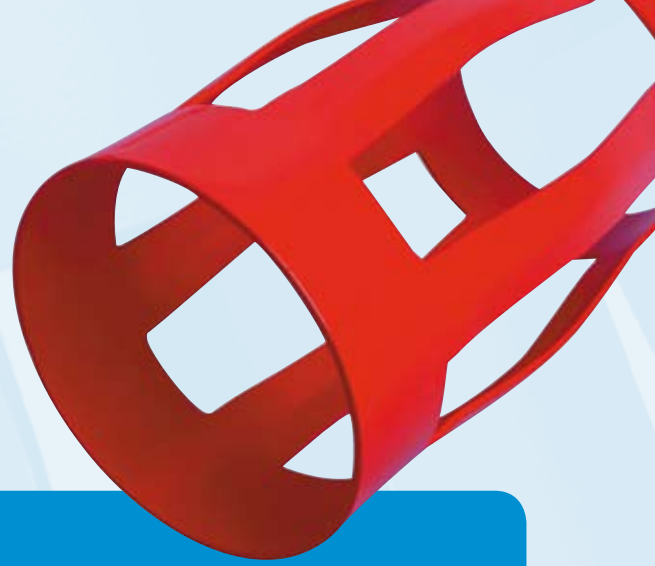




AN ENGINEERED DESIGN SOLUTION

# Flow by Area



It is generally accepted within the industry that an improvement in annular Flow by Area will achieve a far higher percentage of desired, primary cementing results. The factors governing these parameters are also well known.

Flow by Area (displacement) typically covers:

- Fluid Properties
- Flow Regimes
- Pipe Centralisation
- ECD Constraints
- Stand Off

Flow by Area enhancement has other proven well benefits such as:

- Enhanced Well Clean Out
- Enhanced Cementation Operations
- Enhanced well Life
- Enhanced Pipe Movement

Perhaps the most important aspect of Flow by Area is directly related to the stand off achieved. By optimising stand off the fluid path thus created is more uniform and central to the borehole. This factor eliminates low side conditions which crucially, in critical formations allows for greater fluid velocity to be achieved.

The Centek S2 centraliser has many key engineering advantages in design, construction and application. A key area for Centek to address in the design was that of Flow by Area. Flow by Area relates directly to fluid regimes such as volumes, velocity, density and pressure which has a significant impact on primary cementing operations. Centek realised the need to enhance this critical area and results now constantly being achieved in the field, show our engineered approach to design significantly improves annular Flow by Area.

**CENTEK – BRINGING ENGINEERING INNOVATION TO THE INDUSTRY**

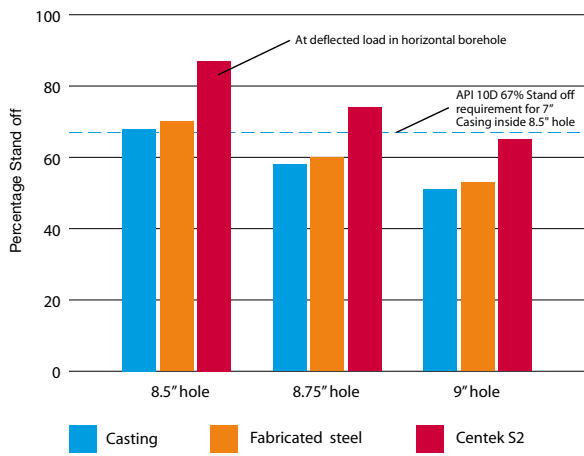
- **Cost Effective Solution**
- **Reduction in remedial works**
- **No low side areas posing clean out issues**
- **Improved Primary Cement Operations**



