CASE STUDY | CENTEK UROS-CT | OFFSHORE

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# TIGHT TOLERANCE WELL, INDONESIA

## SUCCESSFUL CENTRALIZATION IN A TIGHT-TOLERANCE LINER APPLICATION

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| **Region:** | Asia Pacific |
| **Type:** | Tight Tolerance |

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|---|---|
| **Country:** | Indonesia |

## THE CHALLENGE

A well in Indonesia presented a demanding tight-tolerance centralization challenge. The 11-3/4" liner needed to pass through a 13-3/8" casing with an internal diameter of only 12.415", leaving minimal annular clearance for the liner and associated equipment.

With a high inclination of 74° and a total measured depth of over 7400 m, the operation carried an elevated risk of differential sticking, high drag, and potential mechanical interference. Maintaining wellbore integrity and achieving effective cement placement were critical priorities.

The engineering team required a centralization solution that would deliver sufficient restoring force to maintain standoff while minimizing drag and deformation—ensuring a smooth, uninterrupted run to total depth (TD).

## THE SOLUTION

A dedicated centralization plan was developed to address the complex mechanical and geometric constraints of the well. Centek's UROS-CT centralizers were selected following extensive engineering simulations, including Latload and Finite Element Analysis (FEA), to confirm optimal restoring force and flex behavior under lateral loading.

The UROS-CT's design offered the ideal balance between strength and flexibility—providing superior centralization while allowing the liner to navigate the narrow 12.415" ID restriction without excessive drag.

The complete assembly—40 sets of UROS-CT centralizers and 80 Ace stop collars—were installed precisely to the engineered spacing plan. This ensured consistent centralization coverage and mitigated the risk of tool interference in the tight annular clearance.

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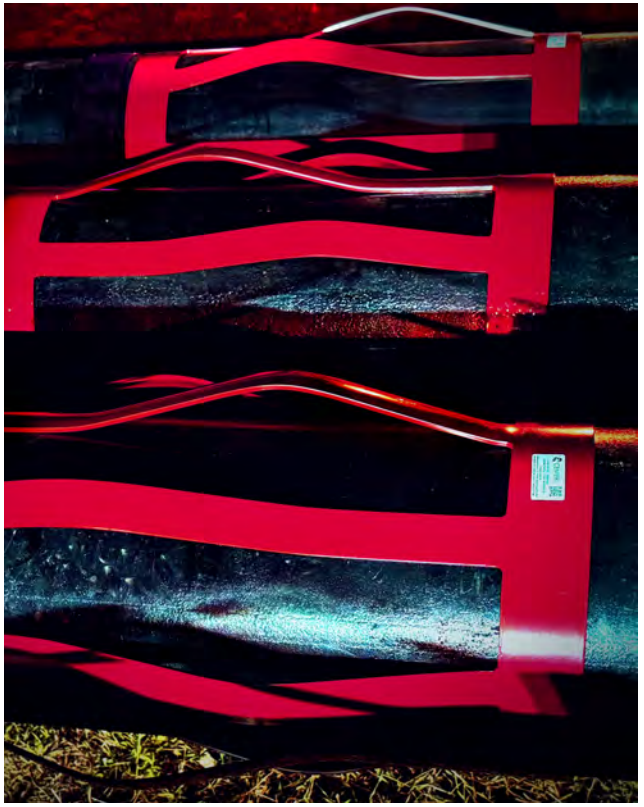
## THE RESULT

The 11-3/4” liner was successfully run to total depth without incident. The centralizers performed exactly as modeled, maintaining position and standoff throughout the descent. Despite the tight clearances, there were no signs of drag, differential sticking, or equipment damage.

Subsequent cement bond log (CBL) results confirmed good cement bond quality, indicating uniform sheath placement and effective zonal isolation. The smooth operation validated both the engineering methodology and the reliability of the chosen hardware.

This successful run demonstrates Centek’s capability to deliver engineered centralization solutions for complex, tight-tolerance, high-inclination wells—achieving operational efficiency, well integrity, and superior cementing performance.



> “During running in hole, we encountered a pressure spike and briefly reciprocated the string before continuing to total depth without issue. The Centek UROS-CT centralizers performed perfectly, allowing us to reach TD smoothly with tight clearances and no drag-related problems.
>
> The cement bond log confirmed a good cement job, and overall borehole stability remained excellent throughout the operation. This equipment combination played a key role in achieving a successful, trouble-free liner run.”
>
> Client Representative, Indonesia

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