

CASE STUDY



PROJECT DESCRIPTION: Rust removal and corrosion prevention on lifting chains at Triferto fertilizer plant in Veendam

Parties & Individuals:	Oegema Transport Dedemsvaart, Gerlof Oegema BLP International Hillegom, Albert Roggen, Project manager
Period:	September 2012 - present
Situation:	Debris build-up and corrosion (as the result of rain, detergents, salt, and acidic dirt build-up) causes wear & tear and oxidation on the portable forklift lifting chains behind the trucks. Chains become damaged and wear prematurely.
Task:	Requested corrosion protection and lubrication to keep the chains usable. Must also remove rust from corroded parts without too much extra work. BLP recommended Archoil AR5100 Corrosion Remover and Archoil AR9100AE Nanoborate Workshop Spray (Friction Modifier).
Action:	AR5100 is based on a chelate bonding process. The chain was immersed in a bath of AR5100 diluted with water (0.5 L to 5L water) and left overnight. All rust was removed and parts of the chain that were stuck became free. A subsequent treatment with AR9100AE Nanoborate provided the necessary protection to prevent further rust forming. AR9100 binds with the metal surface at a molecular level and is therefore resistant to extreme conditions, thus making it superior to conventional coatings. The service life of the chain is now extended by a factor of two to three.
Result:	Costs lifting chains approximately € 250 per meter; length 2x2 meter = € 1.000. Treatment for 4 meters of chain: 0,25L AR5100, € 17, 50 and 1 spray can 0,5L AR9100AE, € 8, 90 = € 26, 40. With € 26, 40 in Archoil products, a chain that would normally be written off can be used again. This saved approximately € 975 per portable forklift.



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