



PALLETIZED LOAD SYSTEM (PLS)

Mission

Perform line haul, local haul, unit resupply, and other missions in the tactical environment to support modernized and highly mobile combat units. Rapid movement of combat configured loads of ammunition and all classes of supply, shelters and containers.

Entered Army Service

1993



Description and Specifications

The Palletized Load System (PLS) consists of a prime mover truck with an integral self-loading and unloading capability, a payload trailer (M1076), and demountable cargo beds, referred to as flatracks. The PLS prime mover truck carries its payloads on its demountable flatrack cargo beds, or inside 8 x 8 x 20 ft International Standards Organization (ISO) containers, or shelters. The PLS prime mover truck comes in two mission-oriented configurations: the M1074 and the M1075. The M1074 is equipped with a variable reach Material Handling Crane (MHC) to support forward-deployed Artillery units. The M1075, without MHC, is used in conjunction with the M1076 trailer in support of transportation line haul missions. The M1076 trailer, capable of carrying payloads up to 16.5 tons, is equipped with a flatrack that is interchangeable between truck and trailer. The prime mover truck and trailer form a self-contained system that loads and unloads its cargo without the need for forklifts or other material handling equipment. Without leaving the cab, the driver can load or unload the truck in less than one minute, and both truck and trailer in less than five minutes.

Two additional pieces of equipment enhance PLS flexibility. The M3 containerized roll-in/out platform (CROP) is an A-frame type flatrack which fits inside a 20-ft ISO container. A container handling unit (CHU) enables PLS to pick up and transport ISO containers without using a flatrack. Flatracks and CROP are interchangeable between PLS and the HEMTT-LHS.

The PLS prime mover features a central tire inflation system that significantly improves off-road mobility. Current NATO agreements require PLS to maintain interoperability with comparable British, German and French systems through the use of a common flatrack.

PLS is a major enabler of the Army's drive to achieve a distribution based logistics system. The PLS-Enhanced (PLS-E) program procures the Movement Tracking System, which provides a multitude of tactical wheeled vehicles with Global Positioning System capability and two-way digital messaging. The MTS enables the commander to track logistics assets over the range of the battle space. The two-way messaging allows redirection of logistics assets as needs develop.

<i>Truck payload:</i>	16.5 tons
<i>Trailer payload:</i>	16.5 tons
<i>Truck length:</i>	431 in

Trailer length:	327.4 in (includes trailer tongue, with flatrack)
Truck width:	96 in
Trailer width:	95.7 in
Flatrack dimensions:	8 x 20 ft
Engine type:	500 horsepower Detroit Diesel
Transmission:	automatic (5-speed forward, 1 reverse)
Number of driven wheels:	10
Range:	300 mi
Fording capability:	48 in
Air transportability:	C-5A, C-17, C-141 (with preparation)
Cab:	2 person

Manufacturer

Truck and CHU (Oshkosh Truck – Oshkosh, WI)

Trailer and Flatrack (Oshkosh Truck – Bradenton, FL)

CROP (Summa Technologies – Huntsville, AL; Hyundai Precision America – San Diego, CA)

Information about this equipment provided by: www.goarmy.com

For further information visit: www.minnesotanationalguard.org