



## Pre-Installed Cable Protector in Action: Cutting Red Zone Exposure and Saving Rig Time

# SUCCESS STORY VALLOUREC

### Overview

Vallourec's innovative Pre-Installed Cable Protectors (PICP) are now regularly deployed on a major UK operator's North Sea asset, delivering significant safety improvements and time savings during completion operations.

### Challenge

Completion installations are complex and time-intensive, often requiring multiple personnel to work in the 'red zone' for extended periods. A key task involves installing cross-coupling cable protectors, which are essential for safeguarding downhole cables and control lines throughout the well's lifecycle.

Traditionally, these protectors are installed at each tubing coupling, requiring **3 to 4 personnel**

to manually lift, position, and energize them—each installation taking **over a minute**. This repetitive exposure in the red zone poses a safety risk and slows down operations.

Given the operator's strong focus on **minimizing red zone exposure**, they sought new technology that could both reduce personnel involvement at the rotary table and accelerate rig floor activities.

PRE-INSTALLED CABLE PROTECTOR IN ACTION:  
CUTTING RED ZONE EXPOSURE AND SAVING RIG  
TIME

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*"The key point – the reduction of personnel in the red zone has greatly improved safety for RIH".*

IOC Feedback

## Solution

Vallourec introduced the **PICP** solution to the operator, initially providing a limited number of units for evaluation. After a successful review, the operator decided to trial them in an upcoming completion.

PICP are designed to be **pre-installed on tubing joints** during the rig-prep phase, eliminating the need for heavy manual handling on the rig floor. The protectors are mounted on the box coupling of each joint and transported in frames to the well site.

During the run-in-hole phase, tubing joints with pre-installed PICP are lifted using the main elevators. A **3D-printed stabbing guide**, also developed by Vallourec, ensures safe and accurate thread engagement.

One consideration with PICP is the orientation of the cable slot, which cannot be determined until the joint is torqued. However, the stabbing guide also assists in rotating the PICP for optimal cable alignment.

Once the tubing is torqued, downhole cables are inserted into the PICP body, and a **retaining lever** is closed to secure them. Final locking is quickly completed using a pneumatic torque wrench.

All rig floor operations related to PICP installation can be performed by a single operator **in just 20 seconds**—a big improvement over traditional methods.

## Results & Benefits

Following the first successful deployment, the operator immediately recognized the safety and efficiency gains and ordered additional units for future wells. After five successful completions, the results are clear:

Up to  
**8x**  
reduction in red  
zone exposure

**1.6**  
minutes saved  
per tubing joint  
on average

**+hours**  
of rig time  
saved per  
completion

Safety  
**KPIs**  
improved

The operator is highly satisfied and has requested Vallourec to expand the PICP product range to support a broader set of completions.

### OTHER SUCCESS STORIES

To find out more about Vallourec's Pre-Installed Cable Protector, visit the [dedicated page](#) on our website.