



CASING CENTRALIZERS



Casing Centralizers, Float Shoe & Collars, Cementing Plug & Baskets

CASING CENTRALIZERS

API 10D Standard for Oil & Gas Cementing

Casing centralizers are important cementing tools to position the casing uniformly inside the wellbore to offer a more uniform distribution of cement slurry around the casing. They can also reduce the friction between casing and wellbore and keep the casing from hitting the wellbore walls.

By this tools, a continuous annular clearance around the casing allows the cement to completely seal the casing to the casing to the borehole wall.

All our casing centralizers are accord with API RP 10D-2 recommendations.



Categories ▼

Bow Spring Centralizers



Bow spring centralizers have slightly larger diameter than the wellbore, which is effective in vertical and slightly deviated wellbores to centralize the casing in borehole so as to improve the cementing efficiency.

Bow spring centralizers are available in single piece, hinged and slip-on types with or without welding process.

Adjustable bow heights and full ranges of sizes ranging from 4-1/2" to 20" can satisfy almost all cementing projects in oil and gas cementing constructions.

Solid Rigid Centralizers



Solid rigid centralizers is built using cast aluminum or steel materials. Because the diameter is smaller than the wellbore, so the solid rigid centralizers are not as effective as bow spring centralizers in vertical wells. But they are rugged and works well in the deviated wellbores.

Solid rigid centralizers are available with straight or spiral vanes & rollers. And the length can be regular or short lengths.

4-1/2" to 20" standard sizes and customized service help you find the best solid rigid centralizers for oil and gas cementing projects.

Advantages ▼

- › Simple Structure
- › Convenient Use
- › Long Service Life
- › Low Maintenance Cost
- › Improve Cementing Quality
- › High Centralizing Performance
- › Reduce Casing and Wellbore Friction
- › Excellent Corrosion and Abrasion Resistance
- › Wide Ranges of Structures and Sizes Options
- › Customized Service Satisfy All Your Projects Requirements

 **MORE CHOICES.....**

More products can be purchased
Online at www.drinol.com

BOW SPRING CENTRALIZER

Single Piece, Hinged & Slip-On Types

Bow spring centralizer is designed for primary cementing, applied in vertical, deviated and horizontal wells where low starting force as high restoring force.

It is used to keep casing in the center of wellbore and reduce friction between casing and well bore.

Bow spring centralizer consists of several metal strips shaped like a hunting bow and attached to a tool or to the outside of casing. It is a critical step in quality cementing as the lack of proper centralization can lead to severe cementing problems including lack of zonal isolation and improper casing support.



Categories ▼

Slip-on Single Piece Bow Spring Centralizer

- › It is used to position the casing in the center of the wellbore in vertical deviated and horizontal wells.
- › It can reduce the effect of channeling by reducing pipe movement before cement sets in and improving the cement flow for more uniform cement thickness in the well bore.
- › Special high strength steel which imparts excellent hardness and spring action ensuring an unmatched ability to come back to its original shape after undergoing rigorous stress loads conditions.
- › It is formed from single sheet of special steel resulting in no weld between bows and end collars, increasing the robustness and ability to withstand higher lateral and side loads during casing running.
- › Zero weak points, such as hinges, welds or mechanical interlocks.
- › Available in 4-1/2" to 20" sizes and special sizes are also available.

Hinged Non-Welded Bow Spring Centralizer

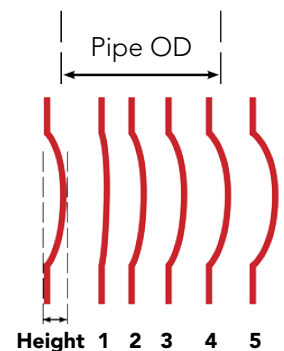
- › It consists of bows, end collar with hinges and hinge pins. The formed bows are attached to the end collar using rivets onto the hinged end collars. And the centralizers use hinged pins to secure the end collars together around the casing.
- › The hinged design is convenient for assembly and storage. When assembled, just place the two assembled halves on the pipe and insert the pins in the end collar hinge. Unassembled centralizers are packed and stored in compact package, which can reduce transporting and storage space and costs.
- › Hinged non-welded bow spring casing centralizer is a simple, low cost spring design which can perform well in both vertical and slightly deviated wells as the bow springs are slightly larger than the wellbore.
- › Combines the highest restoring force with the lowest starting force at all bow heights.
- › The bows are heat treated in special furnace to ensure centralizers to provide the best centralization as well as help in faster running of casing.
- › The bows angles are available in a range to accommodate any well profiles.
- › Available in single bow or double bow design.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



Single bow hinged non-welded centralizer



Double bow hinged non-welded centralizer



Adjustable bow heights

MORE CHOICES.....

