

CASE STUDY

Rugged Reliability from Ore to Ingot: IVC Displays and Timet

Client	Timet (Titanium Metals Corporation) — fully integrated titanium producer
Industry	Titanium and metals manufacturing, serving aerospace, defense, and industrial markets
Engagement	Industrial touch screen computer supplier for harsh-environment process monitoring
Application Areas	Ore extraction, slurry separation, and argon gas monitoring

BACKGROUND

Timet is a fully integrated titanium producer, converting raw ore into titanium mill products — ingot, slab, bar, plate, and sheet — used in commercial aerospace, defense, and industrial applications. That process starts at the ore stage, where titanium-bearing minerals are extracted and separated through a slurry separation process, and continues through melting and refining, where molten titanium is shielded from oxygen and nitrogen using a carefully monitored argon atmosphere.

IVC Displays supplies the rugged, reliable industrial touch screen computers Timet uses to monitor and control these processes.

THE CHALLENGE

Few environments are harder on computing hardware than the front end of metals manufacturing. Ore extraction and slurry separation expose equipment to dust, moisture, and abrasive mineral particulate — conditions that quickly degrade standard, commercial-grade touch screens. At the same time, Timet's argon gas systems, which protect molten and reactive titanium from oxygen and nitrogen during processing, are critical to both product quality and plant safety — monitoring them requires computing hardware that will not fail or feed inaccurate readings under continuous industrial duty.

Timet needed touch screen computers rugged enough to withstand the harshest stages of metal manufacturing while remaining dependable enough for the accurate, continuous monitoring its processes require.

THE SOLUTION

IVC Displays supplies Timet with rugged, industrial-grade touch screen computers built for harsh-environment duty across its titanium production process — from ore extraction and slurry separation, where equipment must withstand dust, moisture, and particulate exposure, to argon gas monitoring, where dependable, accurate readings are essential to both metallurgical quality and worker safety.

Rather than general-purpose computing hardware, Timet's operators rely on touch screen systems engineered specifically to survive continuous exposure to the elements found on a metals-processing floor, without sacrificing the reliability their monitoring and control applications demand.

RESULTS

Through this partnership, Timet has been able to keep critical monitoring and control functions running reliably across some of the most demanding stages of titanium production, while relying on IVC Displays for hardware built to withstand those conditions. The relationship has delivered:

Rugged durability — touch screen computers built to withstand the dust, moisture, and particulate exposure of ore extraction and slurry separation.

Dependable safety-critical monitoring — reliable, accurate touch screen interfaces for argon gas systems that protect both product quality and personnel.

A trusted industrial hardware partner — rugged computing hardware suited to the full range of harsh conditions found across metal manufacturing.

LOOKING AHEAD

IVC Displays continues to supply Timet with rugged, reliable touch screen computers built for harsh-environment metal manufacturing, supporting the critical processes that turn raw ore into the titanium mill products the aerospace, defense, and industrial markets depend on.