

In most countries it is required by law that the ladders in wind turbines are equipped with a fall protection system preventing the service technicians from falling.

Avanti Wind System has developed a safe and easy Fall Protection System with a safety rail installed as part of the ladder. Avanti Fall Protection can be used by several technicians at the same time contrary to most other systems based on wires. Throughout the length of the ladder a technician can connect himself to Avanti's system for every 6 meters.

The technician carries a special click-on runner in his safety harness. The click-on runner is fastened to his harness with a snap hook like the ones used by mountain climbers.

When entering the ladder – anywhere in the tower - the technician clicks the runner onto the safety rail in the center of the ladder.

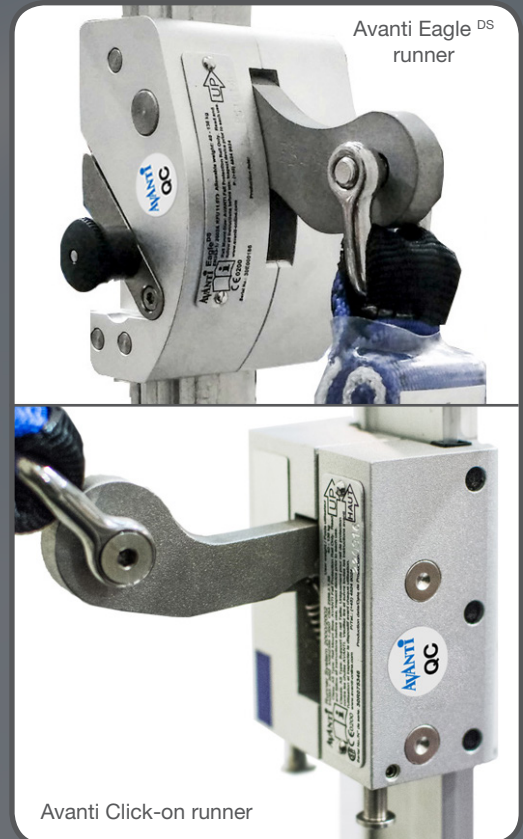
The click-on runner follows the user up and down. If he loses his foothold, the runner will immediately lock, and he will be hanging in the safety system until he gets a foothold again or until his colleagues can help him.

Avanti Fall Protection System must be inspected and tested at least once a year by Avanti personnel or by a company authorized by Avanti Wind Systems.

Avanti Fall Protection System is CE marked (Europe) and has been tested according to the ANSI regulations (USA). The Avanti Ladder, that the safety system is connected to, is made of aluminum and complies with the European Standards EN 131-2, ISO 14122-4, DIN 18799, BS 4211. Australia AS1657, USA ANSI A14, OSHA 29 CFR 1910.23.



The fall protection system prevents the user from falling in case he feels indisposed or by accident does not get a proper foothold.



The click-on runner follows the user up and down the ladder and can be clicked on and off no matter where you are on the ladder.



Avanti has developed a click-on runner for the fall protection system, which is carried in a strap by the service technician. It is fastened with a snap hook of the same type as the ones used by mountain climbers.

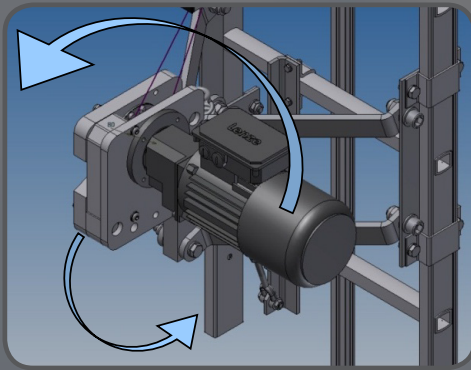
CLIMB ASSISTANCE VII – NEW MODEL

This new model has new features and benefits for the user and a faster more flexible installation. Both the motor and the control box can be attached to the ladder. The installation is independent of the design and material of the bottom platform making it easier to make regulation for the tensioning of the rope.

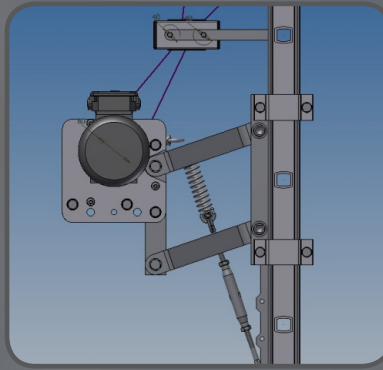
The engine for the application has been optimized with a better performance as a result.

The installation is highly flexible and easily adaptable to most WTG designs.

Benefits for the user are a higher safety when using the Climb Assistance because he can stay attached to the rope and the fall protection system and still be able to access the control box.



4 different assembly configuration with the same standard parts



More regulation for tensioning the rope.



ADVANTAGES FOR THE USER:

The service technician's own weight will be relieved of the chosen number of kilos (35 to 45 kg).

If the user weighs say 100 kg and chooses a pull of 40 kg, he only has to lift 60 kg of his own body weight.

The user decides whether he wants to climb slowly or quickly.

The automatic pull is constant no matter how fast the user is climbing avoiding sudden movements.

Pull and speed work independent of each other.

The automatics can be disconnected or connected anywhere and at any time.

SPECIFICATIONS:

Motion detection system for start/stop (patented system)

Adjustable pulling force 35/45 kg

CE/UL Marked

Machines parts developed according to the Machinery Directive 2006/42/EC

Power supply: -Standard: 230 V 50-60 Hz -Option: 110 V 60 Hz \pm 10%

Maximum current: 4 A \pm 10%

Rated current consumption: 2.4 A \pm 10%

Working temperature: -Standard -10°C/+55 °C -Option: -25 °C/+55 °C

Protection rating: -Motor IP55 -Control box IP66

Hauling rope \varnothing 12 mm breaking load: 2700 daN

Max.Noise level: <70 dB

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