Mining and Metals Solutions
Having access to your valuable automation data is essential to maintaining and improving mining and metals operations. Whether you need clear communications in a harsh environment, modules to connect a variety of protocols, or a way to remotely access tough-to-reach equipment, ProSoft’s solutions are up to the challenge.

Our protocol solutions help gather valuable data from many mining and metals operations’ systems. Our wireless solutions help you keep track of your moving assets. And our remote connectivity solutions let you see diagnostics from anywhere.

Solutions for Various Applications
Our communication solutions have been designed for the harsh environments in mining and metals. Functions such as stacker/reclaimers, open pit and underground extraction, and conveyance of materials use drives, motor control centers, and SCADA systems that may not communicate with your new control system. We have communication solutions for:

- Modbus®
- Modbus® TCP/IP
- PROFINET
- EtherNet/IP™
- PROFIBUS DP
- HART
- Many more

With these solutions, you will not only control these systems – you will also be able to gather additional data that can be analyzed and acted upon to reduce energy usage/costs and downtime.

Need to monitor video cameras, deploy a mobile worker network, or monitor some remote I/O points? Running cables is always a challenge in these environments. Our industrial wireless solutions will help you get the data you need where you need it reliably. Our wireless experts can help you design the best solution for your application:

- 802.11n
- 4G LTE
Substation and Intelligent Motor Control Applications

Substation Automation Solutions
Power distribution plays a big part in every mine, and being able to monitor your substation devices is critical. These devices often communicate via:
- DNP3
- IEC 61850
- Modbus®
- Modbus® TCP/IP
- IEC 60870-5-101
- IEC 60870-5-104
Our solutions communicate with DCS systems, Rockwell Automation®, Schneider Electric®, Siemens®, or GE controllers or SCADA systems to ensure that you’ll have the information that you need when you need it.

These communication solutions can help you:
- Monitor the status of your intelligent electronic devices (IEDs)
- Determine protections status to ensure that your operation is running safely
- Monitor and control circuit breakers

Intelligent Motor Control Centers
IMCCs contain power monitors, circuit breakers, intelligent motor starters, drives, and soft starters that are connected to a network and need to be connected to your controller and/or SCADA system. We offer solutions for:
- EtherNet/IP™
- Modbus® TCP/IP
- PROFIBUS DP
- Modbus® Serial
- PROFINET
Having the data supplied by these devices where you need it will help you diagnose and troubleshoot problems, or analyze operational performance quickly. This can minimize your unscheduled downtime and improve your bottom line.
Wireless and Remote Connectivity Solutions

In a wide-ranging mining or metals operation, a strong wireless communications network is essential. ProSoft Technology has a number of solutions that can strengthen the communications for your application, whether it’s smaller or operating worldwide.

Wireless Communications

Our Industrial Hotspot radios feature an EtherNet/IP embedded object and Modbus agent support, allowing you to get wireless diagnostic information into your PAC/PLC. Your operations can now identify potential network problems to your IT network personnel, helping to reduce unscheduled downtime. The radios also feature Ultra-Fast access point switchover times, which allow your real-time control networks to be run wirelessly. This is great for applications where your control devices move and need access to multiple radios.

Radiating cable can be used in underground mining applications and other projects where a flexible solution is a must, or used in conjunction with MIMO antennas and wireless radios in mine winder applications. Wireless radios also provide the reliability needed in stacker-reclaimer applications.

Remote Connectivity

One of the keys to minimizing unscheduled downtime is getting the right person the information they need wherever they are. Using ProSoft's cellular gateway in conjunction with Belden Horizon™, your support personnel can securely access automation equipment remotely. Belden Horizon is our secure, cloud-native platform designed to help you get value out of the Industrial Internet of Things. All your support people need is access to the Internet, and they can use their automation device configuration tools as though they were connected to the local Ethernet switch in the cabinet.

Scalable subscription-based Belden Horizon plans are also available for those who need to manage multiple projects, such as system integrators or OEMs. Contact us to learn more!
Accessing Your Data

Accessing your mining and metals data can help you optimize your resources, gain historical perspective on equipment diagnostics, and make more informed business decisions.

Data Loggers

ProSoft’s Data Logger modules allow you to see your equipment’s diagnostics and performance history before you go on site so you can have an advanced view of any issues. This solution is especially ideal for hard-to-reach operations, and does not require an existing network infrastructure. Analyzing information stored by the Data Logger can also help OEMs increase Overall Equipment Effectiveness (OEE) and ensure equipment has been operated in accordance with agreed-upon parameters.

EtherNet/IP-Modbus TCP-OPC UA Gateway

Your EtherNet/IP and Modbus TCP equipment likely holds some valuable data – but how can you get to it? This module connects those protocols simultaneously with a built-in OPC UA server, which will send your equipment’s data to your MES or ERP. From there, you can easily access your data, analyze it, and make business improvements based on the information.

Case Study: Radios up to metallurgy plant’s communication challenges

A metallurgical plant in Ukraine needed communication solutions that could stand up to its harsh environment – its previous setup had limited range and data loss. Its new wireless radios help ensure clear communications between the control room and the plant’s scale car – and the Wi-Fi connection stays strong, no matter what’s happening in the plant.

Case Study: Castings plant sees better ROI with a phased modernization

American Castings instituted a phased modernization of its plant’s legacy system. They’ve estimated a cost savings of over $100,000 in lost production and implementation time, and about 140 hours’ worth of work.
Support and expertise for your projects
ProSoft provides a variety of resources and services for wireless applications from initial system design to site surveys to launch support and configuration support.
Tech Support: support@prosoft-technology.com