

Grundfos Hydro 2000 guarantees energy-efficient tyre production in India

HYDERABAD, INDIA: The newly built Ace Tyres factory near Hyderabad in India is a sister company of UK based ACE Limited. Ace Tyres is a commercial tyre company serving the transport, heavy plant and agricultural industries.

The rigorous daily workloads on tractors, combines, forklifts, diggers, dumpers, quarry and environmental vehicles, etc. demand strong and hard-wearing tyres. Consequently, the tyre manufacturing process involves vulcanisation of nylon and curing at extremely high temperatures. But once the tyres are formed all heat must be eliminated from the tyres and moulds as fast as possible for the tyres to achieve the required strength. And to secure express cooling, only a reliable booster system can guarantee a constant pressure.

The Situation

For some years, Ace Tyres had used a standard booster pump with fixed speed motor and by-pass valves to supply a constant pressure and keep the excess cold water circulating. However, to do so, the pumps constantly operated at full speed irrespective of the different intervals and different loads. As a result, Ace Tyres was wasting large amounts of energy to secure a constant pressure.

To cut down the operation of pumps and to get a more energyefficient and reliable cooling system, Ace Tyres initiated a partnership with Grundfos India. Grundfos' reputation as a responsible supplier of innovative and reliable pump systems appealed to the company, and fit perfectly with their requirements.

TOPIC:

The quality of the tyres produced by Ace Tyres in India relies greatly on the cooling provided by a booster system. However, the existing booster system was unable to adjust to variable loads and intervals, and was therefore wasting large amounts of energy.

LOCATION:

India

COMPANY:

HYDERABAD

The Grundfos Solution

Years of experience with energy-efficiency and innovative solutions quickly enabled Grundfos India to identify an opportunity for constant high pressure boosting system under variable loads: GRUNDFOS Hydro 2000 proved to be the ideal solution for Ace Tyres.

However, as a responsible solution provider, Grundfos recognised after careful process study that Ace Tyres required a customised solution for their specific requirements. A Hydro 2000 with 4 x CR16-160 could guarantee 20 bar operating pressure and still adjust the performance to the loads and intervals. To secure smooth operation at a high pressure, Grundfos India made sure that the system was fitted with special headers, valves, fittings, tank etc.

The Outcome

The customised Grundfos Hydro2000 booster system is the first of its kind built and sold by Grundfos India. However, it is yet another example of Grundfos' determined pursuit to deliver innovative solutions that cut energy consumption to a minimum and secure reliable operation for many years. And that is exactly why Ace Tyres wanted Grundfos to solve the task:

“Grundfos' System reliability is undisputed. That's why we preferred Grundfos Hydro 2000 for this critical application ” says Mr.K.Ramakrishna (GM, Operations).