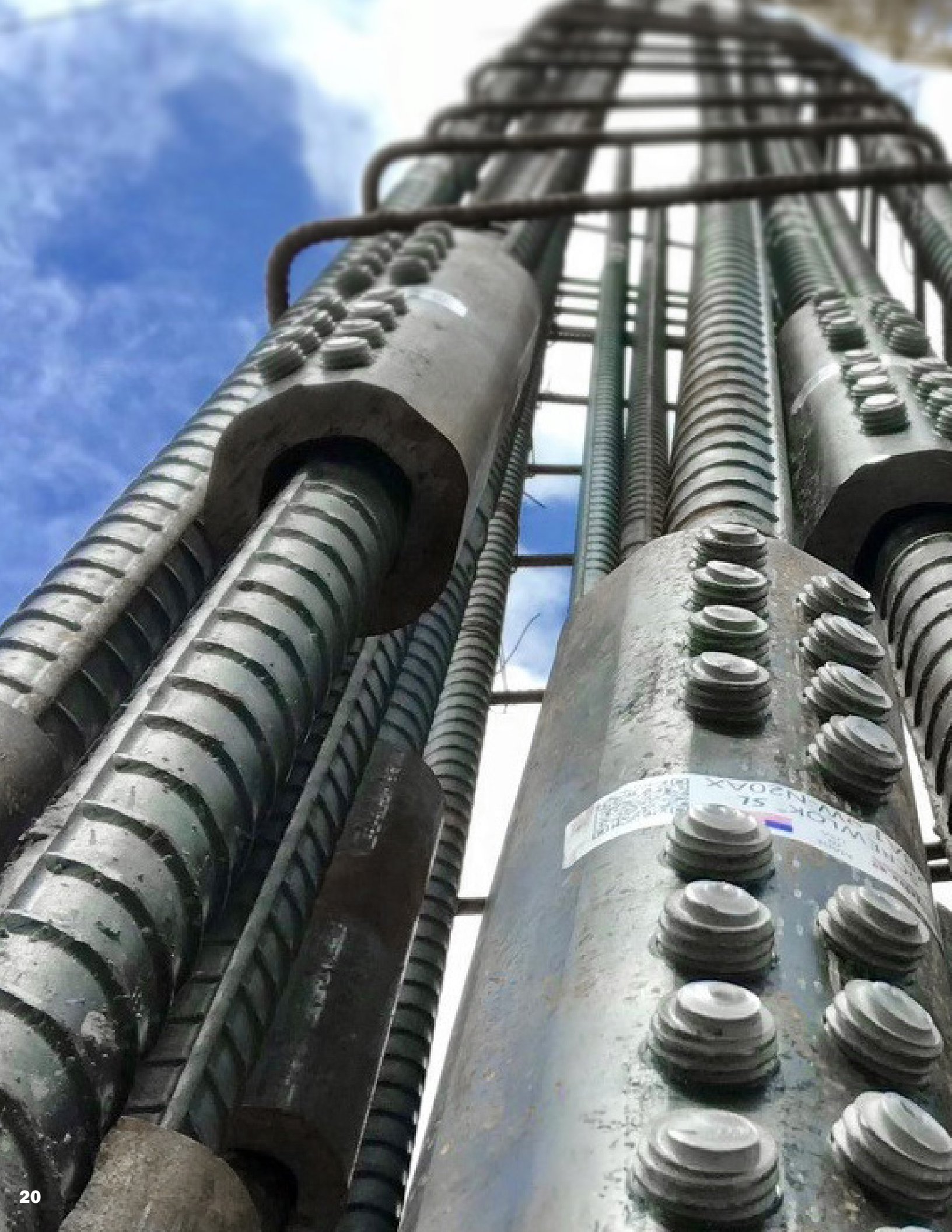


- **High Strength, Full Mechanical Splice** - Exceeds 125% x specified yield (f_y) strength of uncoated ASTM A1035 Grade 100 bar, ASTM A615 or ASTM A706 Grade 80 bar.
- **IAPMO-UES Evaluation Report ER-0796** - Uncoated sizes #11, #14 and #18
- **Dual Certified Reinforcement Bars** - Acceptable for ASTM A1035 / A615 Dual certified bars from Grade 75 to Grade 100.
- **Epoxy Coated Bars** - Capacity to exceed 125% x f_y, Grade 80 epoxy coated ASTM A775 bar, sizes #4 - #14.
- **Available in FX Transitions** - For butt-splicing bars of different sizes, or for connecting bars of different configurations or shape.

