Hybrid Rebar Coupler

Technology in Brief

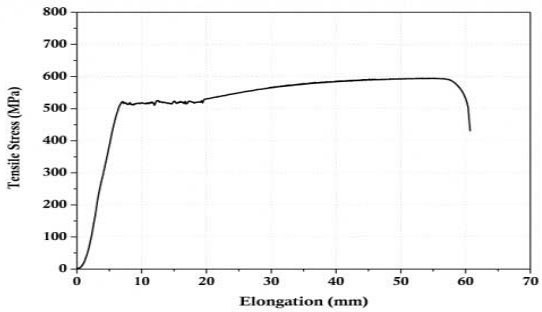
Coupler connects two adjacent re bars at any critical location of RC elements and also very effective in connecting the old and new re bars in retrofitting works. The hybridization helps to sustain the cyclic/static loading under direct tension and in transferring the applied stress in structural member. The proposed coupler has been employed in using RC elements and tested under static/cyclic loading to authenticate its effectiveness in the civil engineering applications. It can be used as an alternate to conventional lap splice and can be used to connect two adjacent rebars in retrofitting and in new construction work.

Salient Features/Advantages

- Economical compared to bolted/grouted coupler.
- Easy to use in retrofitting works and in new construction work.
- Tested with RC elements under static/cyclic loading.
- Tensile strength similar to rebar.
- Reduced lap length.
- Stress-strain behavior similar to rebar.
- Applicable in seismic zones.

Rebar with Coupler: Failure away from Coupled region.

Rebar Yielding



Tensile behavior of rebar with coupler.

Properties & Standards	Tensile Strength as per IS 16172:2014 Type test as per IS 16172:2014
End Product(s)	Rebar Connector
License/Commercialization	M/s Jeeta Industries Pvt. Ltd., Coimbatore
TRL	7