More products can be purchased
Online at www.drinol.com



Hinged Non-Welded Positive Casing Centralizer

- › Hinged design for easy transporting, storing and installing.
- › Use hinged pins to secure the hinged end collars together around the casing.
- › Straight formed positive bars are attached onto the hinged end collar with rivets.
- › Easy installation and normally run over a stop collar or coupling.
- › U-profile design instead of spring bows can ensure maximum fluid passage and reduce frictional drag force in deviated hole conditions.
- › Almost 100% standoff when run inside a cased hole.
- › Flat U profile is fitted in self locking retaining lips for firm and positive hold.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



Hinged Welded Bow Spring Centralizer

- › It has more restoring force than non-welded centralizers.
- › The bow springs are strongly welded to the end collar under required temperature and condition with extra low hydrogen coated electrodes.
- › Hinged design is easy to transport, store and installation.
- › End collars are designed with a reinforcing rib stamped into the end collar to give maximum structural toughness.
- › Bow spring heights can be adjustable.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



Slip-On Welded Bow Spring Centralizer

- › It is composed of welded bow springs and seamless end collars.
- › Slip on centralizers are designed with roll formed peripheral ridges to provide extra rigidity.
- › It is directly installed on the pipe by slipping on and can be provided with stop collars with set screws.
- › Adjustable bow heights for optimum starting and restoring force.
- › Powder coating or painting to prevent from rust and corrosion in well bore.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.



Slip-On Welded Positive Casing Centralizer

- › Specially designed with flat bottom U profile with different depths permit maximum fluid passage.
- › Bow springs are strongly welded to seamless end collars under required temperature conditions with correct grade electrode.
- › Provide 100% standoff (concentricity) when run inside a case hole.
- › Just install onto the casing by slipping on the centralizer.
- › Available in sizes 4-1/2" to 20" and special sizes are also available.

Specifications ▼

Size (inch)	Bow Quantity	Outside Diameter	Inner Diameter	Overall Length
4-1/2" x 6"	4	160	116	450/575
4-1/2" x 6-1/4"	4	167	116	450/575
4-1/2" x 7-7/8"	4	210	116	450/575
4-1/2" x 8-1/2"	4	230	116	450/575
5" x 6"	4	160	128	450/540
6" x 6-3/4"	4	180	128	450/575
5" x 7-7/8"	4	210	128	450/575
5-1/2" x 7-7/8"	5	210	140	450/575
5-1/2" x 8-1/2"	5	216/245	140	450/575
5-1/2" x 8-3/4"	5	222/250	140	450/575
5-1/2" x 9-7/8"	5	251/264	140	450/575
5-1/2" x 9-1/2"	5	242/264	140	450/575
7" x 8-1/2"	6	216/230	179	450/575
7" x 8-3/4"	6	222/233	179	450/575
7" x 9-1/2"	6	242/264	179	450/575
7" x 9-7/8"	6	251/264	179	550/650
9-5/8" x 12-1/4"	8	346	245	550/650
9-5/8" x 13-3/8"	8	346/352	245	550/650
9-5/8" x 12-13/16"	8	378	245	550/650
10-3/4" x 14-3/4"	9	405	275	550/650
10-3/4" x 15-1/2"	9	374	275	550/650
13-3/8" x 17-1/2"	10	440/466	342	550/650
13-5/8" x 17-1/2"	12	440/466	342	550/650
20" x 26"	12	696	510	550/610/650



MORE CHOICES.....

More products can be purchased
Online at www.drinol.com

SOLID RIGID CENTRALIZER

Spiral/Straight Vanes and Rollers

Solid rigid centralizers are one series of casing centralizers, which are integral part of cementing processing. They are built out of solid steel bar or cast iron with a fixed blade height and are sized to fit a specific casing or hole size.

It is available in steel or aluminum materials with spiral or straight blade body construction in standard and customized sizes to match different casing sizes and wellbore conditions. Roller centralizers are also available for customers' requirements.

Solid rigid centralizers are available in deviated or horizontal wells. But it is rarely selected in the vertical wells because of the smaller diameter than the wellbore.



Categories ▼

Straight/Spiral Vane Solid Centralizer



Straight vane solid centralizer



Spiral vane solid centralizer

- › Available in straight or spiral vane types
- › It is used in areas where a good primary cementing job is required, including deviated and horizontal wells, liner overlaps and shoe joints.
- › Spiral vane is developed in response to the need for better cementing and can provide optimum flow area in high deviated and horizontal well.
- › Reduced flow area between the spiral blades produces a vortex motion of the fluids for more fluid velocity with direction.
- › Made of cast steel, which is high tensile and solid for shock and impact resistance.
- › 360 degree overlapping solid vanes provide maximum wall contact and fluid swirl.
- › Powder coating treatment provide excellent corrosion and rust resistance performance.
- › Vane ends are beveled 30 degree relative to the casing centerline to provide excellent lead into restrictions and reduced drag when running in the wellbore. Besides, it keeps running forces at a minimum.
- › Wide vanes distribute load from the casing string into the wellbore without gouging.
- › Standard size is 4-1/2" to 20". Any special sizes or combinations can be customized on request.
- › Available in with or without set screws for eliminating of stop collars.

