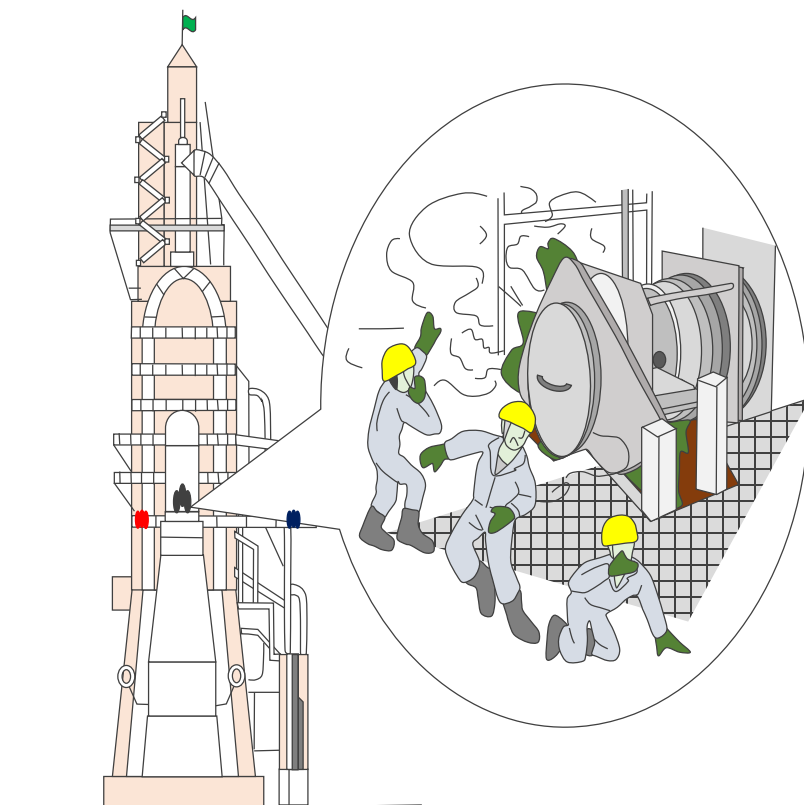


Case involving CO poisoning of multiple workers inside steelworks blast furnace during measuring equipment testing



[Location of accident]

Inside a steelworks blast furnace

[Cause of accident]

The main power was turned on in the electrical room, while the main circuit switch was shut off at the site. The measuring equipment was pushed back by furnace gas pressure when the Forward button was pressed. The measuring equipment initially stopped when the Stop button was pressed but moved back further when the purge button on the antenna of the measuring instrument to purge gas into the furnace was pressed. Gas inside the furnace leaked out past the tire seal from the ball valve intended to prevent gas leaks.

[Damage/injuries]

Numerous workers observing the test at points close to and distant from the control panel were exposed to gas from the furnace and suffered carbon monoxide poisoning.

Extract from [Preventive measures]

- [1] Procedures for the test work must be clearly established.
- [4] The use of protective breathing equipment must be enforced.



Riken Keiki Recommendations

Wearing carbon monoxide monitors during work allows prompt detection of gas leaks inside a furnace and alerts others in the vicinity of hazards.