

# Agitators



**LEE INDUSTRIES**  
*Processing Perfection.™*

Our agitators are ideal for blending/mixing products across a wide range of viscosities, providing optimal mixing and improved heat transfer rates through scraped-surface agitation. Lee agitators can be custom designed for new or existing kettles, tanks and vacuum pans, including hemispherical, flat, dished and cone bottom configurations. Agitator bars and scrapers are designed to work to create uniformly blended product.

## Agitator Standard Features

- USDA/3A
- Capability to mix product viscosities ranging from waterlike to over 2,000,000 cps, with a minimum standard design on all scraped-surface agitators of 100,000 cps.
- Superior, exclusive heavy-duty gearboxes, that offer the most robust drive systems.
- Special, optional configurations for products that are difficult to mix with standard vertical agitators.
- State-of-the-art variable-speed capabilities for the most versatile processing opportunities.
- The highest-quality sanitary materials, welding, and polishing available.
- Custom engineered design – can be incorporated into kettles as well as dished, conical and flat-bottom tanks.
- Design and fabrication that meets or exceeds your sanitation and processing requirements.



# AGITATORS

We manufacture custom processing equipment based exclusively on your product processing needs. To provide a complete look at all of the features we offer with our agitators, we've included a description of them below.

## Scraper blades

- Scrape the walls of the vessel to ensure thorough agitation.
- A variety of scraper blade styles and materials are available, including time-tested Lee standard scraper blades, to wide mixing/lifting/heavy-duty shovel-style scraper assemblies.

## Agitator bars

- Provide additional top to bottom mixing of the product as the agitator scrapes the walls and swirls the product toward the agitator bars.

## Vertical baffle

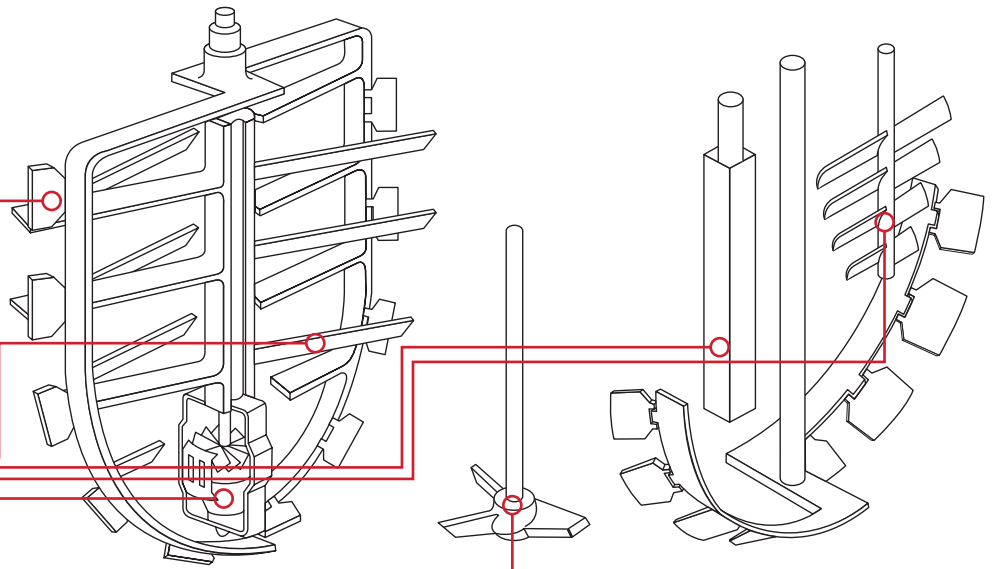
- Adjustable or removable baffles are available.

## Secondary mixer

- Provides thorough agitation as the agitator scrapes the walls and swirls the product toward the secondary mixer.

## High-Shear Mixer

- Can be added to incorporate powders into liquids to minimize lumps and create a smooth liquid.



## Auxiliary prop

- Provides additional mixing and agitation

## Extensions

- By extending an agitator to the top of your kettle, tank or vacuum pan, you'll be sure not to miss any of your product as the agitator mixes completely from top to bottom.

## Inclines

- Designing your agitator at an incline will provide uniform dispersion and direct the product to the bottom outlet for thorough discharge of the batch.

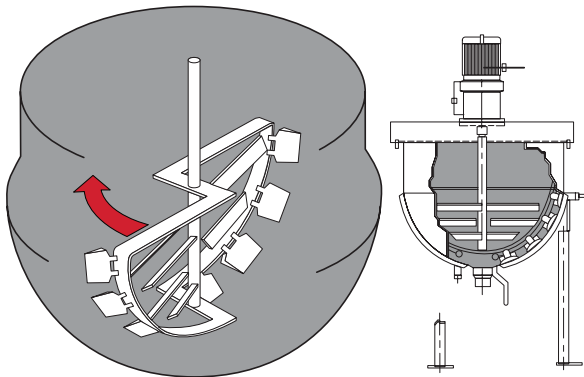
## Gearboxes

- Our gearboxes offer the most robust drive systems for our agitators. Optional independent "piggy-back" style gearbox designs are available for double-motion agitators, maximizing mixing flexibility for future products.

