CSS Multi-Bowl Wellhead System

13-5/8" 5M
CSS Multi-Bowl Installation

- Standard Off-the-Shelf Casing Head
- Lower Profile Solution
- Common Support Bushing
- Field Proven Sealing Designs
- FS Seals require No Plastic

Packing
- C-22 Profile = Standard Off-the-Shelf Slips
- Removable Upper Section = Improved Asset Management
- Rig Time Savings
CSS Multi-Bowl Installation

**SW-22 Casing Head**
13-5/8"-5M x 13-3/8" SOW

**CSS Head**
13-5/8"-5M x 13-5/8"-5M

**Mandrel Casing Hanger**
13-5/8" x 9-5/8"

**Packoff**
13-5/8" Nom.

**SW-22 Casing Hanger**
13-5/8" x 5-1/2"
- Run Conductor to Desired Height.
- Install Diverter Stack over Conductor.
- Drill for Surface Casing as required.
• Remove Diverter Stack
CSS Multi-Bowl Installation

- Run Surface Casing and Space Out as required.
- Cement Casing as Required.
- Make final cut on Surface Casing
- Install the CSS Assembly onto the casing, weld and test as required
CSS Multi-Bowl Installation

- Clean and inspect the ring grooves on the CSS spool before setting the BOP
- Install the Ring Gasket
- Make-Up BOP stack
• Make up C-22 test plug to the drill pipe on rig floor.
• Run test plug into the hole and land on the load shoulder.
• Test stack.
• Retrieve C-22 test plug
- Make up Long Wear Bushing Running Tool to the drill pipe on rig floor.
- Insert running tool onto Wear Bushing through the J slots, rotate to the right until the stop.
- Run the Wear Bushing into the well bore and land on the load shoulder.
Engage two of the upper Lockscrews to hold the Wear Bushing in place.

Look at the measurements stenciled on the flange and measure the lock screws to match the engage measurement.

Rotate the running tool left until the stop and retrieve the running tool.

Drill for Intermediate Casing as Required.

Lockscrews will be painted yellow and will have in & out measurements.
CSS Multi-Bowl
Installation

- Make up Long Wear Bushing Running Tool to the drill pipe on rig floor.
- Run into well bore and land on the Wear Bushing.
- Disengage the upper Lockscrews.
- Look at the measurements stenciled on the flange and measure the lock screws to match the disengage measurement.
- Rotate the running tool to the right until the stop.
- Retrieve Long Wear Bushing
CSS Multi-Bowl Installation

- Make-up Mandrel Casing Hanger to the Last Joint of Intermediate Casing.
- Pick up landing joint with running tool and make up to the Mandrel Hanger turning to the right to thread.
- Run in and land the Mandrel Hanger on the Load Shoulder.
- Cement as needed.
- Flush casing valves after cementing is complete.
- Rotate the running tool to the left to unthread from Mandrel Hanger.
- Retrieve running tool.

Note:
- Landing Joint, Running Tool, Fluted Casing Hanger, and Pup Joint can be shipped as an Assembly.
• Make-up Packoff Running Tool to the drill pipe on the rig floor.
• Insert running tool onto Packoff through the J slots, rotate to the right until the stop.
Run and Land the Packoff in the CSS Housing.

Use the Sight Plug to visually confirm the landing of the Packoff. (The load shoulder on the packoff will be spray painted yellow for easy confirmation.)

Engage lower Lockscrews to lock the Packoff into place.

Look at the measurements stenciled on the flange and measure the lock screws to match the engage measurement.
• Test the inner and outer seals before retrieving the running tool.
• Rotate the running tool left until the stop and retrieve the running tool.
• Make up C-22 test plug to the drill pipe on rig floor.
• Run test plug into the hole and land on the load shoulder.
• Test stack.
• Retrieve C-22 test plug
Make up Short Wear Bushing Running Tool to the drill pipe on rig floor.

Insert running tool onto Wear Bushing through the J slots, rotate to the right until the stop.

Run the Wear Bushing into the well bore and land on the load shoulder.
Engage two of the upper Lockscrews to hold the Wear Bushing in place.

Look at the measurements stenciled on the flange and measure the lock screws to match the engage measurement.

Rotate the running tool left until the stop and retrieve the running tool.

Drill for Production Casing as Required.
CSS Multi-Bowl Installation

- Make up Short Wear Bushing Running Tool to the drill pipe on rig floor.
- Run into well bore and land on the Wear Bushing.
- Disengage the upper Lockscrews.
- Look at the measurements stenciled on the flange and measure the lock screws to match the disengage measurement.
- Rotate running tool to the right until the stop.
- Retrieve Short Wear Bushing
CSS Multi-Bowl
Installation

• Run Production Casing as Required.
• Cement as Required.
• Lift up BOP Stack, Wrap Casing Hanger around Casing and Support with Boards.
• Land in Bowl.
• Slack off on Casing to Set Slips to Company Desired Weight.
- Rough Cut Casing
- Remove BOP
- Final Cut and Bevel Casing
- Install and torque up the cover flange to protect the well during the rig move
CSS Multi-Bowl Installation

- Remove Cover Flange.
- Land and Make-Up Tubing Spool.
- Rig up Packing Tool and pack off the PP seals.
- Test between Seals on Casing.
- Test the Flange Connection
• Make-up the Frac Tree Assembly.
• Frac Down Production Casing as Required.
- Remove Frac Stack.
- Run Production Tubing as needed.
- Make up TC1A-EN to last joint of Production Tubing.
- Land Hanger in top of Tubing Head.
- Secure Hanger with Lockpins
CSS Multi-Bowl Installation

- Install Production Tree Assembly.
- Test Flange Connection.
- Remove BPV (if needed).
CSS Multi-Bowl Installation

Complete Assembly
For more information about your next project, contact the sales / service location in your area. Our knowledgable sales staff can answer your questions when planning your drilling program.

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