EXERCISES



Plastic deformation



1. When can overloading of the rolling bearing occur?

- a) Only while static
- b) Only in dynamic operation
- c) In dynamic operation and while static
- d) Before installation

2. When has an overload occurred?

- a) If the Hertzian pressure in the rolling contact is below the permissible contact stress
- b) If the Hertzian pressure in the rolling contact is above the permissible contact stress
- c) If the Hertzian pressure outside the rolling contact is above the permissible contact stress
- d) If the Hertzian pressure in the rolling contact is above the permissible contact pressure

3. Static safety depends on the static load rating.

- a) Correct
- b) Incorrect

4. Why do you calculate static safety?

- a) To calculate the equivalent static load
- b) To prevent assembly errors
- c) To prevent plastic deformation due to operating conditions
- d) To determine the maximum permissible Hertzian pressure in the rolling contact

5. Particles can only enter a bearing from the outside.

- a) Correct
- b) Incorrect

6. What types of particles are specified in connection with plastic deformation?

- a) Soft particles
- b) Hardened steel particles
- c) Liquid particles
- d) Mineral particles

7. Elastomers are mineral particles.

- a) Correct
- b) Incorrect

8. Sand is hard, mineral particles.

- a) Correct
- b) Incorrect

9. What do you call the highest level for the classification of impressions?

- a) Average impressions
- b) Clear impressions
- c) Very many impressions
- d) Extremely many impressions