

ROITEC®

Mechanical Splicing System



Dextra
www.dextragroup.com

Product features

Rolltec® is a rolled parallel threaded mechanical splicing system designed for the connection of concrete reinforcing bars from Ø12 to 50 mm (ASTM #4 to #18).

Rolltec® couplers comply with ACI 318, IBC 2006, BS 8110, Eurocode 2, DIN 1045, CalTrans, ASME Sec III Div 2.

Benefits

- Practical and economical alternative to laps.
- Simple process: only one machine, one operator.
- Fast cycle time: less than 30 seconds per thread!
- Same coupler model for standard splicing and position splicing (when none of the rebar can rotate).
- Easy installation, no torque wrench required.
- Shortens construction cycle times.

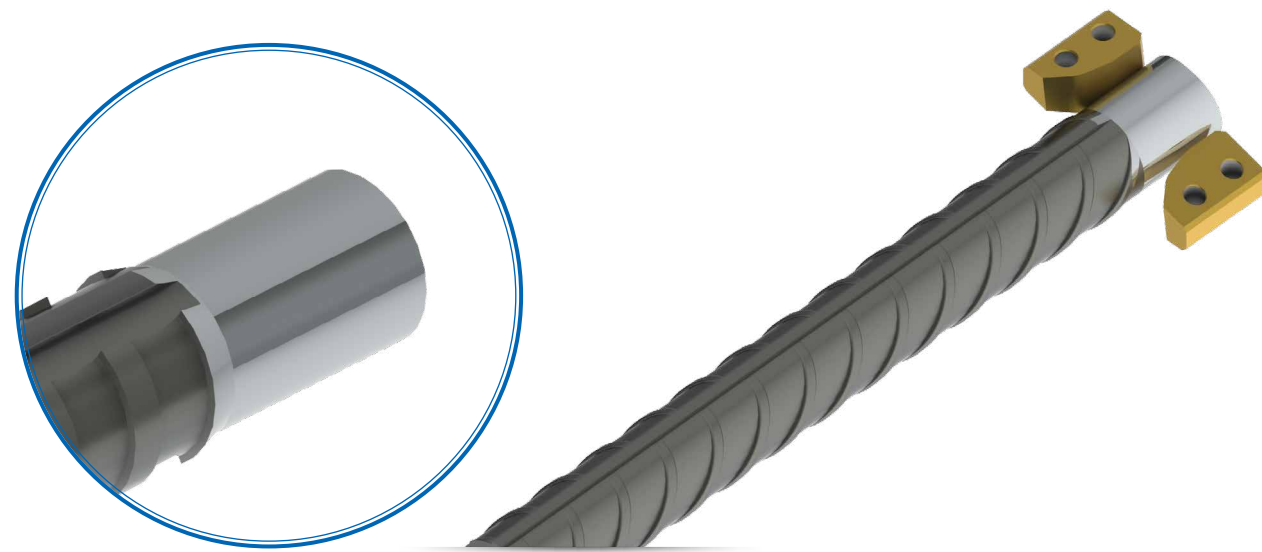


