

TODAY'S AGENDA



Topics

Overview of well intervention techniques
Common Completion Accessories
Slickline Rigup Overview
Common Slickline Tools & Applications
Slickline as a Key for well intervention
Q&A Session



Objective

- **Exchanging Knowledge**
- **Introduction for the upcoming 5-day Slickline operation Course**

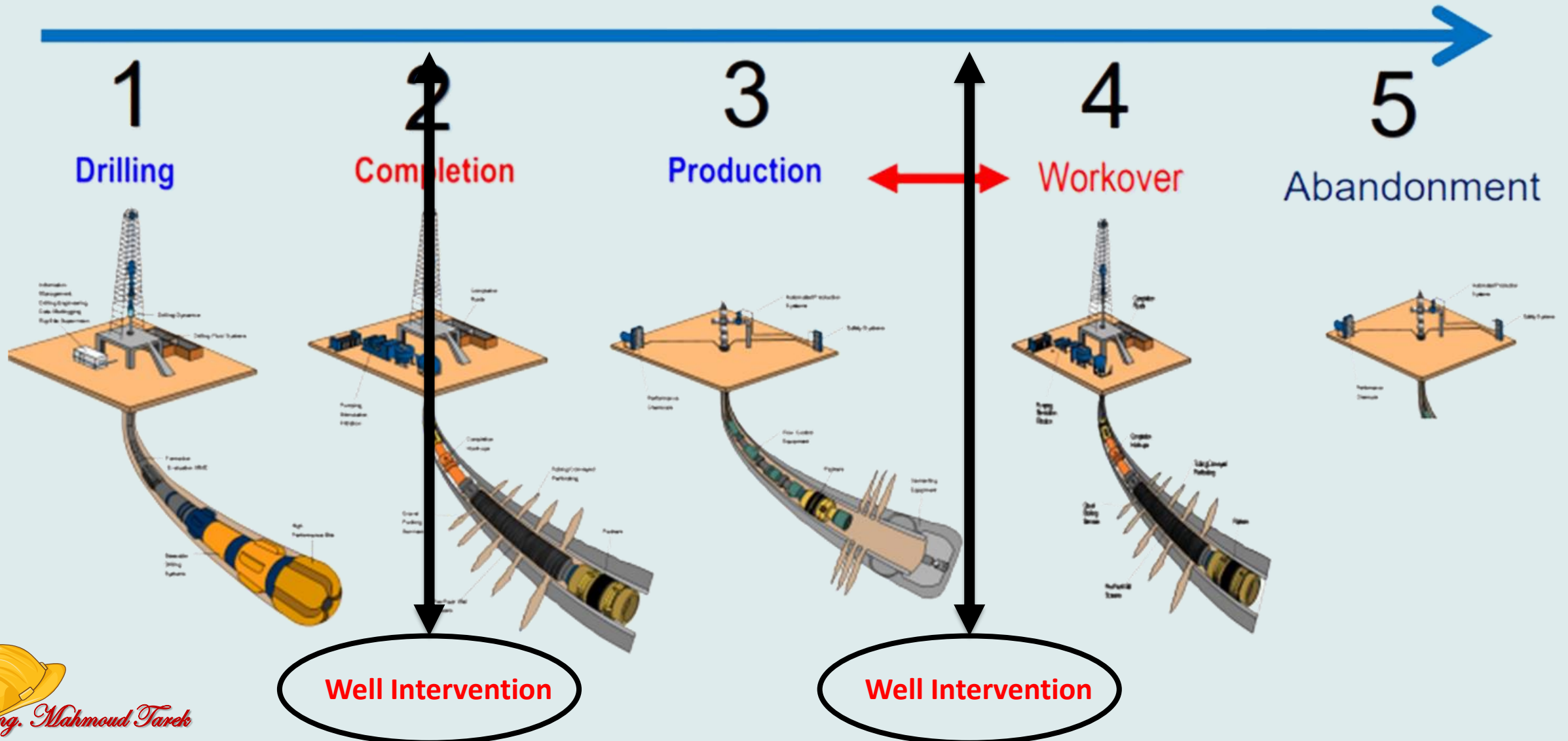


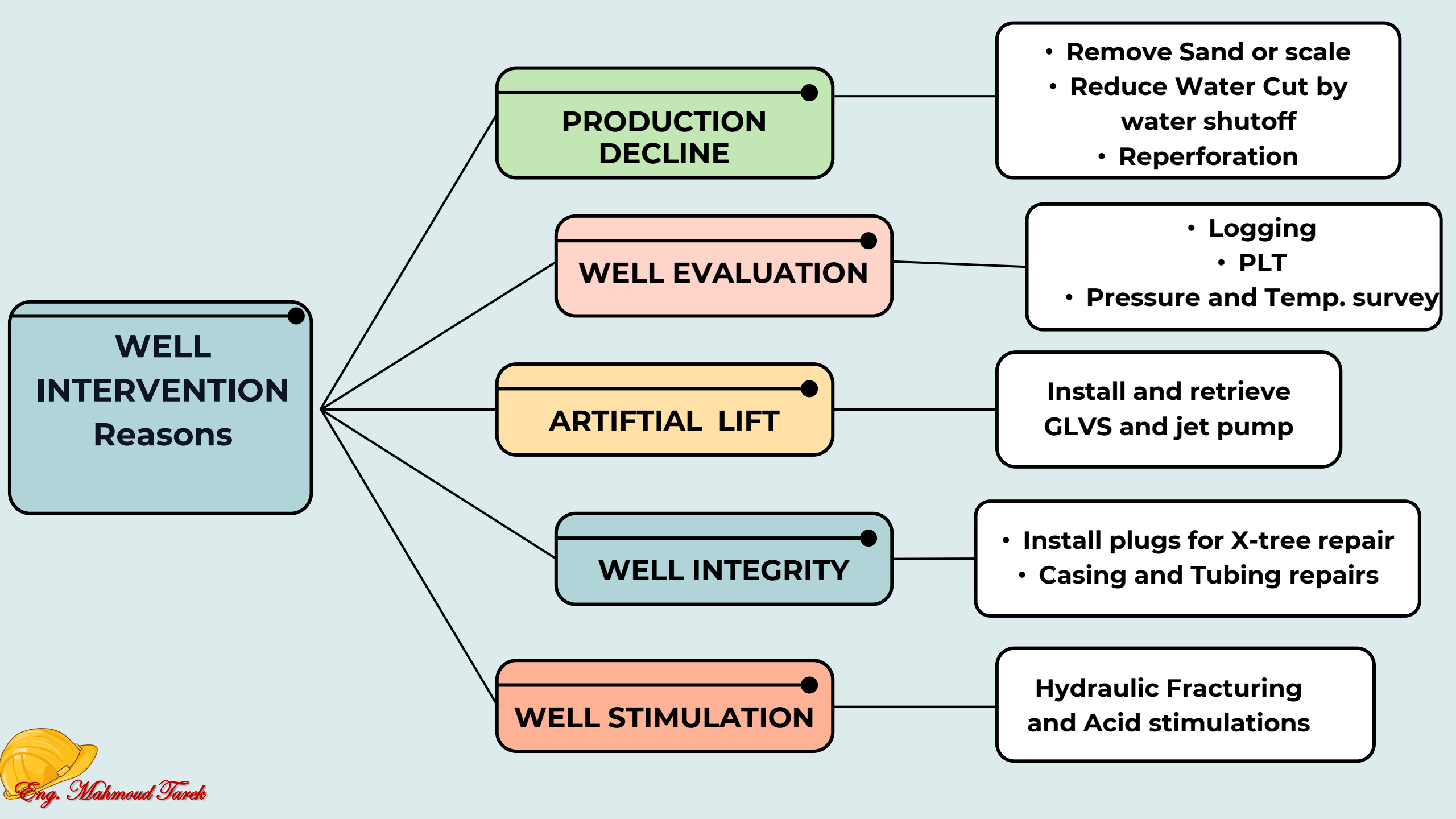
What is Well Intervention ?

