Abstract

This paper presents an attempt of automation of air separation unit using PLC. In Air Separation unit, the process control and interlocking systems are implemented by using analog signal processing cards (M/s BELLS make) and relay logics. Advancements in the field of digital signal processing opens many other features for optimized process control. These digital systems are highly reliable and it takes low down time for maintenance or trouble shooting. In
steel making process oxygen, nitrogen and argon plays a vital role. Oxygen is required for blowing in the LD converter, general purpose uses of Steel Melting Shop, Blast Furnace. Nitrogen is required for Blast Furnace Plant, dry quenching of coke and as a purging medium for LD converter gas cleaning system. Argon is required for rinsing in the Steel Melting Shop. These gases are separated from the atmospheric air in Air Separation unit.

Reference

- W. Bolton, 1st Edition 2000, An Introduction to Programmable Logic Controllers
- Kelvin Collins PLC Programming for Industrial Automation
- W.Bolten 2008, Programmable logic controllers 5th edition

Index Terms

Computer Science  Wireless

Key words

PLC  RTU

SCADA

HMI