

PW 32001 | PW 35001-SH

**PALFINGER**

LIFETIME EXCELLENCE

# PRODUCT INFORMATION

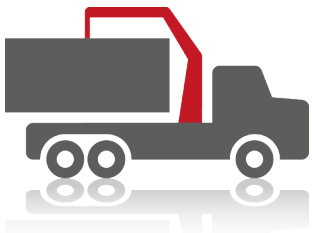


# NEW HIGH PERFORMANCE CRANE MODELS

## PW 32001 | PW 35001-SH

PALFINGER PW cranes set a benchmark in the material handling industry. Industry leading capacities and service friendly designs offer the highest power-to-weight cranes on the market.

- PW 360
  - PW 380
  - PW 400
- PW 32001 & PW 35001-SH (A boom)**  
(B boom)  
(C boom)



# TECHNICAL SPECIFICATIONS

The new models incorporate PALFINGER High Performance crane generation features. Serviceability was a core concept in developing the new PW cranes.

|                                  | <b>PW 32001 (A)</b>         | <b>PW 35001-SH (A)</b>      |
|----------------------------------|-----------------------------|-----------------------------|
| <b>Max. Lifting Moment</b>       | 27.8 mt<br>201,340 ft. lbs. | 31.0 mt<br>224,640 ft. lbs. |
| <b>Max. Hydraulic Outreach</b>   | 43' 0"                      | 43' 0"                      |
| <b>Slewing System</b>            | TURNTABLE Bearing           | TURNTABLE Bearing           |
| <b>Slewing Range</b>             | 470°                        | 470°                        |
| <b>Linkage System</b>            | Power Link                  | Power Link                  |
| <b>Operating Pressure</b>        | 4,640 psi                   | 5,075 psi                   |
| <b>Stabilizer Spread</b>         | 21' 8"                      | 21' 8"                      |
| <b>Weight (FL, R3X, STZS3,4)</b> | 6,742 lbs.                  | 6,742 lbs.                  |
| <b>Net Slewing Moment</b>        | 28,910 ft. lbs.             | 28,910 ft. lbs.             |
| <b>Gross Slewing Moment</b>      | 42,700 ft. lbs.             | 42,700 ft. lbs.             |

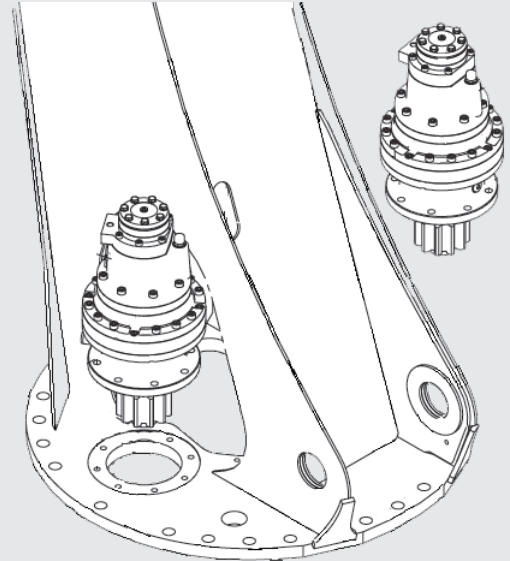
|                                  | <b>PW 32001 (B)</b>         | <b>PW 35001-SH (B)</b>      |
|----------------------------------|-----------------------------|-----------------------------|
| <b>Max. Lifting Moment</b>       | 24.8 mt<br>179,040 ft. lbs. | 27.6 mt<br>199,759 ft. lbs. |
| <b>Max. Hydraulic Outreach</b>   | 52' 8"                      | 52' 8"                      |
| <b>Slewing System</b>            | TURNTABLE Bearing           | TURNTABLE Bearing           |
| <b>Slewing Range</b>             | 470°                        | 470°                        |
| <b>Linkage System</b>            | Power Link Plus             | Power Link Plus             |
| <b>Operating Pressure</b>        | 4,640 psi                   | 5,075 psi                   |
| <b>Stabilizer Spread</b>         | 21' 8"                      | 21' 8"                      |
| <b>Weight (FL, R3X, STZS3,4)</b> | 7,716 lbs.                  | 7,716 lbs.                  |
| <b>Net Slewing Moment</b>        | 28,910 ft. lbs.             | 28,910 ft. lbs.             |
| <b>Gross Slewing Moment</b>      | 42,700 ft. lbs.             | 42,700 ft. lbs.             |

