



Pump Users
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Practical test: rubberised pump wins endurance test against chromium-alloy cast iron and ceramic coating

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Summary

In the waste-water treatment plant of “Entsorgungsverband Saar” (EVS) in Saarbrücken-Brebach, Germany, an above-average amount of sand and earth is responsible for a high level of wear in the pumps of the grit channel. The chromium-alloy cast-iron pumps that had been used to date were so worn out after one year of service that they had to be completely replaced. As this proved to be too expensive in the long run, two types of alternative pump systems were tested: firstly, a pump designed with a ceramic coating and secondly, a specially rubberised pump.

In a parallel endurance test under realistic conditions, both pumps ran seven months long for six to eight hours per day continuously. During this period, the ceramic coating showed definite signs of wear and was completely worn out in places. The rubberised coating, however, was practically untouched and looked almost like new. Neither did the rubber dissolve or separate from the metal core of the pump. Not only that, the rubberised pump was also a great deal cheaper than the chromium-alloy pumps used till now. The test was completed in 2006.