

# Technical Bulletin

TB No: 038

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Description: Casing Drive System™ Axial Compression Capacity



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## BACKGROUND INFORMATION

The TESCO Casing Drive System™ is designed to grip, hoist and rotate casing with loading conditions of torsion and axial tension. There are occasions when operators may wish to put axial compression on the tool during running operations. The risks of loading the tool in axial compression include structural damage to components and/or overpowering the hydraulic actuator and spring such that the dies or grapples disengage. This bulletin provides guidelines on the maximum recommended axial compression loads for Internal and External Casing Drive System™. These guidelines do not consider the effect of axial compression on any other overhead equipment or components.

## AFFECTED PRODUCT:

All TESCO Internal and External Casing Drive Systems™ described in master document 15800 (Parts, Spares/Optional, ECDS/ICDS) are potentially affected by this bulletin.

## SCOPE:

This bulletin applies to casing pushing operations (axial compression at surface) ONLY.

## ACTION REQUIRED:

Follow this procedure when it is necessary to push casing:

1. Authority must be obtained from the operating company representative **prior** to any casing pushing activities – see below. Contact Tesco Business Unit Operational Manager **prior** to commencing ANY casing pushing activities.

**CAUTION: Care should be taken when placing casing in axial compression. Some combinations of loading and hole conditions may create buckling loads that can damage the casing or casing connections.**

**CAUTION: Rotation with axial compression on the CDS is not permitted.**

**CAUTION: Ensure mandrel ramps (ICDS) or external body ramps (ECDS) are lubricated per CDS™ Maintenance Guide document number 883004 prior to commencing any casing pushing activities.**

2. Before attempting to push on casing with CDS™ tool ensure the correct total weight of the traveling equipment is showing on the weight indicator and is recorded in the tour book and on this form for later reference.
3. Casing or tubing should be run in accordance with standard practices established in CDS™ Operations Guide document number 883003.

**CAUTION: ENSURE ACTUATOR ENGAGEMENT PRESSURE REMAINS APPLIED AT ALL TIMES DURING PUSHING OPERATIONS.**

**CAUTION: While lowering the casing into the well, pay close attention to the weight indicator and be careful not to impact the weight of the traveling equipment onto the CDS™ tool if the casing suddenly stops.**

4. Lower the casing into the well until the weight indicator shows the weight of the traveling equipment as recorded in step 2. Slowly lower the traveling equipment until the **lesser** of the following weights is applied to the top of the casing:

- Tool Limit

Tool	Push Limit
CDS	25,000 lbs

- Buckling limitation (above or below the rotary table) of the casing being pushed – as specified by Operating Company Representative – see below.

5. If the casing stops moving, hoist slowly until the traveling equipment recorded weight is showing on the weight indicator. Repeat lowering procedure.

***NOTE: If the standard actuator OPEN pressure setting is insufficient to retract the grapples/dies, it is permissible to increase the setting to a maximum of 2000 psi. PRESSURE SETTING MUST BE RETURNED TO STANDARD IMMEDIATELY FOLLOWING***

6. Make up another joint of casing, following all procedures, repeating as required.

NOTE: In an effort to promote continual process improvement, please feedback any operational issues, anomalies or suggestions to the CDS™ Product Line management. Thank you.

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**ACKNOWLEDGEMENT**

Traveling equipment total weight: \_\_\_\_\_ lbs    \_\_\_\_\_ DaN

Maximum push force as per Operating Company Representative: \_\_\_\_\_ lbs    \_\_\_\_\_ DaN

Operating Company Representative Signature: \_\_\_\_\_ (print) Date: \_\_\_\_\_

\_\_\_\_\_ (sign)

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 Please contact Tesco Corporation at the following email address on issues specific to this bulletin.

[Safety\\_Technical\\_Bulletins@TescoCorp.com](mailto:Safety_Technical_Bulletins@TescoCorp.com)