ZAP T-LOK™

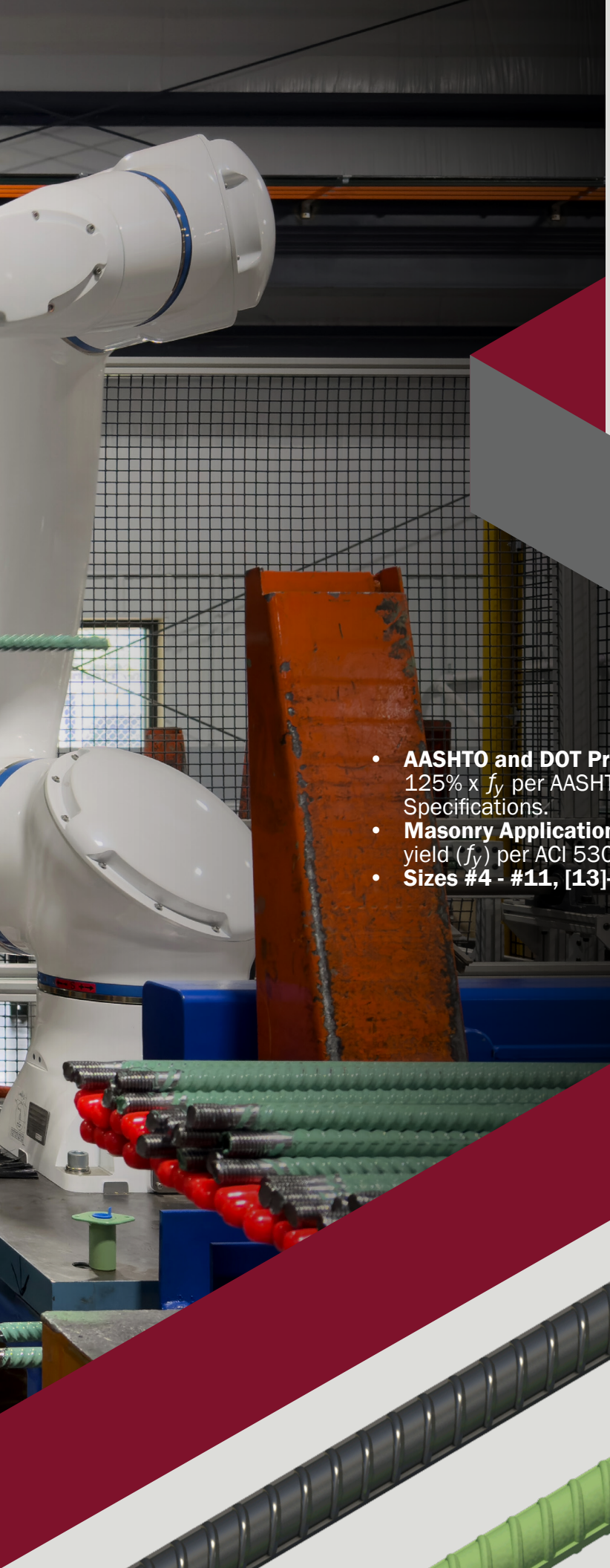
SHEAR SCREW AND WEDGE MECHANICAL HEADED REINFORCEMENT

- **ACI 318 & ASTM A970 Compliance** - Exceeds specified yield strength (f_y) for ASTM A615 and A706 Grade 60 bars, as required by ACI 318. In-air tests also exceed the specified tensile strength (f_u) per ASTM A970 Class A and Class HA (reverse orientation) for uncoated Grade 60 bars.
- **Class A Orientation** - Net head bearing area exceeds 9x rebar area (Ab), transmitting bond force through head bearing and development length.
- **Class HA Orientation** - Net head bearing area exceeds 14x Ab, transmitting full force by head bearing alone without the need for additional development length.
- **Simple Design** - One-piece device with converging sides, manufactured as ductile casting with no welds.
- **Coated Bar Solutions** - Available with epoxy or hot-dip galvanized finished for use on epoxy coated reinforcement per ASTM A775 or galvanized reinforcement per ASTM A767 or A1094.
- **Convenience** - No special bar end preparation or thread cutting required. Can be sheared, sawed, or flame-cut.



BarSplicer

ADVANTAGES



The **BPI® BarSplicer** is a parallel UNC-threaded dowel bar replacement system designed for staged construction projects such as bridges and roadways.

It eliminates the need for drilling holes in formwork, bar-end upsizing, or pre-forging, making it a more efficient and cost-effective solution.

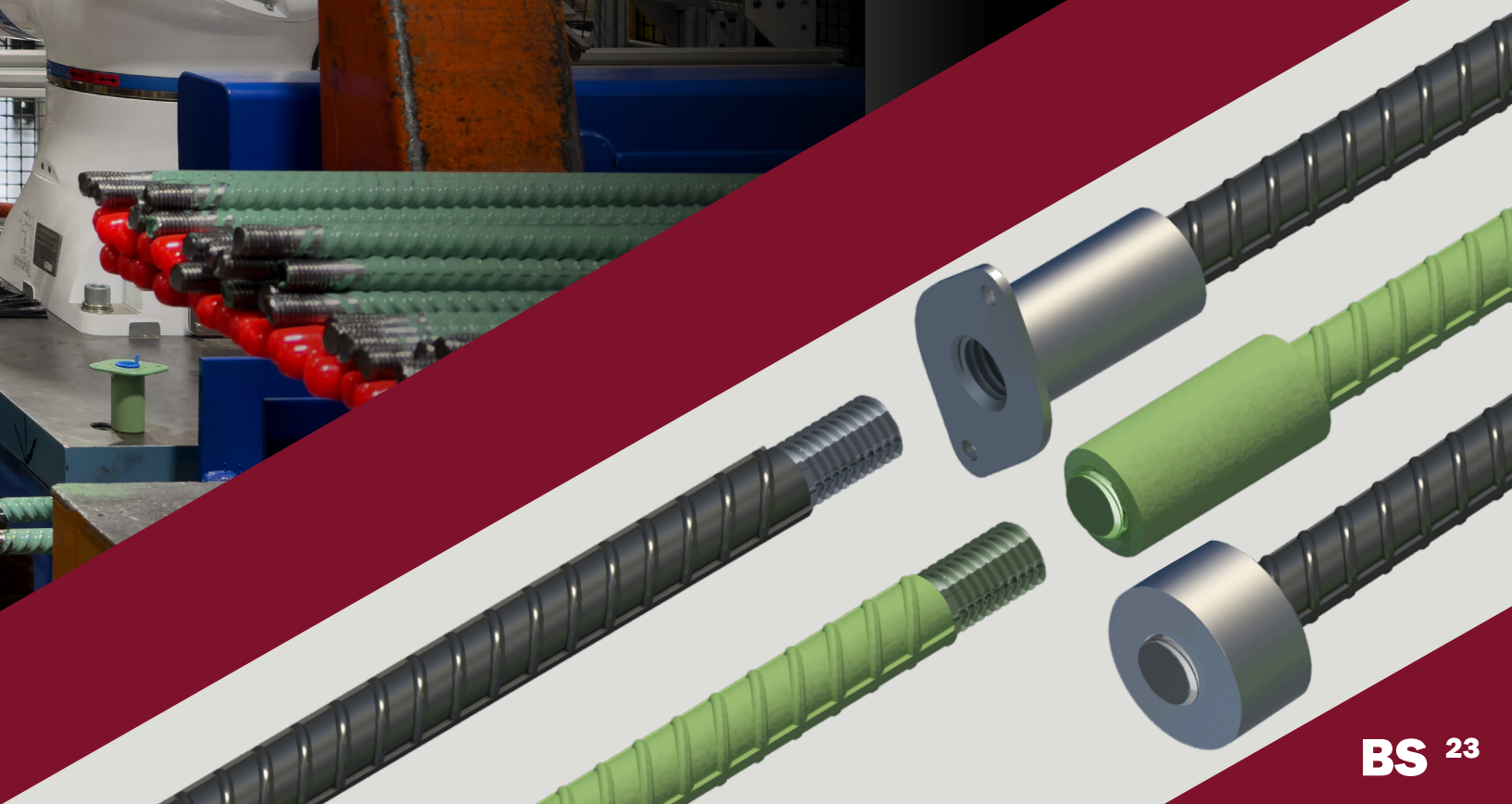
All bars are threaded in-house under BPI's quality management system to ensure consistent performance and reliability.

BARSPLICER INSTALLATION

BARSPLICER POSITION COUPLERS

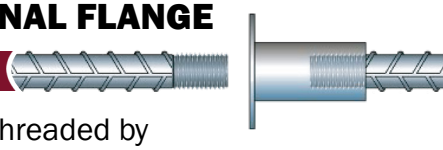
BARSPLICER ROAD EXPANSION

- **AASHTO and DOT Projects** - Exceeds 125% x f_y per AASHTO LRFD Bridge Design Specifications.
- **Masonry Applications** - Exceeds 125% x specified yield (f_y) per ACI 530 / TMS 402.
- **Sizes #4 - #11, [13]-[35], 15M - 35M.**



