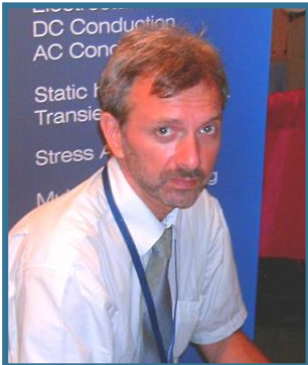# What's new in QuickField 6.3

Vladimir Podnos,
Director of Marketing and Support,
Tera Analysis Ltd.
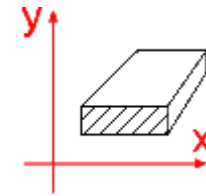*New features overview*

Alexander Lyubimtsev
Support Engineer,
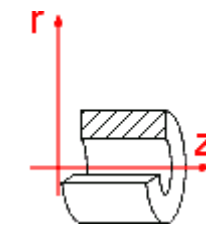**Tera Analysis Ltd.**
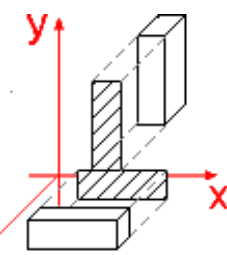*QuickField live demonstration*

QuickField 6.3

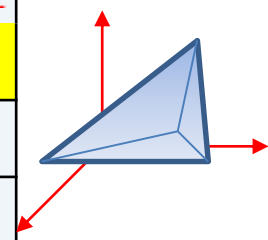| Magnetic analysis suite		
Magnetic Problems	Magnetostatics	
	AC Magnetics	
	Transient Magnetics	
Electric analysis suite		
Electric Problems	Electrostatics and DC Conduction	
	3D Electrostatics + 3D DC Conduction	
	AC Conduction	
	Transient Electric field	
Thermo-structural analysis suite		
Thermal and mechanical problems	Steady-State Heat transfer	
	3D Steady-State Heat transfer	
	Transient Heat transfer	
	Stress analysis	

plane-parallel

axisymmetric

3D extrusion

3D import

QuickField 6.3

Magnetic analysis suite		
Magnetic Problems	Magnetostatics	
	AC Magnetics	
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Electric analysis suite		
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	3D Electrostatics + 3D DC Conduction ⭐	
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plane-parallel

