The Taylor Tools



The Competition

Competitive strippers use **gear pumps** for their hydraulics.

The Bronco uses hydrostatic pumps for its hydraulics.

Gear pumps run at full power all the time. That means a pump that produces 9 gallons/min. at 3000 psi when running is always delivering 9 gallons/min. at 3000 psi. The Broncos hydrostatic pumps use only the oil flow and pressure that is required to do the work.

To reduce speed, you must shear the oil flow (divert the unused oil back to the reservoir). This is done with servos/proportion valves. In order to get reasonable operating power and control, the speed must be slowed down.

The Bronco's hydraulic circuit is a closed loop circuit which means that the only oil that is returned to the oil reservoir is the blow-by from the pistons. There are no servos or proportion valves in the Bronco's system. The pumps are operated mechanically.

The diverted oil contains wasted energy in the form of heat which must be evacuated and which raises the ambient temperature of the work environment. Hydrostatic pumps run at much lower pressures which is a better use of energy and safer to operate. And the Bronco's hydrostatic pumps have a positive auto-neutral return system that immediately returns the controls to neutral when released. The neutral return is quick and accurate with no coasting. The machine comes to a quick, positive stop every time.

Gear pump driven equipment operates in a herky-jerky fashion. When trying to move with precision, there is no initial response on the controls, and then suddenly the machine lurches forward. This erratic cadence puts walls and molding at risk. The Bronco's controls in tight areas is very precise. The controls are responsive even when moving inch by inch such as when boarding an elevator.

SURVEYS SHOW THAT HYDRAULIC ENGINEERS OVERWHELMINGLY PREFER HYDROSTATIC PUMPS OVER GEAR PUMPS FOR THIS TYPE OF EQUIPMENT!



On machines with replaceable batteries, the batteries do not last more than an hour or two on hard-to-remove flooring. They have a quick change system for changing the two battery packs but most owners report needing several battery pack sets to keep the machine running during a normal work day. Battery packs are \$1,500+

The small battery and all-day battery machines are very slow, 100 ft./min maximum.

The Bronco Optimum operates at 300 ft./min maximum. Remember, it's not how long you run but how much you remove when operating. The Optimum runs 4-8 hours on hard-to-remove flooring and strips 15-25k per charge on well stuck material..

Some competetive machines are a narrow 24" in width and top heavy. There are several reports of them tipping over when loading and unloading.

Because of their high-pressure hydraulic system, competitive machines operate in a herky-jerky fashion. At first they don't respond to controls and then they suddenly lurch forward about 6." This is particularly problematic when trying to negotiate confined areas. In the Case Study described below, this would put them through the glass wall.

The Optimum has several advance features to prolong the battery life:

- We have a proprietary battery balancing system that, when charging, diverts power evenly to all four battery banks and, if necessary, gives a bank more charge power to bring it even with the other banks. This is very important for prolonging battery life.
- The Optimum can charge while operating. This "hybrid" feature reduces the battery consumption by up to 50% to extend the battery run time on the job.
- The Optimum's Low Battery Alarm System will sound an alarm when the battery pack drops below the safe level. After two minutes, if the pack is not charged, the system will actually turn off the machine to prevent damage from excessive discharge. This can be overridden by turning the key on and off to get to an area to plug in for charging.

With the Optimum's patented Power Glide suspension system, the frame is articulated rather than wiggling the blade to keep the blade flat to the floor. This is much more efficient and makes for a faster, smoother ride when removing flooring. That's why our machines can be smaller, lighter and faster while removing more material than machines over twice as big and heavy.