Pumarejo Bridge,
Colombia

Rebar preparation: A two-step Process

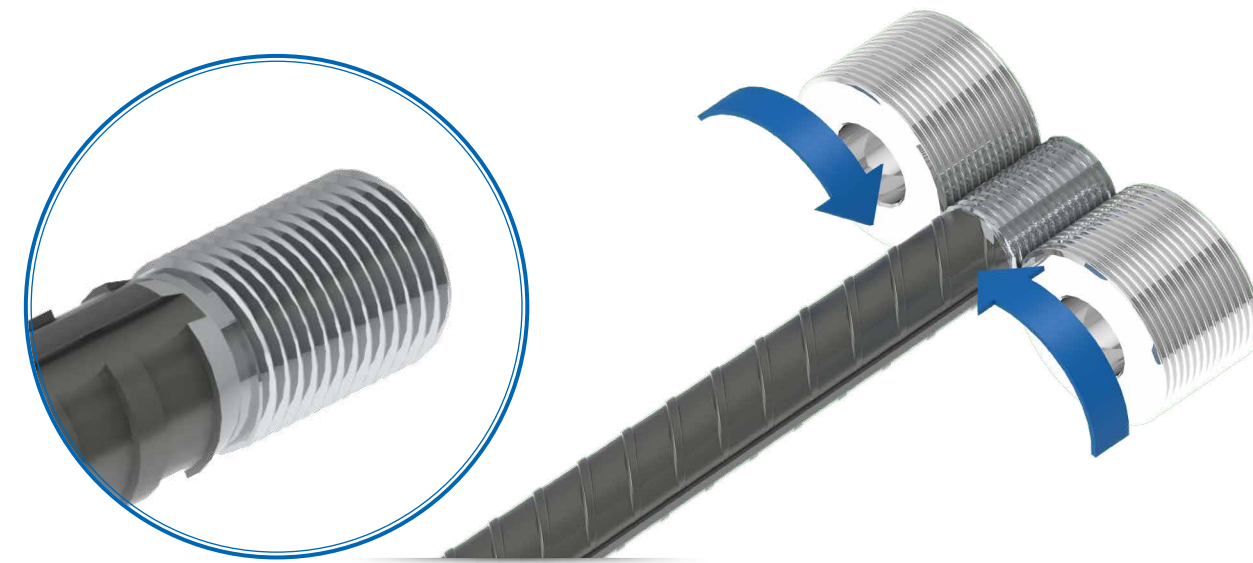
Peeling

The end of the reinforcing bar is peeled.



Thread Rolling

The peeled end of the reinforcing bar is then threaded by rolling.



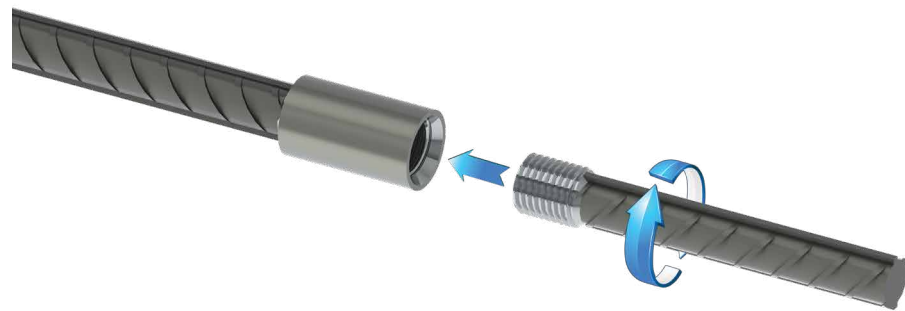
Rolltec rebar preparation equipment

Splicing methods

Standard splice (Type A)

Easy connection by bar rotation until full thread engagement. Thanks to the parallel thread:

- No risk of thread mismatch.
- No risk of cross-threading.

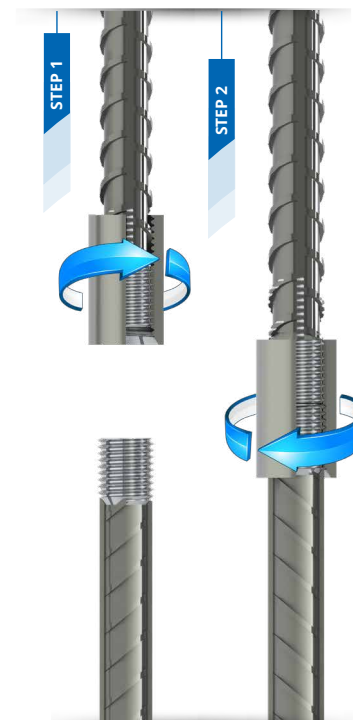


Position splice (Type B)

The Bartec® position splice, to be used when both bars cannot be rotated, consists of an extended thread on the connecting bar and a standard coupler.

