RIMROCK 7th AXIS LADLE

ROBOTIC SYSTEMS





Renders are for reference only

Rimrock® 7th Axis Ladle robotic systems are pre-engineered solutions designed to deliver precise, repeatable molten metal pouring while helping improve process safety, metal flow quality, and overall system reliability. Featuring a servo-driven chain pour shaft, the system integrates seamlessly with ABB® and FANUC® 6-axis robots and is built for the demands of foundry and die cast environments.

KEY FEATURES

- Non-contact laser furnace-level sensing
- Foundry laser-guided mold tracking
- Submersible pour shaft (withstands 30-min submersion under metal bath)
- Industry-leading robotic pour control
- Smooth pre-programmed pouring profiles
- Programmable pour spout TCP
- Automatic fill-angle calculation by volume
- Ladle cup metal fill level verification
- Foundry split pour functionality (fill two sprues with a single cup)
- Multi-part recipe management
- Operator-friendly pendant with real-time process adjustment

BENEFITS

- RIA safety-compliant robotic cell
- Reduced setup time
- Reduced turbulence and oxidation
- Reduced downtime

OPTIONS AVAILABLE

- Layout & simulation services
- Robot arm heat shielding
- Spring chain tensioner
- Lincoln Electric Rimrock standard ceramic ladle cups

INDUSTRIES

- Die casting
- General foundry

CONTACT LINCOLN ELECTRIC AUTOMATION

407 S. Main St.
Fort Loramie, OH 45848

+1 (937) 295-2120

sales_fortloramie@lincolnelectric.com

www.lincolnelectric.com

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Heavy
ABB IRB 7710-500/2.85



Core
ABB IRB 6710-210/2.65



Compact
ABB IRB 4600-60/2.05



Compact
FANUC M-710iC/70



Core
FANUC R-2000iC/210F



Heavy
FANUC M-900iB/360

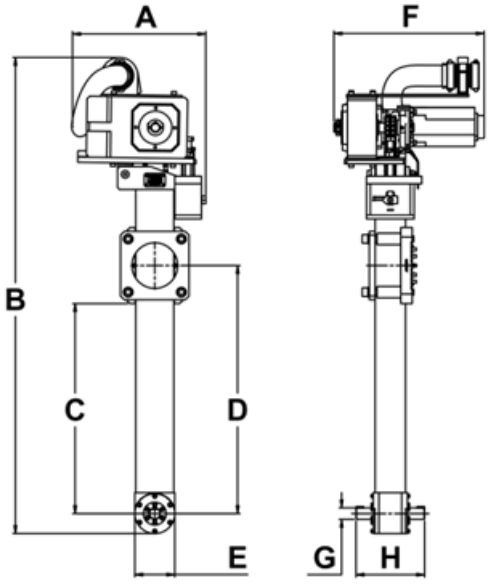
Part Number	Series	Robot Options	Max Pour	Draw-Down
AD2494-45	Compact	FANUC M-710iC/70 or ABB IRB 4600-60/2.05	11.34 kg [25 lbs.]	358.8 mm [14.13 in]
	Core	FANUC R-2000iC/210F or ABB IRB 6710-210/2.65	45.36 kg [100 lbs.]	701.7 mm [27.63 in]
	Heavy	FANUC M-900iB/360 or ABB IRB 7710-500/2.85	68.04 kg [150 lbs.]	692.2 mm [27.25 in]

Note: Maximum pour and draw down capacities are established using Lincoln Electric Rimrock ladle cups. The use of non-Rimrock ladle cups may reduce capabilities and is subject to robot payload limitations. Engineering review and approval are required.

In addition to our standard models, Lincoln Electric Automation offers customized solutions specific to customers' needs.

PRODUCT SPECIFICATIONS

Dimension	Compact	Core	Heavy
A	288.8 mm [11.37 in]	444.9 mm [17.51 in]	489.5 mm [19.27 in]
B	1139.1 mm [44.85 in]	1590.4 mm [62.61 in]	1658.4 mm [65.29 in]
C	358.8 mm [14.13 in]	701.7 mm [27.63 in]	698.5 mm [27.50 in]
D	431.8 mm [17.00 in]	828.7 mm [32.63 in]	844.6 mm [33.25 in]
E	101.6 mm [4.00 in]	133.4 mm [5.25 in]	152.4 mm [6.00 in]
F	264.6 mm [10.42 in]	501.2 mm [19.73 in]	515.0 mm [20.28 in]
G	31.7 mm [1.25 in]	38.1 mm [1.50 in]	38.1 mm [1.50 in]
H	158.0 mm [6.22 in]	228.6 mm [9.00 in]	273.1 mm [10.75 in]



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THE LINCOLN ELECTRIC COMPANY
22801 Saint Clair Avenue · Cleveland, OH · 44117 · U.S.A.
Phone: +1 216.481.8100 · www.lincolnelectric.com