

## INTERNAL LIFTING TOOLS FOR PILE HANDLING / UPENDING

OCS has developed and fabricated a series of Internal Lifting Tools (ILTs) specifically engineered for the safe lifting, upending, and in some cases, horizontal handling of tubular piles during offshore construction operations.

Designed for robust deployment across a wide diameter range (24" to 158"), these tools are hydraulically actuated, featuring reliable clamping mechanisms and integrated safety features to ensure secure engagement throughout the lift cycle.

Each ILT is supplied with its own hydraulic power pack and hose spooler, enabling controlled engage and release operations via hydraulic downlines or optional hot stab connection. The system is designed for offshore barge or vessel-based lifts and is adaptable to site-specific crane hook capacities and operational constraints.

The latest addition to the ILT fleet is our patent-pending 158" (4.0m) Internal Lifting Tool, capable of handling piles with wall thicknesses of up to 100mm and vertical load ratings of up to 800 metric tons (MT). This unit combines precision engineering and advanced hydraulics to offer a safe and efficient solution for handling ultra-large diameter piles.

Specifications for all three ILT models, including diameter range, wall thickness, working load limits, pressure rating, connection size, fluid type, and weight are detailed in the table below.

ILT Specifications			
Pile diameter range :	30 - 54"	24 - 42"	4.0m (158")
Wall thickness range :	12mm - 60mm	12mm - 40mm	65mm – 100mm
Working load limit (WL) vertically :	500 MT	330 MT	800 MT
Working load limit (WLL) horizontal :	125 MT	45 MT	400 MT
Clamping pressure :	165 Bar	180 Bar	230 bar
Connection :	1/2" QC/QD Coupling	1/2" QC/QD Coupling	1" QC/QD Coupling
Hydraulic fluid :	Shell Tellus 68	Shell Tellus 68	Shell Tellus 68
Weight :	4.4 MT	3 MT	46.5 MT



