

Automated tractor for cleaning mirrors in CSP plants with tower technology. High-capacity trailer water tank, a high pressure pump and cleaning devices.

Technical specifications:

- Tractor with appropriate gearbox to work at low speed (0-4.5 Km/h) and quick displacements (over 30 km/h without Triton arm).
- Water tank built in polyester reinforced with fiberglass that provides low maintenance, high corrosion resistance and excellent electrical and thermal insulation performance. Includes manhole, breakwaters, overflow tube and water level.
- Water tank anchored to a trailer made of high resistance steel and great turning capacity. Towed by the tractor.
- High pressure pump driven by oil hydraulic circuit connected to the PTO. Nominal performance are 96 l/min and 140 bar.
- Automated front arm with a high load capacity to support the device.
- Control system that allows an automatic single operator cleaning. Sensors installed in the cleaning devices can correct deviations such as: Variations in the ground, changes in the direction made by the driver or oscillations due to accelerations or strong braking.
- LED lightings and work lamps to operate during night.
- Cleaning devices are easily interchangeable. Only two operators are required to exchange them.
- Electronic security measures included:
 - Ultrasonic sensors to keep working distances.
 - Potentiometers to control the cleaning device position.
 - Different speed alarms to guarantee the structural safety of the bodywork.

Cleaning devices

- Brushing cleaning device: For deeper cleaning, reaching near the nominal reflectivity of the mirror. Up to 2 km/h working speed. Reflectivity can reach 99% or more depending on the initial dirtiness.
- High pressure cleaning device: For faster cleaning when is not necessary a more precise cleaning. Up to 4 km/h working speed. Reflectivity increases between 2-10% and it can reach 97% depending on initial dirtiness.

Optionals:

- Rear hose reel with 15 m hose and high-pressure lance for manual cleaning [1150]
- Front irrigation bar [1151]
- Global position system [1153]
- Remote control [1154]
- Water Flow meter [1152]
- Cabinet with blinds [1155]
- Labeling – customer's corporate image [1156]



Tractor

- Power over 110 HP
- Suitable PTO to provide the necessary power to move all the equipment installed.
- A/C and heating in the cabin

General conditions

- 2 years warranty
- Operation and maintenance manual included
- Legalization and registration in the country of destination is not necessary to work within a solar plant. If the client wishes it, is his own responsibility to take the necessary steps to legalize it and Feniks will provide him all the necessary information
- Commissioning and training on site is needed for each truck and cleaning device



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