

SLIM LINE SHRINK-LOK® HEAVY DUTY STOP COLLAR

CHALLENGE: A major Operator contacted Down Hole Products regarding centralization for their 9 5/8" close tolerance application, the 9 5/8" casing was required to pass an 11 3/4" 65# section in the wellbore with a 10.682" ID (10.526" Drift). Due to the anticipated force required to push the underreamed centralizer through the restriction DHP designed a reduced OD. Bi-directional Shrink-Lok high holding force stop collar employing P-110 grade material to allow for a reduction from the standard 10.625" OD to 10.300" while still maintaining body strength.



TEST OBJECTIVES:

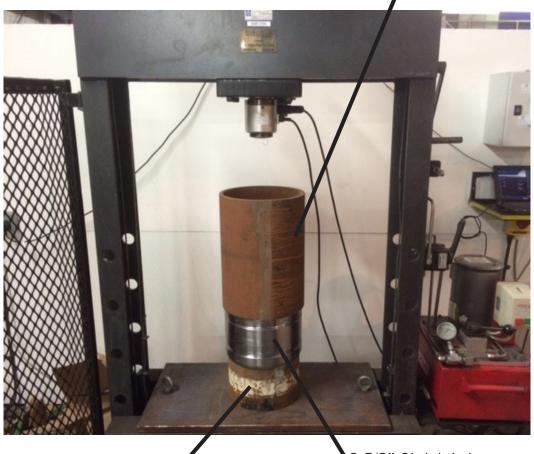
- To ensure the 9 5/8" Slim-Line Shrink-Lok was capable of withstanding a bidirectional direct loading up to 30 tonnes
- To ensure no swelling of the OD with max-load of 30 tonnes applied to the 9 5/8" Slim-Line Shrink-Lok

PERFORMANCE: Load/Holding force testing was performed at DHP's Test Facility in Aberdeen utilizing a 60 tonne vertical test press. The 9 5/8" Slim-Line Shrink-Lok stop collar was installed on a section of 9 5/8" 53.5# P-110 casing, with a section of 10 3/4" 51# L-80 casing slide over the 9 5/8" casing hard against the Slim-Line Shrink-Lok and positioned in the test press.

For further information on this tool and proposed applications, please contact your local DHP representative. Specifications may be liable to change without prior notice.



Load applied to the 10 3/4" 51# L-80



9 5/8" 53.5# P-110 Casing

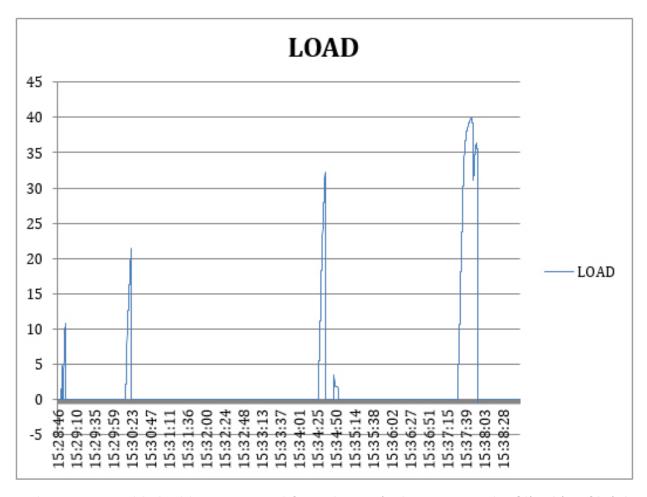
9 5/8" Shrink-Lok

Once the assembly had been lowered into position, load was applied in 10 tonne increments up to 30 tonnes, a total movement of 0.197" was recorded. The Slim-Line Shrink-Lok was measured on the OD with load applied where a minimal increase in OD was noted from Start OD of 10.293" to 10.304". The test assembly was then removed and reoriented to allow load to be applied from the opposite direction. The Slim-Line Shrink-Lok held, as designed, a force of 30 tonnes bi-directionally. Load was then increased to establish a fail point, this was established at 39.88 tonnes (88,000 lbs.) where the Slim-Line Shrink-Lok was seen to distort and lose grip.

Based on the testing performed, the DHP 9 5/8" Slim-Line Shrink-Lok high holding force stop collar is load/holding force rated to a max set down weight of 30 tonnes/ 66,000 lbs. at the tool.

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Once the test assembly had been removed from the vertical test press, the Slim-Line Shrink-Lok was cut off the 9 5/8" 53.5# P-110 test casing and the casing inspected for marking.



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