axisymmetric

3D extrusion

3D import

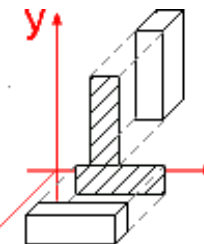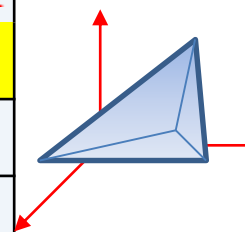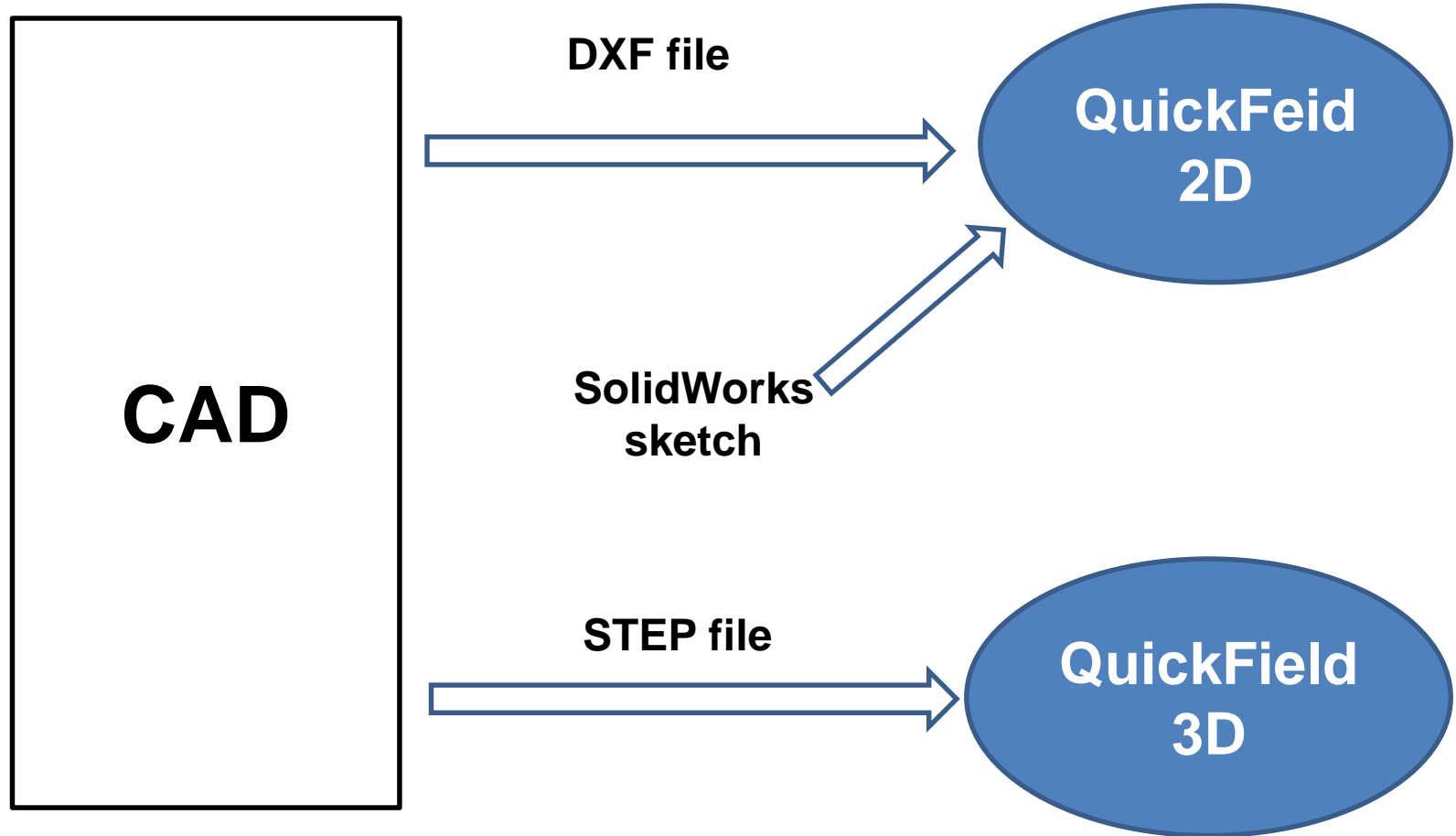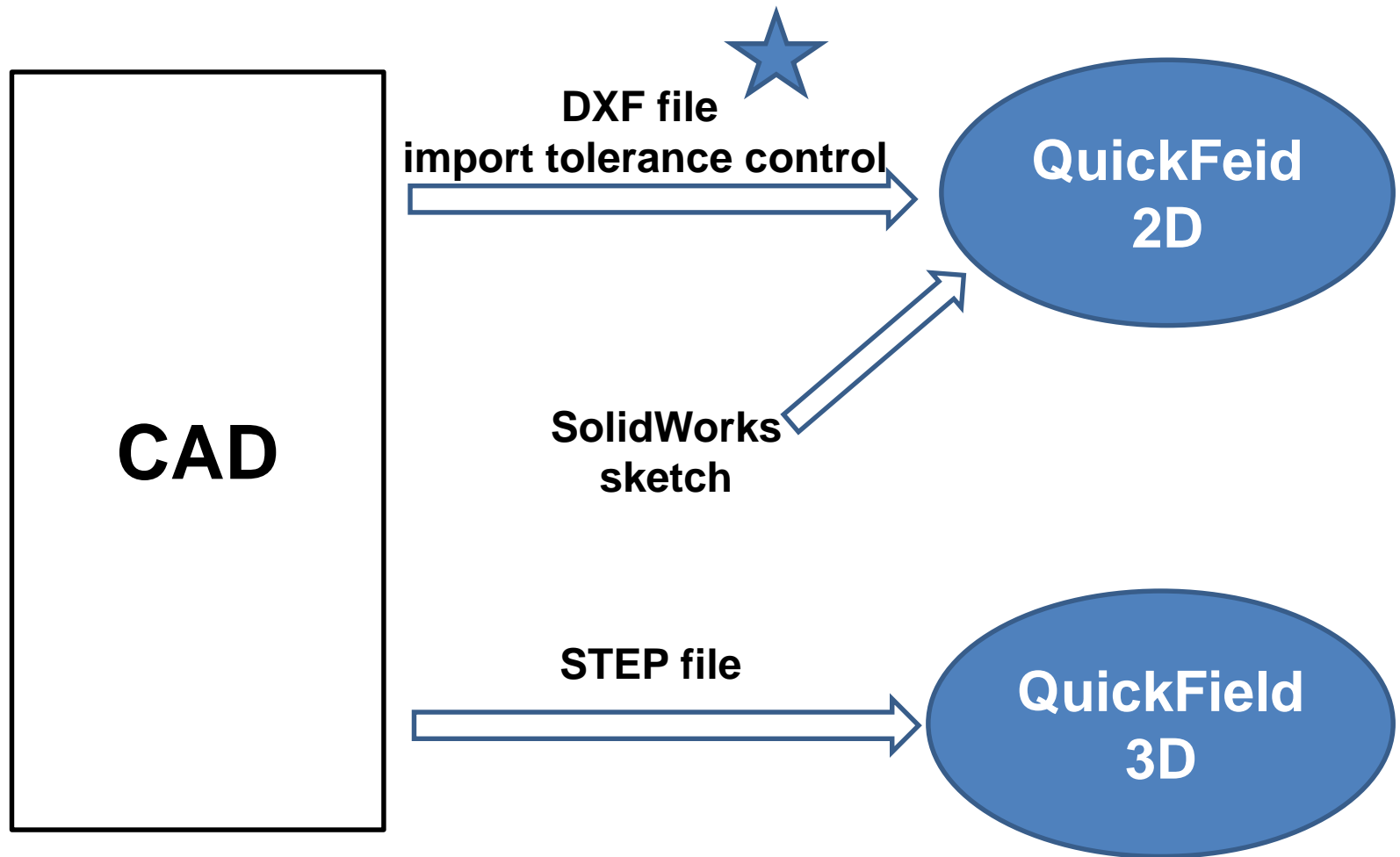# Geometry model import

