

Overhead Mixer Selection Guide



133 104 104A 104X 107 107SC 134-1

	133	104	104A	104X	107	107SC	134-1
Horsepower	1/12	1/18	1/18	1/18	1/30	1/30	1/18
Type of Speed Control	Transi-Stir	Electronic	Electronic	Fixed	Fixed	Electronic	Transi-Stir
Number of Output Shafts	1	2	2	2	1	1	2
Speed Range: Direct Drive	500 to 7500rpm	1000 to 7500rpm	1000 to 7500rpm	7500rpm	1600rpm	100 to 1600rpm	500 to 7500rpm
10:1	N/A	100 to 750rpm	100 to 750rpm	750rpm	N/A	N/A	50 to 750rpm
60:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Torque: Direct Drive	0.7 in-lbs	0.5 in-lbs	0.5 in-lbs	0.5 in-lbs	1.3 in-lbs	1.3 in-lbs	0.5 in-lbs
10:1	N/A	4.7 in-lbs	4.7 in-lbs	4.7 in-lbs	N/A	N/A	4.7 in-lbs
60:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Specifications: Volts	120 AC	120 AC	120 AC	120 AC	120 AC	120 AC	120 AC
Amps	1.3	1.1	1.1	1.1	1.2	1.2	1.1
Overall Usage Rating	High Speed	Medium	Medium	Medium	Medium	Medium	Heavy
Type of Chuck	Collet, Model 193	Collet, Model 193	Collet, Model 193	Collet, Model 193	Collet, Model 193	Collet, Model 193	Adjustable, Model 191D
Recommended Paddles	151, 153B	All 5/16" Accessory Shafts*	All 5/16" Accessory Shafts*	All 5/16" Accessory Shafts*	151, 152, 153B, 156, 166	151, 152, 153B, 156, 166	All

* Be sure the accessory shaft is 5/16" in diameter to fit Model 193 Collet Chuck.

How to Select an Overhead Mixer

Review the following information to help you select the appropriate motor and accessories for your unique applications.

Paddle Selection

- Viscosity of the sample
- Volume of the sample
- Size and shape of mixing vessel and vessel opening
- Speed needed to achieve proper mixing
- Paddle depth for effective mixing
- Paddle material: stainless steel, PTFE, or glass; may be dependent on the nature of the material being mixed
- Fluid flow: axial, radial

Motor Selection

- Mixing speed
- Viscosity
- Duty Rating:
 - Light:
 - Ideal for low viscosity materials
 - Volumes under 10 gallons
 - High Speed:
 - Ideal for high speed dispersion and low viscosity
 - Medium:
 - Multi-purpose units designed for various mixing tasks
 - Gear reduction shaft provides more torque for higher viscosity mixing
 - Direct drive shaft is ideal for lower viscosity and high speed mixing
 - Heavy:
 - Designed for high viscosity applications or large batch mixing
 - Gear reduction provides the torque required for more difficult mixing applications.

Speed Control

- Transi-stir:
 - Provides variable speed control throughout the entire speed range
 - Available top mounted or remotely attached
- Electronic:
 - Maintains set speed even under changing viscosity or load
 - Provides stepless, variable speed control
- Fixed:
 - Maintains fixed speed

Support Stands and Holders

- Support stands are not included with motors
- Available in a variety of lengths
- Standard Holder supports the supplied rod for mounting most mixers
- Heavy-Duty Holder accommodates a wider range of sizes and is sturdier thus decreasing vibration

Chucks

- Adjustable Jacobs style:
 - Not recommended for high speed mixing
- Precision Collet style:
 - Used when motor shaft and accessory shaft are the same diameter
 - Recommended when running at higher speeds
- Glass Rod:
 - Required chuck when using glass mixing rods
 - Designed to eliminate wobble and vibration common with glass mixing rods
 - Nylon inserts help maintain the integrity of glass mixing rods