Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Casing profile / cross-section



Simplified conceptual diagram — not dimensional specifications or tool-selection instructions.

ROP / Drivers Seat | ropinc.ca | Original conceptual diagrams | v1.0 · 2026-11-25

Professional use: field-reference and planning aids only. Verify inputs, units, current company procedures, equipment limits, licensed standards, and qualified engineering/well-control review before operational use. These tools do not confer API or IADC certification and are not equivalent to Landmark or WELLPLAN engineering software.

Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Tubing profile / cross-section



Production / service tubular

Tubing wall / fluid bore

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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Drill pipe / tool joint



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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Heavy-weight drill pipe



Thick body / centre upset

Heavy wall / fluid bore

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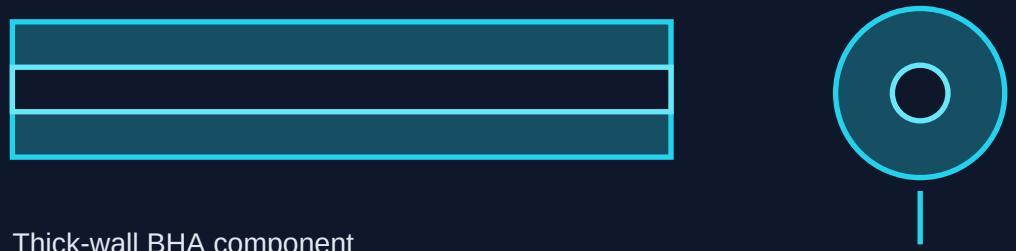
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Drill collar



Thick-wall BHA component

Small bore / heavy wall

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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Coiled tubing profile / cross-section



Continuous reel-fed tubular



Bore / wall

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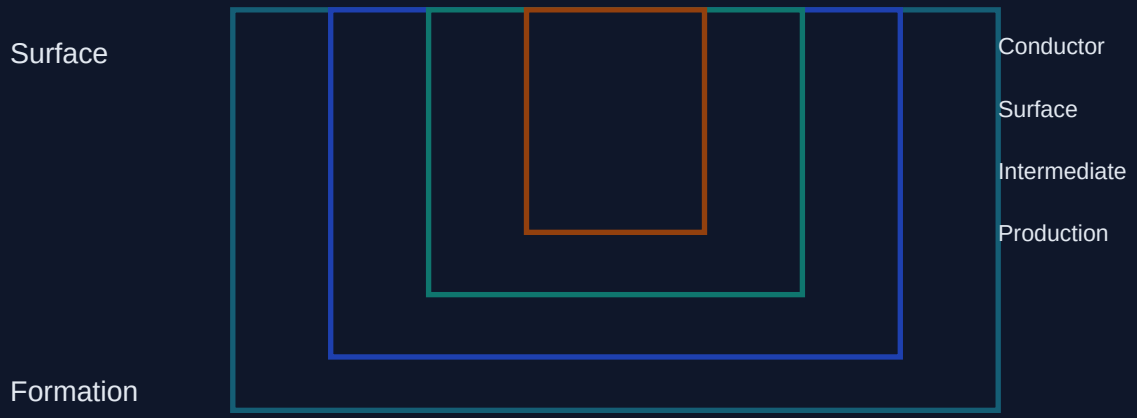
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Nested wellbore / casing strings



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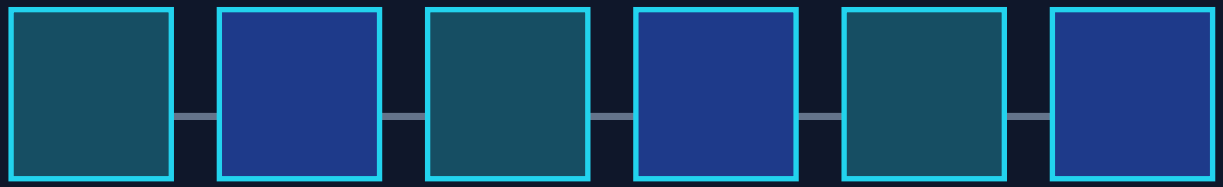
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

BHA anatomy



Conceptual sequence; actual BHA composition and order vary.

