

The challenge:

The special circumstances for LOC-matic equipment, especially due to underground mining operations, such as the extremely low mining heights and the resulting kinematics requirements, lead to extreme and above-average loads on the equipment.

In order to counteract these heavy loads - we always try to achieve the optimum in terms of welding technology and material selection. In such a project - this and intensive notch-free polishing, is not enough to continuously guarantee that these heavily loaded details meet our quality standards.

The solution:

The use of the PIT technology provides us the possibility to counteract such problem areas. The dynamically loaded areas of our components are treated with the PIT technology not only at the weld transition area, but also larger surface areas including weld surfaces and heat affected zone. This ensures that the residual shrinkage stresses are converted into residual compressive stresses. By introducing residual compressive stresses - the shrinkage stresses are superseded, which leads to a significant increase in operational strength and service life.

“ In our opinion, PIT technology will play a decisive role in the future for dynamically loaded highly stressed areas. We are pleased about the pleasant cooperation. Not only a great product, but also an open-minded and friendly team!

Helmut Scherhauser-Kremmer, CEO LOC-matic GmbH
Dr. Stefan Allmeier, Welding engineer

