

# Well Construction

## Cementing Technologies

### ULTRAFLUSH™ Centralizer Sub

Expro's proprietary ULTRAFLUSH™ Centralizer Sub design offers a unique solution for centralizing and cementing casing and liner strings from 4-1/2" to 22". The centralizer sub can be run through the tightest restrictions by allowing for the bows to compress flush with the sub body.

The ULTRAFLUSH™ Centralizer Sub has full-rotating capability to provide optimal performance in tight-tolerance and underreamed hole conditions. All models and sizes feature a rotating design to allow for rotating the casing or liner to bottom or rotating during the cement job. Full penetration welding of the end band to the bows creates a robust and reliable design that helps ensure operators more efficiently reach total depth.

#### Features and benefits

- Rounded bows compress flush with body of the centralizer to pass smoothly through tight restrictions for improved zonal isolation.
- Proprietary machined end bands "pull" the centralizer into or out of the wellbore to reduce the risk of casing getting stuck which could lead to costly retrieval operations.
- Grease ports allow smooth rotation of the centralizer and prevent corrosion between body and end bands.
- Propriety bow design meets or exceeds API 10D requirements to improve standoff in underreamed holes to mitigate risks and costs associated with secondary cementing operations.
- Centralizer body maintains ID drift requirements of host and previous casing strings and meets or exceeds burst and collapse ratings of host casing to ensure reliable integrity of the casing string.

