SikaBond® R&B: ON-SITE REPAIR OF CONVEYOR BELTS

Conveyor belts are widely used in highly demanding applications, such as in the tunneling and mining industry, and whenever bulk materials (grain, salt, coal, ore, sand, etc.) are transported. In order to ensure smooth and ongoing operations, it is necessary to maintain and repair conveyor belts continuously. Conveyor belts are often exposed to heavy stress, which leads to wear and tear of the belt, surface damages, or even holes.

Fast and efficient repair of such damages is possible with our repair material for cold repair, thus maintaining your conveyor belt system in good operational condition. A cost-effective repair of conveyor belts can be achieved with a specialty adhesive system, allowing a rapid return to service.

The repair of rubber components typically requires hot vulcanization to restore the original strength. Broadly used are also solvent based contact adhesives, however, the resulting bonding strength often varies over a wide performance range. The required steps: buffing, cementing, filling, curing and pressing or bonding mean a long downtime. Over the last years, Sika launched innovative systems for rubber adhesion. Focus was to reduce downtime due to conveyor belt repair in mining operations. The products are applicable with minimum equipment requirements, fast curing, and easy to apply. Our acrylic based system, SikaBond® R&B Aktivator and R&B 210 allows for fast repair of rubber components. Customers confirm that this adhesive system is equivalent to hot vulcanization, if not superior, due to greater robustness.

The SikaBond® R&B is based on peroxidically cross linked acrylates that react with the double bonds in rubber and thus allow for a structural bond.

The SikaBond® R&B system offers a good compromise between flexibility and strength.
Pot life and cure time offer a window that allows for safe application and fast recommissioning of the repaired part.

Reliability of the system has been proven by dynamic tests at the Institute of Transportation Technology, Hannover, Germany. Customers confirmed the ease and robustness of this system for conveyor belt repair.

**SikaBond® R&B put into practice: Rapid splicing and installation**
It was necessary to minimize the installation downtime of a new EP800/4 crusher belt at a large cement clinker plant in Albania. Due to the very favorable installation time when comparing the SikaBond® R&B-210 system with standard hot vulcanizing procedure, the client opted for the new SikaBond® R&B-210 product that allowed rapid splicing and installation of the belt. The belt was put back in operation after less than 1.5 hours, cutting down-time by roughly 80%. Furthermore, there was no need for heavy equipment like presses and heating aggregates, power-supply and health damaging solvents at the installations site.

SIKA CORPORATE PROFILE
Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and motor vehicle industry. Sika has subsidiaries in 101 countries around the world and manufactures in over 300 factories. Its more than 24,000 employees generated annual sales of CHF 8.11 billion in 2019.