

SUCCESS STORY

Tension drum of a conveyor



CONTEXT OF THE CUSTOMER'S CHALLENGE

adopted solution that will be fully implemented on all quarry conveyors.

In Poland, the quarrying facility «**Jeleniogórskie Kopalnie Surowców Mineralnych Lipiński Sp. J. ZWiPD Piszczowice**» wished to optimize the profitability of its production devices.

“**Service life several times higher of KIZEI®** bearings in very dusty environments than an open bearing, has helped **to eliminate unplanned downtime** (failures) and increase the efficiency of the **production line**.

Big advantage is that they are mounted in the same way with the **same accessories** (same ISO dimensions).

The product deserves a very high rating and we recommend it to other users.”

More than 90% of quarry conveyors are equipped with open steel cage spherical roller bearings.



In addition to production downtime for maintenance, a bearing breakage can cause collateral damage (destruction of the housing or shaft...)



CUSTOMER REQUIREMENTS AND NTN RECOMMENDATIONS

End-user has defined that a **production shutdown** due to a bearing failure generates a cost of **€4,000***. NTN recommended KIZEI®, a unique solution in the market provided by its nitrided metal shields and that is also 100% interchangeable with an open solution.

The customer tested our solution on a drum tension conveyor, in a highly polluted area:

- Drop of fine particles « limestone dust »
- Proximity to the ground « humidity / mud »

Open solutions of **main competitors** were showing an **average lifespan of 2 months**.

Customer expectation with KIZEI® : at least double maintenance intervals



RESULTS FAR BEYOND CUSTOMER EXPECTATIONS

- Tests of several KIZEI® references 22212EAKW33ZZ, all of them still running after 10 months, i.e. a.
- ▶ **Service life multiplied by more than 5 compared to open steel cage version.**
For the moment, End-user expected service life is more than doubled.
- **Grease retention** increased by **3**

	Number of stop/yr	Annual downtime cost	KIZEI® Savings* €20.000
Antigua solución	6	€24.000	
New KIZEI® solution	1 maximum	€4.000	

*Savings estimated on production performance. Savings on Bearing purchase and maintenance operation are not taken into account.