

Melt/Cast Technician

Summary

The Melt/Cast Technician is responsible for learning multiple positions involving melting and casting aluminum in the foundry.

Essential Duties and Responsibilities

Crane Operator

- Transfer slabs from casting pit to transfer table
- Stamp slabs with metal punches and remove slabs from table to storage area
- Unload slabs from homogenizing car after being homogenized
- Transfer slabs to homogenizing car
- Assist in scrapping and removing dross from furnace when able
- During cycle: If not loading or unloading a car should be by the pit
- Clean up around furnaces and pit
- Fix controls and floats
- Perform miscellaneous duties as assigned

Bowl Operator

- Control the flow of metal from furnace through trough
- Clean trough plug, bowl nozzle, remove strainer and frame from bowl
- Remove scrap from bowl and trough areas, lime bowl and trough
- Outside of cycle: sweep scrap, help clean pit, prep filter bags for next drop
- Assist in scrapping and removing dross from furnace
- Be able to perform duties of cast table assistant
- Perform miscellaneous duties as assigned

Table Operator

- Responsible for assisting in casting molten aluminum into slabs
- During cycle: DO not leave pit without approval of head caster
- Observe flow of metal in trough, notify head caster when anything deviates from normal
- Outside of casting cycle: Clean out trough, clean and cool nipples, dip whitewash compound to nipples
- Assist in hooking lift to slab
- Clean and remove burrs from molds and shoes with sandpaper, grease molds, transfer scrap from trough cart to scrap bin
- Sweep scrap from floor

- Assist in removing dross from furnace
- Clean bottom of molds for proper water flow
- Light gas burners in trough and bowl
- Mix and maintain mold grease levels
- Perform miscellaneous duties as assigned
- Must be able to fill in as Headman

Melt Assistant

- Responsible for assisting the head melter in melting operation
- Weighs the next load to be melted
- Gives weights of weighed load to head smelter
- “Charges furnace when instructed by head melter
- Assist in removing dross from furnace to dross boxes
- Assist in operation of Briquetter
- Assist in keeping dross recovery room organized and clean
- Adds flux to loads after they are weighed up
- Adds hardeners to furnace when instructed by head melter
- “Puddles” and “skims” metal when instructed by head melter
- Weighs and transports dross to recovery room. (Records dross on Production Sheet)
- Operates Briquetter in a safe and efficient manner
- Assist in keeping dross recovery room organized and clean
- Load dross truck when needed using lift truck with rotating forks
- Perform miscellaneous duties as assigned

Head Melter

- Lead the melting crew in preparing next load to be charged in the furnace (Record weights of scrap and ingots)
- First Responder training certification required
- Keep a constant check on temperature of the furnace and the metal in the furnace
- Determines when to “puddle” and when to “skim” the furnace
- Assists with skimming and dross handling as needed
- Takes a sample of the metal in the melting furnace prior to transferring metal to holding furnace
- Runs a test on the sample taken in the metal and determines hardener additions required for chemistry if any, and verifies hardeners are melted and mixed if any were added
- Perform any miscellaneous duties as assigned
- Takes a sample of the metal in the melting furnace prior to transferring metal to holding furnace
- Runs a test on the sample taken in the metal and determines hardener additions required for chemistry if any, and verifies hardeners are melted and mixed if any were added

- Perform any miscellaneous duties as assigned

Head Caster

- Responsible for leading casting crew in casting molten aluminum into slabs
- First Responder training certification required
- Perform a table change safely and efficiently
- During casting, watch molds for any deviation from normal procedure
- The head caster should not leave the pit unless testing the standard
- Continuously monitor and adjust critical variants as needed during cast (metal temp, sled speed, water flow, water psi)
- Check height of metal in mold collar
- Perform all duties in a safe and efficient manner
- Makes sure that the furnaces are scraped when needed
- Helps remove floats, clean floats, hits button to drop slabs
- Perform any miscellaneous duties as assigned from Management
- Comply with the Company's quality management system requirements
- Willingness to cross train
- Advocate for continuous improvement projects
- Clean and remove burrs from molds and shoes with sandpaper
- Be able to lance and torch out tap holes when needed

Work Environment

This position is in a plant environment which includes frequent exposure to heat, noise, moving mechanical parts and forklift traffic.

Requirements

Education and/or Experience

- High school diploma or equivalent
- Prior foundry experience is a plus

Knowledge, Skills and Abilities

- Strong communication skills
- Willingness to work with others as a team
- Must obtain forklift certification
- Comply with the Company's quality management system requirements
- Advocate for continuous improvement projects
- Willingness to cross train
- Good record keeping
- Maintain a clean and organized work area at all times