

Zinger™ horizontal media mills

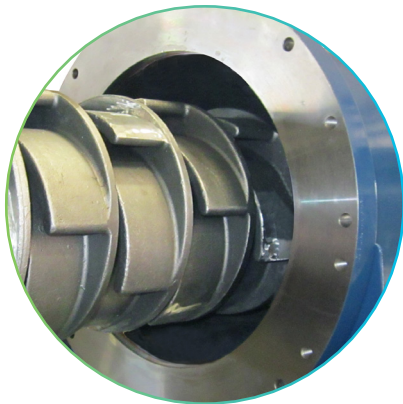
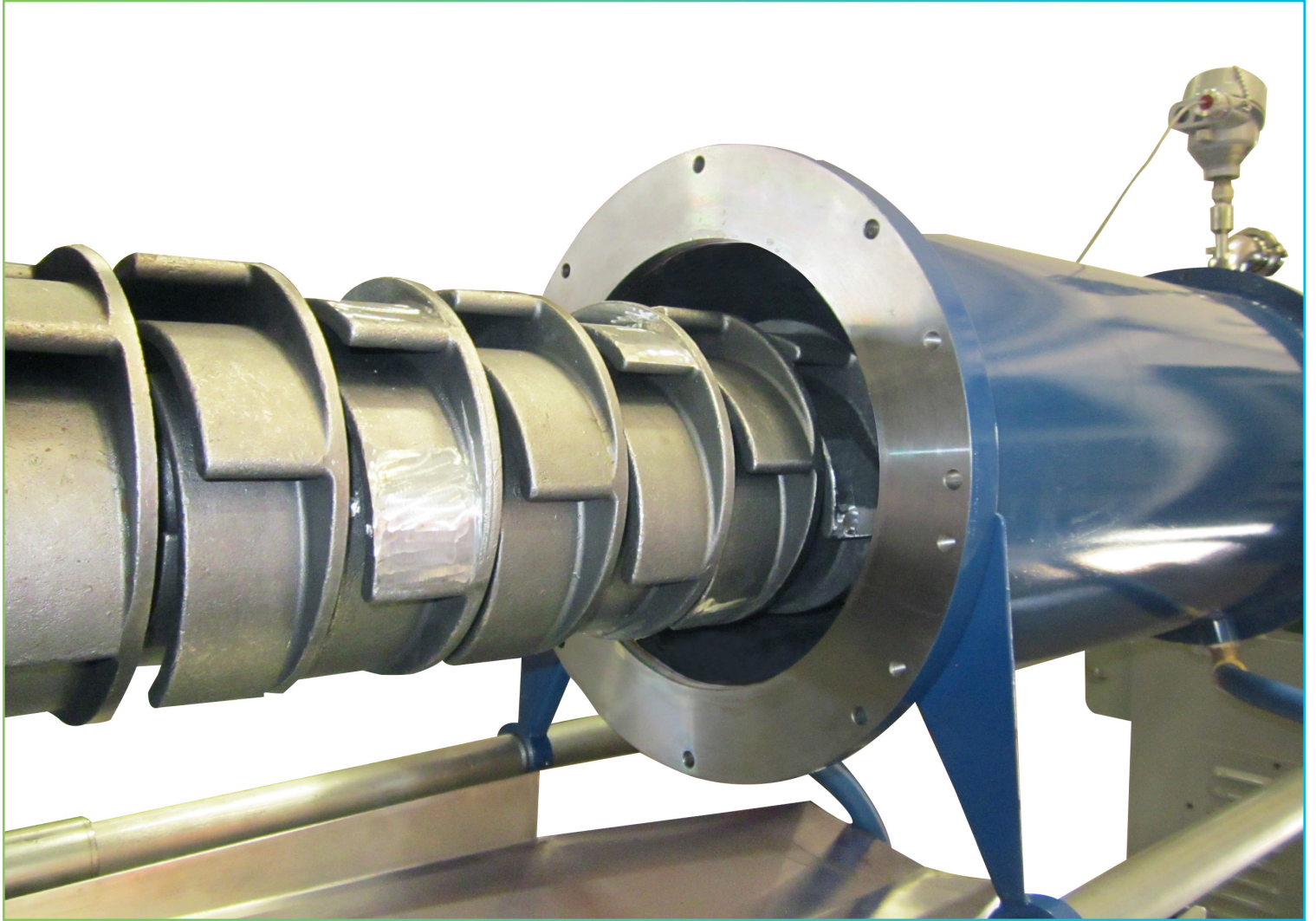
Product Guide

This completely sealed, self-contained grinding and dispersion mill produces fine and ultra-fine dispersions. The Zinger™ uses an exclusive rotor and vessel design to aggressively move media through the slurry and has proven to reduce particle size in significantly less time than the conventional disc mill design. This horizontal design requires less energy and allows the use of smaller media. Low to extremely high viscosity slurries are easily and efficiently processed using its unique rotor design.

EFFICIENT, CONTINUOUS MILLING ACTION

A prepared pre-mixed liquid/solid slurry is continuously pumped into a pressure-sealed horizontal chamber. The chamber contains grinding media and several shaft-mounted rotors. Each rotor is fitted with specially designed vanes. Media is accelerated at high velocity through the slurry toward the chamber wall, impacting, shearing, and reducing the size of the solid slurry particles.





