

# UNIQUE MACHINE

*Cementalizer™*  
Specialty Centralization

Introducing the  
*Standoff Connector*



Helical bladed premium couplings for flush joint and coupled casings & liners.

## ***Applications and Successes***

### **Extended reach programs**

The *Cementralizer*<sup>™</sup> will help you with challenges presented with extended reach wells. The *Cementralizer*<sup>™</sup> has been designed to achieving 100% compliance to the original connection design capability while providing:

- centralization
- reduced running friction
- enhanced rotation and reciprocation capabilities
- provide a limited reaming capability


Our success in obtaining these objectives will result in your success with extended reach programs.

### **Coil tubing drilling success**

Coil tubing and small hole conditions present additional problems with the lack rotational and limited compressive forces to reach increased total depth requirements. The *Cementralizer*<sup>™</sup> will help achieve increased total depths through the friction reduction design and obtain consistent cementing success as seen in Alaska.

### **Workover sidetrack challenges**

Getting past a milled window or achieving total depth with slip on centralization techniques often causes typical centralizers to slip presenting stacking problems. Our integrated coupling and centralizer design reduces the chance of running problems through the ability to tolerate extreme axial and radial dynamic loads.



### **Ability to run in reduced clearance conditions**

With new technologies to reduce hole size while achieving greater total depths, casing and liners simply must go to bottom easily and without damage. Using the *Cementralizer*<sup>™</sup> to lower running friction is often the most economical answer to achieve the extra distance required. Flush joint pipe with the *Cementralizer*<sup>™</sup> creates the largest flow area and stand-off values available on the market.

### **Extended reach horizontal wellbore**

Proven track record for protection of zonal isolation swell packers and sand screens with horizontal wellbores in extended reach programs.

### **Cost reduction and assurance in one unit**

The ability of our *Cementralizer*<sup>™</sup> to be installed at any quality manufacturing facility assures cost savings by combining durability and centralization in one package. Running times are greatly decreased when compared to slip on type centralizer installation on the rig floor.

### **Additional Information**

SPE 92392

Unique “through tubing” completions maximize production and flexibility

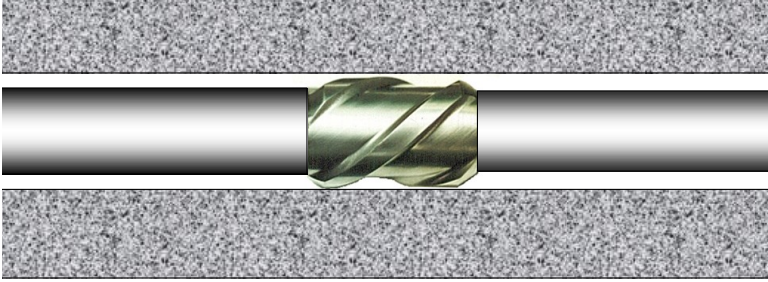
SPE 171957

Rotating Sand Screens to TD in Korchagina ERD wells



## **Cementralizer™**

### Flush Joint Pipe Applications



### *Worlds First Flush Joint Cement Coupling*

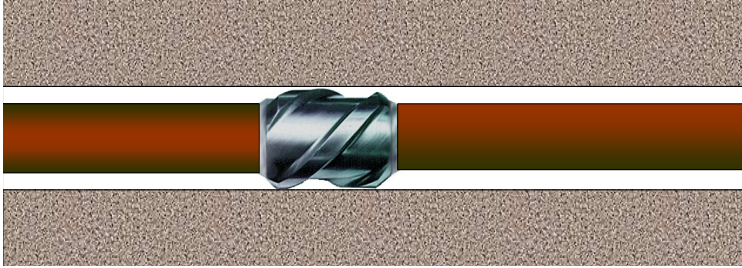
#### Advantages

- Maximum flow area
- Economical and lowers field costs
- Improves running of casing & liner
- Reduces differential sticking
- Lowers running friction
- 360 degree standoff
- No decrease in connection strength
- Excellent mud and scale removal
- Helical blades improve cementing operations
- No slippage
- Most premium connections available
- Run with conventional elevators
- Tong adapters for all sizes
- Stabbing guides for all sizes
- Box by pin also available
- Quick deliveries
- Proven performance in the harsh conditions of Alaska

Come on up to our way down!  
Use the **Cementralizer™** in your next well.

