

## SUBSEA HANDLING EQUIPMENT

# CONDUCTOR TENSIONING UNITS



EFC GROUP

A Conductor Tensioning System is employed to maintain a primary, vertical tension and therefore lateral stability to the conductor string to enable it to withstand the loads imposed upon it by environmental conditions and offshore drilling operations.

A Conductor Tensioning System consists of an elevated tensioning ring pinned to and supported by hydraulic tensioning cylinders, each of which are interconnected to a compensated hydraulic circuit employing bladder type accumulators.

When the cylinders are hydraulically extended to their mid-stroke, the tensioning ring exerts a balanced upward pressure against a collar fitted around the conductor, thereby imposing vertical tension on the conductor string.

Load-induced variations in hydraulic pressure in any of the tensioning cylinder circuits are compensated for by the accumulators, which maintain and balance hydraulic pressure during variations in tension. This causes stroking out or retracting of the hydraulic cylinders over their allowable compensation stroke, thus maintaining tension in the Conductor String.



### KEY FEATURES

- Can be retro-fitted to existing rigs
- Tensions available up to 400,000 kgs
- Can withstand side loads of up to 80,000 kgs
- Bespoke options available to suit rig layout
- Classified for Zone 1 installation
- Provided with integral hydraulic power unit and control console for setting cylinders and charging accumulators
- Offers some angular deflection, reducing bending loads imposed on the conductor string



DESIGNED & CONSTRUCTED  
TO OPERATE IN ZONE 1 AREAS

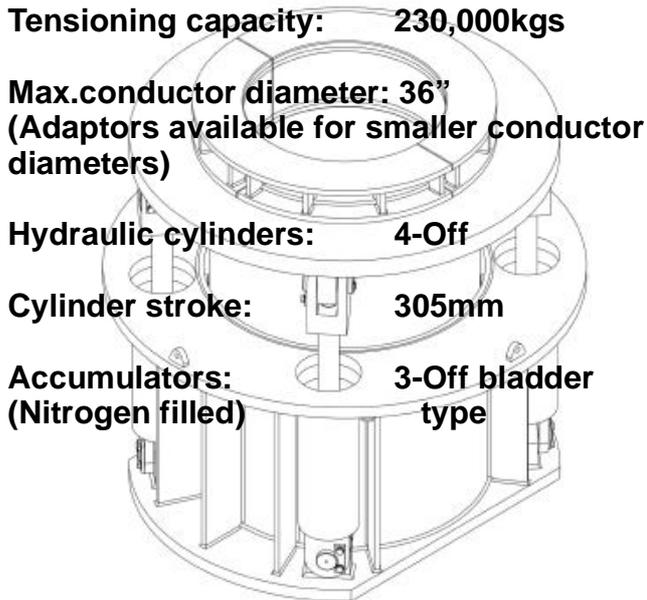


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## COMPACT CTU - TYPICAL SPECIFICATION



## LARGE SKID-MOUNTED SPLIT CTU TYPICAL SPECIFICATION

**Tensioning capacity:** 400,000kgs

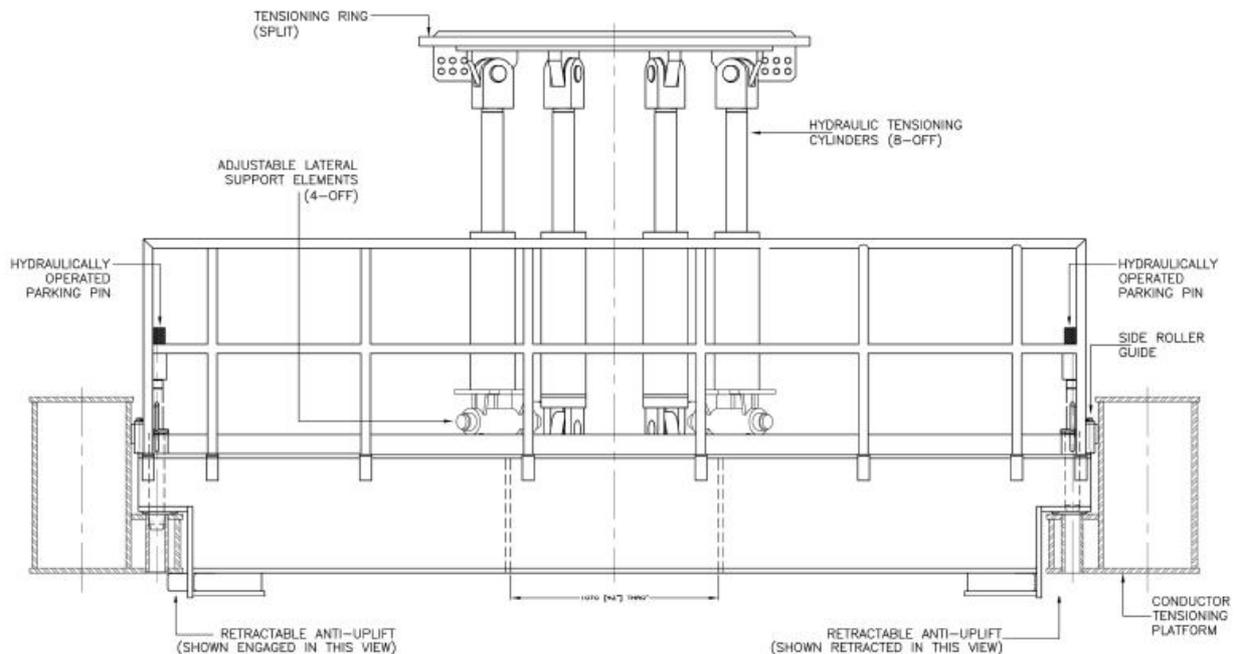
**Max.conductor diameter: 36"**  
(Adaptors available for smaller conductor diameters)

**Hydraulic cylinders:** 8-Off  
(4-Off per half)

**Cylinder stroke:** 610mm

**Accumulators:** Up to 11-Off bladder type  
Nitrogen filled  
(depending on application)

**Mode of travel:** Slot and claw type Skidding mechanism for travel across CTP structure



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