

# ECL Tapping Flow Regulation System



An accurate control of your metal tapping

- Flow rate automatic control
- Perfectly suitable for all Tending Assembly applications
- Quick and easy installation on existing equipment



# The pioneering technology to ensure your metal quality

With the objective of producing a metal free from impurities, each step of the process, from potline to casthouse, has to be carefully considered. It includes the tapping operation that consists of drawing liquid metal from a cell and filling a crucible with a predefined mass of metal.

## PRINCIPLES OF THE SOLUTION

To maximise productivity and quality, two main criterias are essential (see Fig 1):

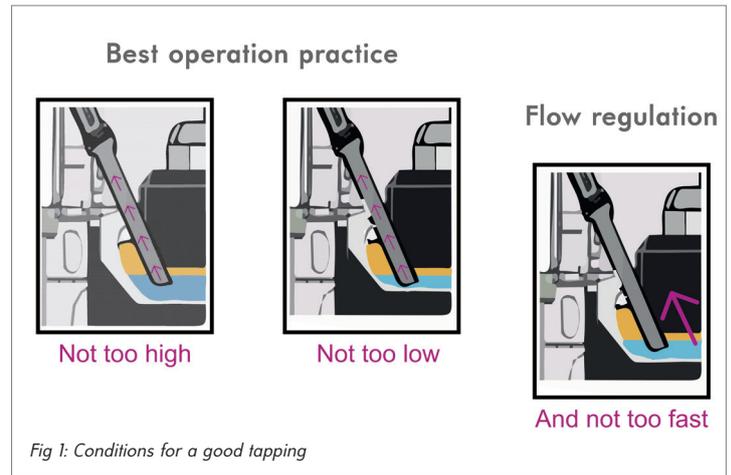
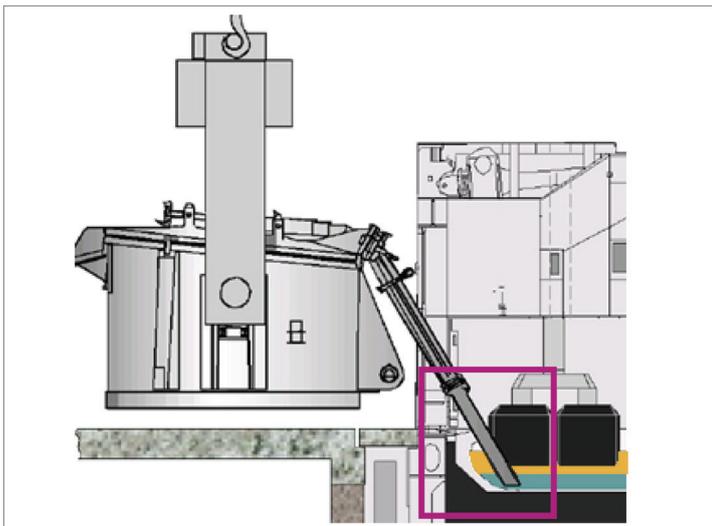
- To implement the best operation practices
- To optimize flow rate

Fives has designed, qualified and industrialized a system based on the automatic control of the flow rate to avoid the sucking of electrolytic bath during tapping operation.

## IMPLEMENTATION

This solution is suitable for any smelter configuration using any technology, both for greenfield and brownfield projects.

- Easy integration directly on the Pot Tending Machine and in the ladle tapping beam
- Process optimization by Fives' experts for:
  - analysis of the current situation such as bath consumption
  - installation of the new system
  - final measurement and follow up
  - training for best practices in operation



## OPERATIONAL ADVANTAGES

- Self-adaptive system: no action from the operator
- Reduced metal treatment
- Less waste and skimming
- Less cleaning, damages and replacement of ladles and tapping tube
- Less clogging of tubes, transfer launders or siphoning systems
- Easy diagnostic in case of tube clogging or vacuum issues
- Good process quality thanks to a stable balance between bath and metal

## BENEFITS AT A GLANCE

- Easy operation
- Maximization of productivity and quality
- Increased casthouse furnace lifetime
- Operating and maintenance cost reduction:
  - low maintenance
  - quick return on investment

Up to 50% | less sucked bath during tapping operations