BPI® BARSPLICER SYSTEM

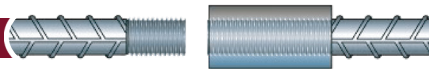
STANDARD AND XP UNC THREADED BAR WITH COUPLER & OPTIONAL FLANGE



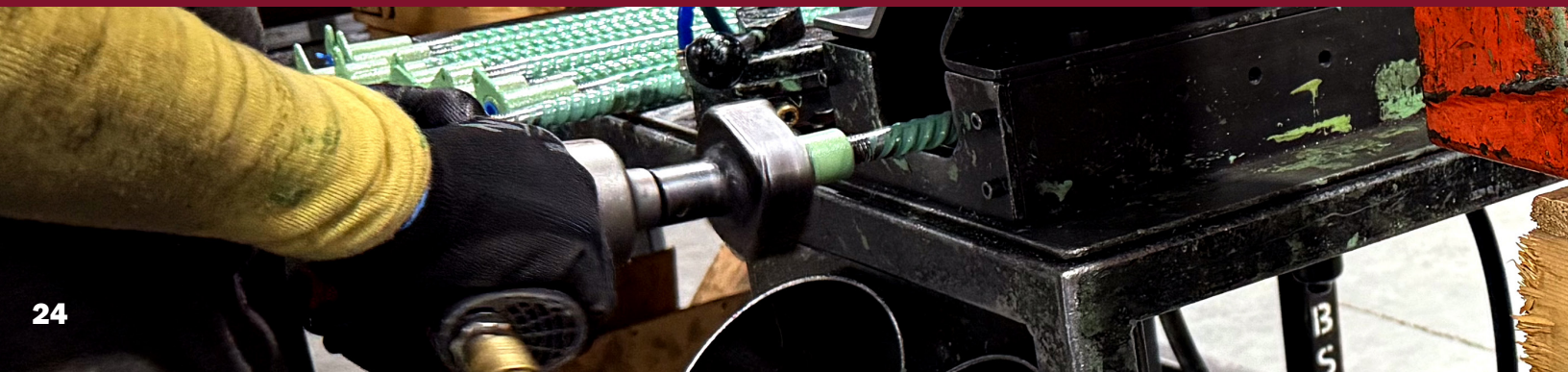
- **ACI 318 Full Mechanical Splice** - The Standard BPI® BarSplicer system, when threaded by BPI®, is pre-tested to develop at least 125% x f_y of the bar. For Xtra Performance, use the BARSPLICER XP series.
- **IAPMO-UES Evaluation Report ER-0796** - For BARSPLICER XP series Grades 60, 75 and 80.
- **Applications** - Bridge decks, piers, ramps, walls, mats, tanks, parking garages - where specifications are 125% x specified yield (f_y) Grade 60, 75 or 80.
- **Pre-Fabricated Setting and Splice Bars** - Made by BPI® to your dimensions - straight, hooked 90° to 180°, single or double-ended connections and many other configurations.
- **Standard Reinforcing Bars** - Each reinforcement bar heat lot supplied by BPI® is controlled, tested and certified, ASTM A615 or A706 uncoated, ASTM A775 epoxy coated, and ASTM A767 or A1094 galvanized deformed reinforcing bars, Grades 60, 75 or 80.
- **Dowel Bar Replacement** - No drilling holes through forms - No protruding rebar when concrete is poured. Continuity across construction joint is established upon engaging splice bar from BPI®.
- **BarSplicer XP Series** - Bars threaded and supplied by BPI® exceed 135% x specified yield (f_y) ASTM A615 uncoated, ASTM A706 uncoated and epoxy, ASTM A775 epoxy and ASTM A767 or A1094 galvanized, Grade 60 bar. Procurable as a TYPE 2 splice to exceed the specified tensile (f_u) strength of Grade 60 bar. For ASTM A615 and A706 bars, this equals 133% x f_y, uncoated and epoxy coated. Be sure to specify BarSplicer XP Type 2.

BARSPLICER POSITION

STANDARD AND XP UNC THREADED BAR WITH COUPLER

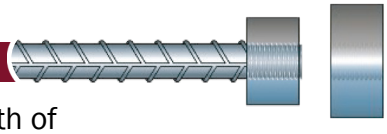


- **ACI 318 Full Mechanical Splice** - BPI® BarSplicer Position couplers are designed to develop at least 125% x f_y of the bar, Grade 60 and 75, meeting the mechanical splice requirements of ACI 318 and most state DOT strength requirements.
- **No Rotation of Bars** - When reinforcing steel congestion is a problem and the splice bars cannot be rotated to engage the threads, or when bar lengths are long and impractical to rotate, the assembly can be completed in the field by unwinding a pre-assembled coupler from a long thread on the splice bar onto the adjoining thread on the setting bar.
- **Optional Lock Nut** - Available to lock a pre-bent splice bar in a specific position, alignment or orientation after engaging a position coupler onto the setting bar. (Extra thread length required)
- **Convenience** - Position Couplers, and optional lock nuts, are pre-assembled to splice bars that have been fabricated to your dimensions, resulting in time saved in the field.
- **BarSplicer XP Series** - Also available with BarSplicer XP threads for Xtra Performance.



BARSPLICER DOUGHNUT™

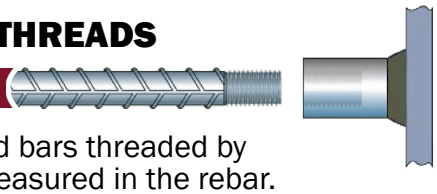
NATIONAL COARSE THREADED BAR HEADED REINFORCEMENT



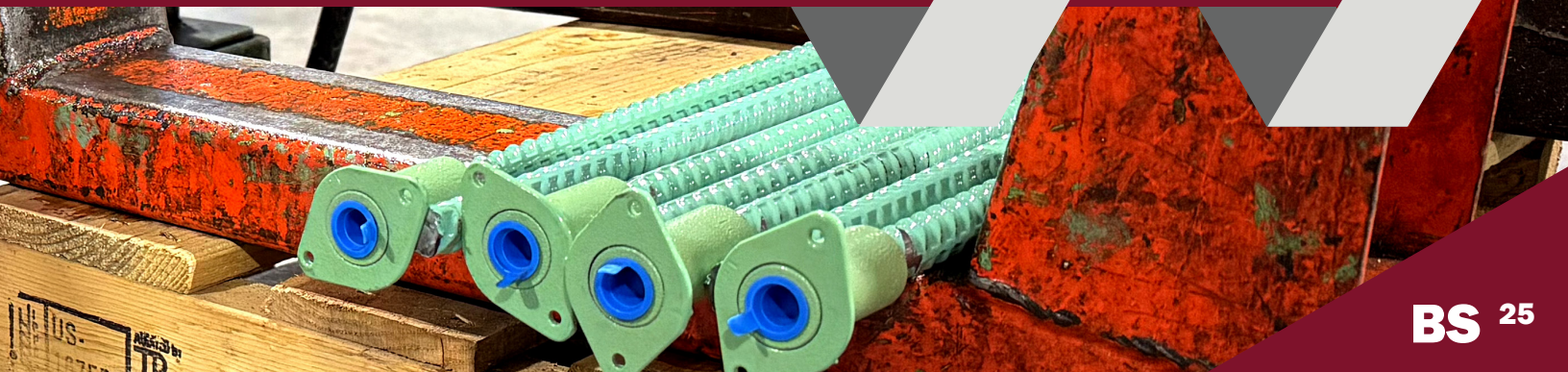
- **Headed Reinforcing Bar Mechanical Anchorage** - Reduces development length of bars by transmitting a proportion of force from bar to concrete via head bearing area.
- **Strength Rating** - In accordance with ACI 318, the BPI® BarSplicer DoughNUT™ develops at least the specified yield (f_y) strength of the bar for Grades 60, 75 and 80. In air tests exceed 125% x f_y for Grades 60, 75 and 80. The BarSplicer DoughNUT™ also meets ASTM A970 Class A and HA requirements.
- **Headed Versus Hook** - While hook bars reduce development length compared to straight, they bring about congestion. The DoughNUT™ alleviates this problem, eases installation and facilitates bar placement.
- **Applications** - Replaces hook bars in beam-column joints, knee joints, pile caps and column roof slab connections. Replaces stirrup bars as confinement steel.
- **Benefits** - The DoughNUT™ comes pre-installed on threaded reinforcing bars supplied by BPI®, saving field labor. Easy placement - no special bend direction, minimal detailing, saves space, more design flexibility.
- **Head Area** - 5Ab full cross-sectional area, with at least 4Ab projected bearing area in tension, requiring a minimum recommended development length in accordance with ACI 318 or AASHTO. Also available in 10Ab full cross- sectional area, with at least 9Ab projected bearing area in tension, to fully develop the bar within the head. (Ab = area of reinforcement)

