

# Optimol Optigear® BM 220 in the bucket wheel gear of a bucket wheel excavator

Case history:  
brown coal open-cast



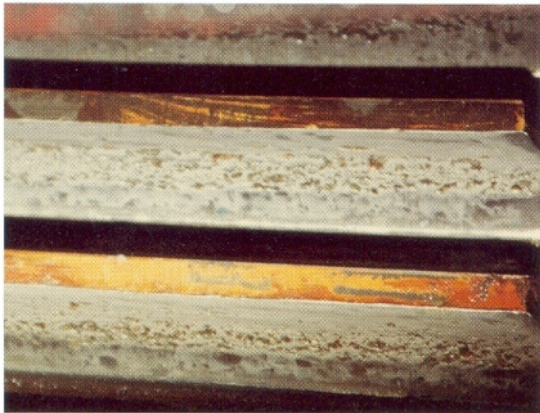
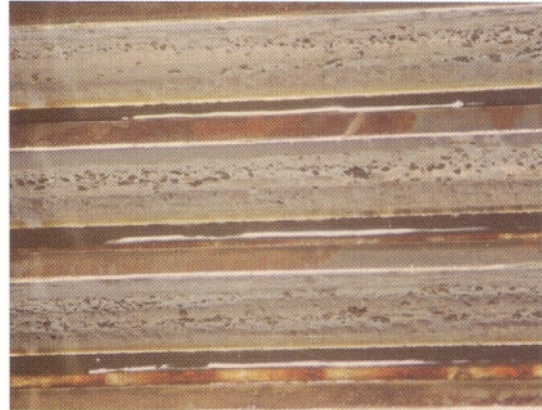
Bucket wheel excavator

## ◆ Four-stage, heat-treated main gear with gear reducer unit. Bucket wheel drive: 2 x 400 kW.

The main gear lubricated with a commercial EP 150 gear oil via forced-feed lubrication showed heavy pitting formation, distinct scratches, scoring and even tooth breakages as well as bearing damage after only a few years of operation.

Optimol Optigear® BM 220 was applied to stop progressive pitting formation and to smooth the surface – especially pitting, sharp-edged pores and cracks.

Wear came to a standstill. Rounding-off and smoothing of the teeth indicate the beginning of reducing the damage process.



Pitting, sharp-edged pores and cracks after the application of a commercial EP 150 gear oil. The damage pictures only partly show the initial condition of the sharp-edged breakages.

Smoothing after almost a year of operation with Optimol Optigear® BM 220