Simplified conceptual diagram — not dimensional specifications or tool-selection instructions.

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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Balanced-plug placement



Ideal hydrostatic balance before pull-out

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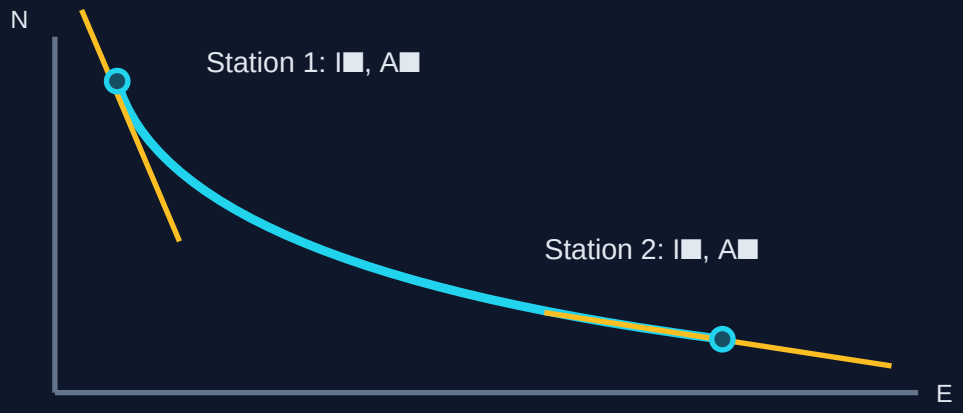
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Minimum-curvature survey geometry



Circular arc / ratio factor interpolation

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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Motor: slide vs rotate

SLIDE



Motor turns bit; toolface held

ROTATE



String and bit rotate

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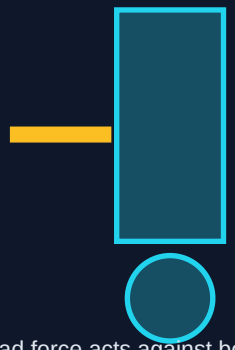
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

RSS steering concepts

PUSH-THE-BIT



Pad force acts against bore wall

POINT-THE-BIT



Internal steering points bit axis

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Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Fishing assembly / recovery concepts



Work string | Jars | Bumper sub | Overshot | Fish

Spear: internal engagement / Overshot: external engagement

Free-point and back-off: specialist assessment / approved program

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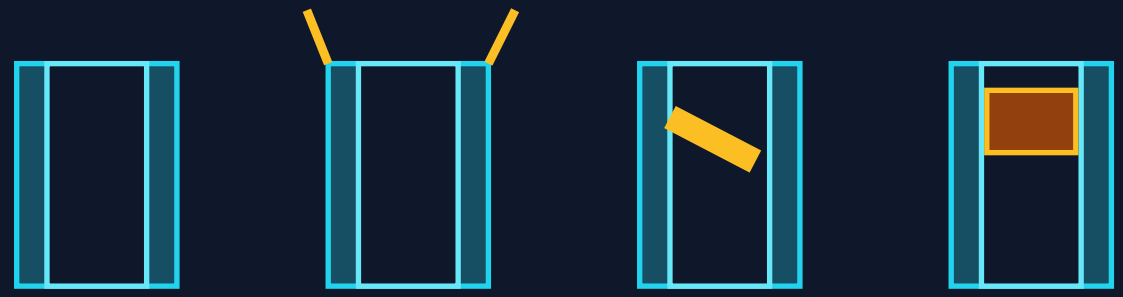
Remote Operations Professionals (ROP)

Drivers Seat

ENGINEERING REFERENCE

Fish-top / tubular conditions



Open tubular | Split / flared top | Collapsed bore | Obstruction

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