BARSPLICER STRUCTURAL CONNECTOR

WELDABLE CONNECTOR WITH STANDARD NATIONAL COARSE THREADS



- **Strength Rating** - BarSplicer Structural Connectors, installed with deformed bars threaded by BPI, have the capacity to exceed a minimum joint strength of 80,000 psi measured in the rebar.
- **Compatibility** - Both ASTM A615 uncoated and ASTM A775 epoxy coated reinforcing bars, Grade 60, 75 and 80, supplied with threaded ends from BPI® can be used.
- **Versatility** - For attachment of reinforcing bars with threaded ends to plates, structural steel shapes or for creating headed anchorage. Shop or field weldable, before or after bar placement.
- **Certified Low Carbon Steel** - Meets chemistry AISI Grade 1018 and ASTM A36. Suited to E7018 electrode.
- **Welding Bevel** - For full penetration, provided for greater strength, convenience & quality assurance.
- **Less Weld Stress** - Compared to direct butt welds, the weld area is disposed over greater length, because the outside diameter of structural connector is larger than the reinforcing bar.

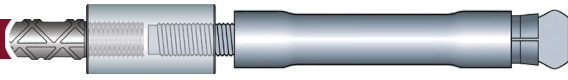


BarSplicer

STAINLESS BARSPLICER SYSTEM
THREADED STAINLESS STEEL COUPLERS WITH OPTIONAL FLANGE

- **Corrosion-Resistant** - Available with both austenitic stainless-steel couplers per ASTM A955 type 303 or Duplex Stainless Steel per ASTM A955 type 2205.
- **Slip and Fatigue Resistance** - Independently tested to have less than 0.010" total slip per AASHTO LRFD Bridge Design Specifications, and to withstand 1 million cycles of fatigue.
- **AASHTO and DOT Projects** - Exceeds 125% x specified yield (f_y) per AASHTO LRFD Bridge Design Specifications.
- **Full Mechanical Splice** - ACI 318-19 Chapter 18 and 2021 International Building Code Exceeds specified tensile strength (f_u) of ASTM A955 Grades 60, 75 and 80
- **Inert Plastic Flanges and Plugs**
- **Standard National Coarse Threads**
- **Developed Strength** - Has capacity to exceed 125% specified yield (f_y) grades 60, 75, and 80, with ability to exceed 100% specified tensile (f_u) grade 60.

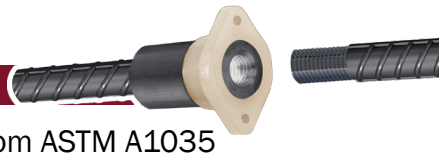
BARSPLICER METRIC ANCHOR COUPLER
THREADED COUPLER WITH METRIC & STANDARD UNC THREADS



The BPI® Metric Anchor Coupler is manufactured with metric threads to attach concrete anchors to standard Unified National Coarse threads of BPI® threaded rebar, standard bolts or threaded rod.

- **Applications** - Used to splice BPI® threaded rebar, bolts or threaded rod with UNC threads to stud anchors, wedge anchors, undercut anchors or safety studs with metric threads.
- **Sizes** - Available in metric sizes M10 through M24 transitioning to UNC thread size ½" to 1"

100KSI (MMFX) BARSPLICER SYSTEM
THREADED A1035 STEEL COUPLER WITH OPTIONAL FLANGE



- **Corrosion-Resistant** - Low Carbon chromium steel bars and couplers made from ASTM A1035
- **Inert Plastic Flanges and Plugs**
- **Standard National Coarse Threads**
- **Developed Strength -** Has capacity to exceed 125% specified yield (f_y) grades 60, 75, 80, and 100, and 100% specified tensile (f_y) grade 120.

BARSPLICER HEX COUPLER
HEX COUPLER WITH STANDARD NATIONAL COARSE THREADS

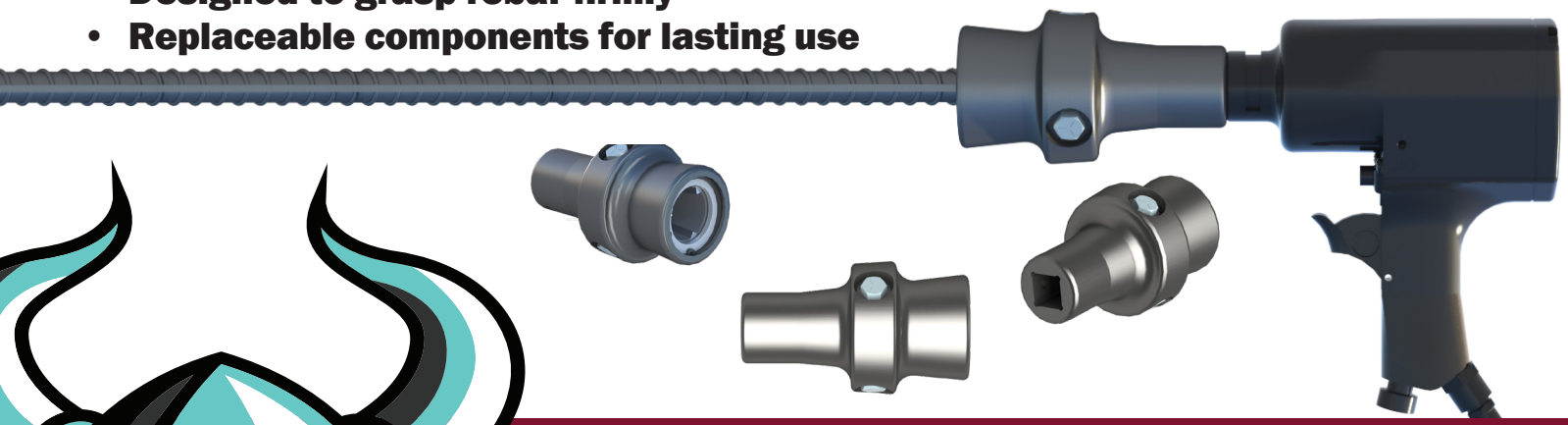
The BPI® BarSplicer Hex Coupler has standard Unified National Coarse threads so that standard bolts, nuts and threaded rod can be used in addition to threaded rebar.

- **Welding** - The couplers are made from a low carbon weldable grade of steel for directly attaching to structural steel.
- **Applications** - Can be used with threaded rebar, threaded rod or anchor bolts.
- **Convenience** - Hexagonal outer shape for ease of assembly or welding.
- **Versatile** - Perfect for extending or connecting to ASTM F1554 Grade 36 / 55 / 105 light pole or sign post anchor bolts.
- **Sizes** - Available in 1/2” (#4 [13]) through 2” (#16 [50]).

