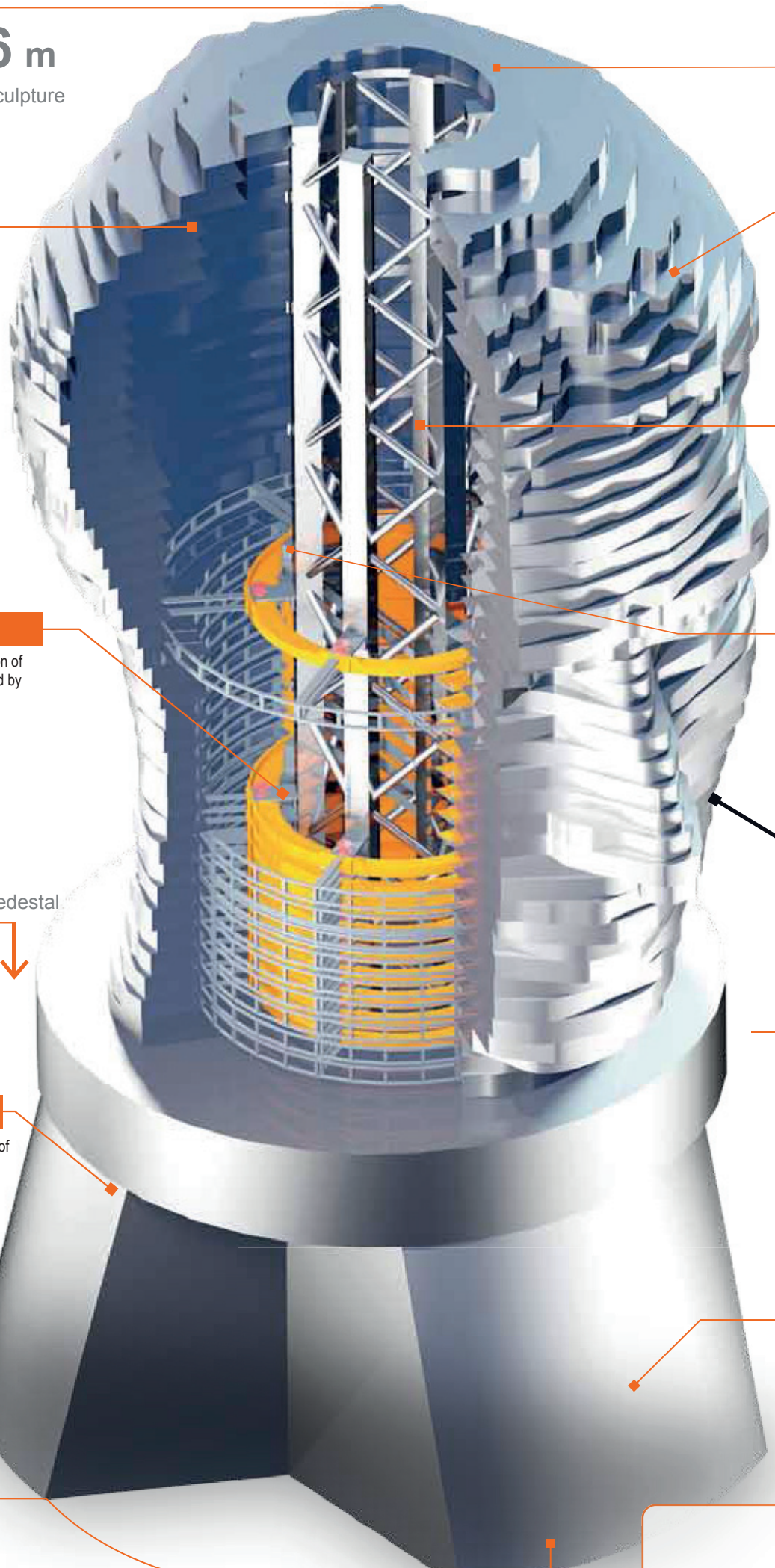
# EXCLUSIVE MOVING HEAD OF FRANZ KAFKA

**10,6 m**
height of the sculpture with pedestal

**39 t**
weight of the sculpture

**2,8 m**
height of the pedestal

**6,06 m ∅**
diameter of the sculpture



**Structure**
The whole sculpture is composed of 252 structural members.

**Position detection**
The correct orientation of the panels is detected by 42 induction sensors.

**Energy**
The energy intensity of operation is reduced by the utilised recuperation units.

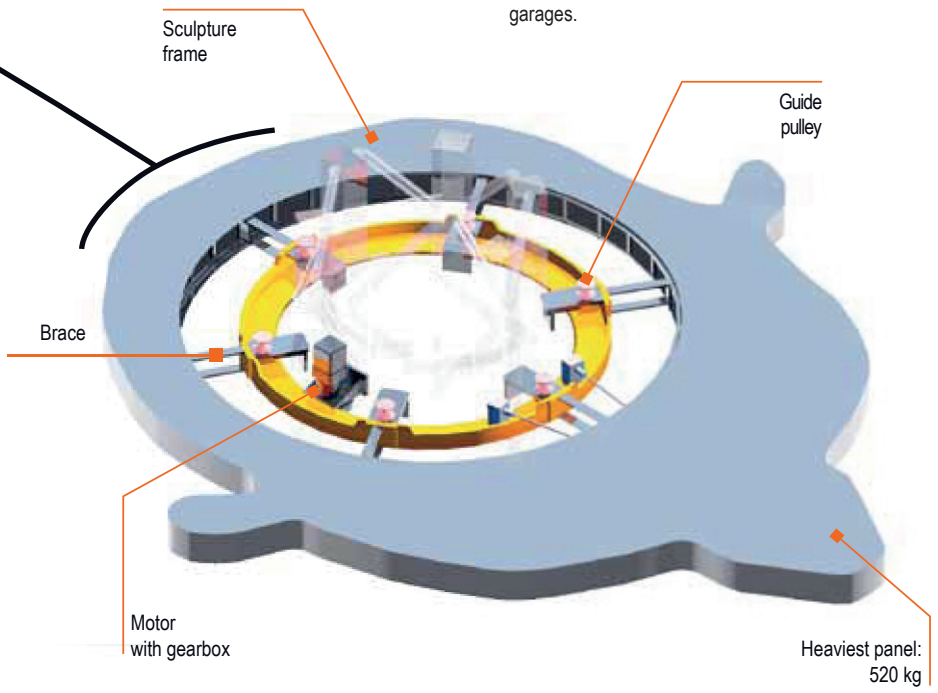
**Pedestal**
Place for the control system, control panel, distributor, transformer for the servomotors and other electrical equipment.

Lightest panel: 190 kg

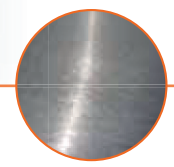
**Bends on the perimeters**
The resulting face comprises 18,500 bends of stainless steel sheet.

**Joining materials**
12,500 rivet welds and more than 3,800 other joining parts. The total amount of joining materials is thus more than 16,300.

**Actuation**
The rotation of the panels is ensured by 42 synchronous motors with increased moment of inertia.

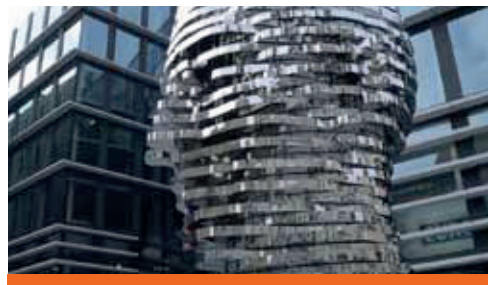



**Control system**
The brain of the structure is a Siemens Simotion control system with the possibility of remote communication.



