

**Calculation of benefits
of application of reconditioning XADO-compound
in lubrication system of babbitt bearing of pump 16 of pumping plant 8
of water-supply workshop of the JSC Iron-and-steel Works named after Ilyich**

A pump, which needed replacement of the bearing, was chosen to be tested.

The tests started on December, 24, 2000. Before the tests the temperature, which is the main ability factor of the unit, was measured (65°C).

Later on, inspection was made every four days until February, 5, 2000. Oil temperature amounted 35°C and is stable up to the present day (July, 2001), which proves absolute restoration of the shaft-bushing gap. The bearing needs not to be replaced. Costs for replacement and manufacturing of bearings by traditional methods amount to:

$$192,0 + 1,3 + 7,4 - 124,13 = 75,57 \text{ USD, where}$$

| | |
|--------|---|
| 192,0 | value of lined bearing; |
| 1,3 | value of bearing's machining; |
| 7,4 | value of replacement and scraping of bearing; |
| 124,13 | depreciable value of bearing at a price of scrap babbitt. |

Costs for repairing works made by reconditioning **XADO**-compounds amount to \$ 17,12 USD. The given figures show that savings on repairing of one slide bearing of such type amount to \$ 58,45 USD, i.e. **benefits** amounted to \$ 3,28 USD for \$ 1 USD of costs.
