

Lighting, Electric Heating and Welder Installations in Mines and Mining Plants

Course Overview:

An Electrical Safety Code Workshop on Lighting, Electric Heating and Welder Installations in Mines and Mining Plants with specific references to the Provincial Mining Regulations, M421-93-00 “Use of Electricity in Mines” and Canadian Electrical Code.

Course Topics:

- Mining specific requirements for surface/Underground mines and surface plants
- Lighting Installations:
 - General, HID, recessed, outdoor floodlighting, pole-top wiring
 - Conductors, protection, circuit loading, grounding and bonding, disconnecting means and control
- Electric Heating Installations:
 - Magazines, fire precautions, heating plants, work environment
 - Terminal connections, branch circuit loading, protection and demand factors, temperature control devices
 - Specific requirements for electric space, surface and under-floor/slab heating systems
- Electric Welder Installations:
 - Specific requirements for transformer, motor-generator and resistance arc welders, relating to:
 - Conductors, protection, demand factors, disconnecting means and control

Course Purpose:

- Learn using all of the applicable regulations, standards and code for reference with respect to wiring in mines and mining plants to ensure electrical safety.
- Focus on sections 30, 42 and 62 of the Canadian Electrical Code, along with other requirements specific to mines and mining plants.
- Recognize potential hazards in existing installations that may have been previously overlooked.
- Providing detailed information to ensure new installations meet all of the applicable codes and standards.