|                                  | <b>PW 32001 (C)</b>         | <b>PW 35001-SH (C)</b>      |
|----------------------------------|-----------------------------|-----------------------------|
| <b>Max. Lifting Moment</b>       | 23.4 mt<br>168,834 ft. lbs. | 26.0 mt<br>188,409 ft. lbs. |
| <b>Max. Hydraulic Outreach</b>   | 61' 0"                      | 61' 0"                      |
| <b>Slewing System</b>            | TURNTABLE Bearing           | TURNTABLE Bearing           |
| <b>Slewing Range</b>             | 470°                        | 470°                        |
| <b>Linkage System</b>            | Power Link Plus             | Power Link Plus             |
| <b>Operating Pressure</b>        | 4,640 psi                   | 5,075 psi                   |
| <b>Stabilizer Spread</b>         | 21' 8"                      | 21' 8"                      |
| <b>Weight (FL, R3X, STZS3,4)</b> | 7,829 lbs                   | 7,829 lbs.                  |
| <b>Net Slewing Moment</b>        | 28,910 ft. lbs.             | 28,910 ft. lbs.             |
| <b>Gross Slewing Moment</b>      | 42,700 ft. lbs.             | 42,700 ft. lbs.             |

# FEATURES

## NEW ROTATION SYSTEM

- » Proven TURNTABLE rotation system from the PALFINGER large crane class. Turntable from our 34mt knuckle boom crane.
- » Better durability in poor greasing applications.
- » 51 % increase in slewing torque.
- » Dual drive motors standard.
- » Smooth operation with very low backlash.
- » Minimal movement of hoses in crane column.
- » Ideal hose routing with large radius for increased hose life.
- » Swivel fittings standard at mid-point in column. Prevents hose twisting during slewing. Also allows for easier service.
- » Reduces mounting footprint by 1.8" (45mm). Increased deck space on truck.



NEW



OLD

## NEW EXTENSION SYSTEM

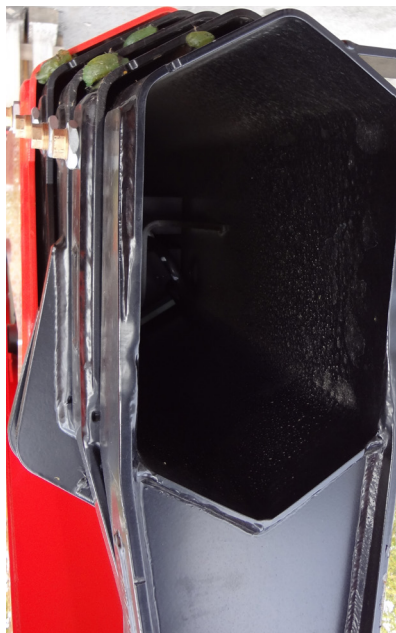
Detailed review went into the design of the next generation extension system. Maintenance was the core principal of the design philosophy.



- » New cylinder pack design.
- » New fitting system on cylinder pack.
- » Cylinder pack is easily removed for service by removal of mounting pins only.
- » Maintenance free extension system.
- » Reinforced lifting lug.
- » Outer boom cylinder guard improved to cover radius of piston rod.