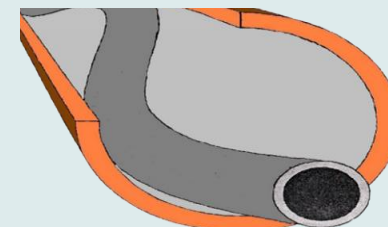
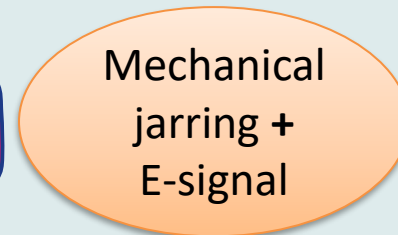
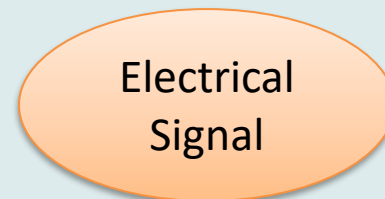
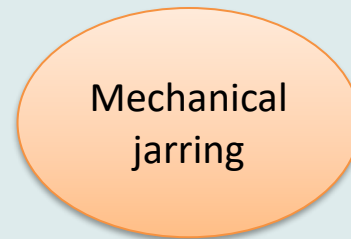
- **Well intervention** is defined as any operation performed on an oil or gas well, throughout the well's productive life or at the end of the productive life, in order to **improve production** performance, to extend production life, and to change condition of the well and **well Integrity**.



