

## BBC SEALAND a success story



BBC Sealand in the harbour of Dampier/ Australia



The MAN B&W 7-cylinder motor

Oy RVS Technology Ltd. from Helsinki, Finland produces active coating products for restoration and prevention of wear of combustion engines, gears separators and bearings. Furthermore the technology has the capacity to clean coked cylinder surfaces and coat them new.

In July 2004 shipping company Bockstiegel from Emden placed the order to treat the vessel BBC Sealand, which has the problem of huge oil consumption caused by cylinder coking. The motor of the Sealand, a 4235kW MAN B&W seven cylinder 4 stroke motor has been treated during sailing from Dampier (Australia) to Jakarta (Indonesia) from 08/11/2004 to 08/15/2004 with the RVS-Nanocoating. The changing of cylinder compression was recorded. After the first treatments and two days sailing we detected an average compression improvement of 40%. Decisive for a successful motor treatment was the reduction of oil consumption. In a period of 4 weeks after treatment they have analysed the daily oil consumption. The result was also for the leading ship engineer of Shipping company, Captain Gerrit Faber, upsetting, cause of the daily reduction of about 30%, that means from 300 litre a day to 200 litre a day. The yearly savings for the shipping company are with 5000 calculated operating hours about 25.000, - EUR. The coating takes place during the running process and causes no time outs of engines. The result is a reduction of oil-, fuel consumption, wear, cylinder coking, run in time of new motors and a increasing of machinery lifetime. Another 10 of 36 container ships of Bockstiegel will also be treated shortly.

Another application for the RVS Technology Nanocoating saw Gerrit Faber in treatment of ship separators, which have wear in a very short time and service is very expensive. In June 2004 the separators of the Bockstiegel vessel BBC Italy were treated with the RVS Technology coating products. The target was the reduction of wear, the metal ceramic coating of the worn out gear surfaces during running and the prevention against new wear.

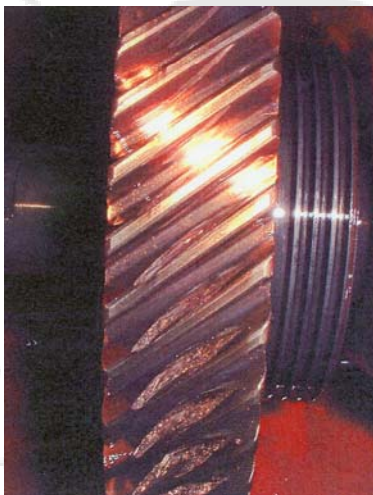
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Before the nanocoating of RVS Technology, Bockstiegel had to change separator gears every 3 months. Since June 2004 the separator gear is running without problems. During SMM fair in October 2004 the BBC Italy was in the harbour of Hamburg and the separator gear could be investigated. Together with the Superintendent Bernd Pallentin from company Bockstiegel the gearbox was opened and the gear teeth were analysed and photographed.

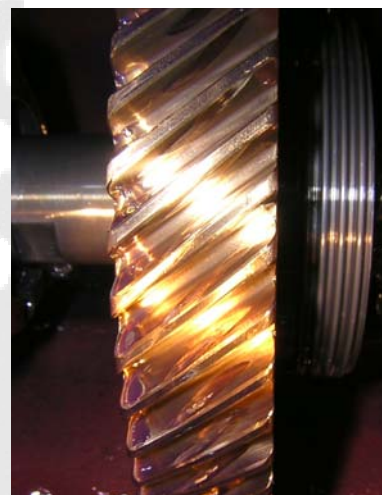


BBC Italy in the Hamburg harbour

Gear surfaces, which have been in June 2004 extremely worn out, were feeling very smooth now and looking new coated. We could see the area of previous worn out surfaces, but the new surface was extremely smooth and we could feel nearly no dents.



Separator gear before treatment



Separator gear after coating and 4 months run