Geometry model import

What's new in QuickField 6.3

- (2D) Initial temperature setting in the transient heat transfer problems.

- (2D) Tolerance control for the geometry import from DXF.

- (3D) Extended list of the integrals calculated in 3D postprocessors.

- (3D) Arbitrary contours in the 2D sections of 3D bodies.

QuickField 6.3 Editions

|	*QuickField Student Edition*	*QuickField Lite Edition*	*QuickField Professional Edition*
Mesh size limit	2D: 255 nodes 3D: 4000 nodes	2D: about 4000 nodes 3D: No artificial restrictions	No artificial restrictions
Cost	**F R E E**	Online quote may be generated at QuickField.com>Product>Order	
License term	Permanent	per year	per year or permanent
Network licensing availability	single-user only	License permits **unlimited** number of concurrent QuickField sessions within a campus	Single-user and agreed number of floating network licenses are available
Licensing requirements	no restrictions	Academic only	No restrictions, however, commercial and academic licensing terms are different

QuickField 6.3 pricing

- Commercial and academic prices are same as for 6.2
- Customers under maintenance get 6.3 for free
- Older licenses may be updated for 40% of the current cost of compatible configuration. One year maintenance is included.
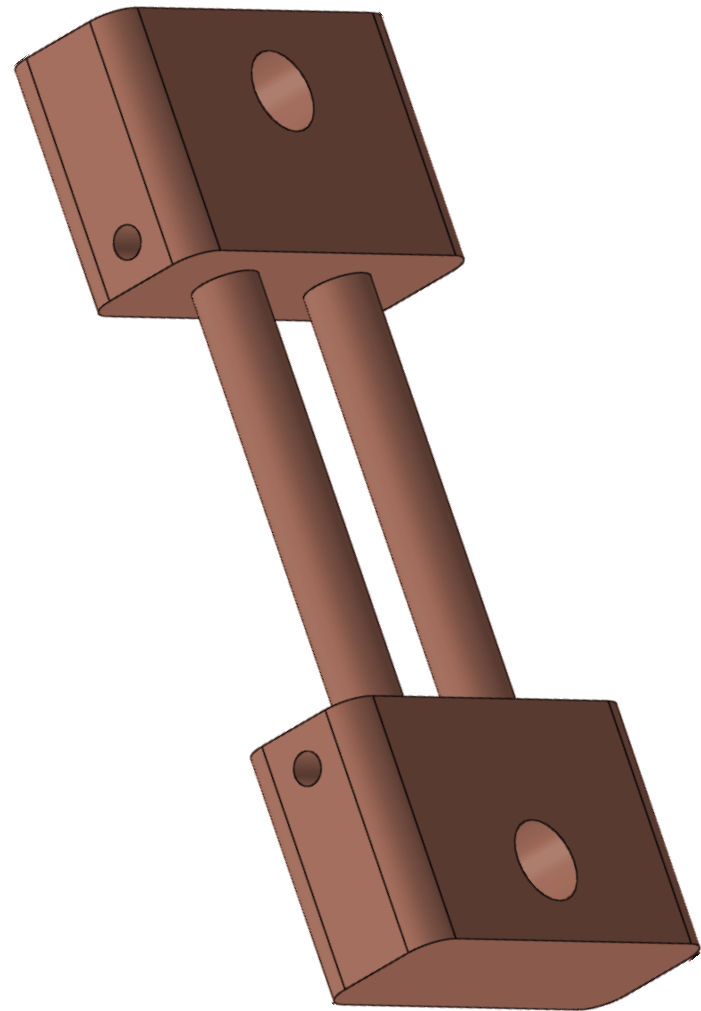- 12 months maintenance extension costs 16.5%

Prices depend on the set of analysis options, number of seats and region. Automatic quote generator at

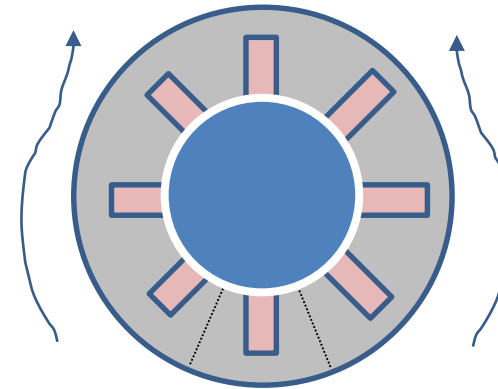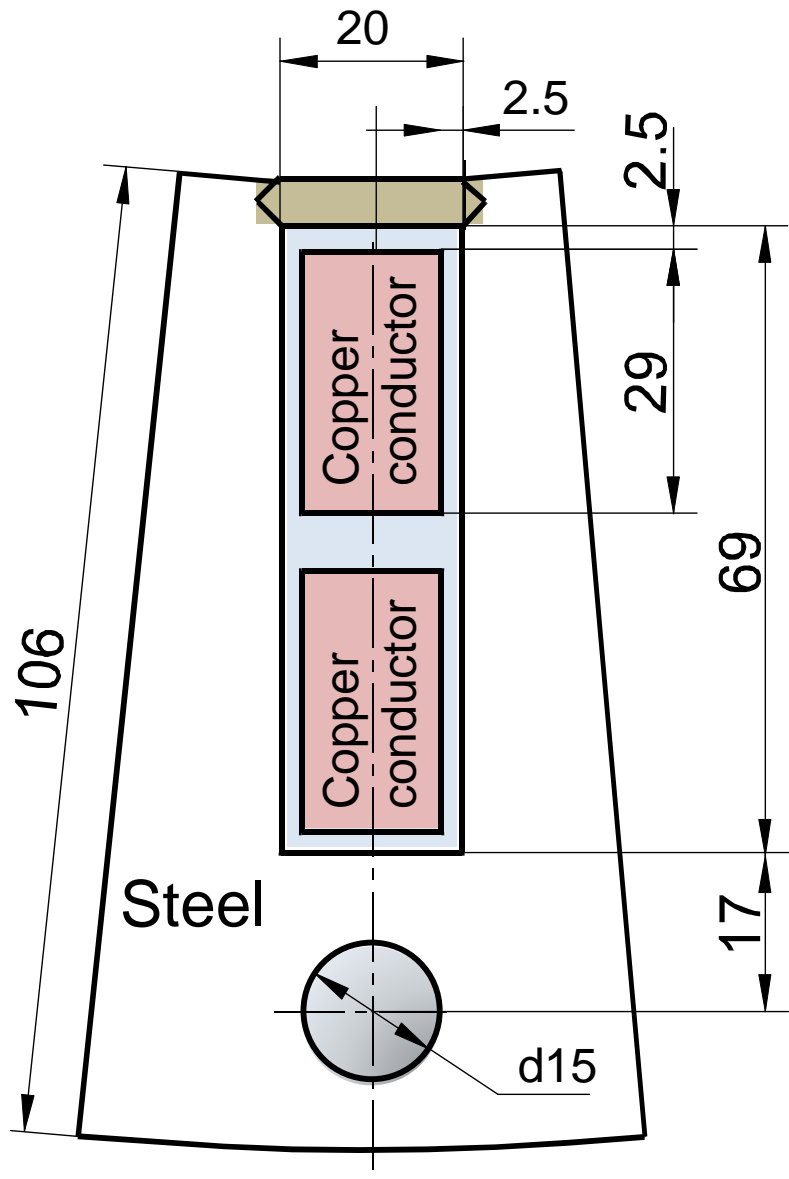**QuickField.com > Product > Order**

