



**MIRS**, leader in robotic applications for mining and heavy industry, has applications for a wide range of production processes, with solutions aimed at improving productivity and reducing costs.

**MIRS** products incorporate state-of-the-art robotics for more efficient and safer operations.



**Reduces Production Costs**



**Increases Process Reliability**



**Ensures Operational Health and Safety**



**Improves Final Product Quality**

## ROBOTIC APPLICATIONS

- Robotic Haul Truck Washing Station
- Robotic Collector of Concentrate Samples from Trucks
- Robotic Collector of Concentrate Samples from Maxibags
- Robotic Cathode Stripping Machine
- Starter Sheet Robotic Stripping Machine
- Robotic base plate buffing
- Robotic Furnace Passage Tapping and Plugging
- Robotic Mill Liner Change (Internal, External and Trommel)
- Scheduled Maintenance Service, Technical Assistance, Training and Supplies

## ROBOTIC SYSTEMS

## ENGINEERING

## SERVICE & PARTS



# TAPPING & PLUGGING ROBOT

It is a robotic system designed and developed by **MIRS** to automatically carry out the burning and plugging of the slag discharge from the Flash furnace. This application allows to minimize human interaction, thus avoiding dangerous and unnecessary exposure to toxic gases, projection of incandescent particles and molten liquid material.

This robotic system allows the opening and plugging of the process in a more precise and safe way. It is made up of high-quality and world-class robots that withstand an environment of extreme heat, only known in foundry areas, making it an immune system to external variables, with high levels of

effectiveness, precision, and safety superior to a manual system. In addition, it allows the automatic exchange of the opening, sampling, and plugging tool.

## BENEFITS

- Avoid exposing people to a very high temperature environment, with projection of incandescent particles, in strenuous work.
- Allows a more continuous drainage of slag.
- The programmed movement of the lance lengthens the useful life of the passage.

## REDUCTION OF OPERATIONAL RISKS AND CONTINUITY IN DRAINAGE



**CONTINUOUS  
DRAINAGE**



**AUTOMATIC  
TOOL EXCHANGE**



**HIGHER  
OPERATIONAL  
SAFETY**



**REDUCE  
COSTS**