Well Life Phases

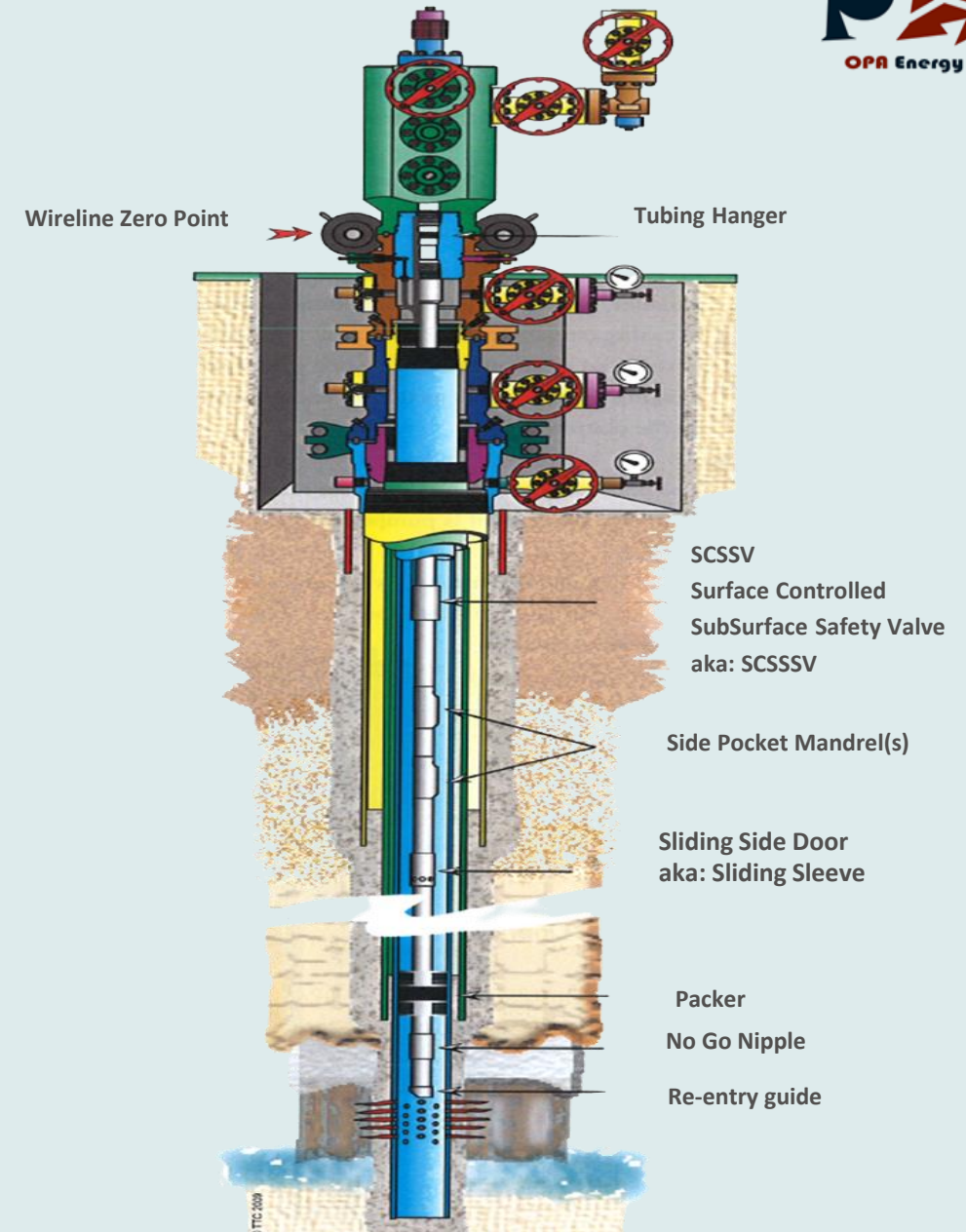






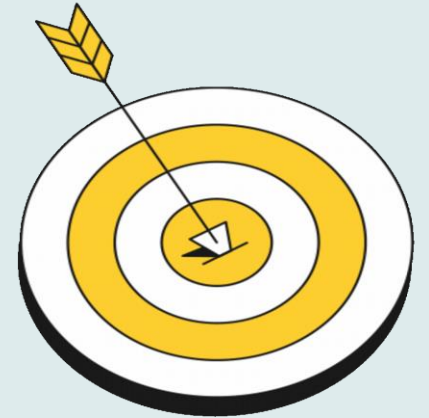
Common Tubing Accessories

1. **SSSV (Surface-Controlled Subsurface Safety Valve):** A downhole safety valve used for emergency well shut-in.
2. **Side Pocket Mandrel (SPM):** The component where the gas lift valve is installed to facilitate oil lifting to the surface.
3. **Sliding Side Door (SSD):** A device that allows communication between the tubing and the annulus.
4. **Packer:** A downhole device that isolates the oil-producing zone from the wellbore, ensuring oil flows through the tubing.
