

## CTE MODEL 7000 MIXER 1L / 4L CONSTANT SPEED MIXERS



### 1L / 4L CONSTANT SPEED MIXERS

The CTE Model 7000 and 7100 Constant Speed Mixers provide all the necessary functions to mix cement slurries according to API and ISO specifications and recommended practices. These mixers can also be used to thoroughly mix other shear-sensitive dry or fluid materials. Detailed testing within the API has shown that the methods of mixing cement slurries will significantly effect the thickening time. The Model 7000 and 7100 Mixers are designed in accordance to API Spec 10 and have constant speed operation independent of the line voltage and rate that cement is added to the mix water. Good practice indicates that the cement be added slowly over a fifteen second period as specified by the latest addition of API Spec 10. The Model 7000 and 7100 Mixers will hold speed constant during the fifteen second period without operator attention, so wide variations in shear rate are avoided. Variations in shear rate have been found to be a major source of differences in thickening time tests when other variables are held constant. Tests within the API have also shown significant variations in thickening time as a result of worn or eroded mixer blades. Major differences in thickening time are eliminated by the use of hardened blades in the Model 7000 and 7100. The hardened blades resist erosion during the mixing process and retain their original shape and pattern many times longer than standard blades normally found on regular industrial mixers. Of course, worn, hardened blades will need to be replaced with new hardened blades after showing signs of erosion.

The hardened blades offer two advantages when used with Constant Speed Mixer:

- Increased reproducibility when measuring thickening time to reach 100 Bc units.
- More efficient utilization of mixer blades.

The control panels of the Model 7000 and 7100 are at eye level when the mixers are placed on a normal laboratory bench. Ease of operation is ensured by having push button controls for the two speeds specified by API Spec 10 preset. It is a simple operation to add the cement to the mix water at 4,000 rpm and then set the speed to 12,000 rpm by pressing a switch. The speed is immediately increased to 12,000 rpm with no other operator action, assuring compliance with API Spec 10, and consistent mixing from sample to sample. The Model 7000 and 7100 Mixers are designed for heavy-duty industrial applications and long life. An additional shaft seal and special electronic circuitry are added to the basic mixer motor assembly to ensure the mixers reliability. The mixers also have stainless steel cabinets to protect against corrosive elements.

### WARRANTY

All CTE products are covered by a full one-year warranty against defect in materials and workmanship. A sales terms, conditions, and warranty statement is included with each quotation or confirmation of order.





MODEL 7000 1 LITER MIXER



MODEL 7100 4 LITER MIXER

115 & 230 Volt Models Available

## BENEFITS

- No variation in thickening time test due to changes in shear rate
- Hardened mixing blades assure long life
- Operator can quickly select API specified speeds while adding cement to mixer
- Variable speed selection allows mixing of shear-sensitive dry or fluid materials at any speed
- Stainless steel container can withstand abrasive action when mixing cement at high speeds
- The constant speed is easily observed via a bright digital display
- Stability of the unit is ensured by the heavy base plate and control panel which are designed for safe and easy operation
- The preset speeds can be easily changed to any value between 1,000 and 16,000 rpm for applications outside API Spec 10
- Heavy-duty industrial-grade mixer assures its trouble-free and long life operation

## FEATURES

- Constant speed operation Hardened mixing blades
- Two preset constant speeds (4,000 and 12,000 rpm)
- Push button selection of speed
- One continuous variable speed (1,000 to 21,000 rpm)
- Stainless steel container
- Bright digital display at eye level
- Stable base plate and control panel
- Preset speeds easily set to new values
- Industrial grade mixer

## ENVIRONMENTAL & UTILITY CONNECTIONS

MODEL 7000		MODEL 7100	
Container Material	Stainless Steel	Container Material	Stainless Steel
Maximum Speed	21,000 rpm	Maximum Speed	21,000 rpm
Speed Selection Switch	Three push button switches to quickly select the desired speed	Speed Selection Switch	Three push button switches to quickly select the desired speed
Constant Speeds	Two independently adjustable speeds over a wide range of rpm, adjusted by CTE to 4,000 to 12,000 rpm (per API Spec 10)	Constant Speeds	Two independently adjustable speeds over a wide range of rpm, adjusted by CTE to 4,000 to 12,000 rpm (per API Spec 10)
Adjustable Speeds	1,000 to 21,000 rpm	Adjustable Speeds	1,000 to 21,000 rpm
Display	Speed is displayed directly in rpm	Display	Speed is displayed directly in rpm
Cabinet	Stainless Steel	Cabinet	Stainless Steel
Container Volume	1 quart (1 liter)	Container Volume	4 quarts (4 liters)
Dimensions	26 inches (66cm) high x 16 inches (41cm) wide x 11 inches (28 cm) long	Conversion Adapter	Provides conversion so 1 liter container can be operated by Model 7100
Net Weight	45 lb (20 kg)	Dimensions	35 inches (89cm) high x 16 inches (41cm) wide x 11 inches (28 cm) long
Shipping Weight	80 lb (36 kg)	Net Weight	55 lb (25 kg)
		Shipping Weight	110 lb (50 kg)