Barbarian Bar Spinner

BARBARIAN BAR SPINNER IS AN IMPACT WRENCH ATTACHMENT THAT IMPROVES YOUR ABILITY TO QUICKLY INSTALL THREADED BAR INTO COUPLERS.

- **Can be used on #4-#8 rebar**
- **NEW Barbarian Beast Spinner can go up to #11 rebar**
- **Can be used on any bar or coating**
- **Helps to decrease labor cost**
- **Compatible with standard 3/4” drive impact wrench**
- **Designed to grasp rebar firmly**
- **Replaceable components for lasting use**



SAVE YOUR BACK. LET THE BARBARIAN BAR SPINNER DO THE HARD WORK.

Contact your Regional Sales Manager for more information: **(937) 275-8700**

MEMBER MEMBER BUY AMERICAN STEEL PRODUCTS ASSOCIATION MEMBER MEMBER

4900 Webster Street
Dayton, Ohio 45414

www.barsplice.com

FITT®

ADVANTAGES

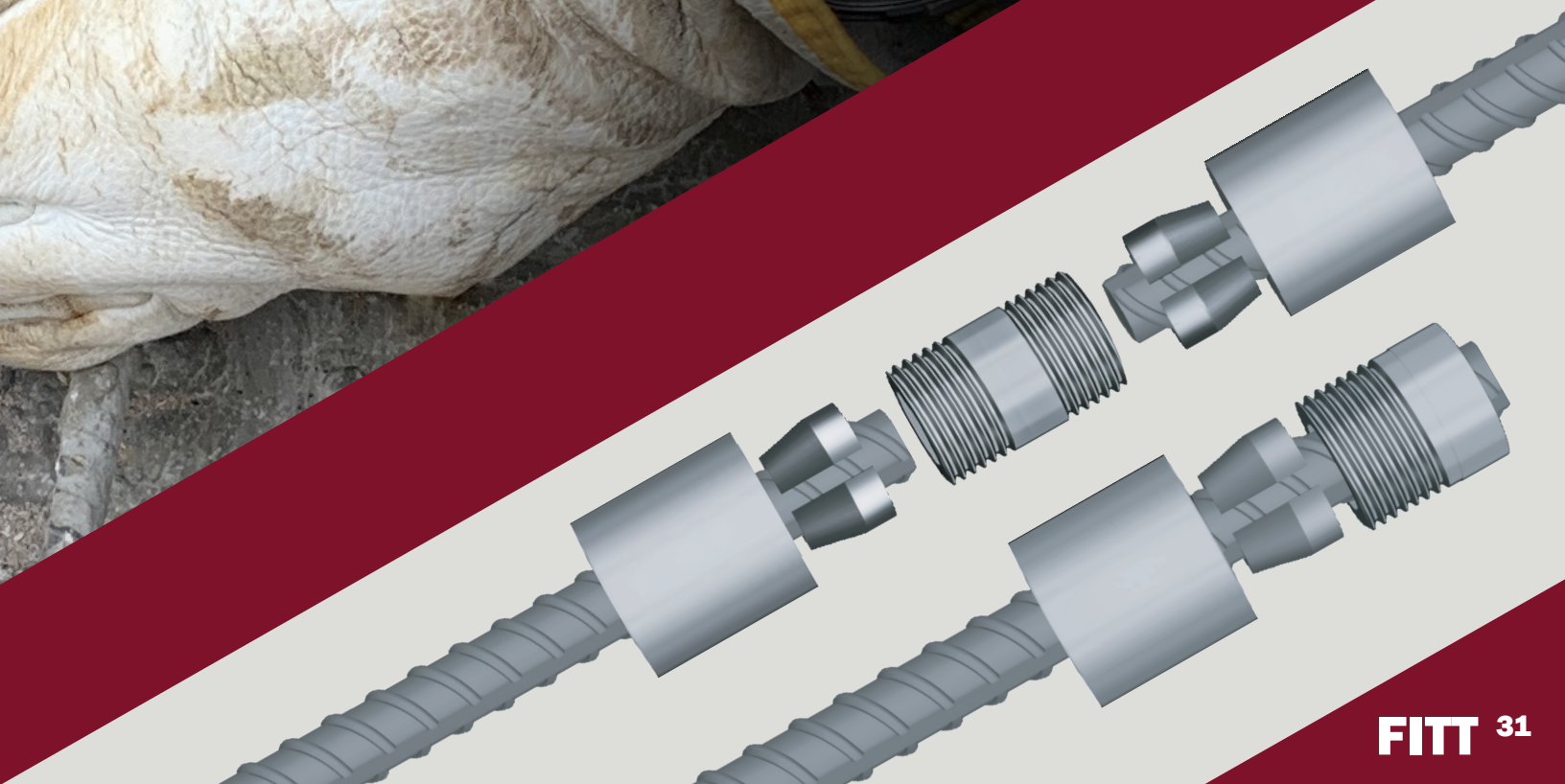
The BPI® FITT® is a field-installed threaded system for reinforcing bars. It alleviates congestion with easy installation - just snug it up with a pipe wrench, no other special assembly required.

- *Fast Field Installation*
- *No Heat, Welding, or Forging Needed*
- *Alleviates Congestion*
- *No Bar End Preparation*

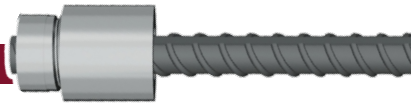
***The FITT® is available in* FITT® Termination *and* FITT® Coupler.**

FITT® COUPLER - ASSEMBLY

FITT® TERMINATION - ASSEMBLY



FITT® TERMINATION
FIELD INSTALLED THREADED HEADED REINFORCEMENT



- **5Ab HEAD** - Transmits bond force from reinforcing bar to concrete through a combination of head bearing and development length.
- **10Ab HEAD** - Larger bearing area transmits full force by head bearing alone when specified.
- **Strength** - Exceeds the specified yield strength (f_y) of the bar for ASTM A615 Grades 60, 75, & 80 and A706 Grades 60 & 80, as required by ACI 318, and exceeds specified tensile strength (f_u) meeting ASTM A970 Class A and Class HA for uncoated Grades 60 & 80 reinforcing bars.
- **Key Advantages** - Alleviates congestion, replaces hooks or hook extensions, and avoids complex stress patterns. No heat, welding, or forging required. No bending or possible cracking of rebar.
- **Sizes** - Available for bar sizes #4 - #11 / Ø 12 - 36 mm / 15M - 35M.

