

MINING THE FUTURE.



OLKO Maschinentechnik GmbH.

Pioneering your world.

Since our company was founded in 1989, OLKO Maschinentechnik GmbH has been a driving force in shaft construction and hoisting technology. As a 100%-owned subsidiary of the Thyssen Schachtbau Group we are at home on all of the globally relevant markets, and we supply the whole world with pioneering equipment from the birth-place of mining.

What makes us different is that we don't do things by halves: OLKO Maschinentechnik GmbH produces pioneering system solutions featuring a high vertical range of manufacture, as well as components we develop ourselves, many of which are patented.

That's how we mine the future. What about you?

Mechanical engineering – made in Germany

- Planning and construction
- Hoisting winders
- Bobbins for inspection, auxiliary and emergency installations
- Roping-up technology
- Brake systems, units & hydraulics
- Head frames
- Shaft-sinking systems
- Signalling equipment
- Building material technology
- Steel and plant technology
- Services



Projects with power, *from idea to operation.*

OLKO Maschinentchnik GmbH supplies the latest shaft construction and associated hoisting technology from a single source – which in our industry is an almost unique advantage. You can realise your vision completely with us, from concept all the way to commissioning, without any frictional losses or multiple points of contact.

In shaft hoisting engineering, we plan and implement entire turnkey systems. We generally optimise hoisting winders during operation. Our service comes inclusive of around 25 years of expertise, and typical German quality which minimises wear and tear from the outset. Those are just some of the reasons why our customers trust us, in Germany and elsewhere from Russia to China.



- Designing and calculating complete systems
- Producing all of the necessary documentation and drawings
- Optimising existing systems for productivity and efficiency
- Complete, scalable turnkey system solutions
- Implementation in existing systems and during operation



Extracting intelligently, *quickly and safely.*

Shaft hoisting equipment

- Hoisting winders
- Brake systems
- Head frames
- Shaft insets and fittings
- Shaft-sinking devices
- Roping-up technology
- Mobile friction and shaft winches
- Comprehensive accessories
- Service and maintenance





OLKO Maschinentechnik GmbH produces intelligent hoisting winders – including in difficult situations. Our products include high-performance and high-speed hoisting winders, both geared and directly driven. In twin-drum machines our patented, proven clutch system enables hoisting to be adjusted quickly and safely to changing depths. Our bobbins are developed for the transport of material and people, with a conveying speed of $v \leq 4 \text{ m/s}$.

We also develop pioneering bobbins for inspection, auxiliary and emergency installations for rescuing people from shafts, and for transporting people down to monitor and maintain shafts. Compressed air operated, these systems can also be used underground.

Mobile frictional winches from OLKO enable safe, quick roping and unroping. The winches are designed to enable multiple cables to be attached and detached at the same time.



Power with control, *always and everywhere.*

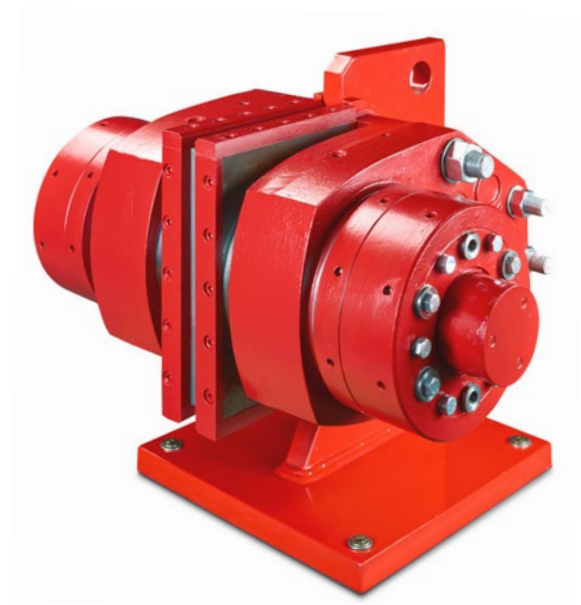
Patenting your safety: OLKO brake systems are among the best of their kind. Because most modern hoisting winders are stopped electrically, our brakes are used increasingly as retainer and safety systems to safeguard against power cuts, excessive speeds and large-scale breakdowns in shaft operations. In other words: whenever dependability is a matter of life and death.

Our hydraulic braking elements are developed for mining, and optimised for operation with electro-hydraulic systems.

The multi-channel, delay-regulated COBRA 01 brake arrests hoisting winders at a predefined, constant deceleration. This it does regardless of load, direction of rotation, brake pad wear and possible fictional fluctuations – always!

Our new generation of braking systems are characterised by:

- Multiple control circuits
- Additional reserve channels
- High availability
- High resistance to wear
- No additional stand-by unit necessary
- Advanced accumulator technology
- Reduced amount of valve assemblies
- Compact design
- Full redundancy in hydraulic and electrical systems
- Considerable savings in multi-rope systems as a whole



Built for big things, *proven in detail.*

OLKO Maschinentechnik GmbH supplies you with high-quality head frames, shaft towers and shaft installations.

We have built and maintained numerous head frames, and upgraded others during operation to cope with higher loads. Our frames are usually designed as trestle and brace frames.

In our shaft towers, we either arrange the hoisting winder as part of the tower itself, on the uppermost stage, or fit it at platform level.

OLKO shaft-sinking machines and systems have been built for German coal mines and operated in conjunction with domestic and foreign shaft construction companies.



The following OLKO components are nowadays considered essential to the sinking of new shafts.

- Shaft-sinking equipment
- Sinking frames
- Sinking platforms
- Gripper systems





Technology with depth, *intelligent and compact.*

In mining and tunnel-building, hydraulic and pneumatic construction material transport are both used successfully over long conveying distances. OLKO Maschinentchnik GmbH can supply you with modular conveyor systems that are adapted entirely to your local circumstances, providing a steady flow of material and transporting building materials fully automatically to great depths.

With the help of our dedicated, comprehensive control and communication systems, one man can generally monitor and guide all of the processes alone. This makes in-shaft conveying more efficient, and reduces expenditure and costs.

That in turn increases the certainty of your planning, safety among your employees and safety while servicing, giving you flexibility you will appreciate.



Fully automated building material conveying by OLKO

- Hydraulic and pneumatic building material transport
- Modular extensions over maximum conveying distances
- Continuous flow of material assured
- Highly intelligent control systems



Stability and substance, *even when things get hot.*

Mining the future means keeping things going: that is why we offer maintenance on mining head frames, which guarantees the long-term operation of your shaft.

We organise our work so your operations are restricted as little as possible during renovations. Our product range includes steel construction based on the drawings of others.

In addition to considerable manufacturing depth, OLKO Maschinentchnik GmbH offers the full service you expect from a global, interdisciplinary corporation.

This includes customer consulting, planning, production, assembly, installation, commissioning, as well as the training of your employees, and their support during operation.



Find out for yourself – and mine a bit of future for yourself – with OLKO.

- Steel and plant technology
- Steel construction, including on the basis of third-party drawings
- Optimising existing systems for productivity / efficiency
- Special plant construction
- Availability and quality
- Full service, from concept to maintenance





Ein Unternehmen der **THYSSEN SCHACHTBAU** Gruppe

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