

Tower Logistics, Climb-Assist

Technical review by Daniel A. Cushman

Who ever thought that climbing up would be easier than climbing down?

As a thirteen year veteran of the wind turbine industry, I will now put it in the books that getting up the windmill is, well, at least as easy as getting down. If you have never had the chance to climb a windmill, now is the time, as simplicity and innovation come together.

Before the **Tower Logistics Climb-Assist system**, the first climb you make up that long endless ladder, you are full of anticipation and enthusiasm, wondering what is really at the top of this crazy wind machine. Believe me, after about 5,000 times of feeling your heart pound out of your chest, your limbs and joints screaming at you to just get to the top, the romance is long gone. Just don't tell your boss you feel that way.

All of us who have experienced the reality of being a professional climbing machine have poised the same age-old question, why don't they put some elevators in these damn things? The good news has finally come! Tower Logistics has developed a Climb-Assist system that is entirely functional and has surpassed even my own scrutiny. As a Quality Assurance surveyor for many years, I have seen component manufacturers succeed in passing off a myriad of dysfunctional equipment, and unfortunately it is- you guessed it! At the top of the windmill where you have to climb once again, to get to it and fix it.

Windmills have and always will have inherent problems, either by design, service quality or force majeure. As a buyer you invest in the right piece of equipment that will perform and meet expectations! Electrical output and turbine efficiency equals money in the bank, that's the easy calculation. The part of the equation that is nearly impossible to nail down, are the associated factors due to turbine down time, loss of efficiency, premature failure and quality manpower. When your turbine is off-line on Saturday, it is possibly because the worn out technicians who were just there on Friday at 3:25, were able to justify not climbing and just do something logical at the ground level portion of the windmill and hope that it runs through the weekend. This does not only happen on a Friday, it happens every day.

When it is 118 degrees and the internal tower temperature is at a blistering 150 degrees, yeah! let me climb this one please. How about Monday? Nice relaxing weekend you get to work to find 14 of your 33 windmills down on a low temperature faults, your service truck is nice and warm, you and your partner decide once again that "rock-paper-scissors (or) a flip of a coin" will ultimately decide who steps into the minus 20 degree windchill to do what it is that we are here for, climb up and fix the problem.

As an owner, I want to know that when my wind turbine demands that a service provider is addressing needs, repairs, or scheduled maintenance, that qualified and motivated technicians are on the job and willing, and that my multi-million dollar investment is being operated and cared for by the best in the business, using the latest technology.

As any good technician would do, I have identified the problem - or at least a few. Now let's look for the solution, here it is, the Climb-Assist system.

Installed easily in either erected turbines or turbines not yet erected. The Climb-Assist system does not infringe on the turbines normal operation or design. If it is installed before you erect the turbine, the accrued man hours spent during the erection and commissioning process will be greatly reduced. The fitters and technicians performing this work will definitely be motivated and the once out of shape, over qualified guy, can now be putting skills and knowledge directly into effect ON the turbine. When the production capability of an individual is set into motion, then we achieve, that's a win/win for everybody.

When I scoured the Climb-Assist system to determine if this device was really going to live up to expectations, I began to realize that a mountain of practical sense had been engineered in its design. All of us who truly know the nature of wind turbines agree, simplicity works- bells and whistles do not! The materials quality is superior, from the pulleys and fasteners to the welding and dexterity. I have climbed all over this thing and it works. I have tried to be rough with it and it does not grimace. I have climbed up and down as fast as I can and let the device come to an abrupt halt, no problem.

The safety aspect of every part of a wind turbine is, and must always be, priority one, as this is reflective to the personnel who are betting their lives each day that things work as they are intended. The Climb-Assist system poses no realistic hazards to the climber or the person below waiting to climb. When I say realistic, I mean just that- nothing is void of malfunction. I feel that this Climb-Assist system is designed with all the negative factors that would be considered likely, to have been appropriately addressed, and then some.

One of the major things accomplished with the Climb-Assist system, is that of the immediate ability to lower an injured worker. There is no "perfect" or "anatomically correct" way to get a person out of any windmill whom has become badly injured and is in desperate need of immediate care. I have performed lowering with other devices and techniques, it is extremely stressful and always dangerous for all those involved in the lowering and/or rescue. The Climb-Assist system is very controllable, safe and is an immediate resource to get someone down when the time is upon us. There is no set-up time, it is already installed and ready to go.

I am in no way affiliated with Tower Logistics and have nothing to gain from providing an objective and realistic summary of this Climb-Assist system.

I believe the Climb-Assist device is exactly what is needed for the wind turbine industry in any number of ways. Either way you cut it, a windmill has to be climbed, how you get there is up to you.

Now lets take a closer look at our budgets, finally get what we are paying for and there are no more good reasons not to climb!

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