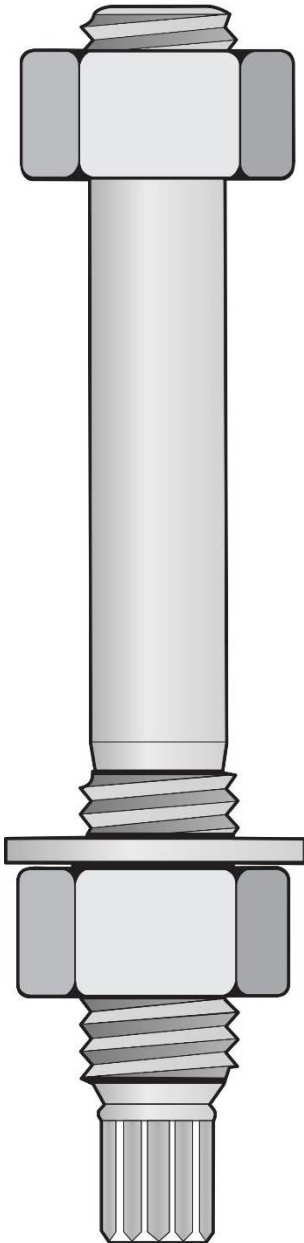


# TCB Stud Assemblies

TCB Studs were designed to be used where a normal TC Bolt could not be utilised due to restricted access. The high strength stud assemblies are manufactured in accordance with EN 14399-1, achieved preload as detailed in EN 1090-2 table 18 are CE marked under European Technical Approval # ETA-13/0244.



## Technical Specification

- TCB Stud assemblies consist of 1 x class 10.9 stud, 1 x standard class 10 HRD nut, 1 x standard hardened washer and 1 x class 10 left hand thread HRD nut
- The LH thread nut replaces the conventional bolt head - this allows the stud to be inserted into a clearance hole first and the LH nut is screwed on the stud afterwards
- The left-hand thread nut is easily identified with embossed arrow (as detailed in ISO 898-2 section 10.5)
- Design resistances are in accordance with EN 1993-8-1 table 3.4
- Left hand thread protrusion at least 1 x thread pitch to ensure full thread contact with nut in accordance with EN 1090-2, section 8.2.2
- Available in diameters M16, M20, M22, M24, M27, M30 & M36

## Manufacturing

- Blank stud lengths (with RH thread, breakneck point & spline already formed) are held in stock
- A stud length is determined from the grip of steel and is manufactured specifically to the customer requirements
- Once the steel grip has been confirmed, a drawing is sent to the customer for approval that needs to be signed-off before manufacturing can commence
- A CNC is used to machine the finished length & rolling diameter from the stud blank
- The LH thread is formed by plunge rolling & is checked with calibrated GO/NOGO gauges
- Studs are coated with Greenkote® after manufacture