NEW



OLD

# FEATURES CONTROLS

## A. RADIO REMOTE CONTROLS

- » Boom specific load chart.
- » Soft grip controls.
- » Prepared for Auxiliary Stabilizers (2x 4 function control valves)
- » NEW: Switch from CRANE mode to OUTRIGGER mode via NEW selector switch (no key required).
- » Bubble level with mirror.
- » Emergency Stop.
- » Available with SCANRECO remote as standard.
- » HKONS - Top seat with remote bracket optional.

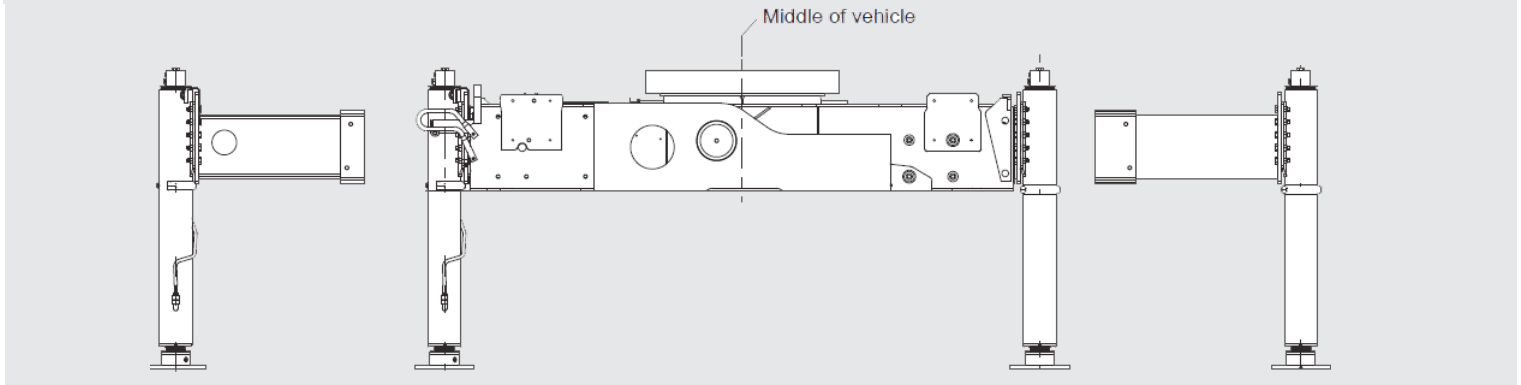
## B. TOP SEAT CONTROLS

- » Boom specific load chart.
- » Soft grip controls.
- » Prepared for Auxiliary Stabilizers (2x 4 function control valves)
- » Bubble level with mirror.
- » Emergency Stop.



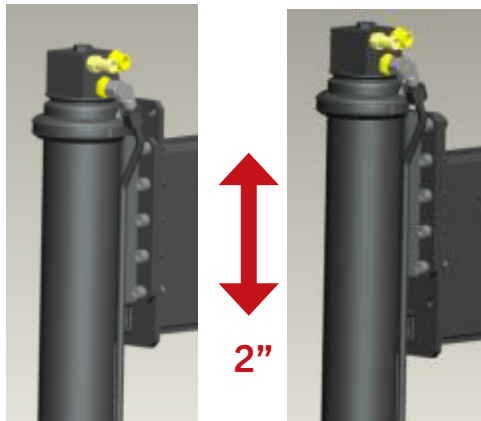
# FEATURES SUPPORT

- » Hydraulic extendable stabilizer beams standard (R3X) with spread of 21'8".
- » Crane equipped with 2x 4-function control valves mounted on each for auxiliary stabilizer beams.



**STABILIZER WARNING LIGHTS**

- » LED warning lights on stabilizer cylinders improve visibility



**HIGH ADJUSTABLE STABILIZERS**

- » Stabilizers can be adjusted for optimum ground clearance and penetration.



**NEW HYDRAULIC TILTABLE STABILIZERS**

- » 180 degree hydraulic tilting stabilizers (optional)
- » Ideal for space savings on installation (tool boxes or oil tank positions)
- » Ideal for operators overcoming barriers during crane set-up.



