

Machine and Concrete

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More Details

A machine cast in concrete

Each gear wheel turns almost nine times slower than the previous one. The movement is slowed down significantly by 24 wheels. The last wheel would need almost 600 trillion years for one rotation – a gigantic time span! In order to get a sense of these time spans, we travel back in time mentally: how far back in time does one rotation of each wheel take us?

Times required for one rotation

Small wheel: 0.75 seconds

Large double gear wheels:

- 1st gear wheel: 6.5 seconds
- 2nd gear wheel: 55 seconds
- 3rd gear wheel: 8 minutes
- 4th gear wheel: 1 hour
- 5th gear wheel: 10 hours
- 6th gear wheel: 3.5 days
- 7th gear wheel: 1 month
- 8th gear wheel: 8.5 months
- 9th gear wheel: 6 years
- 10th gear wheel: 50 years Half of the human lifespan

- 11th gear wheel: 440 years Copernicus “puts the sun in the center”
- 12th gear wheel: 3700 years Stonehenge is built
- 13th gear wheel: 30,000 years The Neanderthal becomes extinct
- 14th gear wheel: 275,000 years The woolly mammoth appears in Siberia for the first time
- 15th gear wheel: 2.4 million years The early man uses stone tools: beginning of the Stone Age
- 16th gear wheel: 20 million years India slides under the Eurasian Plate: formation of the Himalayas
- 17th gear wheel: 175 million years Heyday of the Archaeopteryx
- 18th gear wheel: 1.5 billion years Development of living organisms with a cell nucleus
- 19th gear wheel: 13 billion years Origin of the universe
- 20th gear wheel: 100 billion years Before the beginning of time
- 21st gear wheel: 1 trillion years
- 22nd gear wheel: 8 trillion years
- 23rd gear wheel: 70 trillion years
- 24th gear wheel (cast in concrete): 594 trillion years