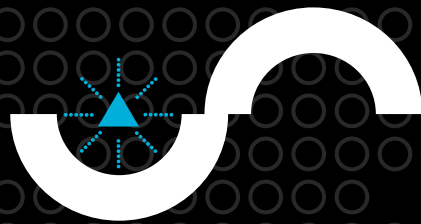


QUALITY CREATES TRUST



Steiger
engineering

Engineering Bureau STEIGER





Bureau

Engineering Bureau STEIGER offers wide array of consultancy services for the mining industry. Your satisfaction is ensured by our commitment to the assignment and practical experience of our engineers.

Engineering Bureau STEIGER LLC is an independent mining consultant company based in Estonia. Formed in 2004, STEIGER has grown into the leading mining engineering bureau in the region, currently employing over 35 highly trained specialists. We are just the right partner to carry out multiplex assignments with the flexibility you need.

Our motto

Our company name comes from the old German mining term „steiger“, which means foreman or overman of the mine. The word is derived from the German word (steige(r)nd) – to rise up or to come to the light and was adopted as a term already in the middle ages. Throughout the history safety has always been the one main concerns in mining. Steiger’s task was to ensure that men who descended into the mine in the morning would safely come back in the evening.

International experience

We have cornered the local market during our 8 years of existence and gained experience in sites in Near East and Europe. Our expert staff is capable of providing a wide range of engineering services in the fields of geology, environmental impact assessement, mine planning and design, mine survey, civil engineering and geotech and laboratory services.

“Our goal is to offer the best and safest solutions when it comes to mining, so we could create a bridge between the benefits received from the consumption of natural resources and the environment.”



Services

Geology

- metal and other resources geological exploration and assessment
- feasibility studies
- resource assessment and program/project evaluation
- resource consultancy
- hydrogeological study
- geochemical and physical studies of rocks and sediments (incl. XRF, XRD, ICP-MS-LA, SEM & other)
- drilling and other field works
- geophysical field investigation, rock engineering and slope stability
- geological mapping

Planning and Design

- mining operations
- subterranean facilities
- mining development plans
- analysis and optimization of existing mining operations
- mining method and equipment selection
- technological applied research
- mine water management, dewatering and treatment
- ventilation projects
- mine waste engineering
- mine reclamation and closure

Environment

- baseline environmental studies
- environmental impact assessment
- preparation of monitoring plans
- organizing and executing monitoring
- project preparation for emission allowances
- ambient air pollution permit application preparation
- dust and exhaust gas dispersion models
- sound scattering calculations and modeling
- drilling and blasting safety calculations



Mine Survey

- topo-geodetic survey
- marking out objects, facilities, borders & other
- quarries and excavation pits survey
- calculation of mined out volumes
- determination of the residual reserve
- surveying and calculating stockpile volumes
- preparation of mining plans
- cadastral surveying and land consolidation



Consulting Services

- operational assistance
- risk analysis
- management of mining operations
- permitting for mining and associated activities
- competent person reports
- professional and legal consultation on matters of mining
- subterranean planning
- independent expert reports



Laboratory Services

- XRF, XRD, ICP-MS-LA, SEM & other
- granular composition, filtration module, moisture, bulk density & other
- measurement of equivalent noise levels
- outdoor and indoor air dust concentration measurement
- measurement of vibrations, caused by explosives
- other environmental studies



Experience

2011

- Geological research of Attatart Um Gudhran oil shale deposit in Jordan (Jordan Oil Shale Energy Co)
- EIA of Kogula limestone quarry (Moreen)
- Comparison of mining conditions Oandu and Sonda oil shale mining fields (VKG)

2010

- Control survey of 8 quarries (Ministry of the Environment of Estonia)
- Hydrogeological prognosis of Northern part of Harku limestone deposit (Quarry of Harku Co)
- Project for underground workings in Kohtla mining museum (Kohtla Mining Museum)

2009

- Geotechnical research in Suur-Pakri island for nuclear power plant site selection (Estonian Energy)
- Base study for national strategy of natural construction materials of Estonia for 2010 2020 (Ministry of the Environment)
- Mining project for Põhja-Kiviõli II oil shale opencast mine (Kiviõli Oil Shale Processing & Chemicals Plant)

2008

- Draft project of Maardu underground granite mine (Maardu Granite Mine Co)
- Mining project for Naissaare marine sand deposit (Veelinn Real Estate)
- Evaluation of limestone reserve in Kohtla-Järve area for cement production (VKG)

2007

- EIA of solid heat carrier (TSK-500) for oil shale retorting (Kiviõli Oil Shale Processing & Chemicals Plant)
- Geological research of Arumetsa clay deposit (Saint-Gobain)
- Analysis of Vermeer TI225 continuous miner tests in Vão limestone quarry (Vão Paas)

2006

- Comparative EIA of Ruu limestone quarry mining technologies (Vão Paas)
- Mining project for Männiku II sand quarry (Silikaat)
- Applied study of more environmental friendly carbonate rock mining technologies (Ministry of the Environment of Estonia)

2005

- Draft project of Usnova oil shale mine (Riverito)
- EIA of Naissaare marine sand excavation (Veelinn Real Estate)
- Estimation of blasting ground vibrations impact to Tallinn-Narva gas pipeline (Limestone Products Factory)

2004

- EIA of Põhja-Kiviõli oil shale opencast mine (Kiviõli Oil Shale Processing & Chemicals Plant)
- Development plane of Anelema dolomite quarry (Reiden Dolomite)
- Resource estimation of Vão limestone deposit (Estonian Limestone)

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Contact

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European Union
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