
Process Optimisation



Milling



Flotation



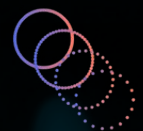
Leaching



Process
Optimisation

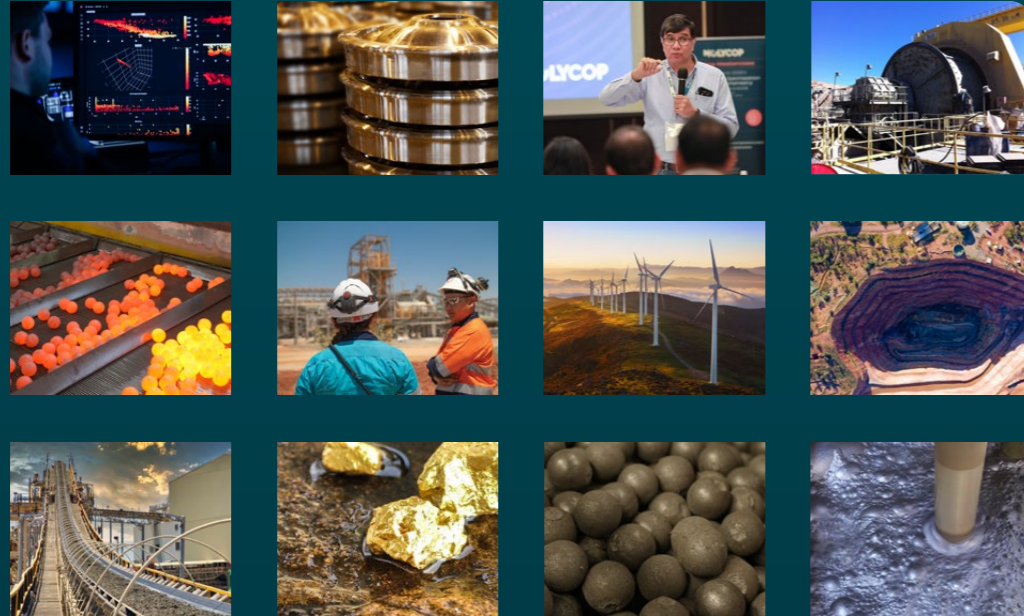


Consulting
& training



Engineered

MOLYCOP
A **tego** company



Progress Together

› At Molycop, we partner with our customers to drive efficiency, profitability and sustainability across the mining, mineral processing and rail sectors.

Our comprehensive range of solutions empowers mining operators to unlock performance gains across their entire operations. From high-performance grinding media and advanced milling circuit solutions that optimise comminution operations, to expert flotation and leaching services that maximise mineral recovery, we deliver results that make a tangible difference.

We are committed to continuous improvement – and to improving the performance of every operation we support. Our process optimisation services combine smart control systems and cutting-edge AI visualisation and analytics to give our customers the tools and insights they need to achieve their goals.

Beyond mineral processing, our precision engineered solutions, including robust rail and industrial products, address the needs of critical rail and infrastructure projects.

With our leading technology, reliable global and regional supply chains, and solutions-oriented approach, we partner with our customers to drive operational excellence and sustainable performance – delivering better for all.

Solutions

Molycop provides a range of innovative solutions that enhance mineral processing performance, improve operational efficiency and support safer, more sustainable mining operations.

Milling



Molycop's milling solutions maximise efficiency and minimise downtime so customers achieve peak operating performance immediately and over sustained periods. Our range of mining consumables is supported by measurement and control, analytics, and consulting and training services so operations can fully leverage the Molycop solutions available to them.



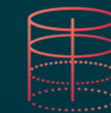
Flotation



By combining high-performance collector, frother and modifier chemicals with smart instrumentation, OreVia Process Characterisation and Smart Process Control, Molycop's flotation solutions enable mining operators to optimise mineral recovery, driving measurable improvements in flotation circuit efficiency and profitability.



Leaching



Customers achieve superior leaching performance with Molycop's range of leaching instrumentation and expert-led solutions. By integrating smart instrumentation, Smart Process Control, data analytics and consulting services, Molycop gives customers the tools and expertise they need to optimise performance and improve mineral recovery.



Process Optimisation



Molycop's process optimisation solutions combine consumables, smart instrumentation and the StarCS suite – including MillStar, FloatStar and LeachStar – with advanced analytics, data visualisation and expert consulting services. Together, these capabilities give mineral processing operations the opportunity to achieve long-term improvements in recovery and profitability.



Consulting and Training



With years of collective experience as a foundation, Molycop's industry-leading experts deliver consulting services and training courses, both onsite and on-demand, to improve the performance of customers' operations and upskill their staff.



Engineered



Backed by over a century of expertise, Molycop's engineered solutions keep Australia's rail and industrial sectors moving. From heavy-haul and passenger rail wheels to axles, track wheels, gear blanks and anode pins, our rail and niche engineered solutions are designed to optimise performance, minimise maintenance and maximise operational reliability.



