

PIPELINE MACHINERY

Review

Volvo Construction Equipment

Targeting customers globally in the onshore oil and gas industry, Volvo pipelayers represent a most significant innovation for the sector.

Their innovative design represents a major technical advance compared with traditional, tracked tractors with side booms, a design that has changed little since the 1930s.

Volvo's excavator-based machines, combined with state-of-the-art lifting technology, enable work through 360°, with full lifting performance and functionality at all radius positions. Unattainable with the traditional tractors, the resulting precise, efficient load positioning, increases both productivity and safety, allowing easy positioning and directional changes.

With a wider gauge and lower centre of gravity - the boom mounted inboard of the track frame and closer to the machine's centre - they offer superior stability to work on up to 35° slopes, with greater lift capacity. The 150 t lift capacity of the largest model - PL7015 - is 40% greater than the largest track-type tractor side boom ever produced.

Heavily designed boom, car body, and roller frames provide structural integrity to manage higher loads. Longer boom lengths - up to 11.0 m on PL7015 - offer higher hook height for a better work positioning, or working further away from the trench, avoiding caving in side walls.

With an on-board Load Management System (LMS), the operator can see what he can safely pick up, depending on the angle of the boom, cab position relative to the tracks and, the incline on which the machine is operating. Load charts are constantly updated for 360° rotation and infinite machine geometries up to a 35° grade slope, comparing these with current operating conditions via a graphic display on an in-cab monitor, including warnings and operational

aids. Load-indicating light bars, located on the boom tips, provide visible warning to the operator, adjacent operators and ground personnel, optimising safety and site management.

An anti-two-block device, with auto kick-out at full lift, is standard, further improving safety.

An elevated cab, plus an asymmetric boom design, substantially improve visibility, for greater safety when working with personnel on the ground/in the trench.

High ground clearance enables work in rugged and muddy conditions, ensuring a solid footing. Single and double grouser shoes are available.

A key benefit of these new pipelayers is the cost saving versatility of their design. With their excavator platform, these are 'multi-purpose' machines that can be quickly converted into a high production excavator or, used in a variety of heavy lift applications.

Ease of transportation can often limit optimum machine size selection on a project, or in anticipation of future projects and Volvo has thought very carefully about this. The larger models are designed with removable counterweights, variable gauge (PL4608) or, on the two larger models (PL4611/PL7015), easily removable track side frames, allowing disassembly to roadable weight modules. Self disassembly/re-assembly - in less than an hour - requires no other lifting machines, lowering the cost of ownership over the lifetime of the machine.

Unlike 'weather exposed' conventional track-type tractor side booms, Volvo pipelayers feature the 'Care Cab'. Known for spaciousness, excellent visibility, ergonomic controls, climate control; operator comfort is substantially increased; seldom more important than on harsh, demanding pipeline projects. ●



The excavator-based design allows for lift and load positioning through 360° for maximum flexibility and infinite load positioning.



Excellent stability and traction enable working on up to 35° grade slopes.