# **Cementralizer™**

## **Threaded and Coupled Applications**



***The Industries Strongest Most Universal Cement Coupling***

### **Advantages**

- Value added by all in one design
- Reduced rig time
- No set screws, no slippage
- Reduced running friction
- Facilitates rotating and reciprocating
- Ease of getting to bottom greatly increased
- Special clearance body available for improved flow
- Helical blades improve cementing operations
- Additional coupling strength
- Available in most premium threads

Use the **Cementralizer™** when you just can't take the chance.



All tubing, casing up to 10 3/4" and API grades currently available

Tong adapters for all sizes

Most premium threads

Special body sizes no problem

Most flush joint threads

International shipments



Reference of common flush joint sizes

Pipe Size	Hole Size	Blade Diameter	Length Overall	Number Of Blades	Blade Width
2.375	3.00	2.64	4.75	3	.500
2.375	3.75	3.50	4.75	3	.500
2.875	3.75	3.50	5.25	3	.625
2.875	4.50	4.25	5.25	3	.625
3.500	4.50	4.25	6.25	3	.625
3.500	4.75	4.50	6.25	3	.625
4.500	6.25	6.00	8.00	4	.625
5.000	6.25	6.00	8.00	4	.625
5.500	6.75	6.37	8.00	4	.687
5.500	6.75	6.50	8.00	4	.687
7.000	8.50	8.25	9.5	6	.625
7.625	9 5/8 47# Casing	8.38	10.00	6	.687
9.625	11 3/4 65# Casing	10.37	10.625	6	.687



## *Standoff Connector*

When it comes to advancing oil field technology, Unique Machine does not sit still and works to improve our products.



The original **Cementralizer™** was primarily designed to achieve a better cement job by having a full 360-degree stand-off from the borehole wall, large flow area, and cement to swirl around each connection from the helical blades.

Due to the increasing demands in performance and the complexity of today's wells, this design is no longer sufficient when used for purposes other than cementing operations.

Introducing our new line of Centralizing equipment designed specifically for extended reach wells, swell packer/screen protection, minimal drag and increased rotational capabilities. The Unique Machine patent pending centralizing Standoff Connector.

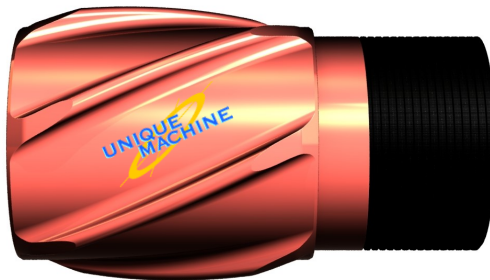
Three trial small bore coil tubing wells were field tested with the Standoff Connector against the **Cementralizer™** in the Alaska oil fields and have resulted in decreased nonproductive running time from an average of 18% to less than 3%. Friction factor reduction of approximately 13% and the footage of liners worked to bottom from an average of 548 feet down to 67 feet.

## *Key Improvements*

Leading edges of the helical body now have decreased angles with two-stage transition angles from the minor diameter of the top of the blades. The transition angles are provided with blend radii to further reduce lateral friction while running operations.

Outer diameters of the helical blades are provided with blend radii to reduce the possibility of the blades digging into the open well bore and further reduce the torque required during rotational and reciprocating operations. Helical blade angles and quantities are application dependent upon customer required flow characteristics and circumferential string support.

When you have to get to bottom, give it the best chance with our new and improved Standoff Connectors.







Rig make and break tong adapter is simple to use and assures true radial torque to the connection . The adapter is designed to fit power and manual tongs to automatically lock onto helical blades for by-rotational torque applications and to prevent damage to the connection or rig tongs.

For production buck up machines, a simple and economical buck-up adapter is available with shipment of the **Cementralizer™**. The effort of buck-on is nearly as easy as a standard coupling with no damage by aggressive tong dies to the product. Furnished in standard coupling



2-7/8 13Chrome **Cementralizer™** tubing ready for shipment.

The protectors are slightly larger than the blade diameters to assure safe shipment to your rig

Special stabbing guides are available for the **Cementralizer™** product line.

Correct costly stabbing damage to connections before they happen.





# UNIQUE MACHINE

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