

Mine Shafts and Hoisting Systems

MINING & METALS | UNDERGROUND MINES

Introduction

Mine shafts feature commonly in underground mines, serving a number of critical functions that support mining operations, including:

- mine ventilation, heating and refrigeration
- production hoisting
- service cage hoisting
- mine access and egress
- routing of mechanical and electrical services

Temporary hoisting systems are employed for shaft sinking, lining and equipping of new shafts, or for refurbishment of existing shafts. For production, service and access shafts, permanent hoisting systems are generally installed in which the conveyances operate on either fixed guides or rope guide systems in vertical shafts, or otherwise on rail for inclined (drift) haulage applications.

Andvare's key personnel have substantial experience in mine shafts and hoisting systems. This experience extends to both drum winding and Koepe (friction) winding applications.

Andvare's team of experienced engineers have provided consulting and project services to many clients across several continents, addressing the hoisting system requirements for a diverse range of mines and minerals.

As an emerging consultant that is focused on meeting the needs of the mining industry, Andvare is expanding both its in-house capabilities and its links with external service providers, so as to further enhance its range and scope of services.

Specialist Capabilities

- Shaft sinking and lining
- Production hoisting systems
- Service cage hoisting systems
- Winder duty evaluation and specification
- Fixed guides and rope guide systems
- Headframes
- Loading stations
- Shaft stations (plats)
- Shaft services
- Shaft operation, inspection and maintenance

What We Do

- Review and assessment of existing shafts and hoisting systems
- Definition of new shaft system requirements and systems
- Shaft system layout
- Concept and feasibility studies
- Preliminary and detail design
- Project implementation planning and scheduling

- Risk assessments
- Shaft inspection and maintenance
- Troubleshooting and remedial design
- Advisory services
- Peer review