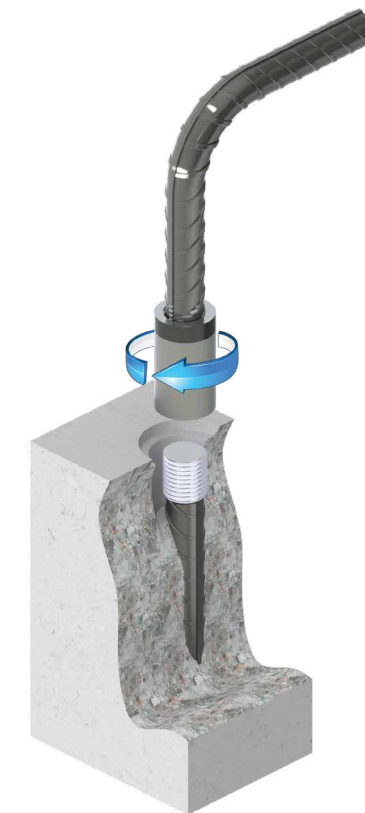
The coupler is fully engaged onto the extended thread of the connecting bar (step 1).

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



Position splice (Type C)

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

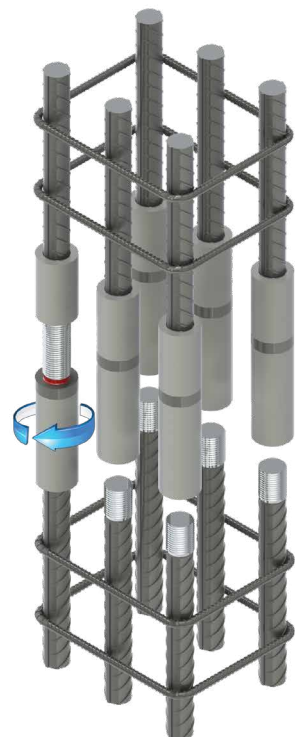


Splicing methods

Caging splice

To connect cages that have not been pre-fabricated together or sets of bars that cannot be brought butt to butt, the Rolltec® caging assembly is your solution.

Both bars are prepared with a standard Rolltec thread. The rotating elements of the assembly will guarantee thread continuity to easily produce the splice.

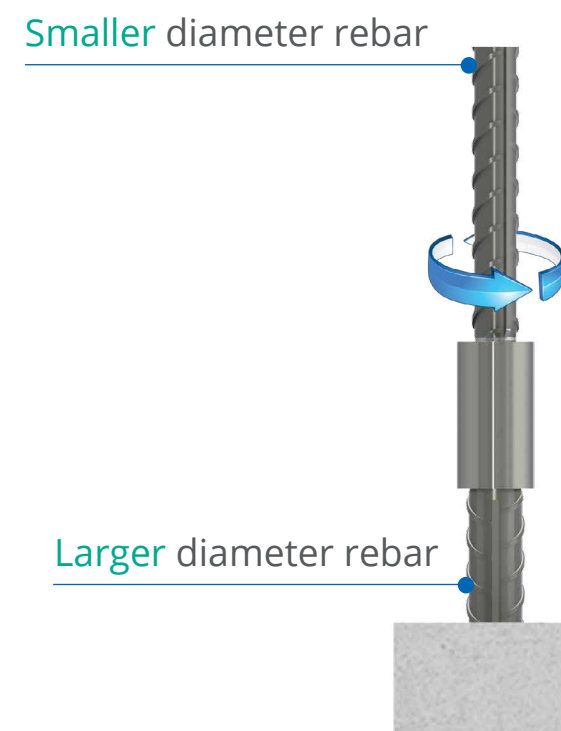


Product features

Transition splice

When you need to splice bars of different diameters, e.g. 40-32 or 32-25, Rolltec® offers transition couplers that conveniently allow such a connection.

Depending on the situation, it may also be possible to reduce the size of the end of the larger bar and then use a standard coupler.

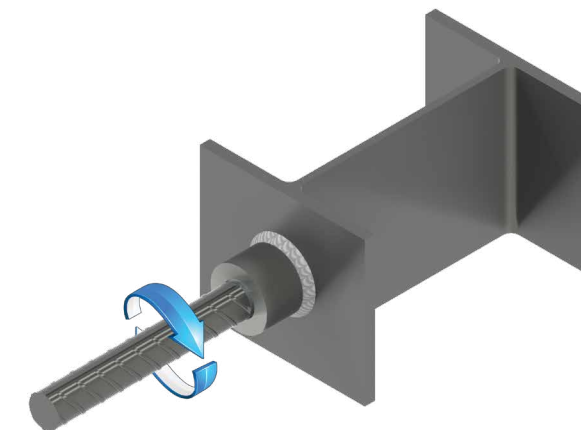


Rebar preparation

Weldable couplers

For composite structures in which the reinforcement bars must be connected to structural steel, Rolltec® weldable couplers provide the ideal solution.