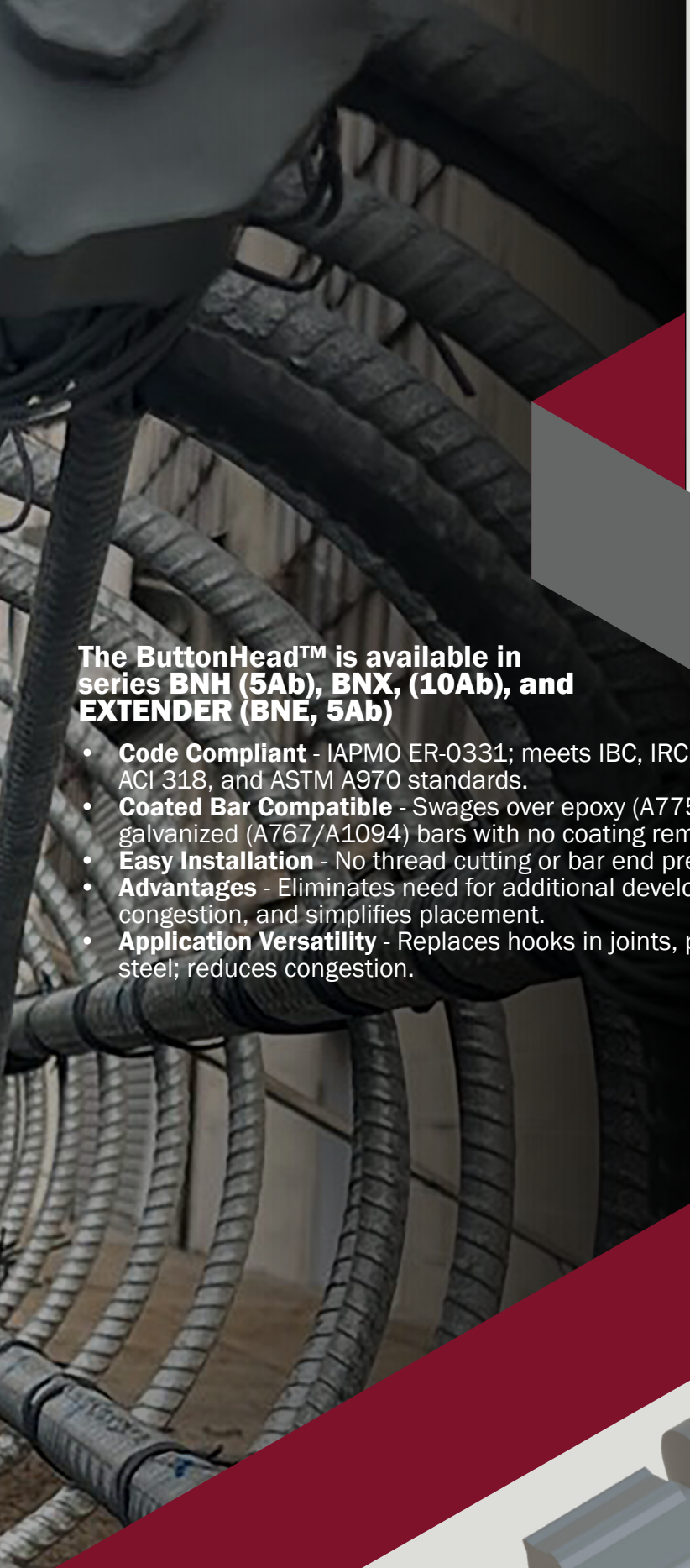
FITT® COUPLER

FIELD INSTALLED THREADED COUPLER FOR REINFORCING BARS

- **Type 2 Full Mechanical Splice** - Complies with ACI 318-19 Section 18 and 2021 International Building Code. Exceeds specified tensile strength (f_u) for ASTM A615 and A706 Grade 60 uncoated deformed bars.
- **High Strength Bars** - In-air tests confirm splice exceeds specified tensile strength (f_u) when installed on ASTM A615 Grades 75 & 80 and A706 Grade 80 uncoated deformed bars.
- **AASHTO and DOT Projects** - Exceeds 125% of specified yield strength (f_y) per AASHTO LRFD Bridge Design Specifications. Capable of exceeding 135% × f_y and 100% × f_u for Grade 60 bars.
- **Available in Transition** - Ideal where bar size changes are needed—commonly used in columns, walls, parking garages, and condominiums.
- **Sizes** - Available for bar sizes #4 - #11 / Ø 12 - 36 mm / 15M - 35M.

ButtonHead™

ADVANTAGES



ButtonHead™ cold-swaged devices are installed using automated hydraulically actuated presses, mechanically interlocking them with rebar deformations for a secure connection.

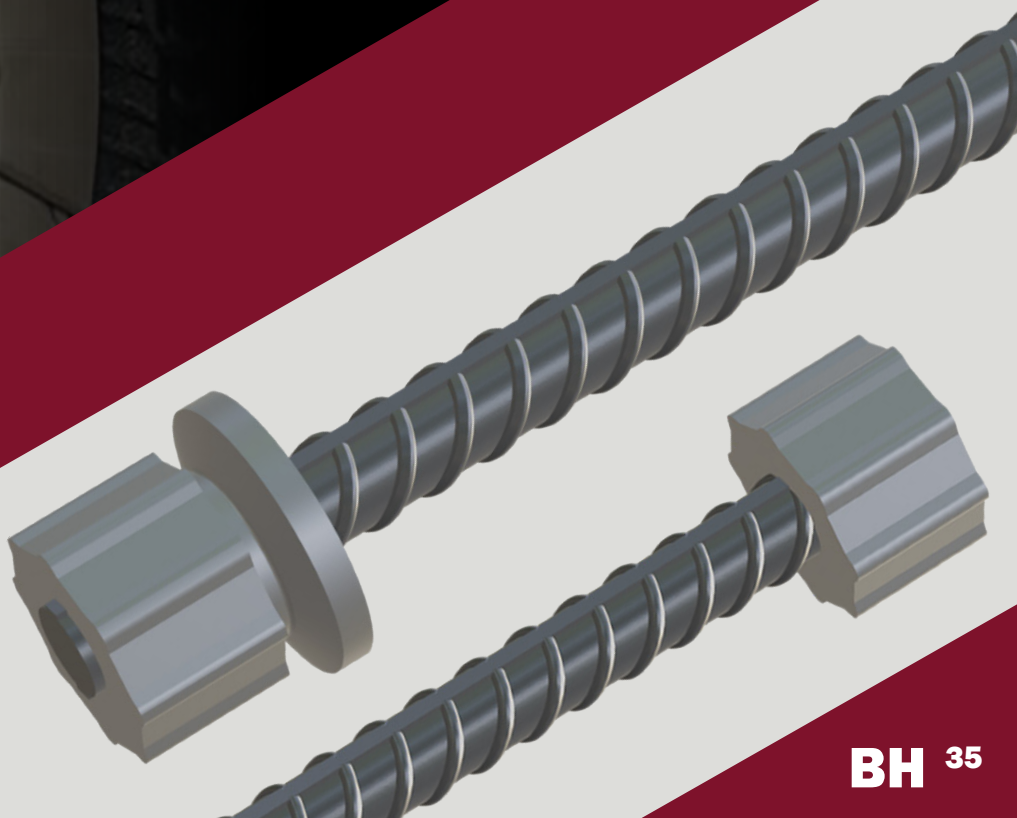
Made from high-quality steel (ASTM A519/ A576) and meet CLASS A and CLASS HA standards per ASTM A970 and ACI 318-19.

