

405 Servo Drive Ladle

- Foundry
- Die Casting

Accurate, Consistent & Fast Automated Pouring

Rimrock's 405 Servo Drive ladler features an innovative linkage drive mechanism with sensor assembly, which enables the ladler to be stronger, faster and smoother. Two servo motors control all movements and pouring speeds to maintain precise pouring accuracy. Moreover, the shot size is accurately controlled by a servo motor, which assures consistency through a commutating encoder assembly. Our 405 Ladler utilizes servo drive technology to provide the user with minimized pot-to-shot times, the ability to use contour pouring, and the "pour forward" command to eliminate dripping.

Key Features

- Servo drive makes the ladle faster and more accurate
- Programmable stroke from 43" to 73"
- Payload capacity up to 75 lbs. (cup and metal)
- Pour forward feature allows user to move arm forward while pouring metal
- Metal Tracking feature, tracks the arm as the sensors contact the metal, and aborts the cycle if the ladle exceeds your programmable position limit
- Programmable Low Metal warning sends an output warning that will alert the operator to fill the furnace before the metal is too low
- Allows for dross free metal transfer with adjustable stationary probes that are used for metal sensing



Process

Fill: Clean metal enters the dipper through the fill slot below the surface to assure a dross-free shot. While filling, two metal sensing probes seek the surface of the bath for accurate positioning of the dipper. A third probe protects the system from furnace recharging while the dipper is in the bath, and serves as a backup should one of the primary sensors fail. Sensor probe adjustments can be made away from the furnace. Also, a continuous electrical check of the entire sensor system is performed to ensure probe integrity.

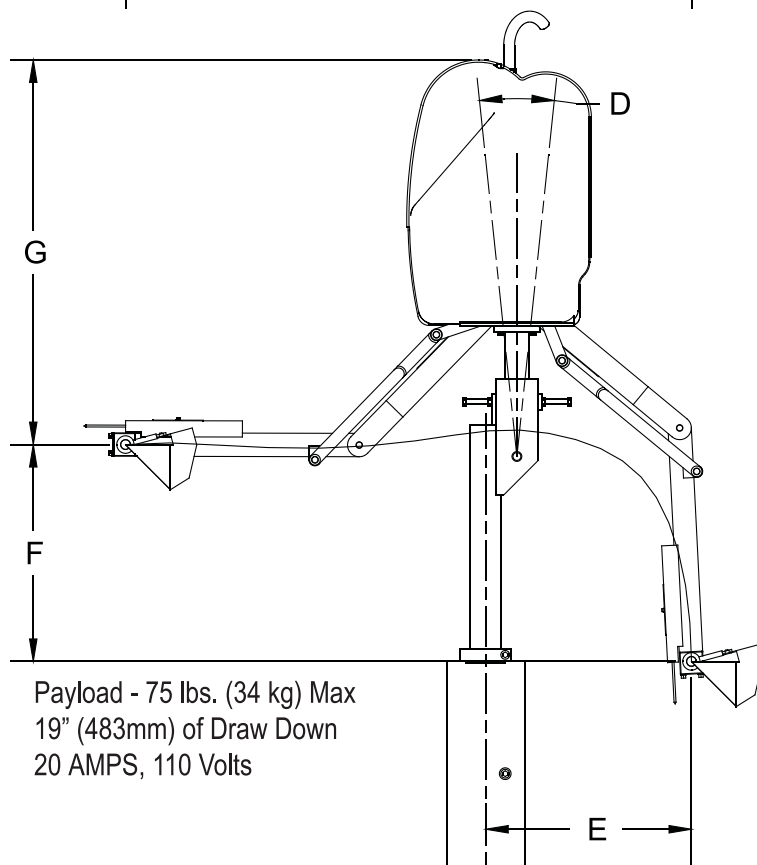
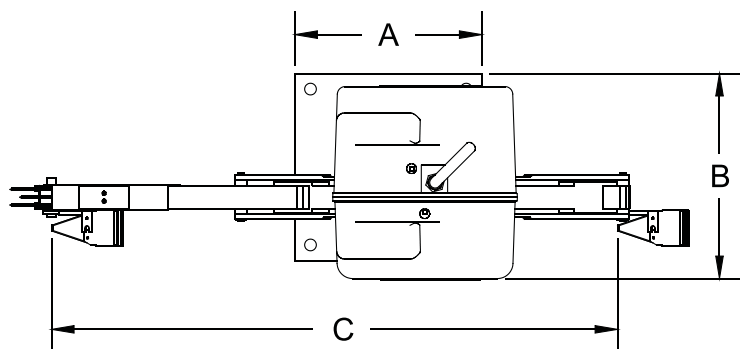
Transport: The linkage construction and adjustable floor mount make the ladler easily adaptable to any shot position, while permitting placement on either the operator's or helper's side of the machine.

Pour: Improved casting quality and reduced erosion of the shot sleeve are achieved with the 405 Ladler's pour contouring capability. Three speed positions may be programmed from the control panel for complete pour management. The unit is designed to pour directly into the pour hole.

Pour Back: Should anything interrupt the machine cycle, automatic pour back is a standard feature of the 405 Servo-Drive ladle. The dipper will automatically return to the furnace, pour back the metal and return to the rest position.



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Payload - 75 lbs. (34 kg) Max
19" (483mm) of Draw Down
20 AMPS, 110 Volts

	Variation "A"	Variation "B"	Variation "C"	Variation "D"	Variation "E"	Variation "F"	Variation "G"
73" Stroke	24	26	43-73	± 6°	22-30	27	49
80" Stroke	24	26	51 - 87	± 6°	27-35	33	54

What Can Rimrock's 405 Ladle Do for Me?

Creates a Safe Workplace

- Reduces risk of injury

Reduces Setup Time With

- Memory areas for program storage
- Auto teach
- Pour forward

Reduces Cycle Time

- Servo drive speed
- Minimizes pot-to-shot times

Reduces Shot Variation

- Servo drive accuracy
- Consistent metal volume
- No spilling or dripping with contour pouring and pour forward

Provides Ease of Maintenance & Operation

- Changeable to operator or helper side
- User-friendly graphical interface
- Proximity switches
- Light fiberglass covers

Sells Castings

- Consistency
- Better quality
- Lower scrap

405 Ladle vs. Dosing Furnaces

Our ladle offers:

- Low maintenance
- A knowledgeable support staff
- An accurate pour
- Increased uptime