

**/// BAR TEC ///**®

The Ultimate Splicing System



**Dextra**

[www.dextragroup.com](http://www.dextragroup.com)

## Product Features

Bartec® is a parallel threaded mechanical splicing system designed for the connection of concrete reinforcing bars from #4 to #18.

Bartec® couplers are designed and manufactured in compliance with ACI 318, AASHTO, ASME Sec III Div 2, Eurocode 2, BS 8110, DIN 1045, IBC, .

## Benefits

- One standard coupler for all splicing requirements (Standard / Position).
- Easy installation, no torque wrench required.
- No reduction of the bar cross section area.
- Allows full ductile elongation of bars.
- Type 2 coupler suitable for seismic areas.
- Tested under reverse cyclic conditions.
- Solves bar congestion problems.

## Site Equipment



The 3 machines necessary to Bartec® system rebar preparation are engineered by Dextra and delivered in a single container.

## Rebar Preparation: A 3-Steps Process

### STEP 01 Cutting

The end of the reinforcing bar is sawn square.



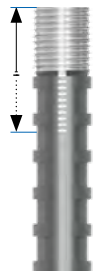
### STEP 02 Cold forging

The sawn end of the reinforcing bar is then enlarged by a patented cold forging process. The core diameter of the bar is increased to a pre-determined size.



### STEP 03 Threading

Finally, the enlarged end of the rebar is threaded to the required length.



## Splicing Methods

### Standard splice

Easy connection by bar rotation until full thread engagement.

Thanks to the parallel thread:

- No risk of thread mis-match.
- No risk of cross-threading.

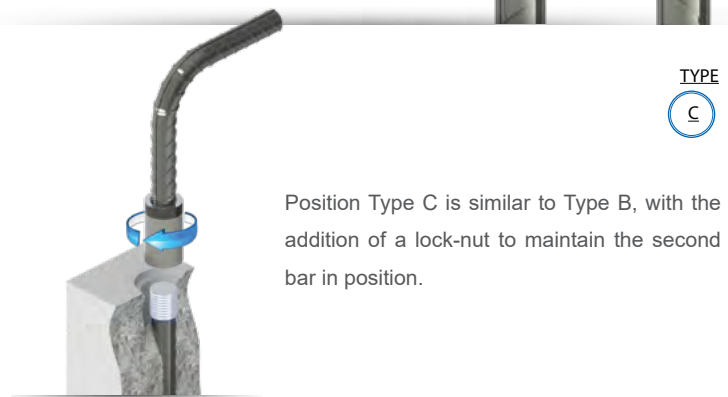
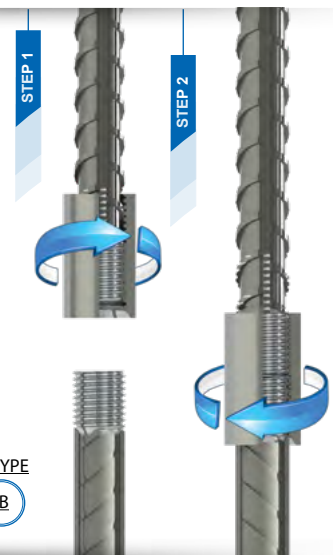


### Position splice

Even when both bars cannot be turned, the Bartec® system uses a standard coupler.

The coupler is fully engaged onto the extended thread of the connecting bar (step 1).

The assembly is simply completed by butting the bars end to end and screwing back the coupler onto the first bar until full engagement (step 2).



Position Type C is similar to Type B, with the addition of a lock-nut to maintain the second bar in position.

## Applications

### Caging splice

To connect cages that haven't been pre-fabricated together or sets of bars that can't be brought butt to butt, Bartec® Caging Splice is your solution.

Both bars are threaded with a standard Bartec® thread, then the free rotating elements of the Caging Splice will restore thread continuity and make the connection.