5. **Nipple:** An internal profile within the tubing that allows the installation of various downhole equipment, such as well plugs.

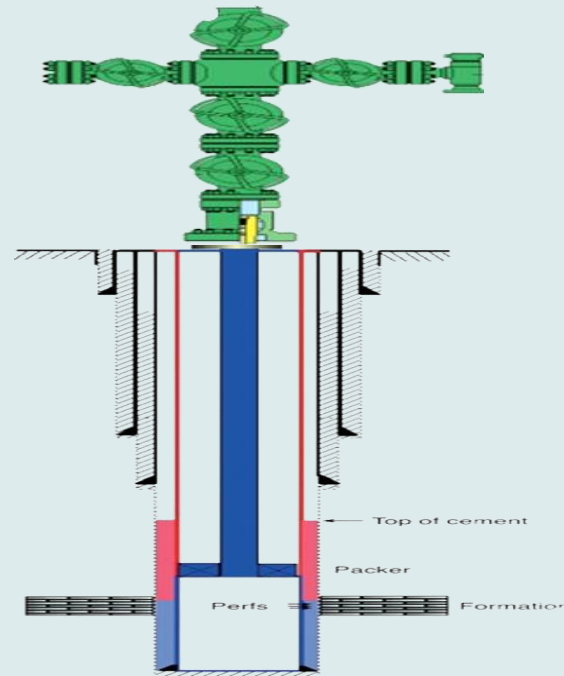


What is slickline main objective ?

- A method of introducing tools and equipment into a well on an uninterrupted length of wire.
- Principle technique used during the producing phase of the well for:
 1. **Access to downhole equipment (GLVC, WLRSSSV, SSD, Nipple.....)**
 2. **Obtain data for reservoir management (press. & temp. survey)**
 3. **Well technical integrity (Tubing drifting, Setting Plug)**



How do slickline tools deployed to the well ?



