

Cross Coupling Protector

(CCP)



Qteq's Cross Coupling Protector (CCP) is designed to secure Tubing Encapsulated Cable (TEC) to completion tubing, and protect it from damage during installation, retrieval, and during well operations. The protectors also safely route the TEC past completions equipment with external upsets, or flow ports. The protectors are secured top and bottom to the completion tubing using either a pneumatic banding tool or impact driver that enables quick, efficient and safe application.

Cross Coupling Protectors are available in a variety of options, including light duty metal (LD-M) protectors for use in benign environments, and a heavy duty (HD) protectors for use in highly corrosive, or deviated wells for maximum protection of the downhole TEC.



Features and Benefits

- Industry proven design, with over 200,000 units installed in CSG wells across Queensland.
- The banding is pre-cut for all tubing sizes and features smooth rounded edges to reduce the potential for injury from traditional sharp-edge banding.
- Protectors are designed with a tapered profile top and bottom to minimise risk of hang-up.
- Vertical movement of protectors is constrained by the coupling shoulders in the undercut, not by the banding.
- TEC weight is supported by inducing a chicane into the TEC around each pipe connection, not by compression of the banding onto the thermoplastic encapsulation around the TEC.
- A specialised pneumatic banding tool or impact driver is used to speed up clamping operations.

Specifications

	LD-M	HD
Size	2.375", 2.875", 3.5" in stock. Other sizes upon request	All casing and tubing sizes upon request
Length	45.5 cm	Size dependant
Metallurgy / Material	Sheet metal, stainless steel 316	Carbon steel, stainless steel 316L, duplex, super duplex
Fastening Method	Stainless steel 316L. 19mm banding & clip	Pin
Fastening Tooling	Pneumatic bander	Pneumatic over hydraulic impact driver
Cable Provision	Single 11 mm encapsulated, or multiple bare TECs	Multi-channel, application dependant
Deviation Limitation	< 10° to TD	> 10° to TD
DLS Limitation	< 3° / 100 ft	> 3° / 100 ft