

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 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.