BUTTONHEAD™ SWAGING

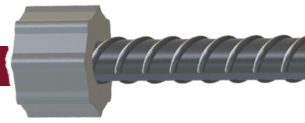
BP2600 SWAGING SYSTEM

The ButtonHead™ is available in series BNH (5Ab), BNX, (10Ab), and EXTENDER (BNE, 5Ab)

- **Code Compliant** - IAPMO ER-0331; meets IBC, IRC, ACI 318, and ASTM A970 standards.
- **Coated Bar Compatible** - Swages over epoxy (A775) and galvanized (A767/A1094) bars with no coating removal.
- **Easy Installation** - No thread cutting or bar end preparation.
- **Advantages** - Eliminates need for additional development length, reduces congestion, and simplifies placement.
- **Application Versatility** - Replaces hooks in joints, pile caps, and confinement steel; reduces congestion.

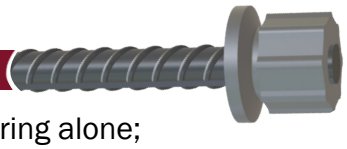


BUTTONHEAD™ BNH, 5Ab
COLD-SWAGED HEADED REINFORCEMENT



- **Standard BNH 5Ab Head** - Transfers bond force via head bearing and development length.
- **Strong & Reliable** - Exceeds f_y for Grades 60, 75, 80 (A615/A706) per ACI 318 and exceeds f_u meeting ASTM A970 Class A & HA for Grades 60-120.
- **Sizes** - Available for bar sizes #3 - #18 / Ø 10 - 57 mm / 10M - 55M.

BUTTONHEAD™ BNX, 10Ab
COLD-SWAGED HEADED REINFORCEMENT

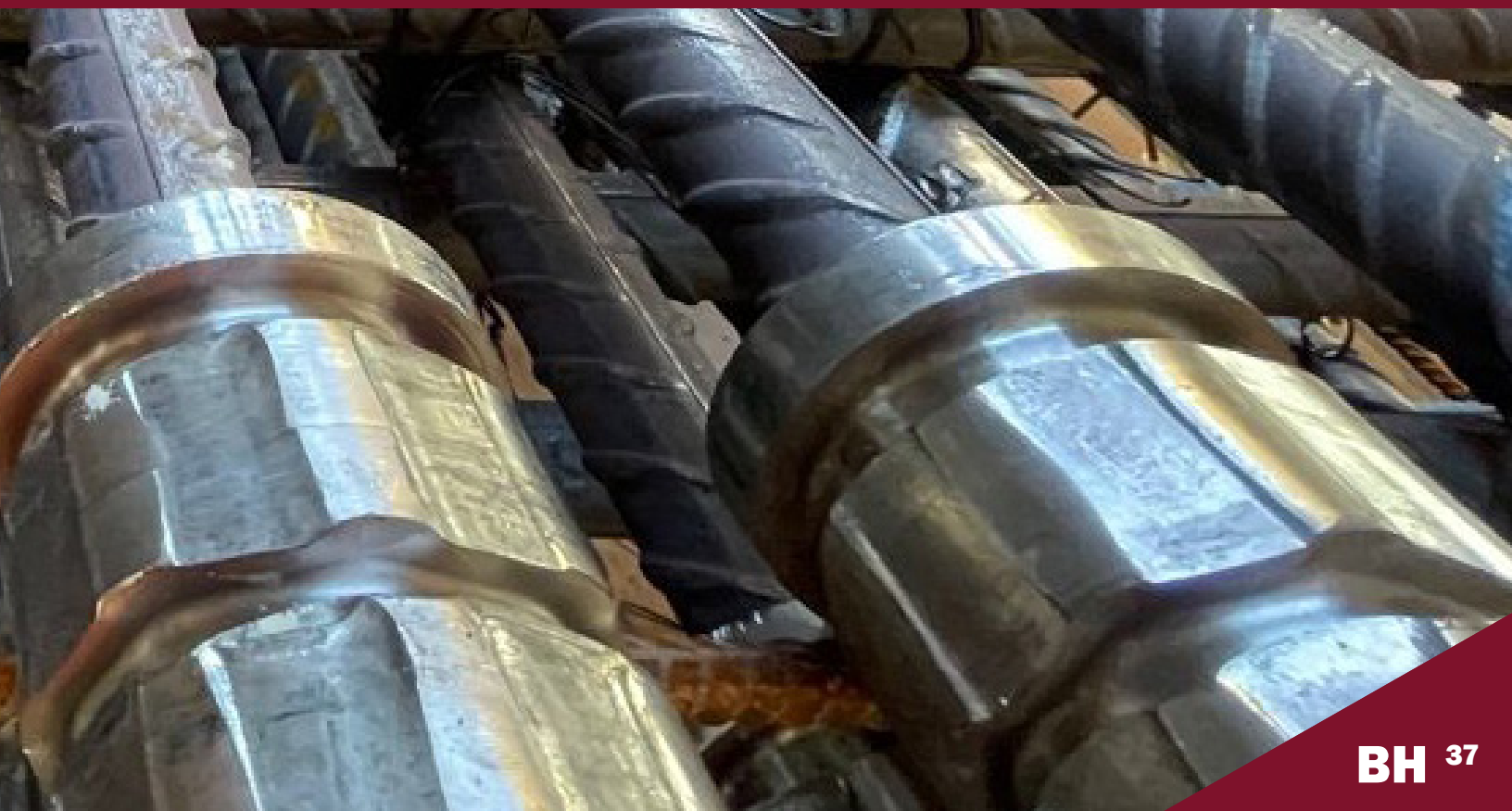


- **BNX 10Ab Head** - Larger bearing area develops full bar strength through head bearing alone; ideal for high-force applications.
- **High Strength** - Exceeds f_y for Grades 60, 75, 80 (A615/A706) per ACI 318 and exceeds f_u meeting ASTM A970 Class A & HA for Grades 60-120.
- **Sizes** - Available for bar sizes #3 - #11 / Ø 10 - 40 mm / 10M - 35M.

BUTTONHEAD™ EXTENDER - BNE, 5Ab

COLD-SWAGED HEADED REINFORCEMENT

- **BNE 5Ab Head** - Has the same bearing area as the standard BPI® ButtonHead™. For transmitting bond force from the reinforcing bar to concrete by a combination of head bearing & development length.
- **Dual Use** - Behaves as a Headed Deformed Bar by itself, and/or as a Full Mechanical Splice when connected to a standard Grip-Twist® male coupler.
- **High Strength Headed Bar** - Connections to bar exceed the specified yield strength (f_y) of the bar for ASTM A615 Grades 60, 75 and 80 and A706 Grades 60 and 80, as required by ACI 318. Confirming in-air tests meet ASTM A970 Class A and Class HA for uncoated Grades 60, 75, 80, 100 and 120 reinforcing bars.
- **Type 2 Full Mechanical Splice** - ACI 318 Section 18 (ACI 318-19 Section 21) and 2018 International Building Code. Exceeds the specified tensile strength (f_u) of the bar for ASTM A615 Grades 60 & 75 and A706 Grades 60 & 80 uncoated deformed bars. Also Exceeds 125% specified yield strength (f_y) of these bars as well as ASTM A615 Grade 80.
- **Positive Internal Stop** - Reinforcement bar is simply inserted completely before shop swaging.
- **Key Advantages** - Acts as an ACI 318 and ASTM A970 Headed Deformed Bar while providing for future expansion in a subsequent phase of construction with the ease of the self locating and quick assembly of the standard Grip-Twist® male coupler's tapered threads.



