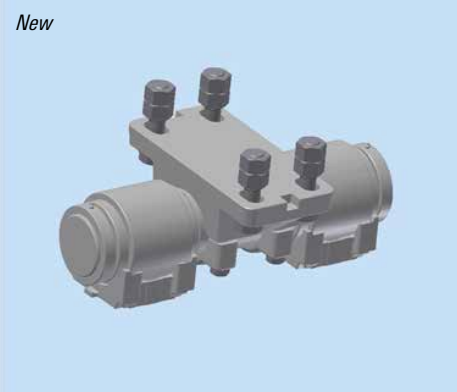


Rod Lift Pump Enhancements

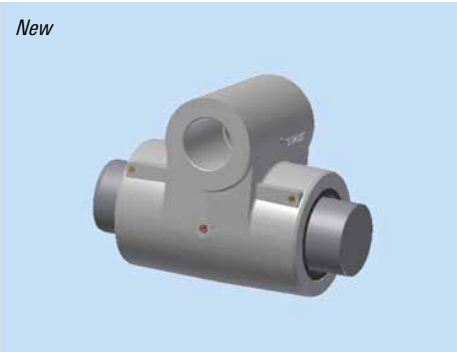
Saddle bearing

Two E-style railway bearings are used. These robust bearings are designed to handle very high loads and are sealed, significantly reducing grease consumption and the likelihood of grease leakage. They are mounted on the water table of the Samson post, facilitating adjustments. The same saddle bearing can be used for rod pump models from C114 up to C912 with the 365 structure.



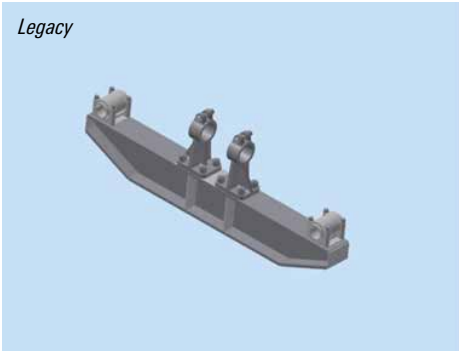
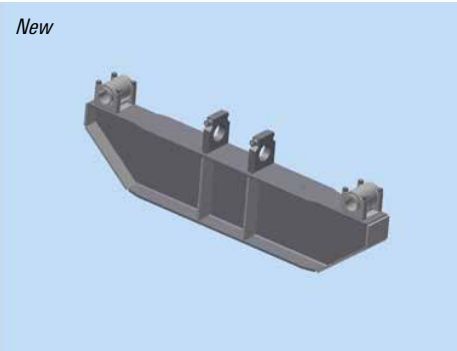
Equalizer bearing

Hinge-pin-style needle bearings improve shaft alignment and consequently reduce seal wear. Eliminating bolt connections to the walking beam removes concerns about bolt fatigue. The same size of bearing assembly can be used on a wide range of unit sizes, reducing inventory.



Equalizer

Equalizer lugs are welded to a hot rolled H-beam, eliminating bolted connections and castings and thereby enhancing the integrity of the component and equipment reliability.



Horsehead

The wire rope hanger is not cast, simplifying fabrication. The arc plate is located on top of the side plates, eliminating the risk of the side plates cutting the wire rope in the event of pumping unit misalignment.



Rod Lift Pump Enhancements

Crank pin sleeve

A keyless precision taper insert (PTI) sleeve provides better mating with the crank pin, reduces costs, and facilitates maintenance. Absence of a slot for a key reduces the risk of deformation in a component that is difficult to inspect.

New



Legacy



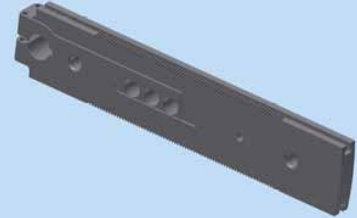
Crank arm

Strategic distribution of mass achieves higher effective counterbalance (ECB) and avoids excessive weight without compromising strength.

New



Legacy



Leg of Samson post

H-beams provide a more robust design because they have a larger section area and higher moment of inertia than similar size I-beams.

New



Legacy



Third leg of Samson post

A single-piece H-beam reduces costs compared with two I-beams while exceeding the API requirement.

New



Legacy



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