Unlock operational excellence with process optimisation

Molycop provides a holistic framework for mining operations to stabilise their circuits, maximise throughput and improve efficiency and sustainability.

> **Mining operations** are under increasing pressure to deliver higher ore yields while managing escalating energy costs. Meeting these challenges requires transitioning from reactive management to proactive, data-driven process optimisation.

Molycop's Process Optimisation Solution offers customers an integrated ecosystem that brings together advanced instrumentation, Smart Process Control and world-class technical expertise.

A holistic strategy for the entire circuit

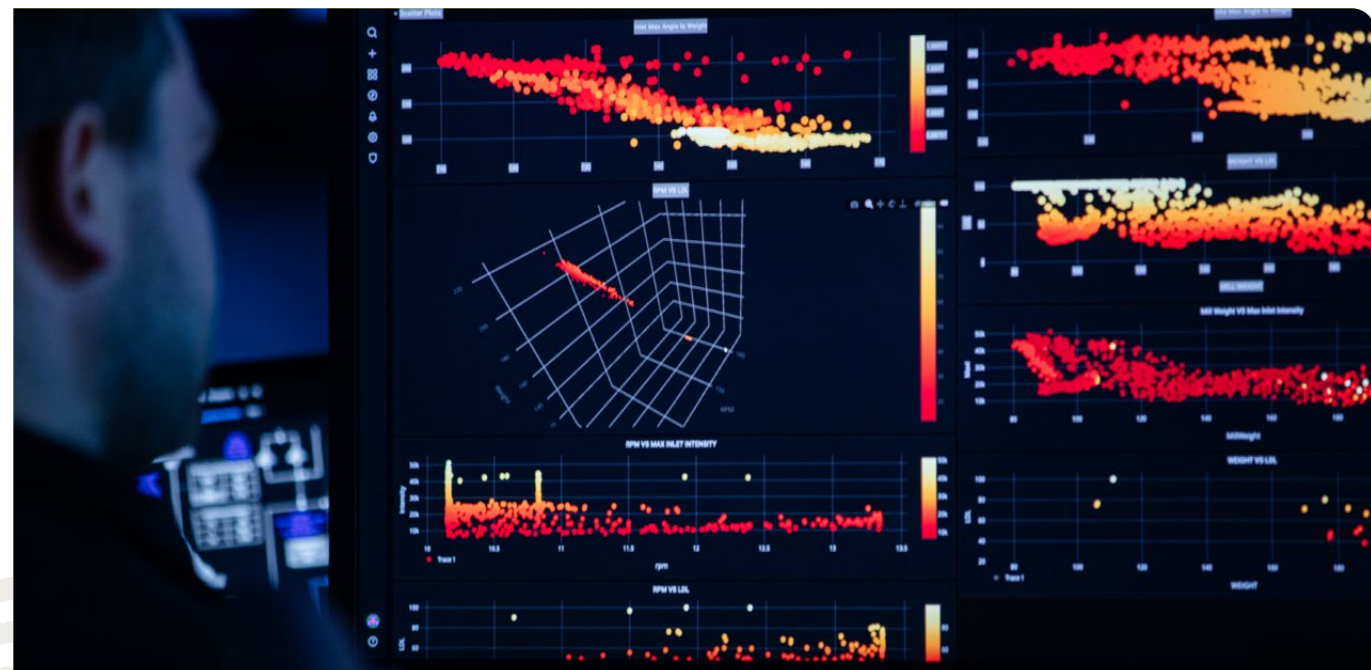
Process optimisation is a continuous cycle of improvement across the entire value chain. Molycop's holistic approach begins with a deep understanding of the mineral processing environment. By capturing and interpreting real-time plant data, Molycop enables operators to identify bottlenecks and inefficiencies that often go unnoticed. Whether the objective is to increase recovery in the flotation circuit or reduce energy consumption in the mill, Molycop's Process Optimisation Solution delivers optimal yields while saving energy and reducing costs.

Advanced control through smart technology

Molycop's Smart Process Control suite is central to improving outcomes for mineral processing operations. Developed in partnership with Mintek, these advanced process control tools integrate with instrumentation devices, data visualisation and analytics to significantly lift plant performance.

StarCS suite is an operator-friendly control system that seamlessly integrates various control systems, including MillStar, FloatStar and LeachStar. These systems are engineered to address the inherent variability of ore feed by automating complex decision-making processes.

MillStar employs predictive optimisation techniques to balance mill throughput against energy draw, ensuring the circuit operates consistently at peak efficiency. FloatStar ensures circuit stability and rapid setpoint tracking, creating a solid foundation for flotation optimisation. LeachStar optimises gold recovery while minimising reagent consumption, boosting operational stability and enhancing the efficiency of the leaching process.



Data-driven insights and analytics

True optimisation requires visibility. Molycop's digital infrastructure, anchored by the VIP Platform, enables integration of instrumentation data – such as that from MillSlicer and OreVia – into a centralised analytics hub. This allows metallurgical teams to move beyond anecdotal observations toward evidence-based decision-making.