BarGrip XL

ADVANTAGES

The **BPI® BarGrip XL** system is a cold-swaged steel sleeve that is field-installed with overlapping bites using Barsplice portable presses.

Cold swaging is one of the most refined splicing methods worldwide, known for its simplicity, adaptability, and affordability.

BG750M FIELD PRESS

BP2600 SWAGING SYSTEM

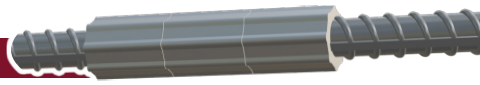
HOW TO INSTALL BARGRIP® XL COUPLER - BG250 FIELD PRESS & PE 55 PUMP

The **BPI® BarGrip XL** is available as a standard coupler, **Transition** coupler, and **a Structural Connector.**

- **Type 2 Full Mechanical Splice** - Meets ACI 318-19 & 2021 IBC; exceeds tensile strength (f_u) of ASTM A615 & A706 Grade 60 bars.
- **IAPMO-UES ER-0796** - Complies with IBC, IRC, and ACI 318. Available in English & Spanish.
- **Nuclear Safety Rated** - ASME Section III, Div. 2 compliant; exceeds 80,000 psi tensile strength (f_u) for Grade 60.
- **Seismic Loading** - Tested per ICC AC-133; handles 5× strain at yield and stress reversals.
- **Dynamic Loading** - Withstands blast loads; develops dynamic yield stress in 10-15 ms.
- **Coated Bars** - Exceeds 125% f_y for Grade 60 when swaged over epoxy (A775) and galvanized (A767/A1094) bars; no coating removal or shielding needed.

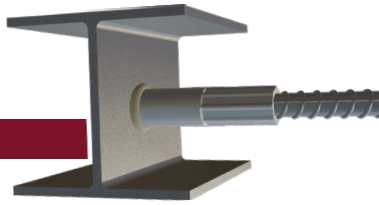
BarGrip XL

BPI® BARGRIP XL
COLD-SWAGED STEEL COUPLING SLEEVE

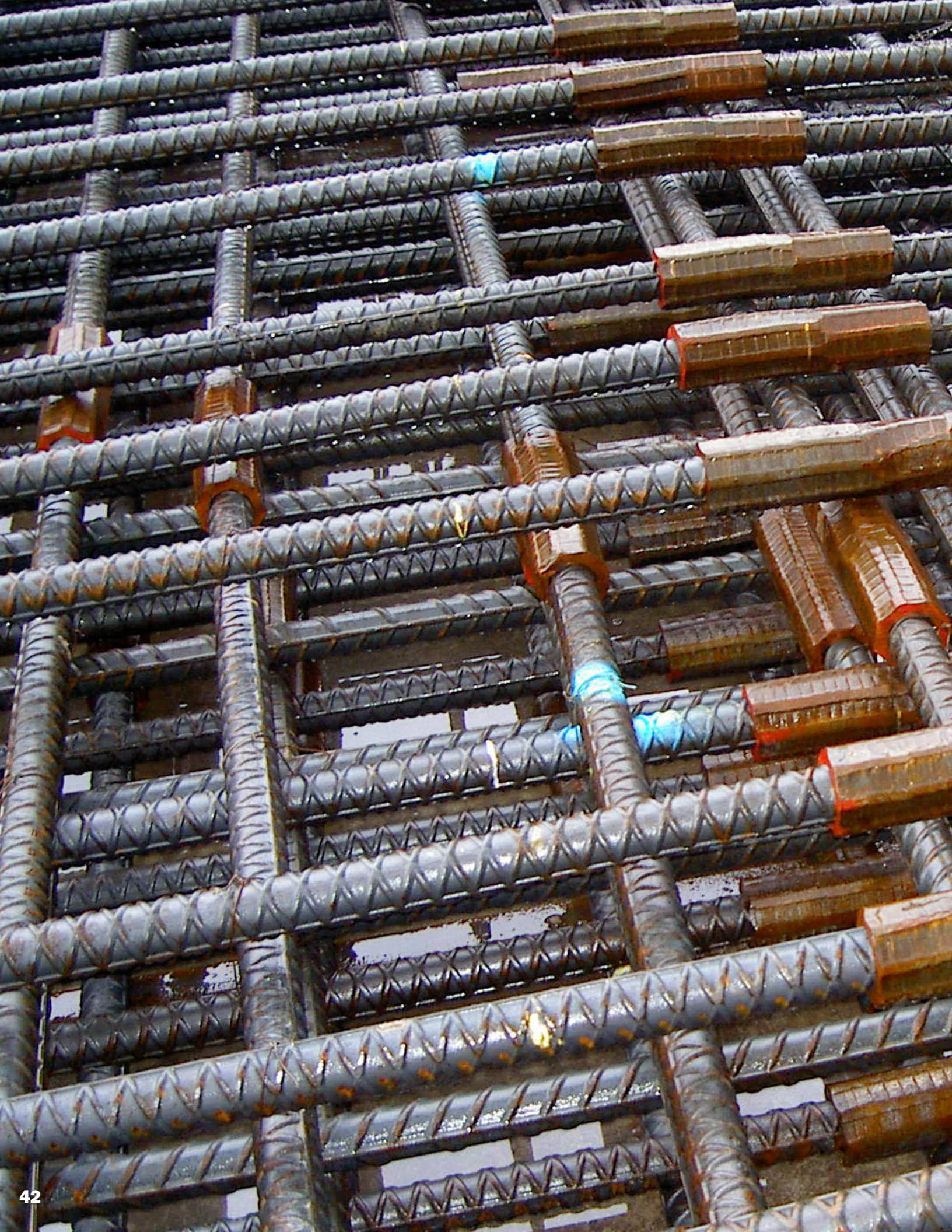


- **Caltrans Approved** - Meets CT670 “Service” & “Ultimate” slip tests; exceeds 80,000 psi tensile strength.
- **AASHTO/DOT Use** - Exceeds 125% of f_y and achieves 135% f_y / 100% f_u for Grade 60.
- **High-Strength Bars** - Valid for Grades 75 & 80 (ASTM A615), and Grade 80 (A706), sizes #3-#8. For higher performance, ask about BarGrip UXL coupler.
- **Coated Bars** - Type 1 splice per ACI 318-19; no coating removal needed. Works with epoxy (A775) and galvanized (A767/A1094) bars.
- **Available in BarGrip Transition** - Ideal where bar size changes are needed—commonly used in columns, walls, parking garages, and condominiums.

BPI® BARGRIP STRUCTURAL CONNECTOR
COLD-SWAGED STEEL CONNECTOR



- **Full Strength** - Meets ASME Section III, Div. 2; achieves 75,000 psi (125% f_y) minimum joint strength and exceeds 80,000 psi (100% f_u) with ASTM A615 Grade 60 bars.
- **Versatility** - Attaches rebar to liner plates, steel shapes, or creates headed anchorage; weldable in shop or field, before or after placement.
- **Certified Low Carbon Steel** - Meets ASME CC-2310(c); conforms to AISI 1018 and ASTM A36. Compatible with E7018 electrodes.
- **Welding Bevel** - Included for full-penetration welds, improving strength and quality.
- **Less Weld Stress** - Connector's larger diameter spreads weld stress over a greater area than direct butt welds.



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