

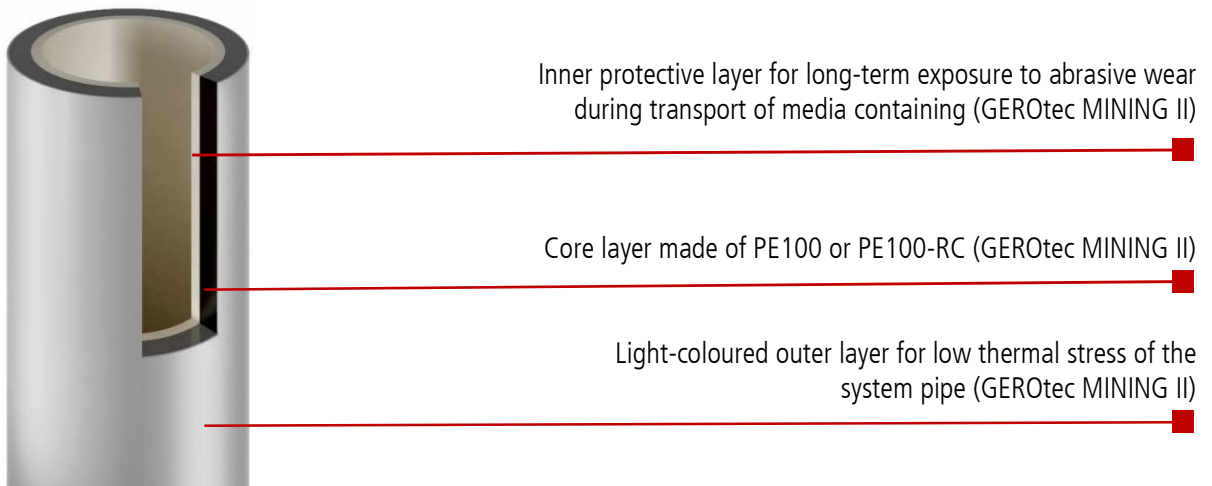
GEROtec MINING – abrasion resistant pressure pipe

Technical information

- Industrial and mining pipe for the transport of media containing solids
- Multilayer pipes with dimensions according to DIN 8074
- Suitable as Type I and II for open installation and common connection techniques
- Manufacturer certified according to DIN EN ISO 9001 und 14001, OHSAS 18001 and ISO 50001

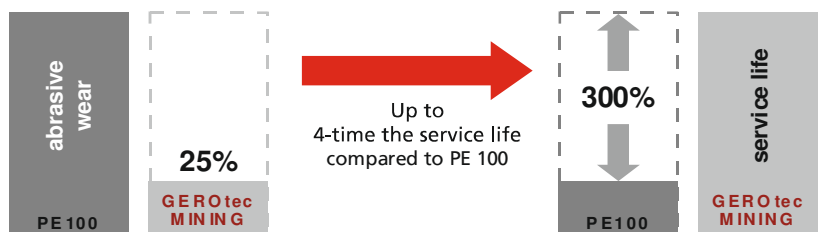
- GEROtec MINING I
Two-Layer media pressure pipe
 - Outer layer made of PE100 / PE100-RC in black, outer layer
 - Dimensionally integrated inner layer made of thermoplastic elastomer with significantly increased resistance against abrasion, light colour (natural material), suitable for inspection

- GEROtec MINING II
Three-Layer media pressure pipe
 - Core layer made of PE100 / PE100-RC in black
 - Dimensionally integrated, coextruded outer layer made of UV-stabilized PE100 / PE100-RC in silver grey
 - Dimensionally integrated inner layer made of thermoplastic elastomer with significantly increased resistance against abrasion, light colour (natural material), suitable for inspection



- Conventional media pipelines made of PE100 or PE100-RC materials have been optimised for long-term operation for the transport of gas, potable water and waste water. These outstanding properties are complemented by the integration of an abrasion-resistant inner layer of thermoplastic elastomer.

- GEROtec MINING pipe systems can guarantee significantly longer pipe service life in operation than PE100 pipes.



This information does not contain any guarantees, errors excepted. Technical information is provided which corresponds to the state of the art at the time of preparation. In general, necessary precautions, standards, guidelines and other relevant regulations must be observed.

Connection with system

When installing pressure pipes of the GEROtec MINING system, connections can be made by electrofusion welding and butt welding process as well as other techniques suitable for PE pipes.



As a system supplement, the required bends in the appropriate dimensions and bending angles are available for each project in order to ensure a consistent use of material for the entire pipeline.

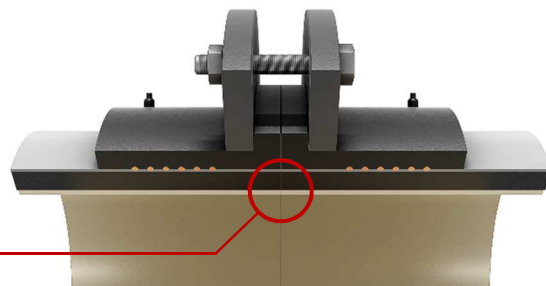
GEROtec MINING weld-on collar

- Flange connection with combination of flange collar and e-fusion socket
- Weld-on collar made of PE100 / PE100-RC with heating coil, weldable via barcode with inserted pipe made of PE100 / PE100-RC
- Dimensions and SDR ratings correspond to system pipe according to DIN 8074
- Loose flange made of PP with steel insert



- Detachable pipe connection
- Transition to other materials
- Continuous abrasive-resistant inner layer

Continous inner layer made of thermoplastic elastomer



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Field test:

Test series in a concrete mixing plant / Fa. Beton Etzel+Linth in Uznach (CH)

- Normal operation of the mixing plant
- Long-term test on the maximum stressed pipe section
- Sand and gravel mixture flowing through with laterally injected binding agent concrete



- Standard pipes made of PE100 are unusable worn out in various test series after operating times between 2 and 8 weeks.
- GEROtec MINING pipes have been in test operation for 10 months until now
- Evaluation of the intermediate inspection after 6 months:
Pipe is not yet worn out and can be used further

Project – GEROtec MINING - Pipeline for Elbekies GmbH in 04931 Mühlberg (D)

- Europe's largest gravel plant; renowned manufacturer and supplier of additives for the construction industry (road, railway, structural and civil engineering)
- Mining, conveying and processing of sand and gravel mixtures, water and open-pit mining, mixing plant, spoil heap management
- Realisation of long-term test series with different pressure pipe materials for the conveyance of mining mixtures (water-sand-gravel)



- Result:**
- * PE pipes with abrasion-resistant inner layer ensure long service life
 - * PE pipes are easy to assemble; process-specific modifications can be carried out at short notice
 - * PE pipes allow low investment and operating costs

➤ The Elbekies GmbH decided in the course of new investment projects for the application of:

GEROtec MINING - pipe OD 355 x 21,1 mm / SDR 17

- 20m – bars / overall length of 960m in the first construction phase
- Bars with GEROtec MINING weld-on collar pre-assembled on both sides



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