

# Flushby Unit

Diagnose and troubleshoot wells with this combination pressure truck and continuous rod rig

## Applications

- COROD® continuous rod and conventional sucker rod interventions
  - Pulling and running rod strings
  - Fishing rod strings
  - Changing insert pumps (progressing cavity pumping [PCP] and reciprocating rod-lift [RRL])
  - Changing plungers (RRL)
  - Changing rotors (PCP)
- Shallow- to high-depth well interventions
  - Killing wells
  - Flushing production wells
  - Changing wellhead valves
  - Changing polished rods
  - Pressure-testing wells
  - Spacing and respacing rod strings

## Features and Benefits

- The compact design offers quick mobilization and increased maneuverability in tight, constricted spaces, enabling deployment into smaller well sites than a standard workover rig can access.
- High-pull capacity increases the range of well depths the unit can service.
- Fast rig-up times of less than 30 minutes decrease downtime.
- The unit can be operated by a small crew of three to four people, which enhances safety by limiting risk exposure.
- In emergency situations, the hydraulic rod safety clamp applies a clamping force of up to 71,000 lb (32,200 kg), providing stopping power for added well containment.
- The low-capacity knuckle picker eliminates the need for additional reel lifting equipment, which reduces onsite congestion and promotes a safer work environment.

## Tool Description

The Weatherford flushby unit is a compact, continuous-rod and conventional sucker-rod service solution that merges the features of a pressure truck and small rod rig to diagnose and troubleshoot wells. Designed for rapid deployment and safe operation, the Flushby unit consists of a fluid tank, triplex pump, freestanding mast assembly, and full set of tools and safety equipment. With a standard or heavy-duty injector, the unit trips and services continuous-rod strings efficiently without the use of additional equipment. The unit can service shallow- to high-depth oil, gas, and coalbed methane (coal-seam gas) wells in vertical wellhead configurations.



Flushby unit



Flushby unit with standard injector



# Flushby Unit

The flushby unit is smaller and faster than a conventional workover rig, yet equally capable of performing all types of well servicing, especially diagnostics. When a well goes offline, the unit quickly troubleshoots and identifies problems, such as tubing holes, failed or stuck pumps, and parted rods, and then immediately executes the required repair work. The flushby unit can be rigged-up in less than 30 minutes by an operating crew of three to four people, whereas rigging up a standard workover rig requires approximately 4 hours. Daytime and nighttime operations are supported.

## Configurations

The Weatherford Global Technical Support team will work with regional representatives to determine the optimal flushby unit configuration for specific needs:

- Flushby unit for shallow-depth wells in vertical configurations
- Flushby unit with standard injector for shallow- to medium-depth wells in vertical configurations
- Flushby unit with heavy-duty injector for medium- to high-depth wells in vertical configurations

## Specifications

### Mast

Unit	Flushby	Flushby with Standard Injector	Flushby with Heavy-Duty Injector
Height	48 ft (14.6 m)	64 ft (19.5 m)	64 ft (19.5 m)
Capacity	50,000 lb (22,680 kg)	50,000 lb (22,680 kg)	50,000 lb (22,680 kg)*

\*Higher capacities available.

### Draw Works (Main Winch)

Unit	Flushby	Flushby with Standard Injector	Flushby with Heavy-Duty Injector
Maximum single-line-pull capacity at low speed	25,000 lb (11,340 kg)	25,000 lb (11,340 kg)	25,000 lb (11,340 kg)
Maximum single-line-pull capacity at high speed	5,357 lb (2,430 kg)	5,357 lb (2,430 kg)	5,357 lb (2,430 kg)

### Injector

Unit	Flushby	Flushby with Standard Injector	Flushby with Heavy-Duty Injector
Maximum dynamic loading	N/A	15,000 lb (6,804 kg)	35,000 lb (15,876 kg)
Maximum static loading	N/A	30,000 lb (13,608 kg)	50,000 lb (22,680 kg)
Rod trip rate	N/A	100 ft/min (30 m/min)	90 ft/min (27.4 m/min)

### Triplex Pump and Fluid Tank

Unit	Flushby	Flushby with Standard Injector	Flushby with Heavy-Duty Injector
Plunger size	3 in. (8 cm)	3 in. (8 cm)	3 in. (8 cm)
Plunger stroke length	5 in. (13 cm)	5 in. (13 cm)	5 in. (13 cm)
Maximum displacement at 300 rpm	138 gpm @ 1,750 psi (522 lpm @ 12,066 kpa)	138 gpm @ 1,750 psi (522 lpm @ 12,066 kpa)	138 gpm @ 1,750 psi (522 lpm @ 12,066 kpa)
Maximum displacement at 500 rpm	23 gpm @ 6,200 psi (887 lpm @ 42,747 kpa)	23 gpm @ 6,200 psi (887 lpm @ 42,747 kpa)	23 gpm @ 6,200 psi (887 lpm @ 42,747 kpa)



# Flushby Unit

## Miscellaneous

Unit	Flushby	Flushby with Standard Injector	Flushby with Heavy-Duty Injector
Blowout preventer rating, 3-in. rod	3,000 psi (20.7 mPa)	3,000 psi (20.7 mPa)	3,000 psi (20.7 mPa)
Blowout preventer rating, 4-in. rod	1,500 psi (10.3 mPa)	1,500 psi (10.3 mPa)	1,500 psi (10.3 mPa)



*Flushby unit with heavy-duty injector*

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