Rotor design



Pressure gauge



Product temperature probe

SPECIFICATIONS

	XL-1*	SV-4	LV-20	LV-40
CAPACITY GAL (LITERS)	- 0.33 (1.25L)	- 1.35 (5.1L)	- 7.3 (27.5L)	- 10 (38L)
THROUGHPUT GAL/HR	- 0 - 10	- 0 - 50	- 0 - 250	- 0 - 400
MOTOR	1 hp <ul style="list-style-type: none"> - 1800 RPM, 115/230 volt, 60 Hz, 1 phase - TEFC Class I, Division 1, Group D (explosion proof) - Premium efficiency - Across the line single speed 	15 hp <ul style="list-style-type: none"> - 1800 RPM, 230/460 volt, 60 Hz, 3 phase - TEFC Class I, Division 1, Group D (explosion proof) - Inverter duty motor 4:1 ratio - Premium efficiency 	25 hp <ul style="list-style-type: none"> - 1800 RPM, 230/460 volt, 60 Hz, 3 phase - TEFC Class I, Division 1, Group D (explosion proof) - Inverter duty motor 4:1 ratio - Premium efficiency 	50 hp <ul style="list-style-type: none"> - 1800 RPM, 230/460 volt, 60 Hz, 3 phase - TEFC Class I, Division 1, Group D (explosion proof) - Inverter duty motor 4:1 ratio - Premium efficiency
DRIVE	- Mechanical variable speed drive through belt and pulley system	- V-belt and sheave - Variable speed via Variable Frequency Drive (VFD/inverter)	- V-belt and sheave - Variable speed via Variable Frequency Drive (VFD/inverter)	- V-belt and sheave - Variable speed via Variable Frequency Drive (VFD/inverter)
SHAFT	- 303 stainless steel	- Carbon steel	- Carbon steel	- Carbon steel
SHAFT SPEED	- 3602 RPM	- 2170 RPM	- 923 RPM	- 989 RPM
DISCS	- 2" diameter patented stainless steel pumping-style rotors	- 3.5" diameter patented design - Abrasion resistant high chrome alloy carbon steel	- 8.0" diameter patented design - Abrasion resistant high chrome alloy carbon steel	- 8.0" diameter patented design - Abrasion resistant high chrome alloy carbon steel
PUMP/PRODUCT FEED	- Viking gear pump - Speed reducer: traction drive belt off main motor sheave	- Viking gear pump controlled through inverter (VFD)	- Viking gear pump controlled through inverter (VFD)	- Viking gear pump controlled through inverter (VFD)
TYPICAL MEDIA LOAD	- 80% of gross volume			
INSTRUMENTATION	<ul style="list-style-type: none"> - Control station: Pressure gauges, sensors, interlocks, logic circuit, start/stop buttons for main motor, circulator and product pump; potentiometer for product pump, and status lights for correct start-up sequencing and automatic shut down in upset conditions. All in a NEMA 7 (explosion proof) enclosure. - Drive cabinet: Inverters for main motor and pump motor, start button for seal reservoir motor, and electrical in NEMA 12 (dust proof) enclosure. Separate from main unit. 			
UTILITIES REQUIRED	- Electrical power 1 phase			
DIMENSIONS	- 32" L X 20.5" W X 25" H	- 54.5" L X 34" W X 52" H	- 56.5" L X 37" W X 64" H	- 68.5" L X 37" W X 64" H
SPECIAL FEATURES	<ul style="list-style-type: none"> - The "jog" or "pulse" function is only operational if the product feed pump is on. Prevents unnecessary media and mill wear. - Telescoping chamber allows easy and complete access to rotor, shaft and chamber interior without need of heavy lifting equipment - Discharge port valve relieves internal chamber pressure for screen removal or to drain cleaning solvent - Media separation device: "lift-out" heavy-duty cartridge, extra-large cylindrical screen with low internal operating pressure - Dual mechanical cartridge type shaft seal cooled with recirculation pump and fluid reservoir - Fully-baffled, high-velocity, cooling jacket on chamber for temperature control 			
SAFETY FEATURES	<ul style="list-style-type: none"> - High pressure chamber shutdown: All operators shut down if chamber is over pressure 			
CONSTRUCTION	<ul style="list-style-type: none"> - All parts in contact with product are 304 stainless steel - All non-wetted parts are painted dark blue and gray solvent-resistant paint 	<ul style="list-style-type: none"> - All wetted parts are carbon steel - All non-wetted parts are painted dark blue and gray solvent resistant paint 	<ul style="list-style-type: none"> - All wetted parts are carbon steel - All non-wetted parts are painted dark blue and gray solvent resistant paint 	<ul style="list-style-type: none"> - All wetted parts are carbon steel - All non-wetted parts are painted dark blue and gray solvent resistant paint

*.25L & .5L sizes available



OPTIONS:

PRODUCT FEED

1. Air diaphragm pumps
2. Progressive cavity pumps

VESSELS

1. Special materials of construction for harsh or corrosive environments
 - 304 & 316L - cast stainless steel
 - Ceramic
 - Urethane

MOTOR

1. Wash-down inverter duty motor

GRINDING MEDIA

The size and type of grinding media are the two most important factors in the quality and quantity of the product processed in a small media mill. There are numerous types and sizes of media available, consult our media experts for proper requirements. It is the combination of the media and the product that ultimately determines how well your mill performs.

Made in the USA

For more information, visit [morehousecowles.com](https://www.morehousecowles.com) or contact MorehouseCowles experts today at sales@morehousecowles.com or +1 (909) 627 7222.