



Mining Without Stepping Underground

In the age of digital camera phones, wireless Internet and ordering your groceries on-line, a revolutionary new technology is taking the mining industry by storm. Telemining is the result of Inco's Mining Automation Program that started in 1996. Developed in Sudbury, Telemining allows miners to operate equipment kilometres away and hundreds of metres below the surface, from consoles in a surface-based control room.

The 2 most outstanding features of Telemining are its safety and efficiency. Through the use of a variety of positioning, navigation, monitoring and control systems, Telemining nearly eliminates the need for a miner to ever set foot below the surface to operate potentially dangerous machinery. Traditionally, it has taken miners hours to travel to remote locations within a mine, but with Telemining each tele-operator can instantly control more than one piece of equipment. Furthermore, the equipment can be used up to 23 hours a day instead of the current 15 hours, resulting not only in increased workplace safety and efficiency, but also in lowered costs and increased revenues.

One Inco mine has been using tele-remote rock hauling vehicles and production drills for several years, moving 1.5 million tonnes of ore since its inception. Currently, numerous companies are collaborating to develop a new generation of more advanced vehicles, communications, explosives, and process control systems prototypes for the Mining Automation Program.

In a world where resources are finite, Telemining and future technological advances may very well be worth their weight in gold!