

Mining world



The mining industry faces challenges that affect the operational efficiency and safety of workers in the mine. Among these problems, equipment corrosion, mechanical wear and structural failure are particularly critical issues.

How can stainless steel help to reduce these risks and improve safety in mining operations?

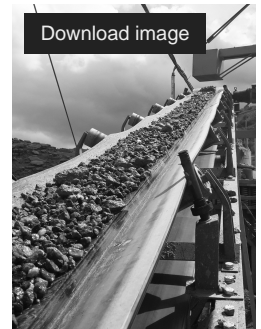
Corrosion is a constant threat in mining due to the presence of moisture and aggressive chemicals. For example, hydrogen sulphide present in underground mines deteriorates pipes and ventilation systems, which can lead to irreparable failures.

Stainless steel grade AISI 316, with molybdenum content, offers great resistance in these environments, prolonging the useful life of the equipment, reducing maintenance interventions and preventing serious accidents.

Equipment such as hoppers and conveyor belts are exposed to continuous friction, which accelerates their deterioration. Martensitic stainless steels, such as AISI 420, stand out for their wear resistance, reducing the need for frequent replacement and improving operational continuity.

Duplex 2205 stainless steel is a good option for tunnels and galleries that must resist heavy loads and are settled on uneven surfaces.

Thanks to their mechanical strength and excellent corrosion resistance in aggressive environments, 2205 is used in anchor bolts, structural reinforcement and other supporting elements in underground mines.



Is stainless steel profitable in mining?

Although the initial investment may seem high, when you consider the reduced maintenance costs, improved safety and increased operational efficiency, the answer is clear.

We would like to share another example of how a good material can save lives in the mining industry. You will find it in our magazine, in the article 'Mining vehicles [/export/sites/cedinox/.galleries/revistas/Revista_94-DigitalB.pdf]'.