By leveraging cutting-edge laboratory testing and AI-powered analytics, Molycop generates deep insights into ore behaviour. This process characterisation enables the plant to adapt to changes in fragmentation and mineralogy before they impact the circuit, effectively reducing operational risk and ensuring a more consistent, high-quality output.

Expert industry knowledge

Technology is most effective when supported by expert knowledge. Molycop's consulting and training services ensure that site-specific solutions are not only implemented but sustained. Molycop's technical applications engineers work directly with customers to analyse operations, optimise circuit designs and refine media selection.

Together with Molycop's combination of world-class instrumentation, advanced control software and peerless technical support, Molycop's Process Optimisation Solutions enable mineral processing operations to unlock the full potential of their mineral processing circuits.

Molycop Solutions



Increase throughput with predictive optimisation strategies.



Increase recovery by stabilising flotation circuits using advanced control.



Reduce wear with MillSlicer monitoring and hard-wearing consumables.



Improve energy efficiency by balancing mill throughput and power draw.

Products and services for process optimisation

Molycop's integrated Process Optimisation Solution combines state-of-the-art technology, advanced analytics, expert analysis and comprehensive support.

Smart Process Control

Molycop partners with Mintek to provide Smart Process Control systems for customers:

- **StarCS:** An open, plant-wide control platform that incorporates various control systems for process stabilisation and optimisation.
- **FloatStar:** A suite of control modules that optimises variables such as air flow, reagent addition and froth levels to improve recovery rates and maintain consistent concentrate quality.
- **MillStar:** Uses advanced algorithms and predictive models to improve throughput and energy consumption, minimise variability in product quality and reduce wear on equipment.
- **Leachstar:** Incorporates leading technology to optimise the performance of gold circuit process units, including thickeners, leaching circuits and carbon circuits.
- **General Control Services:** Integrate with advanced process control solutions to optimise plant operation.

Analytics services

Molycop supports data-driven optimisation with its suite of digital and analytics services:

- **Molycop VIP Platform:** Centralises operational data, providing real-time visibility and advanced analytics to improve decision-making across plant operations.

- **Molycop Tools:** Offers simulation and modelling capabilities, enabling operators to predict performance, test scenarios and optimise processes with confidence.
- **Mineral Analysis Services:** Deliver detailed insights into ore characteristics through laboratory testing and mineralogical assessment, helping operations refine processing strategies, improve recovery and respond effectively to changing ore conditions.

Consulting and Training

Molycop equips mining professionals with the skills they need to analyse their operations and optimise grinding media selection and mill circuit design:

- **Consulting services:** Molycop's **Milling Circuit Optimisation** services are designed to enhance customers' in-house capabilities, equipping them to optimise their mineral processing operations effectively. **MillROC** (Milling Remote Optimisation Consulting & Coaching) training enables operators to unlock significant throughput benefits. Molycop's **gold leach kinetics** analysis service is a trusted and reliable way to enhance gold recovery. And Molycop provides expert **mine start-up services** to establish and embed successful mineral processing operations.
- **Training services:** Upskill members of staff by equipping them with the skills and certifications they need to reach their potential.



Molycop's full range of Products and Services:

Milling	Flotation	Leaching	Process Optimisation	Consulting and Training	Engineered
Grinding Media	Chemicals	Smart Instrumentation	Smart Process Control	Consulting	Rail Wheels
Bolts	Smart Instrumentation	Smart Process Control	Consulting and Training	Training	Axles
Smart Instrumentation	Process Characterisation	Consulting and Training			Track Wheels and Gear Blanks
Process Characterisation	Smart Process Control				Anode Pins
Smart Process Control	Consulting and Training				
Consulting and Training					

For Molycop's Solutions in detail, visit us online:



MOLYCOP

A *tego* company

Visit Molycop's website or contact the sales team for more information.



molycop.com

© Molycop. All rights reserved 2026.

This publication has been prepared by Moly-Cop Global Holdings Inc. on its behalf and as agent for each of its related companies. All information contained in this publication is subject to change, replacement and/or modification at any time, without notice. Moly-Cop Global Holdings Inc. expressly disclaims all warranties, whether expressed or implied, oral or written, including any implied warranty of merchantability, fitness for a particular purpose, non-infringement, or other warranties arising from course of dealing, course of performance, usage of trade, or otherwise. The information is provided on an "as is" and "as available" basis. The information is provided for informational purposes only and Moly-Cop Global Holdings Inc. does not warrant the accuracy of any information or that the information will be error-free. Users of this publication are responsible to verify the accuracy and completeness of all information. Moly-Cop Global Holdings Inc. shall have no liability for any losses or damages of any kind arising out of or resulting from this publication, its contents and any use thereof.

Photographs shown are representative only of typical applications and are current as of May 2026. This publication is not an offer to trade and shall not form any part of the trading terms in any transaction.

Reproduction in whole or in part, in any form or medium without the express written permission of Moly-Cop Global Holdings Inc. is prohibited. All images and content, trademarks or registered trademarks are the property of Moly-Cop Global Holdings Inc.