



# Solar power generation drives oil pumps

What is a solar drive for water pumps?

A Solar Drive (for water pumps) is a type of electrical converter(essentially solar-powered VSDs) which converts the variable direct current (DC) output of a photovoltaic (PV) solar panel into alternating current (AC) that can be used by a local electrical water pump motor (also still allows for an AC input supply if required).

Will Santos convert crude oil beam pumps to solar energy?

Santos' trial project will convert 56 crude oil beam pumps, which are engine powered to 100 per cent renewable solar photovoltaic (PV) and battery storage systems. Santos successfully installed 56 solar photovoltaic and battery energy storage systems on beam pumps in the Cooper Basin.

Will Santos convert oil well pumps to solar and battery power?

Australian oil and gas company Santos will begin converting the pumps on their oil wells to solar and battery power, as part of an Australian-first trial that will reduce emissions from oil production.

Can solar beam pumps save energy?

The solar beam pumps will reduce emissions and waste from oil production and improve energy productivity by reducing fuel consumption and by eliminating the cost of transporting fuel long distances to remote sites. If the trial is successful, Santos will look to convert an additional 151 pumps across the Cooper Basin to solar and batteries.

What is a solar-powered diaphragm metering pump?

Some solar-powered diaphragm metering pumps have proven accurate, consistent, durable and reliable for injecting corrosion inhibitors and production-enhancing chemicals into a wellbore. Their solar-power capability reduces the need for on-site maintenance and costly trips to the well site by technicians.

Why do oil and natural gas producers need rugged injection pumps?

North American oil and natural gas producers face many challenges. Arming their wellheads with rugged chemical injection pumps helps protect critical pumping components from damage and corrosion that could lead to failure, costly downtime and maintenance issues. (Images courtesy of Neptune Pump Co.)

What is concentrated solar power? CSP, sometimes known more as concentrated solar thermal (CST), is a building power generation option in Australia. When developed, CSP plants look like something out of a sci-fi ...

collector pipe through which thermal oil is circulated. This arrangement is fitted with ... The thermal oil is used to vaporize water which, by means of expansion in a steam turbine, drives ...

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Concentrated Solar Power Generation (CSP) provides a ... o HTF oil main pump Solar island. 11 ... o Direct drive options to 6 MW o Back-to-back rotor stack allows up to 16 stages o Multiple ...

Thermal oil is used as heat transfer fluid (HTF) in the primary circuit of solar thermal power plants. Operating temperatures in such a power plant can reach around 350°C which constitute a ...

Solar power generation, Solar cumulative energy, Motor RPM, Voltage, Current, Pump status etc. ... Even if the Solar pump drive is able to meet the power requirements for the motor to run at full frequency- the Voltage required ( 415 ...

Using a central solar tower, heliostat fields involve direct steam generation provided with a certain steam storage capacity. Sulzer supports these processes with pumps for Feed Water (FWP), ...

Concentrated Solar Power (CSP) Plants, also known as concentrated solar thermal, combine three major systems to produce electricity by collecting and concentrating sunlight with mirrors and lenses in a Heat Transfer Fluid (HTF). ...

Solar-Powered Pumps Increase Oilfield Profitability. New chemical injection pumps provide enhanced solutions to optimize North American unconventional and oil sands production. As the months pass, the evidence is ...

ITT Goulds Pumps is a leading manufacturer of pumps for a wide range of industrial markets -- including chemical, mining, oil & gas, power generation, pulp and paper, and general industry. ...

