

Nickel Laterite Acid Leach Process

The high temperature (~250°C) acid pressure leaching of nickeliferous laterite ore has been practised commercially since the late 1950's. In recent process development for fully integrated refineries, producing nickel and cobalt metal, Sherritt has utilized proven process steps in order to assure operability. The acid pressure leach solution is treated using hydrogen sulphide to produce a high grade sulphide containing at least 50% nickel. This mixed sulphide is then pressure leached to give a high purity concentrated nickel-cobalt solution, suitable for efficient solvent extraction to separate the valuable metals. The nickel and cobalt are separately reduced to metal products.