**NEW TILTABLE STABILIZER PLATES**

- » The stabilizer plates are tiltable 14° and adjust for optimal ground contact.

# ADDITIONAL FEATURES | OPTIONS

## OPTIONAL TRANSPORT SWITCHES

Factory mounted switches to indicate transport positions. Wired to an electrical box for use with an optical or acoustic warning signal by installer.

- » Check of boom in transport position switch. (TRAN2)
- » Check of outriggers and stabilizers retracted. (ABSTW)



## OPTIONAL ACTIVE OSCILLATION SUPPRESSION (AOS)

- » Loads are held steady, rather than bouncing after abrupt stops.
- » The boom experiences much less shock loading.
- » Novice crane users can operate the crane much smoother and more accurately.
- » Experienced crane users can run the crane faster, with no loss of accuracy.
- » Only available with remote control operation.



U.S. Patent # 6,328,173. Other patents apply.

## DOUBLE HOSE CLAMP ON COLUMN

- » Improved strength of fastening system with dual clamps on crane column.



NEW



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## HOSE PROTECTION

- » Hose protection between main and outer boom
- » Prevents premature failure due to abrasion and UV damage.



NEW



OLD





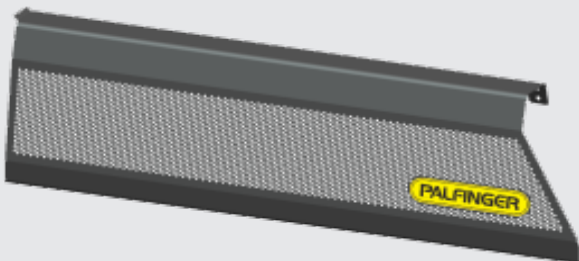
## NEW MAINTENANCE FREE EXTENSION SYSTEM

- » Industry first Maintenance Free Boom System.
- » High quality automotive style dipped paint process in combination with high quality composite guide pads, offers a one time factory installed grease only.
- » No greasing of the boom extension system required.
- » Smooth operation.
- » Reduced service time and costs.
- » Clean operation and reduces grease dripping on loads.



## NEW HOSE TRAY PROTECTION COVER

- » Optional - hose tray protection cover available in modern design.



## NEW REINFORCED HOSE TRAYS

- » Hose trays have been reinforced.
- » Improved strength and more durable.



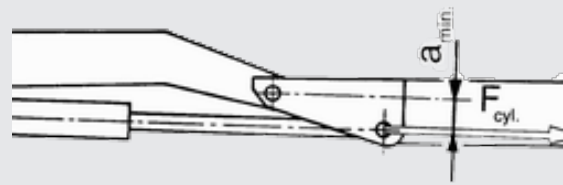
## POWERLINK

The PowerLink linkage system is a special connection between the main boom and outer boom used to increase lifting power at awkward boom angles.

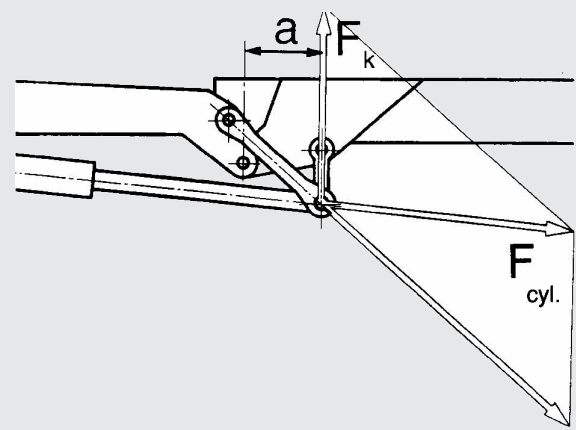
A fully unfolded boom with a simple connection suffers from very poor geometry because the distance between the lifting cylinder and hinge points becomes small. This results in a loss of leverage, and the boom loses as much as 70% of its lifting power. The PowerLink system preserves the optimum geometry by keeping the distance between the lifting cylinder and hinge point the same. Lifting power is kept near 100% even when the boom is flat-out.