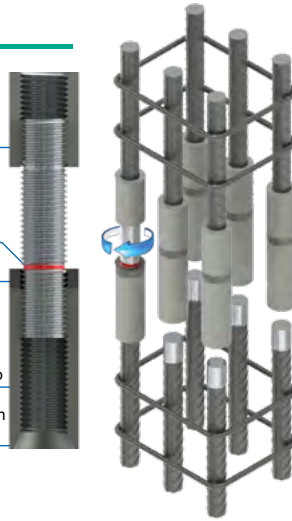
Coupler and threaded stud

Visual Check groove

Lock nut

Long coupler to bridge vertical gap

Chamfer to cope with axial misalignment



Slab connection

Smaller diameter rebar



Larger diameter rebar

### Transition splice

When there is a need to splice bars of different sizes, it is allowable in most cases to reduce the size of the larger bar and to use a standard coupler.

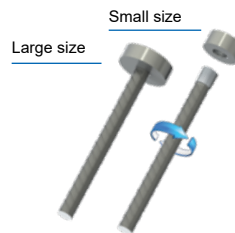
However the Bartec® system also offers special transition couplers that conveniently avoid the difficult task of planning in advance the need of transitions.



Columns

### Headed Bars

Also called "End Anchors" they are convenient alternative to hooked bars to provide end anchorages in congested areas. Bartec® standard anchorage heads are circular and have a net bearing area of 4 times or 9 times the cross-section of the bar.



### Weldable couplers

For composite construction where concrete reinforcement bars must be welded to structural steel, use Bartec® weldable couplers, which are specially made from low carbon steel and which have a large chamfer for bevel welding.



### Form fixer

A special coupler that can be nailed onto a wooden formwork for accurate reinforcement positioning. It is cast in concrete to be used for rebar reconnection at a later stage.



Prefabricated Cages

## Generic specification

- No reduction of the nominal cross section area of the parent bars.
- No reduction of the ductility of the reinforcing bar.
- Couplers are individually marked to allow full traceability of the material.
- Parallel-thread system.

**Note :** The information in this catalogue is considered up to date at the time of publication. We reserve the right to make technical and design changes at any time. Dextra shall not accept liability for the accuracy of the information in this publication or for any printing errors.

## Quality Assurance



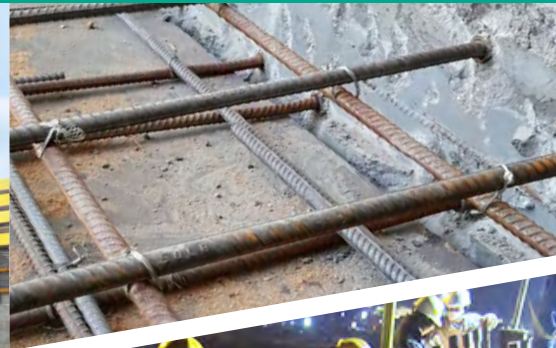
## Approvals & Certifications







Jeddah Tower, Saudi Arabia



Nhat Tan Bridge, Vietnam



Landmark 81, Vietnam



Commercial presence  
in more than  
**55** countries



**Dextra**

**HEADQUARTERS**

**THAILAND**  
Dextra Manufacturing Co.,Ltd.  
Tel: (66) 2 021 3800

**CHINA**

Dextra Building Products (Guangdong) Co.,Ltd.  
Tel: (86) 20 2261 9901

**HONG KONG**

Dextra Pacific Ltd.  
Tel: (852) 2511 8236

**EUROPE**

Dextra Europe SARL  
Tel: (33) 1 45 53 70 82

**MIDDLE EAST**

Dextra Middle East FZE  
Tel: (971) 4886 5620

**INDIA**

Dextra India Pvt.,Ltd.  
Tel: (91) 22 2839 2694

**NORTH AMERICA**

Dextra America Inc.  
Tel: (1) 206 742 6020

**LATIN AMERICA**

Dextra Latam  
Tel: (507) 831 1422

**BRAZIL**

Dextra do Brasil  
Tel: (55) 119 7577 8112