Allied WINCH

HYLINES

NEWSLETTER FOR LANTEC HYDRAULIC WINCH MANUFACTURED BY ALLIED SYSTEMS COMPANY

2002 VOL. 2 NO. 2

ROUTE TO:	
Sales Manager	
Parts Manager	
Service Manager	

Double-Ended Winches Provide Greater Versatility

From the standard Lantec specification sheets, you can get a good idea of the range of performance offered by the different Lantec winch models. But sometimes you find that the performance required doesn't appear to be available from any of the standard models.

First of all, don't give up! Sometimes the solution is just a matter of changing to a different type of motor. Other times, maybe we can come up with a custom drum size to meet the requirement.

Finally, if the requirement for line pull or line speed seems to go well beyond any Lantec winch available, the solution may be a double-ended winch. With this option, the winch can deliver twice the torque as the standard model. The available torque can be used to generate twice the line pull for a given drum size, compared to the equivalent standard model. Or it can be used with a different gear ratio or larger diameter drum to produce twice the line speed at a given line pull.

The standard winch has the motor, brake and first gear reduction on one side of the drum, and the remaining gear reductions attached at the other end. In a double-ended winch, you effectively have one set of motor, brake and all gear reductions on each end of a single drum on a single frame.

This double-ended winch provides the line pull to pull two cables on the same drum without sacrificing line speed.

Of course, to power a double-ended winch, you need twice the power of the equivalent standard winch. For hydraulic power, the typical solution is to distribute the hydraulic flow from a common source to each motor. For electric power, you simply provide the voltage and current demanded by the motors.

Take a look at the Performance Comparison. The computed performance of the Model 750-131 SE (single-ended) closely matches the data in the Model 750 Specification Sheet. The Model 750-131 DE (double-ended) uses the same drum, but with larger diameter wire rope to accommodate the higher line pull, nearly double the standard model. The second DE winch, a Model 752-131 DE, uses a faster gear ratio to generate nearly twice the line speed as the standard model.

The advantage of the double-ended winch is that it extends your range of solutions that much farther. Most other winches lack the ability to be reconfigured in this way. The few other winches operating in this performance range are often custom solutions that are very expensive. Lantec's marvelous configurability gives you the strength of a custom solution at an off-the-shelf price.

Performance Comparison

	750-131 SE	750-131 DE	752-131 DE
Pressure, PSI	2500	2500	2500
Flow, GPM	90	180	180
Input HP	135	270	270
Gear ratio	192:1	192:1	100:1
Drum Dia, in.	18	18	18
Cable Dia, in.	1.375	2.0	1.375
Line pull, bare drum	77,500 lbs.	150,156 lbs.	81,022 lbs.
Line speed, bare drum	38 ft/min	39 ft/min	73 ft/min

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First Dealers Appointed

Allied Systems is off to a strong start in appointing dealers to represent the Lantec winch. In November 2001, Alfa-Tec Inc., located in Seattle, took delivery of their stock unit, a Lantec 540 winch. Located on one of America's great natural harbors, the home of a large Pacific fishing fleet, Alfa-Tec expects to concentrate on the marine and fishing boat segments, both in the Northwest and in Alaska, where much of the fleet operates. Company President Kevin Oakley's first marketing push was to exhibit the shiny new Lantec winch at the FishExpo and Workboat show in Seattle.

In December 2001, Winches, Inc. of Odessa, Texas ordered their stock unit, a Lantec 540-123. Located in the Permian Basin oil country, Winches, Inc. expects to profit from the very strong oil exploration activity underway in Texas and the Gulf of Mexico. They represent a wide range of winches, but the Lantec winch puts them into the high-performance category, where there is much less competition. Owner Terry Stennet is excited about the new prospects.

In March, Allied appointed its first overseas dealer, PT Intraco Penta, in Indonesia. PT Intraco represents a wide range of industrial machinery, including Mack, Ingersoll-Rand, Bobcat and P&H. They have ordered two Lantec 540-107 winches. The PT Intraco management team traveled to the US in March, and met with Allied at Conexpo in Las Vegas.

PT Intraco President Director Halex Halim (second from left) and Director Petrus Halim (right) connect with Allied Senior Vice President Bill Chan (left) and Asian Territory Manager Francis Sebastian at Conexpo.

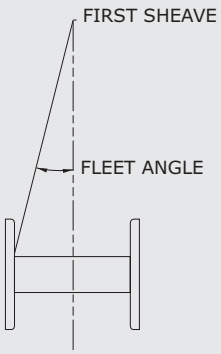
In April, Sam Winer Motors of Canton, Ohio made a major commitment to the Lantec line by ordering one stock winch of each of the three models. Sam Winer sells many winches of almost every description, and the Lantec winch just extends their reach a bit more. As part of their commitment, Sam Winer sent their Manager, John Miskar, to spend three days at Allied Systems working with our engineers to gain a deeper technical understanding of the Lantec winch.

Hydraulic Winch Q & A

Q: What is fleet angle?

A: *From the winch, the cable generally runs over a sheave at some distance away from the winch. The winch is normally aligned so that the cable forms a 90 degree angle with the drum axis when the cable is at the midpoint of the drum. When the cable is at its most extreme position left or right of center, the cable is at a slight angle of deviation from its centerline position. This angle is termed the fleet angle.*

If the fleet angle is small enough, generally in the range of 0.5 and 1.5 degrees, and there is at least a small tension on the cable (3 to 7 percent of cable breaking strength is usually sufficient), then the cable will spool onto the drum smoothly. Each wrap of cable remains tightly coiled to the adjacent wrap. The system design must provide for a sheave at a sufficient distance from the winch to maintain this fleet angle. For a drum length of 20 inches, the distance to first sheave must be at least 30 feet.



To help reduce the distance to the closest sheave, you can use a drum with LeBus® lagging. This increases the maximum fleet angle to 2 degrees. Distance to the first sheave on a 20-inch drum length is reduced to 24 feet.

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A newsletter published by:

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