## Electropolishing and Finishing

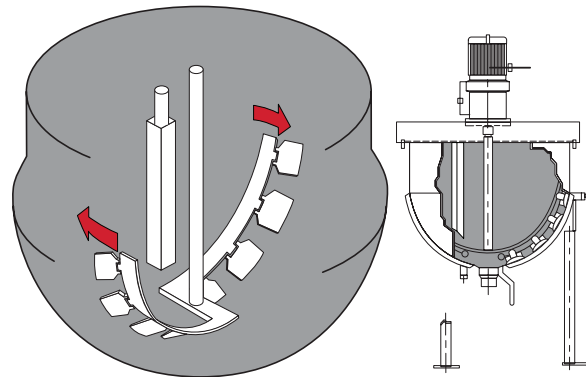
- We recognize the demand for high-quality, durable, ultra-sanitary finishes. We provide world-class mechanical finishes and can also provide electropolish finishes on many of our parts and products.

## Single Motion Agitators



**Single-motion agitator (Style #5)**  
with bars and scraper blades

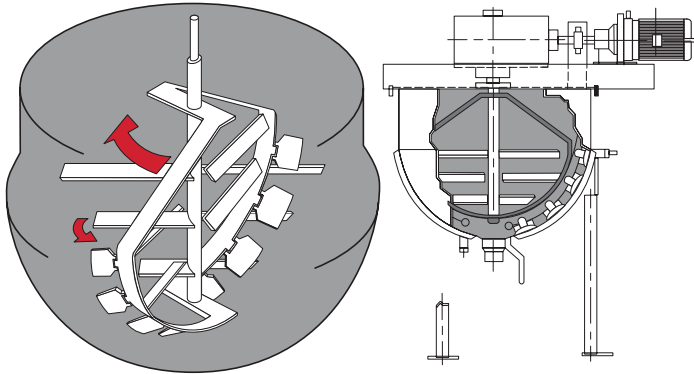
- Also available without scraper blades



**Single-motion, anchor-style (Style #7)**  
with scraper blades and a fixed vertical baffle

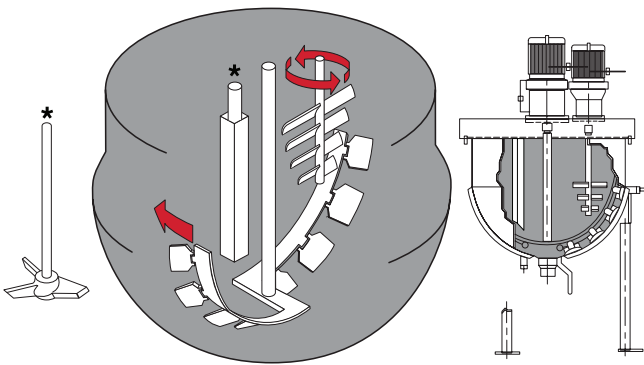
- Adjustable or removable baffle optional
- Sickle and sweep designs available

## Double Motion Agitators



### Double-motion agitator (Style #9M) with scraper blades, counter-rotating shaft and agitator bars

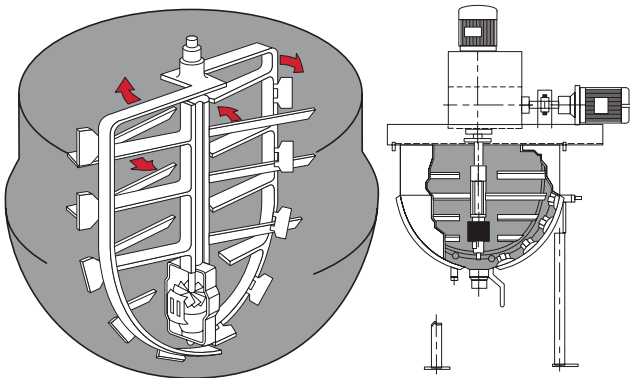
- Meets the most stringent sanitary requirements with a sanitary quick disconnect coupling on the counter-rotating shaft
- Bottom end plate contains a USDA approved bushing to assure alignment



### Dual agitator (Style #10) with anchor-style agitator combined with pitched blade secondary mixer

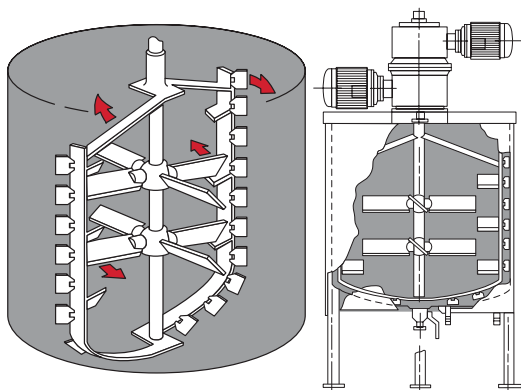
- Anchor-style scrapes side walls and stirs product toward secondary mixer for complete agitation
- \*Auxiliary prop or high-shear mixer available as an option

## Specialty Agitators



### Triple-Motion Tri-Mix Turbo Shear® agitator (Style #12) with scraper blades, counterrotating agitator bars with on-center, high-shear, high-speed mixing

- Independent center mounted high-shear mixer
- High-shear mixer runs at 3,450 or 1,725 RPM



### Turbine Style

- Independent "piggy-back" style drives on high-intensity double-motion agitator with scraper blades
- Adjustable 4-blade pitched turbines on inner construction
- Incorporates batch turnover capability of turbine mixer with efficient agitation of counter-rotating agitator
- Available in USDA approved design



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