- » Maximum load can be lifted nearly straight up (load lines)
- » Easier crane operation with constant speed.

Inferior "simple" Connection



PowerLink Connection

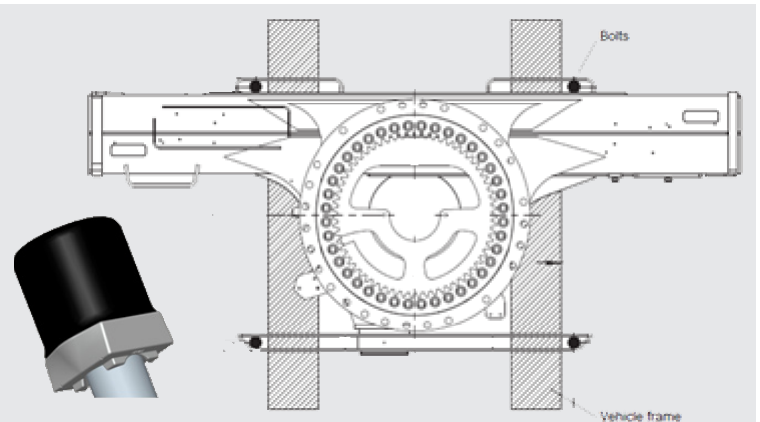


## MOUNTING HARDWARE

Standard mounting hardware is 8-bolt kit. (BRI-8)

Optional kits:

- » 8-bolt with coated hardware (rust-free) (BRI-8B)
- » 4-bolt (BRI-4)
- » 4-bolt with coated hardware (BRI-4B)
- » Offers flexibility in mounting configuration.
- » Ideal when chassis components interfere (eg: exhaust, DEF tanks)



## COMPETITOR COMPARISON

|                     | COMPETITOR 1        | COMPETITOR 2        | PW 35001-SH (C)     |
|---------------------|---------------------|---------------------|---------------------|
| <b>Crane Weight</b> | 11,713 lbs.         | N/A                 | 7,829 lbs.          |
| <b>Capacity</b>     | 2,740 lbs. @ 56' 9" | 2,500 lbs. @ 59' 2" | 2,620 lbs. @ 56' 9" |
|                     |                     |                     | 2,505 lbs. @ 59' 2" |
|                     |                     |                     | 2,450 lbs. @ 61' 0" |

# FUNCTIONALITY

## CRANE HEIGHT

Crane column height has been reduced 4.5" to offset the rising chassis heights. Offering a wider choice in chassis selection.

## PAYLOAD

Chassis Payload:

US federal bridge formula with PW 35001-SH (C)

- » 22,700 lbs to 23,250 lbs maximum payload
- » A fully loaded truck could fit 876 sheets of 4' x 8' x 1/2" light-weight board.
- » This load would be 39,250 lbs.