Straight/Spiral Roller Solid Centralizer



Straight roller solid centralizer



Spiral roller solid centralizer

- › Fully heat treated rollers are fixed on every straight or spiral blades/vanes.
- › Better capacity than the straight/spiral vanes solid centralizers because of rigid body and rolling friction between the roller and inside of well or casing.
- › Made of cast steel, which is high tensile and solid for shock and impact resistance.
- › Roller/wheeled centralizers are mainly used for high deviated wells and horizontal wells to centralize casing.
- › Can remove wellbore cake and improve mud replacement efficiency.
- › Provide superior wear resistance and remain functional throughout the life of the well and can aid in casing/tubing retrieval.
- › Smaller roller-contact area reduces the risk of differential sticking and maintains standoff when running casing through open holes.
- › Rollers are crimped in place, eliminating the welding process, while ensuring the rollers cannot bread free and fall into the wellbore.
- › Available in sizes 4-1/2" to 20".

 **MORE CHOICES.....**

More products can be purchased
Online at www.drinol.com



Straight vane aluminum solid centralizer



Spiral vane aluminum solid centralizer

Straight/Spiral Vane Aluminum Solid Centralizer

- › Made of high tensile, solid, cast aluminum for shock, impact and corrosion resistance.
- › Used in areas where a good primary cementing job is required, including deviated and horizontal wells, liner overlaps and shoe joints.
- › Suitable for either cased or open hole.
- › Spiral vanes fully overlap to give 100% wellbore coverage and increase annular turbulence to improve wellbore cleanout.
- › Vane ends are beveled 30 degree relative to the casing centerline to provide excellent lead into restrictions and reduced drag when running in the wellbore. Besides, it keeps running forces at a minimum.
- › Wide vanes distribute load from the casing string into the wellbore without gouging.
- › Standard size is 4-1/2" to 20". Any special sizes or combinations can be customized on request.



Slip-On Stand Off Band Centralizer

- › The centralizer is made of stamped steel.
- › It is designed for vertical well configurations where lateral loads are at a minimum.
- › It is designed to provide a positive stand off the casing for both cased and open holes.
- › The stand off centralizer is required where close tolerance between the casing and the hole is being encountered.
- › It allows for reciprocation and rotation during cementing and can be installed between set screw stop collar.
- › Available in all sizes ranging from 4-1/2" to 20" and any special sizes or combinations are available on request.



Slip-On Welded Straight Cage Rigid Centralizer

- › It is designed for high deviated horizontal well where casing centralization is the main consideration.
- › Rolled alloy steel bars are welded to the one piece roll formed end collar under required temperature.
- › Provide superior toughness over other material.
- › Its insured positive standoff, maximum flow, maximum well bore stabilization, maximum holding strength and decreased drag.
- › It is directly installed on pipe by slipping on and with or without setscrews for elimination of stop collar.
- › All centralizers are painted or coated with polyester powder.
- › Available in all sizes ranging from 4-1/2" to 20" and any special sizes and combinations are available on request.

Specifications ▼

Size (in.)	Inside Diameter (mm)	Height (mm)	Total Height (mm)	Max. Outside Diameter (mm)
5" × 6-1/2"	128–131	110	650	175
5" × 6-1/4"	130–132	110	650	170
5" × 12-1/4"	128–131	105	690	330
5" × 20"	128–131	105	720	535
5-1/2" × 7"	142–148	55	650	215
5-1/2" × 8-1/2"	142–148	55	650	225
5-1/2" × 8-1/2"	142–148	110	650	225
6" × 8-1/2"	156–158	55	650	235
7" × 8-1/2"	181–186	55	650	235
7" × 8-1/2"	181–186	110	650	235
7" × 9-5/8"	181–186	55	650	255
7" × 9-5/8"	181–186	110	650	255
7-5/8" × 9-1/2"	196–200	110	650	250
7-5/8" × 9-5/8"	197–201	55	650	275
7-5/8" × 12-1/4"	197–201	55	650	275
8-5/8" × 12-1/4"	223–228	55	650	330
9-5/8" × 12-1/4"	250–255	55	650	330
9-5/8" × 12-1/4"	250–255	110	650	330
10-3/4" × 12-1/4"	274–276	55	650	330
10-3/4" × 12-1/4"	274–276	110	650	330
13-3/8" × 17-1/2"	342–347	55	650	450
13-3/8" × 17-1/2"	342–347	110	650	450
18-5/8" × 24"	476	55	600	610
20" × 26"	510	55	600	660

Applications ▼

The solid rigid centralizer ensure positive centering in deviated or horizontal holes. It can provide mechanism to centralize the casing in the wellbore and allow uniform cement flow around the casing by reducing the effects of channeling and protect the casing at all points.

But since the centralizers are smaller than the wellbore, they will not provide a good centralization as the bow spring centralizers do in vertical wells.



MORE CHOICES.....

More products can be purchased
Online at www.drinol.com



Address:

Room 1703, No. Building,
Haiyue Mansion,
HaigangDistrict, Qinhuangdao
city, Hebei Province, China.

Tel:

+86-17333531135

Web:

www.drinol.com

E-mail:

sales@drinol.com

CATALOG

Hebei Wennian Trading Co., Ltd