**1 500 m²** | **24 t**
stainless steel sheet with mirror finish

ARTIST
David Černý



**Choreography**
The final 40-minute choreography is composed of 15 types of movements. The system enables creation of new sequences and programming of other types of movements.

**Preparation of the surrounding area**
It was necessary to conduct two static-dynamic assessments and prepare a special space to prevent transfer of vibrations into buildings and underground garages.

Deimos

Contractor
Deimos is active in the area of industrial automation and robotisation. The company provides industrial solutions from initial technical specification to final delivery of automation technology.

**8 900 h**
man hours

**1 800 h**
developers, designers and programmers

**4 200 h**
production hours

**2 900 h**
assembly hours

## Design and construction processes of the head of Franz Kafka

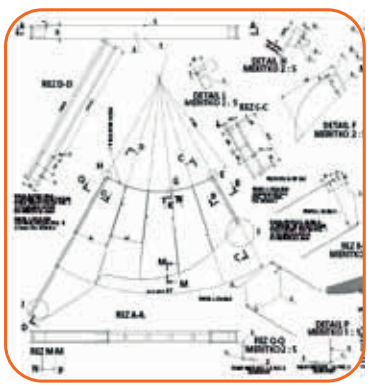
**PREPARATION**

During the design process, a 3D model was created whose data volume was greater than 20 GB.

**SOLUTIONS**

The design uses innovative solutions from the area of industrial automation and robotisation.

**DOCUMENTATION**



For construction, the model was broken down into 2,039 technical drawings.

**CONSTRUCTION**

Construction took place from April to October 2014. Special parts took months to deliver.