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Spinbar® Magnetic Stirring Bar Guide

A Magnetic Stirring Bar for Every Application

Applications	General Stirring Applications	High Temperature Stirring	Viscous Solutions High Speed Stirring
Brand/Type	**Spinbar® Teflon PTFE**	**Spinbar® Pyrex Glass**	**Spinbar® Rare Earth Samarium Cobalt**
Magnetic Type	Alnico	Alnico	Samarium Cobalt
Covering	Teflon® PTFE	Clear Pyrex® Glass	Teflon® PTFE
Features/ Benefits	Wide selection of shapes and sizes to fit vessels of all types; Individual shapes create different vortexes for efficient and effective stirring	Heated stirring applications up to 274ºC (525ºF)	Reliable Magnetic Coupling - Superior magnetic energy reduces frequency of spinout in the most vigorous applications
	FDA grade Teflon® PTFE low friction coating is durable and inert	Glass casing has zero absorption and porosity	FDA Grade Teflon® PTFE low friction coating is durable and inert
	Color selection for color-coding work processes		Distinct Color - Green color lets you quickly identify Spinbar® Rare Earth Samarium Cobalt

All Spinbar® and other Teflon® PTFE Coated Magnetic Stirring Bars are Manufactured in a Registered ISO 9001:2008 Facility, as Verified by SGS Certification.

Spinbar® Magnetic Stirring Bar Shapes and Performance

Whether mixing is needed in a 10mm cuvette, a 1.5ml vial, a beaker, or a 50 gallon drum, there is a Spinbar® magnetic stirring bar that can do the job. Bel-Art – SP Scienceware offers the most comprehensive selection of magnetic stirring bars on the planet.



Capsule magnetic stirring bar has a polygon magnetic stir bar that spins freely inside a protective capsule. The capsule assures the bar does not spin off center and reduces turbulence and obstructions to ensure consistent smooth stirring.



Cell magnetic stirring bars are designed specifically for use with spectrophotometer cells, cuvettes or test tubes. The cell stirrer fits into standard 10mm spectral cells and provides rapid vertical and horizontal mixing with a minimum of vortexing when placed on a magnetic stirring machine. Centrifugal pumping action, generated by the cross channels in the upper face, mixes without aeration.

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Circulus™ magnetic stirring bars provide strong turbulence at relatively low speeds, offer reduced surface contact and have excellent centering characteristics, particularly in vessels with convex bottoms.



Cylindrical magnetic stirring bars offer excellent centering and smooth running characteristics. A small removable pivot ring in the center adds to their versatility. The pivot ring minimizes the contact area of the bar to the vessel, reduces friction and lessens marring of plastic containers.



Elliptical (Egg Shaped) magnetic stirring bars are particularly well suited for round bottom flasks. Their shape mimics that of a flask and ensures complete mixing. They also offer minimal contact when used in plastic containers.



Fluted Octagonal – Rare Earth magnet The flutes of this eight-sided bar along with a definitive tapering to conical ends provides excellent surface area and recessed breaks in the profile to generate strong turbulence and efficiently move fluids. Available only in Rare Earth (Samarium Cobalt), the shape and magnet strength make these bars especially well-suited for viscous solutions.



Micro (Flea) magnetic stirring bars are designed for stirring small volumes in vessels such as vials, tubes and gradient makers. Available in a variety of colors and sizes, micro (flea) stirring bars are particularly useful for environmental testing and life science applications in which small sample volumes need to be prepared and evaluated.



Octagon magnetic stirring bars with integral pivot ring are the most commonly used shape. Their interrupted profile provides greater surface area and added turbulence when compared to the smooth surface of cylindrical bars. Pivot ring aids in reducing friction and chattering.



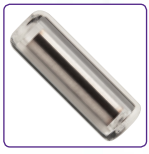
Octagon – Rare Earth magnet The superior magnetic energy of Rare Earth (Samarium Cobalt) magnets provides strong coupling with drive magnets reducing frequency of spinout in viscous solutions or high speed stirring. The bright green Teflon® PTFE coating makes them easy to identify in the laboratory.



Plain Spinbar® Magnetic Stirring Bars Smooth surface stirbars have no sharp or flat edges which maximizes contact with the stirring vessel.



Polygon/Giant Polygon multifaceted surfaces add turbulence relative to similar smooth size cylindrical bars. Giant Polygon bars can be used for stirring substantial volumes in large vessels such as drums and tanks. Available with or without a molded pivot ring, this ring minimizes the contact area between the bar and the vessel, thus reducing friction and chattering.



Pyrex® Spinbar® glass encapsulated Alnico magnet stirring bars are useful for high temperature applications up to 274˚C (525˚F) where Teflon® PTFE is not stable. Completely smooth surface offers "zero absorption" of the stirred solution.

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Round magnetic stirring bars with tapered ends have a naturally centered pivot point, eliminating the need for a separate pivot ring. Smooth surface and the slightly raised ends on these bars facilitate efficient movement through solutions.



Saturn Spinbar® Magnetic Stirring Bars easily stir powders into solutions without getting stalled. A prominent sphere in the middle of the bar elevates the stirring bar arms during rotation and consequently diminishes the surface contact area, permitting the magnet to spin freely without stalling. For use in round or flat bottom vessels.



Spinfin® magnetic stirring bars can be used in round bottom flasks as well as rounded vessels such as test tubes or cylinders.



Spinplus® magnetic stirring bars add speed and efficiency to mixing operations. The "+" shape creates a deep vortex and provides stable, quiet operation.



Spinring® stirring bars provide maximum stabilization of the magnetic stirring bar with the addition of a "hoop" around a standard octagonal bar. The friction fit of the "hoop" and bar allows them to spin as a unit. By presenting a greater surface area and wider profile, "spin out" is virtually eliminated. This particular arrangement is best suited for larger open-neck vessels, such as buckets and beakers.



Spinstar® magnetic stirring bars create a deep mixing vortex at relatively slow speeds. Designed to fit the inside diameter of most commonly-used beakers, the Spinstar® stirring bar is perfect for applications requiring slow, thorough mixing.



Spinvane® magnetic stirring bars are designed for test tubes, micro vials and conical bottom centrifuge tubes. Each style is manufactured for a specific size tube, but can be modified if needed without affecting the magnet.



Spinwedge® magnetic stirring bars provide strong turbulence at fairly low speeds and are well suited for churning sediment or dissolving salts.