



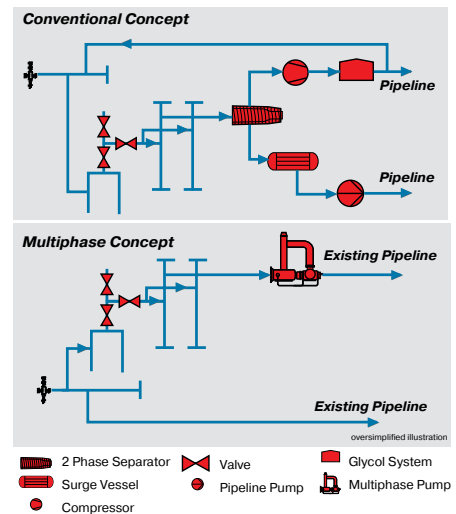
Innovation in Africa

In the last year, five Leistritz multiphase pumps have been installed in Algeria. The pumps are used to transfer crude oil and gas with a gas volume fraction (GVF) of 97% from the wellheads and manifolds to centralised treatment facilities. After separating oil and gas, the oil is transferred over a distance of 700 kilometers across the Sahara to the Mediterranean. ‘Handling liquids and gas at the wellhead of an oil field is a costly procedure,’ Heinz-Dieter Roß, MD at Lesitritz Pumpen explains.

The conventional way is to separate the associated gas from the liquid fraction (hydrocarbons with water) and

to convey them in separate pipelines to a gathering point for a first separation process before feeding them into trunk pipelines. ‘Conventional equipment like separators, compressors, liquid pumps, heaters or individual flow lines are replaced by economical multi-phase pumps which also boost the well flow to a central treatment facility through only one pipeline,’ he explains.

Leistritz multiphase pumps are used for handling untreated well flow with capacities of up to 5,000 m³/h and differential pressures of up to 100 bar. The pumps are based on twin screw pump technology. The self-priming pumps are of double volute design and hence, axially balanced. The possibility of speed variations by means of variable



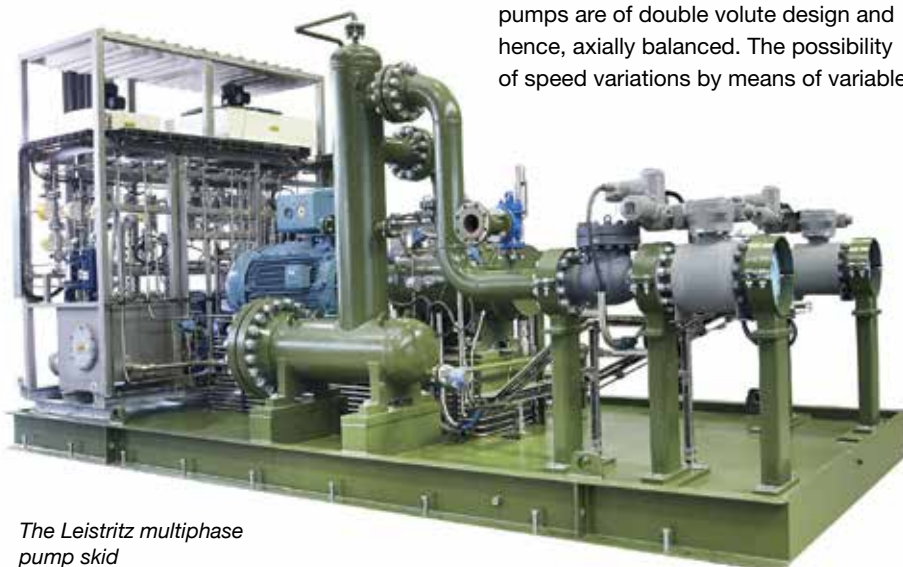
P&ID conventional & multiphase concept

frequency drives offers a wide operating range. The pump along with all further equipment including required controls and electric motors is usually skid mounted.

‘One very important aspect must be mentioned: by using multiphase pumps flaring is vastly eliminated. So, by handling the entire well flow within one machine we not only contribute to a cleaner environment but also to a more efficient use of our energy resources,’ Roß concludes.

For more information:

This article was written by Lotfi Chouba, director of sales for Africa at Leistritz Pumps, www.leistritz.com



The Leistritz multiphase pump skid