They are specially made from low carbon steel.

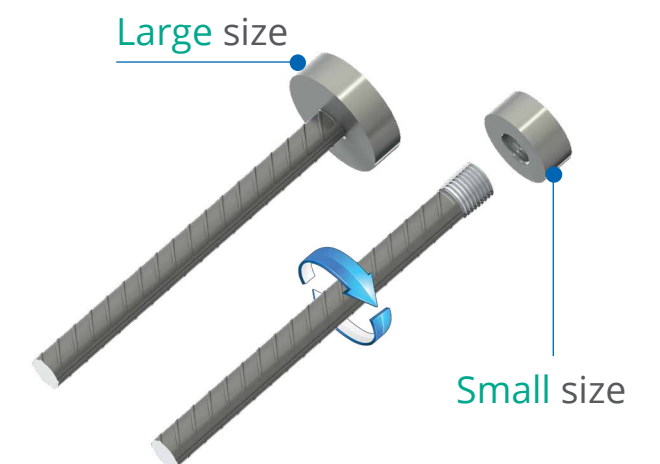


Applications & Quality

Headed bars

Also called “End Anchors”, they are a highly efficient alternative to hooked bars when end anchorages need to be placed in congested areas.

Rolltec® headed bars are round and have a net bearing area of 4 times or 9 times the cross-section of the bar.



References

Applications



Column



Slab Connection



Piles and Cage Connection

Quality assurance



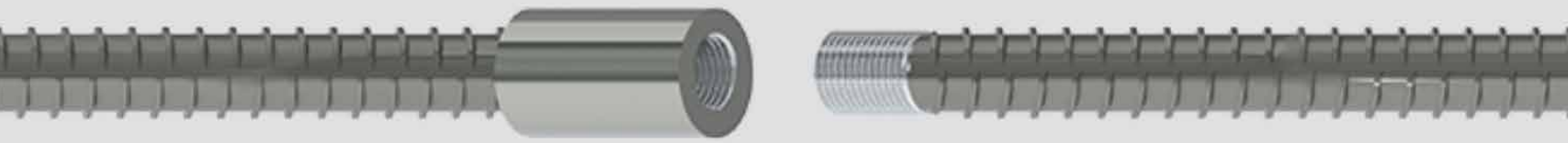
Approvals & Certifications



Design tools

Available on www.dextragroup.com





ROIITEC®

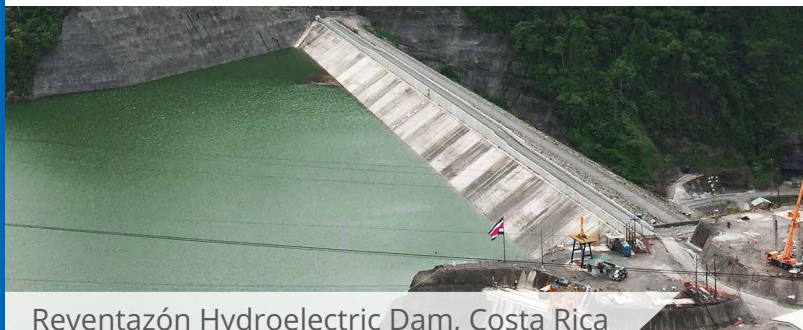
Project References



Kuwait International Airport Terminal II, Kuwait



Tanger Med 2 Port, Morocco



Reventazón Hydroelectric Dam, Costa Rica



São Paulo Arena Corinthians, Brazil



Brasília Mané Garrincha Stadium, Brazil



New Champlain Bridge, Canada

Resources



Brochure



Datasheet



Assembly instruction



Certification



Case study



Webpage

CAD & BIM Tools



Connect with us



www.dextragroup.com





Commercial presence
in more than
55 countries



Dextra

www.dextragroup.com/contact

Main offices (click on the address to see more information)

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 1442

SOUTH AMERICA
Dextra do Brasil
Tel: (55) 119 7577 8112