

PROJECT PROFILE

GARSON MINE



CLIENT

Vale Inco

LOCATION

Garson mine is situated on the Northern side of Sudbury in Ontario Canada and still operates one of the longest operating backfill plants in the greater Sudbury mining area.

OBJECTIVE

As part of the ground support strategy the Garson mine required backfill to fill old stopes and workings to allow for future development. The production rate required was 50m³/h using sand, cement and water. The plant had to be compact and modular to enable relocation in the future.

SCOPE

The Garson plant is a dry feed sand plant with direct loading into a single aggregate hopper. The mines original intention was to produce a paste mix using mine material. However, the mine material was unsuitable to produce paste so the mix design criteria was modified. Local sand was sourced and introduced to the mix, producing a flowable paste.

The MODUMIX II modular mixing system was ideal for Garson. The modular components would connect together forming the total backfill system. With a long life span, the plant could be on site for the life of the mine or relocated to another mine site.

The modular components are manufactured to CSC container standards, factory assembled and tested, which enabled faster delivery to site and reduced site specific design requirements and construction times.

The Aran backfill system included: integrated hopper with feeder, high intensity paste mixer, bulk cement storage/transfer system and distribution system.

RESULT

The plant operated up to 75m³/h for underground reticulation requirements. It has been operational for two years and delivered approximately 300,000m³ of backfill.

CONTACT DETAILS

Ike Isagon,
Vale Group Backfill Expert.
CC & Garson Mines Project Management Group
Vale Inco Limited
(705) 682-7745
Ike.Isagon@vale.com