## STABILITY

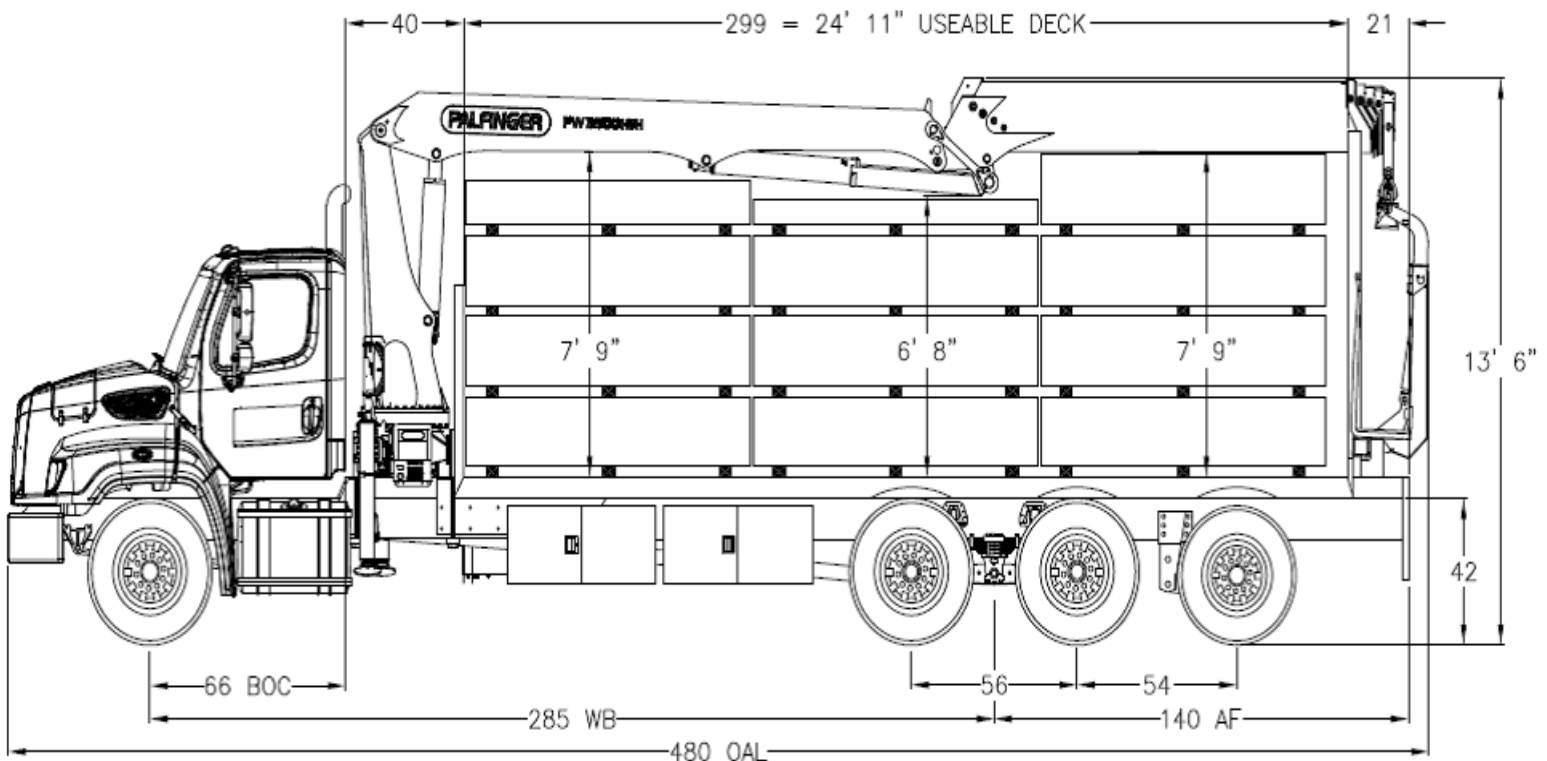
The crane is only as good as the layout and installation. Stability is always at the core of every package.

Example: Freightliner 114SD, 42" height, 20,000 lbs. front, tandem 40,000 lbs. rear with lift.

Subframe & Platform: 24' 11" usable platform, 6" subframe, deck cross members build off.

Stability: Chassis unloaded at maximum reach and maximum capacity:

- » 100% stable with BS001 auxiliary stabilizers.
- » 100% stable with 1300 lbs. added in headrest, without auxiliary stabilizers.
- » 90-95% stable without auxiliary stabilizers.



# MASTER CLASS: -SH

The most superior control system on the market! The PW 35001-SH crane is controlled by the PALTRONIC 150 control and overload protection system. The following features make this system desired by operator and equipment owners:

- » S-HPLS: automatic +15% capacity with speed reduction
- » Soft-Stop: Main boom, Outer boom and Slewing
- » LCD display on remote handset.
- » Geometry Control: the system automatically reduces load capacities from 60° to 85° angles. In addition, automatically stops increasing boom movement above angles of 85°.

