

For all your metal recycling needs



# JMC Recycling Systems

## Leviathan Heavy Duty Ingot Casting Machine



The LEVIATHAN Heavy Duty Ingot Casting Machine has been developed in our own foundry to give trouble-free alloy production. Metal is poured from the furnace into the casting wheel, and the system accurately controls the volume of metal poured into each mould, consistently producing ingots with minimum dross formation. The filled moulds travel up the incline, where they are water-cooled. As the moulds pass around the head sprockets they invert, allowing the ingots to fall by gravity - assisted by two hammers. As the empty moulds return to the pouring end, they are pre-heated to remove any moisture in the mould.



# Leviathan

## Heavy Duty Ingot Casting Machine

***Built for total reliability***

**JMC RECYCLING SYSTEMS LTD**

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## Data and Specification - Leviathan

Mould type	12kg Long Bar Ingot
Mould dimensions	To be advised
Number of moulds	152
Number of impressions per mould	1
Mould material	Hermitite cast iron, material spec 420/12 to BS2789:1985
Production rate	7000 to 8000kg/hr
Mould pre-heat	Natural gas atmospheric burners, 6off, total maximum heat input 80kW
Required gas pressure	17.5mb maximum
Mould cooling	Water spray, 9 spray heads, total water consumption at 2 bar pressure 50 litres/hr
Ingot knockout	Automatic dual hammer
Pour mode	Casting wheel, drive off main chain
Drive motor	3kW 380-400V 50hz 3ph + N + E can be changed to suit local supply
Gearbox	40:1 single reduction worm gear
Speed control	Bonfiglioli hydraulic variator
Conveyor chain	160mm pitch bolted assemblies
Machine construction	Robust frame, fully welded construction (vented to induce natural and equal expansion during machine operation) Section and plate sizes: Main frame 250x150x10RHS 70x70x5RHS 25,20,10 and 5 thick plates throughout All materials grade 43C to BS4360
Safety features	Emergency stop/grab wire switches (sited both sides of machine) stop/grab wire switches (sited both sides of machine)
Overall Dimensions	2713mm high x 12,340 long x 2100mm wide
Approx weight	14,000kg
Now fitted as standard:	Water collection tray, oil pots for continuous chain lubrication, electric ignition and flame failure



Leviathan is just one of a range of quality ingot casting machines supplied by JMC. For further information, please contact us.

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