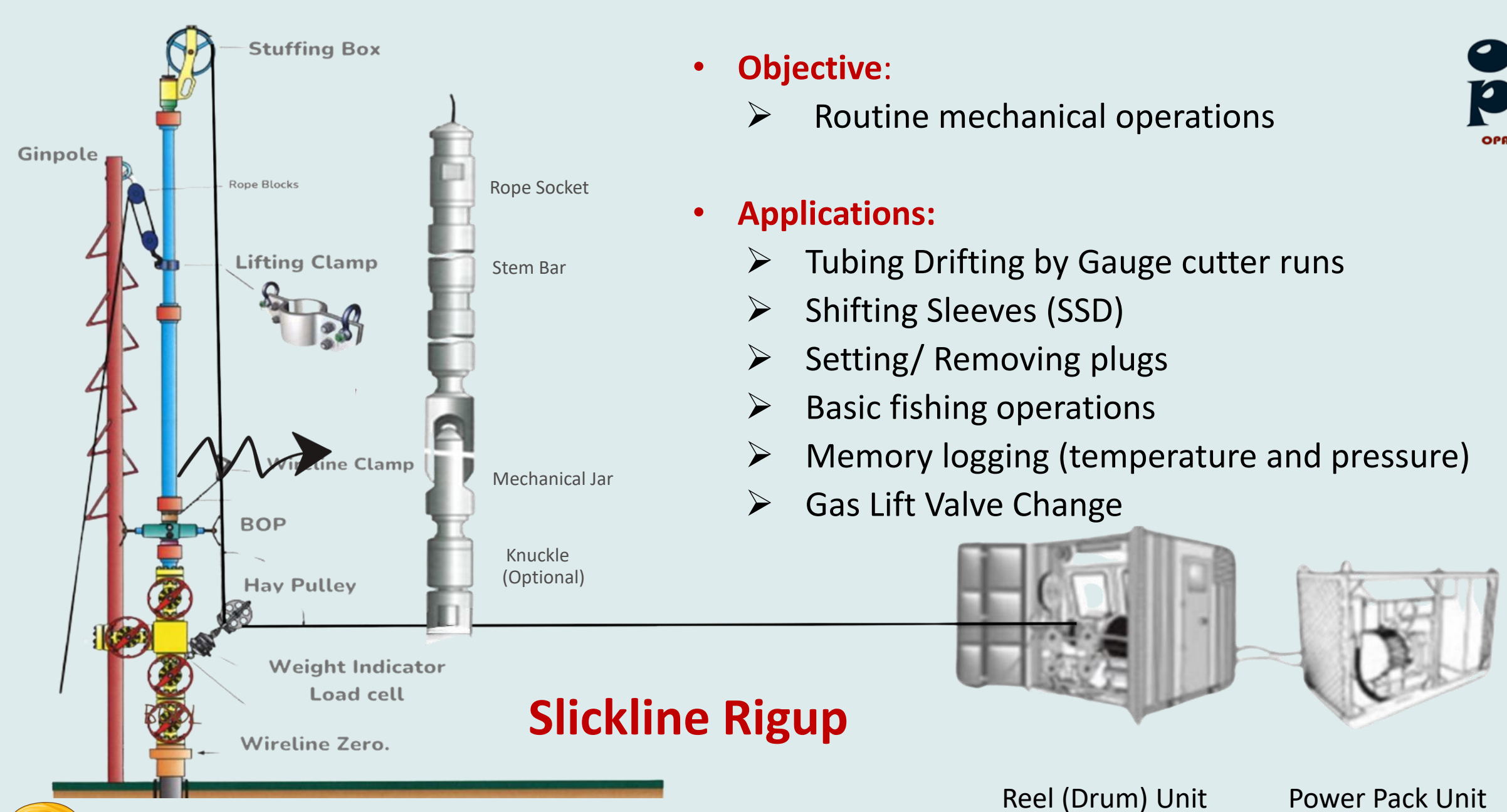
- **Objective:**

- Routine mechanical operations

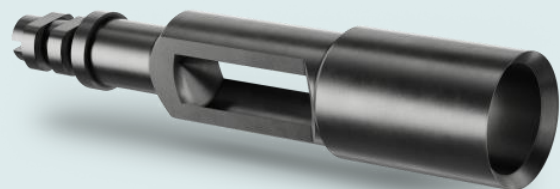
- **Applications:**

- Tubing Drifting by Gauge cutter runs
- Shifting Sleeves (SSD)
- Setting/ Removing plugs
- Basic fishing operations
- Memory logging (temperature and pressure)
- Gas Lift Valve Change

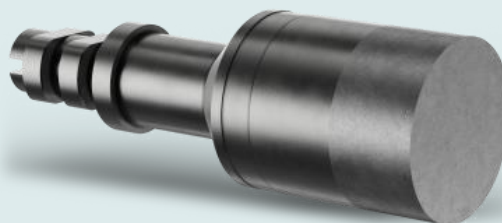
Slickline Rigup



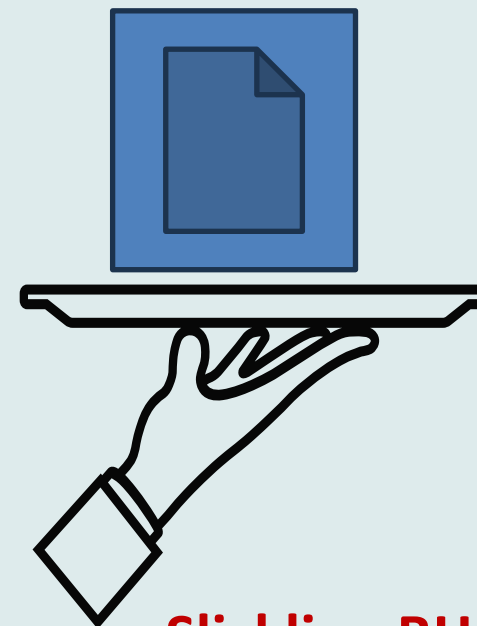
Common Slickline Tools



Gauge Cutter



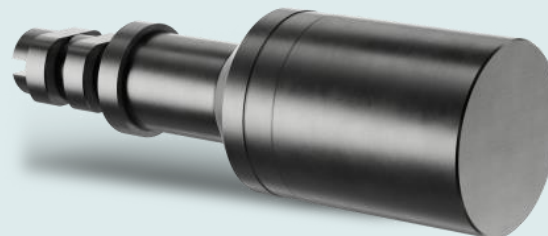
Lead Impression Block (LIB)