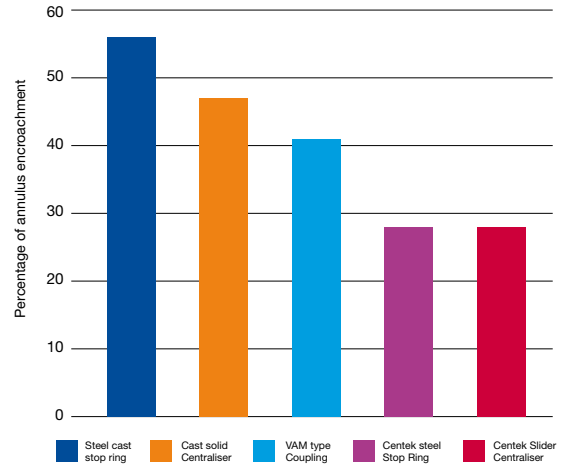
# Centek Centraliser

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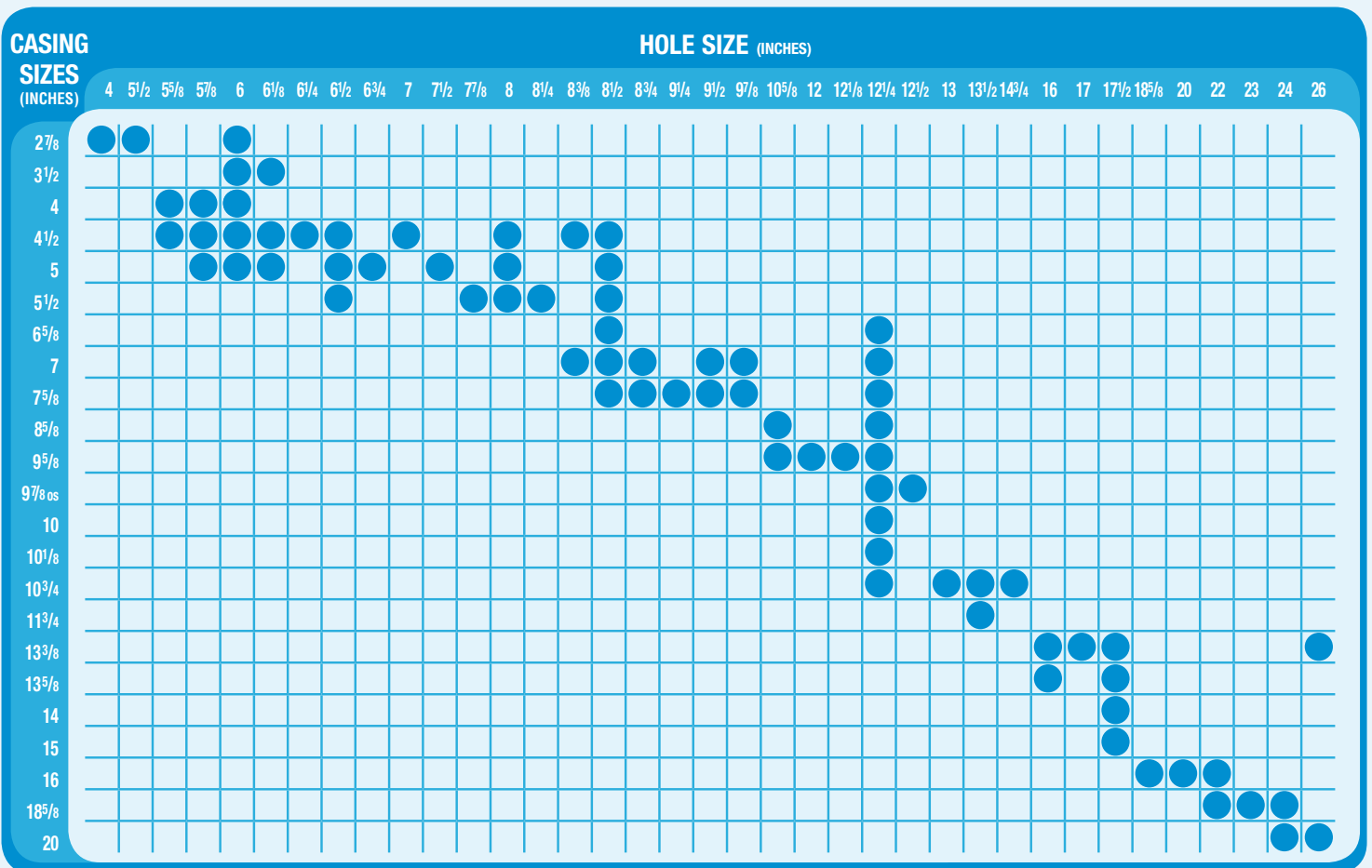
## Stand off



## Annular encroachment



## Sizes available



● Sizes available



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