



# CENetic water systems

## Increase production rates with slimline ESP systems

### Applications

- Municipal water supply
- Mine dewatering
- Gas well dewatering
- Geothermal

### Features and benefits

- Produces up to 4,500 gal/min (17,034 L/min) with a 10<sup>3</sup>/<sub>8</sub>-in. (263.525-mm) slimline centrifugal pump
  - Reduces drilling costs
- Two-pole motor design
  - Provides up to twice the production rates compared to four-pole motor design
- Achieves setting depths greater than 15,000 ft (4.572 km)
  - Allows for development of deep aquifers
- Tolerant of deviated and horizontal wells
  - Increases volume with a deeper pump set depth
- Low-profile wellheads
  - Minimizes horizon pollution
  - May not require a building
- Quiet operation
  - Minimizes noise pollution in municipalities
- Self-contained system
  - Requires no routine maintenance

Whether the need is municipal water supply, gas well dewatering, mine dewatering, or geothermal, the greatest water production rates are achieved with **CENetic Water Systems (CWS)**. CWS from Baker Hughes, a GE company (BHGE), outperform traditional water pumping systems for comparable well diameters.

BHGE has been producing water pumping system components since 1987. We design, manufacture, install, and maintain our pumps, seals, motors, cable, and variable speed drives. This eliminates equipment compatibility issues and allows us to deliver excellent quality control.

The CWS design allows a low-profile wellhead and keeps the motor downhole instead of on the surface, minimizing noise pollution. This low-profile wellhead reduces visual interference with the local horizon and does not require a special building to accommodate zoning or weather protection. Since the shaft does not run all the way from the pump to the surface, the CWS is tolerant of deviated and horizontal wells. This design enhances flexibility in drilling plans.

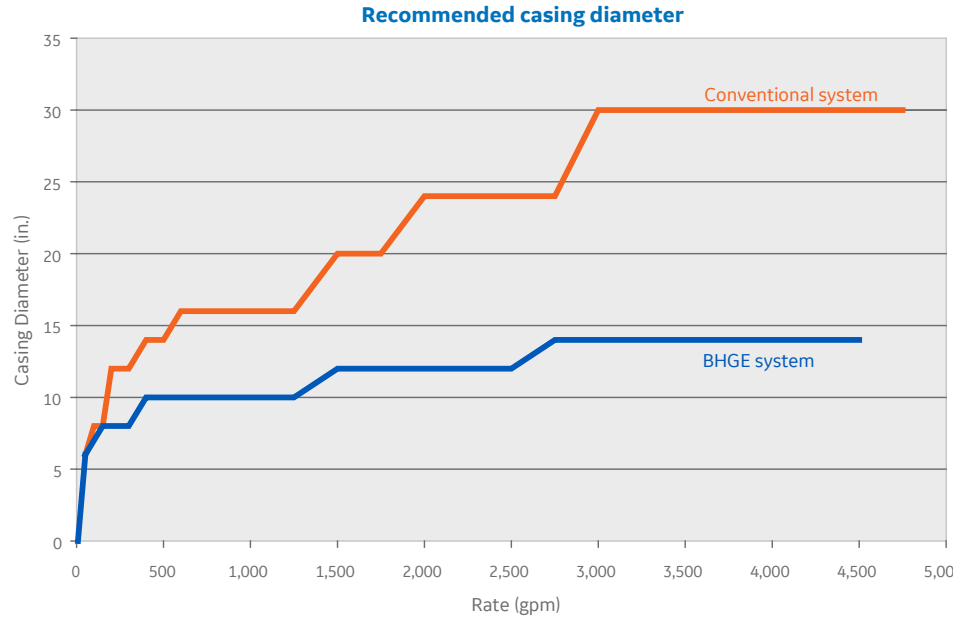
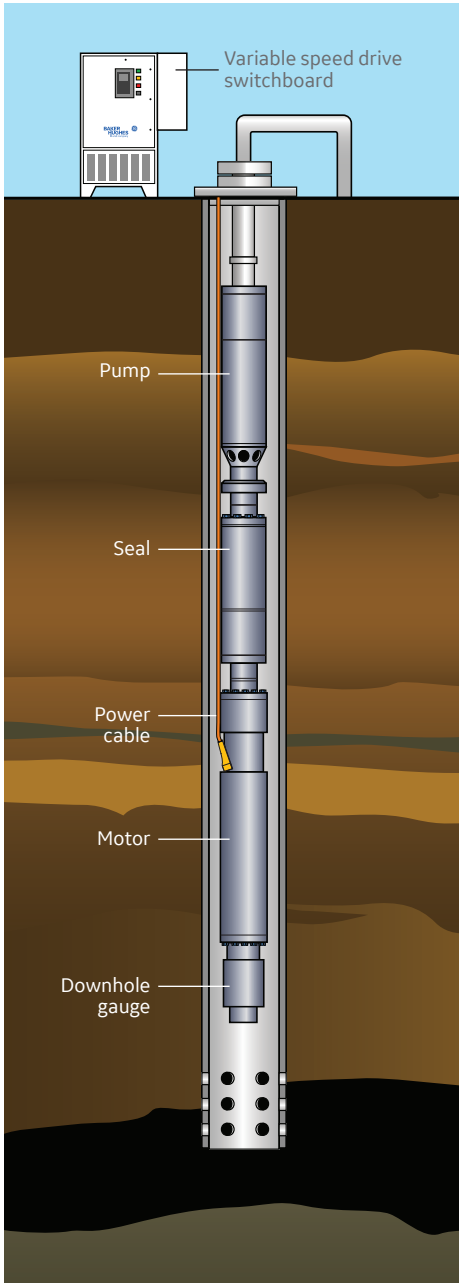
CWS are specifically designed and manufactured to operate reliably in harsh, abrasive environments. Typical water well and industrial systems are designed to operate in fluids with minimal solids and

minimal temperature fluctuations. Our engineers are continually working toward more efficient pumping system designs with testing in the R&D slurry loop, hot loop, viscosity loop, and gas loop test facilities.

We offer a range of robust water pumping solutions, including electrical submersible pumping (ESP) systems for downhole or pit deployment. Our water pumping systems allow users to dramatically reduce drilling costs when compared with traditional water well equipment. The BHGE slimline design fits smaller diameter wells without sacrificing production. With a CWS, a 13<sup>3</sup>/<sub>8</sub>-in.- (339.725-mm-) diameter well can deliver flow rates comparable to a typical 20-in.- (508-mm-) diameter water well.

### Safety and handling

Before handling, storage, or use, review the Safety Data Sheet (SDS) for guidance.



Numerous mines, both open pit and underground operations, have used BHGE to support their dewatering efforts.

[bhge.com](http://bhge.com)

Copyright 2019 Baker Hughes, a GE company, LLC ("BHGE"). All rights reserved.

The information contained in this document is company confidential and proprietary property of BHGE and its affiliates. It is to be used only for the benefit of BHGE and may not be distributed, transmitted, reproduced, altered, or used for any purpose without the express written consent of BHGE.

Baker Hughes reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your BHGE representative for the most current information. The Baker Hughes logo and CENetic are trademarks of Baker Hughes, a GE company, LLC. GE and the GE Monogram are trademarks of the General Electric Company.

79599