Now, two of the industry leaders in cementing and casing equipment have joined forces to provide a unique system to help ensure a successful primary cement job every time. Halliburton’s industry leading Super Seal™ II High-Port Upjet Float Shoe was designed for maximum turbulent flow at the casing shoe. Add the maximum stand-off provided by Ray Oil Tool Company’s solid body centralizers and you have a complete system for successful primary cementing. Nothing in the oilfield pays off better than a good primary cement job. This combination of premium products not only enables successful primary cementing but helps achieve the best possible job every time!
High-Port Upjet Float Shoe

Halliburton’s Super Seal™ II High-Port Upjet Float Shoe improves the chance of obtaining a successful cement job at the casing shoe. The high-port upjet float shoe is designed to jet the formation face to remove detrimental mud cake and cuttings and enhance cement bonding to the formation.

- Improves filter cake removal at casing shoe
- Available in all casing sizes
- 7.12-in.² (4¼-in. valve) flow area allows high cementing rates in 7-in. and larger size casing
- Allows 40% of fluid discharge out of bottom of shoe to wash past ledges and other wellbore restrictions
- Can eliminate the need to squeeze most shoe joints

Ray Spiral Solid Stand-Off® Centralizer

The key to Ray Oil Tool Company’s Spiral Solid Stand-Off® Centralizer is the smooth, spiral, 360° overlapping solid-vane design. It provides maximum wall contact, maximum fluid swirl, and consequently 360° cement coverage around the pipe. The innovative design of the centralizer blades reduces balling between the blades, resulting in complete utilization of the spiral centralizer in swirling the cement.

- Overlapping solid vane cast design
- Provides maximum wall contact, maximum fluid swirl, and 360° cement coverage around the pipe
- Blade design reduces drag and aids the casing in reaching TD
- Centralizer design eliminates scraping, gouging, or digging into the formation
- Solid cast aluminum design reduces manufacturing costs

Ray Solid Straight Blade Centralizer

Ray’s solid straight blade centralizer is another proven success with thousands of successful jobs, worldwide, and a “no-squeeze” record second to none. The straight blade design allows easy wellbore entry, clean fluid passage and maximum stand-off between casing and wellbore.

- Maximum stand-off even in deviated or horizontal wells
- Blade length and width give optimum casing support for each casing size
- Solid straight blade design promotes self-cleaning in the wellbore and less restrictions than bow centralizers
- Reduced drag and gouging
- Ensures fixed stand-off regardless of lateral loads
- Allows pipe to rotate and reciprocate freely inside the centralizer

Ray’s solid body centralizers are cast of high grade aluminum alloy with one-piece construction. This design features high impact and shock resistance, high tensile and high yield strengths, as well as corrosion resistance. The centralizers are designed to slip easily onto the pipe’s pin end. They can run free on the joint or between stop rings, or can be secured to the casing with set screws.

Enhanced Cementing Process Improves Results and Cuts Costs

A Gulf Coast operator needed better results from surface casing cementing jobs. Of 11 recent jobs, five required squeezes and three had marginal leak-off tests. Casing was 13¾ and 10¾ in. and depths were from 3,500 to 6,400 ft. Halliburton implemented a series of improvements to the cementing process that included 1) using Halliburton floating equipment with a 4½-in. valve to reduce restrictions, 2) running two bottom plugs for better wiping, and 3) using High-Port Upjet shoes and spiral solid centralizers.

With four surface casing cementing jobs completed using the improved process, no squeeze jobs have been required. Prior to improvements, these jobs with remedial work would have cost $430,000. When the cost of the improved process is considered, the operator benefited by $170,000 in additional value.

For more information on this winning combination, contact your local Halliburton representative — your Solution Connection TM.