

## Machine operation and maintenance

1. What does the 3 P principle mean?

- : r1 prevention, proactivity, productivity
- : r2 process approach, productivity, proactivity
- : r3 promotion, process approach, proactivity
- : r4 prevention, process approach, productivity

: r1 ok

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2. How do we calculate the "performance rate"?

- : r1 (number of pieces x cycle): time of possible equipment operation - downtime
- : r2 Equipment operating time: equipment operating time
- : r3 usage rate x performance rate x quality measure
- : r4 number of units produced: time of operation of the device

: r1 ok

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3. Define "risk"

- : r1 acceptable form of the activity
- : r2 Possibility of hazard activation
- : r3 object property cause negative effect
- : r4 the probability with which an event can occur

: r1 ok

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4. What does FTA mean?

- : r1 tree fault analysis
- : r2 event tree analysis
- : r3 analysis of the mode and effect of failures
- : r4 analysis of failure, sequence and criticality

: r1 ok

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5. Define the risk of maintenance

- : r1 the product of the probability of failure and consequence
- : r2 failure probability value
- : r3 inventory of possible fault types and causes
- : r4 the probability with which an event can occur

: r1 ok

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6. What does a compact maintenance audit not include?

- : r1 Consequences of failure
- : r2 maintenance benchmarking
- : r3 maintenance outsourcing
- : r4 operational reliability quantification

: r1 ok

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7. What is not the objective of benchmarking?

- : r1 risk analysis
- : r2 cost savings
- : r3 accelerate the change process
- : r4 increase customer satisfaction

: r1 ok

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8. Explain the term "outsourcing"

: r1 the use of external resources to ensure performance that is not one of the company's key capabilities

- : r2 process of comparing and measuring products, processes and methods
- : r3 collecting data on process performance and customer needs
- : r4 Defining goals to improve your own activities

: r1 ok

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9. What does bath curve express?

- : r1 divides the product life cycle into zones
- : r2 shows the difference between the required and actual achieved reliability
- : r3 shows the wear rate of the product
- : r4 shows the progress of product realization

: r1 ok

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10. II. zone of the life cycle zone of the object represents

- : r1 period of normal operation
- : r2 period of frequent disturbances
- : r3 aging period
- : r4 period of growth of failure intensity due to aging of material

: r1 ok

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11. The shutdown and decommissioning of the facility takes place during

- : r1 III. period
- : r2 I. period
- : r3 II. period
- : r4 IV. period

: r1 ok

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12. The reliability data bank is important for

- : r1 reliability management
- : r2 benchmarking
- : r3 feedback
- : r4 device rating

: r1 ok

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13. Methods of reliability analysis do not include

- : r1 benchmarking
- : r2 trend
- : r3 histogram
- : r4 Pareto diagram

: r1 ok

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14. What is Ishikawa diagram?

- : r1 cause and effect diagram
- : r2 shows the importance of each category
- : r3 shows the evolution of changes in reliability indicators over time
- : r4 the only method of reliability management

: r1 ok

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15. The graphical representation of data distribution using a bar graph with columns of the same width is called:

- : r1 histogram
- : r2 Ishikawa diagram
- : r3 trend
- : r4 Pareto diagram

: r1 ok

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16. What does a serial reliability model look like?

- : r1 failure of any element results in failure of the whole system
- : r2 A system failure occurs when all of its elements fail
- : r3 A system that requires only one operable element to operate
- : r4 none of the options

: r1 ok

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17. Define the rated performance class for continuous load

- : r1 the machine can operate for unlimited time in accordance with the requirements
- : r2 the machine can operate for a limited period of time starting from ambient temperature
- : r3 the machine can operate in duty cycles as required
- : r4 the machine can operate at the appropriate load and speed for an indefinite period of time

: r1 ok

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18. The performance at which the machine can operate at a constant load until it reaches a steady temperature, achieving the same warming of the stator winding as the average warming value during the duty cycle is called:

- : r1 Rated performance for equivalent load
- : r2 nominal power for periodic load
- : r3 Rated performance for continuous load

: r4 nominal performance for short - term operation

: r1 ok

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19. The amount of workpieces machined by a given device per unit of time is referred to as

: r1 technological performance

: r2 actual power

: r3 cycle power

: r4 working power

: r1 ok

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20. Tribology deals with

: r1 processes of friction, wear and lubrication

: r2 Description and calculation of work output

: r3 correct maintenance policy

: r4 by determining the cyclic loss

: r1 ok