



## ■ HEATING FOR THE MINING INDUSTRY

Temperature management is critical in the mining industry. This can be difficult since these projects frequently require enormous amounts of heating. They must not only have enough power to heat large tanks but also offer uniform warmth.

Heating is required year-round in mines located in cold regions to avoid the accumulation of ice and frost, which lowers safety risks. In addition, it provides miners with pleasant and safe working conditions while keeping equipment operational.

Mining heating systems can account for up to 50% of ventilation expenses and nearly 40% of overall energy expenditures. Ventilation helps to minimize toxic diesel fumes and other unpleasant organic and inorganic gases and particles emitted by mining operations and equipment.

Corrosive chemicals are used while extracting raw materials like gold, silver, and platinum. So, naturally, corrosivity can pose issues with equipment. Corrosion, if left unchecked, will damage equipment, creating failure or risks. Even routine maintenance might result in diminished effectiveness, long-term damage, and product compromise. Mining companies may assure product quality, equipment durability, and efficiency by selecting corrosion-resistant metals for process heaters.

Process heaters that are powered by thermal fluid, electricity, gas, or waste heat recovery can all be used for suction heating in the mining and minerals sector. Heaters maintain stable temperatures in storage tanks and vessels, safeguarding the goods contained therein and significantly decreasing energy expenses.

### Benefits of an electric duct heater:

- Can be custom-built to your specifications
- Increases employee safety and welfare
- Increase process reliability and efficiency
- Offers precise temperature control
- Includes energy-efficient Vernier control
- Remote control panel option
- [BACnet MS/TP or Modbus compatible](#)

Ore processing is an effective use of heat treatment in the mining sector. Phosphate ore, for example, can be challenging to treat. However, heat treatment increase processing efficiency and provide higher-quality extracted material.

Electric heaters can ensure precise and reliable modulating temperature control via energy-efficient [Vernier control](#).

Neptronic provides typical coil designs with capacities of up to 40kW/sq. ft. and dimensions of 180 in. X 120 in., and process heaters that can raise the leaving air temperature (LAT) up to 648°C (1200°F). Our designs are [easily customizable for much larger capacities](#).