Slickline BHA



Swaging Tool



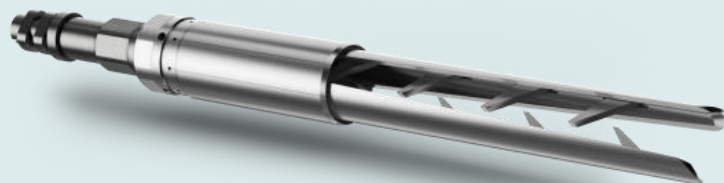
Blind Box



Rope Socket



Knuckle joint



Wireline Grab



Stem Bar

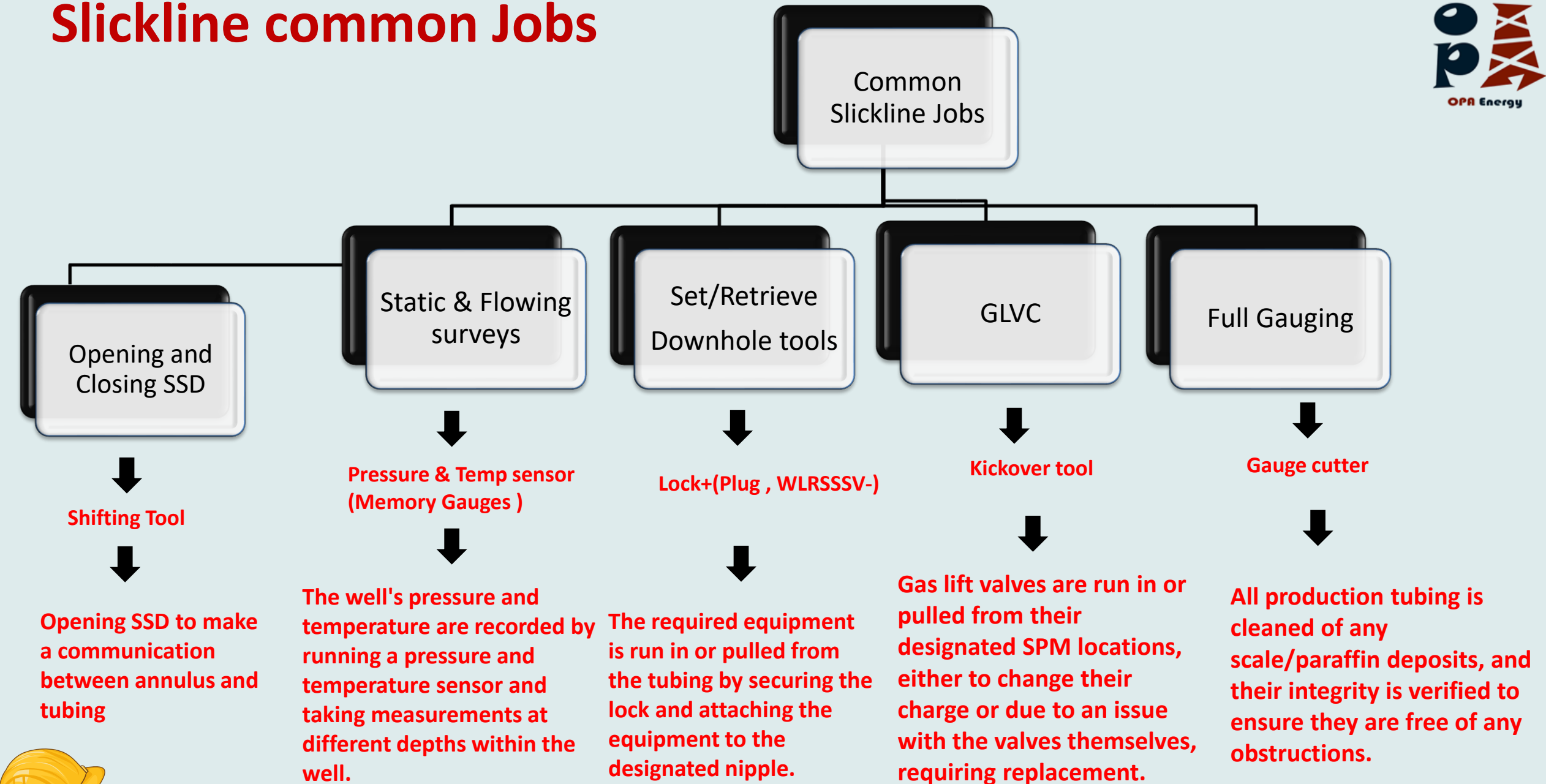


Pulling Tools

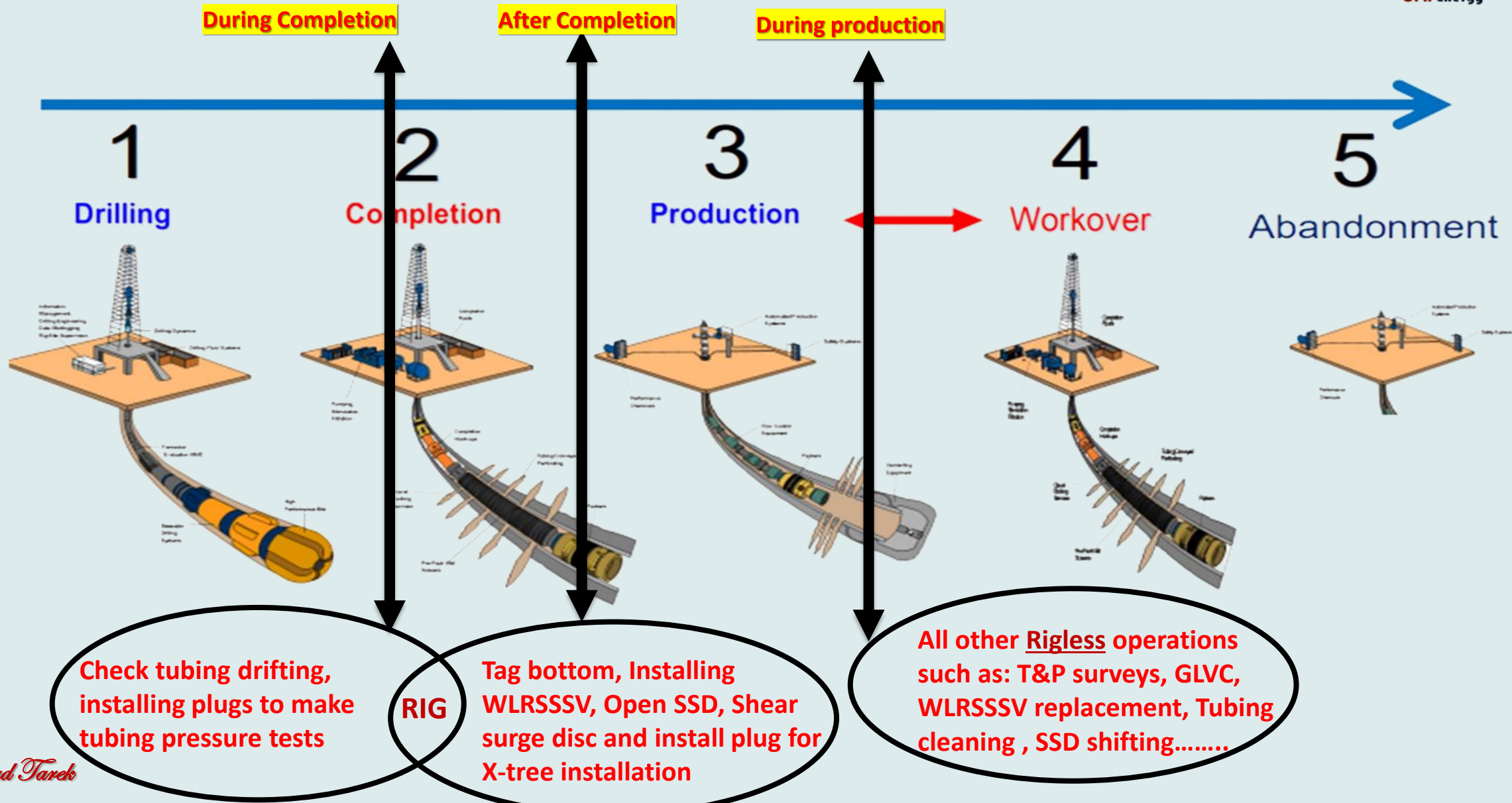


Mechanical Jar

Slickline common Jobs



Slickline common Jobs timeline



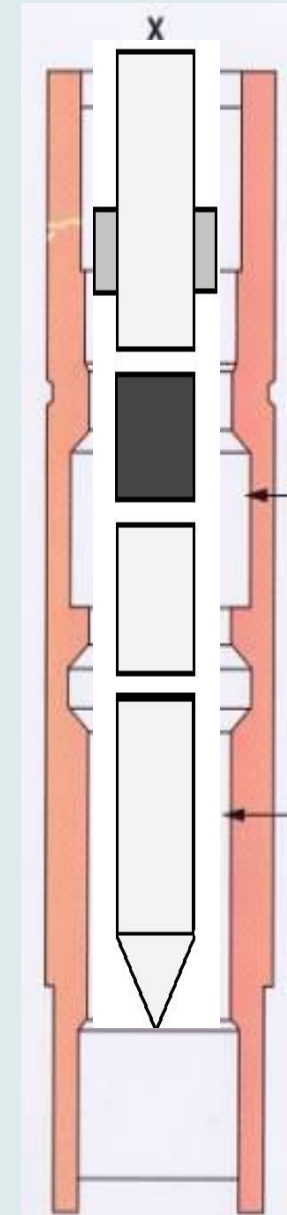
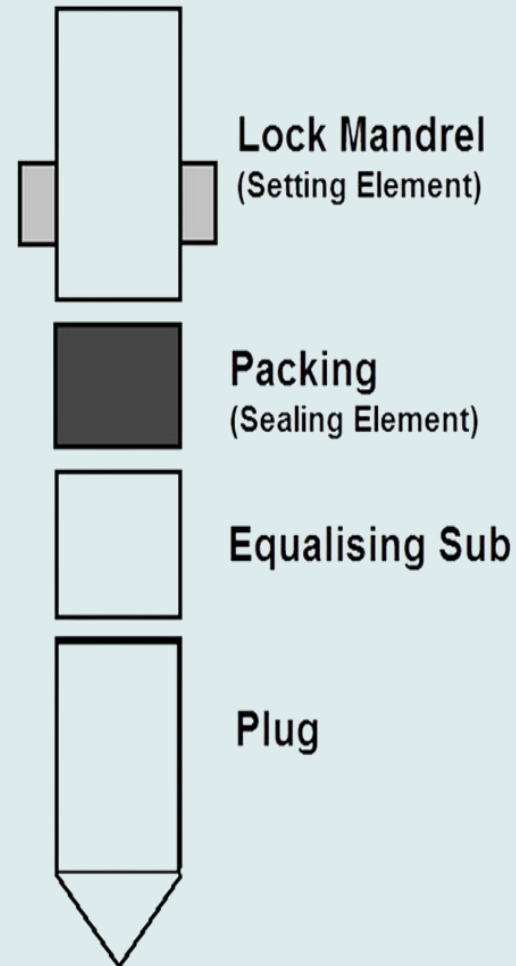
Mechanical Plug (Inside Tubing)

- **Mechanical plug consists of four main parts:**

- ✓ Lock Mandrel (setting element)
- ✓ Packing (sealing element)
- ✓ Equalizing sub
- ✓ Plug

- **Applications**

- ✓ Pressure testing of tubing
- ✓ Setting production packer
- ✓ Zonal isolation
- ✓ Changing X-tree



Landing Nipple

+ Plug

Lock Mandrel + PLUG

Landing Nipple Profile

Polished bore area

No-go Profile

Fishing Neck

Locking Keys

Packing

Equalizing Sub

Plug

- Plug
- WLRSSSV
- Separation Tool
- Downhole Memory Gauge

Slickline: The key to well intervention



1. First drift run:

A preliminary slickline drift run should be conducted to confirm the **wellbore's accessibility** and ensure there are no obstructions. This helps prevent unexpected issues during subsequent well intervention operations.

2. Preparing for Other Interventions:

Wireline retrievable surface-controlled subsurface safety valves (**WR-SCSSVs**) should be retrieved prior to rigging up any other well intervention method . This ensures a clear path and safe setup for operations.

3. Data Collection:

In certain cases, slickline operations are required to obtain **essential downhole data**, such as reservoir pressure measurements These data are vital for selecting the proper treatment Techniques and (e.g., acidizing or mud acid treatments) in addition to well production evaluations.

4. Sliding Sleeve Door (SSD) Shifting:

Slickline may be used to open or close SSDs to achieve **zonal communication** or isolation before running any tools into the well.

5. Zonal Isolation:

When required, slickline can be utilized to set plugs for **isolating specific zones** prior to commencing any operations.





OPA Slickline Operations Course Roadmap



01

Foundations of Well Intervention

Get introduced to the fundamentals of well intervention, understand slickline's role among other techniques, and explore basic well architecture and job preparation essentials.

02

Surface Equipment and Pressure Control

Learn the components of a slickline unit, master surface rig-up procedures, pressure control systems, and essential safety practices for secure operations.

03

Downhole Tools and Completion Interfaces

Dive into slickline tool classifications, operational principles, and key completion accessories such as nipples, landing profiles, and lock mandrels.

04

Slickline Operations and Field Applications

Understand running and pulling operations, flow control devices, and hands-on troubleshooting of surface-controlled subsurface safety valves (SSSVs).

05

Fishing, Calculations, and Case Studies

Apply slickline knowledge to real-world scenarios through fishing operations, wire recovery methods, field case discussions, and an interactive course quiz.

THANK
YOU

Any Questions



Don't hesitate to contact



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