

No. 079n

Customer: Cement and lime factory

Consultation: M.Sc. Wojciech Łukanowski - CHESTER MOLECULAR - Bydgoszcz

PROBLEM DESCRIPTION: In the excavator, the cylinder piston rod with a diameter of 180 mm and a length of about 2 m has failed. A deep scratch has formed on the working surface of the piston rod (sealed). There was a leak and a drop in the operating pressure at this point, which made it impossible for the piston rod to continue working. As the scratch was too deep for regeneration with the galvanic method, it was decided to supplement it with Chester Molecular material.

DESCRIPTION OF THE REPAIR: The scratch in the piston rod was deepened with a high-speed grinder. The side edges were additionally processed with a disc milling cutter to form a "dovetail". The ends of the incision were drilled and threaded. The regenerated surface was sandblasted with silicon carbide and degreased three times with **Chester Fast Cleaner F-7**. Then **Chester Metal Slide** was applied. After the composite cured, the surface was hand treated with sandpaper.

ACHIEVED EFFECTS: The use of Chester Molecular material for regeneration saved the customer from long machine downtime and significantly higher costs of piston rod regeneration by other methods.

