



BEWI Energy Universal Protector User guidelines

Bewi Energy tubular protectors are based on an idea derived from practical drilling and casing handling experience offshore and onshore.

The main purpose behind this product is to reduce operational time and man wear during assembling of protectors. One size fit`s all threads.

9 5/8" OD, fits all 9 5/8" csg 7" OD fit`s all 7" and so on...

This protector is 100% recyclable and will contribute to reduce the CO₂ footprint. We are turning plastic waste into a resource. It is also an important issue for us to deliver a fully thread independent protector to simplify logistics.

The protector is manufactured to meet requirements in API 5CT, with one exemption. The Stripping test is based on the PIN protector's ability to withstand an

axial force (Fax) of 60 x nominal weight (foot/pound) without being torn off. The protector may show sign of stress. This criteria is limiting innovation hence we need to underline that the field testing is predominantly to verify that our protector meets the requirements of normal tubular handling - and provides a major improvement in handling. We have now optimized the protectors to a point where we do believe they are optimum. However, we do need feedback from the end users, and we would highly appreciate your comment both positive and negative to QHSE@bewienergy.com

We hope that this innovative product will be a positive contribution to your operation.



Michael Skjold Development & Innovation Manager + 47 480 60 224 michael.skjold@bewienergy.com



Helge Ørke Sales and Business Development Representative, Kristiansund +47 910 07 355 helge.orke@bewienergy.com

BEWI Energy Universal Protector

User instructions

The Bewi Thread protector is tested according to API 5C and can withstand the vertical load when a stand is racked back in the derrick.

During pre-job meeting, highlight the importance of **optimal body position** to prevent slipping and falling. Correct working height is important to prevent unnecessary body strain.

Tip! It could be useful to apply some small amount of lubrication on dry ends, like WD-40, Prolong or similar. If lubrication is not wanted during csg pulling, ensure that sufficient force is applied to achieve proper seating of the protector.



Correct assembly of BEWI Energy's protectors ensures optimal performance. Some applications, like P&A operations, may require special consideration. It is important to follow the instructions in the user manual.

Tip! We also recommend that the Pin-end of the tubes are aligned. See picture.

Checklist

The protectors can be used optimally by:

	Cleaning of the thread (IMPORTANT)	The right amount of operational dope	The right amount of storage dope	Protector must be pressed all the way in and sealed (IMPORTANT)
P&A	V	V	V	×
Long-term storage			V	×
Offshore operation		V	V	V
Onshore operation		V	V	V
Mill	V	V	V	×
Strapping		V	V	×
Cassettes		V	V	×

BEWI Energy Universal Protector

Locking



Enter the protector onto / into the thread area. **Push it all the** way until it bottoms out.



Turn the protector clockwise until fully locked. This should take approx. $\frac{1}{2} - 1\frac{1}{2}$ turn.



BEWI Energy Universal Protector Removing

To remove, turn the protector counter clockwise until sufficiently loose, and pull straight off.