What's new in QuickField 6.3
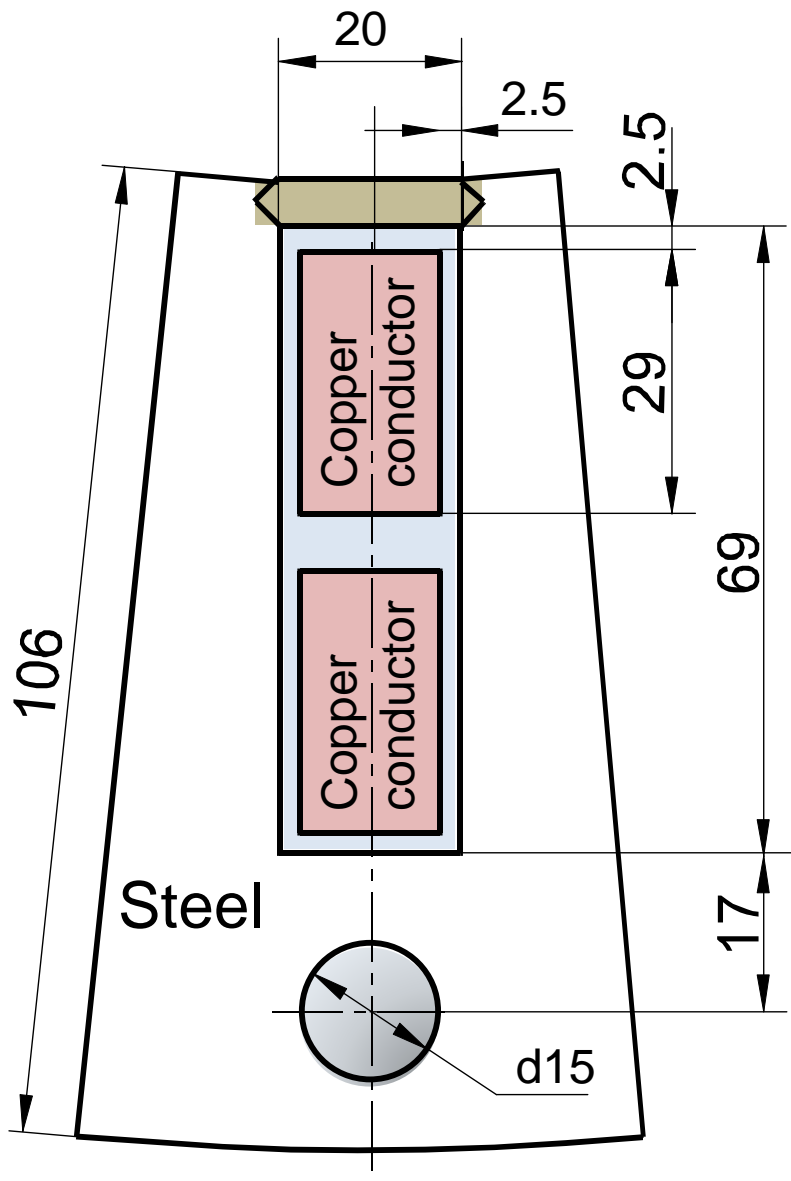
Slot of electric machine

DC shunt resistance

Slot of electric machine

20

2.5

2.5

Copper conductor

29

Copper conductor

69

106

Steel
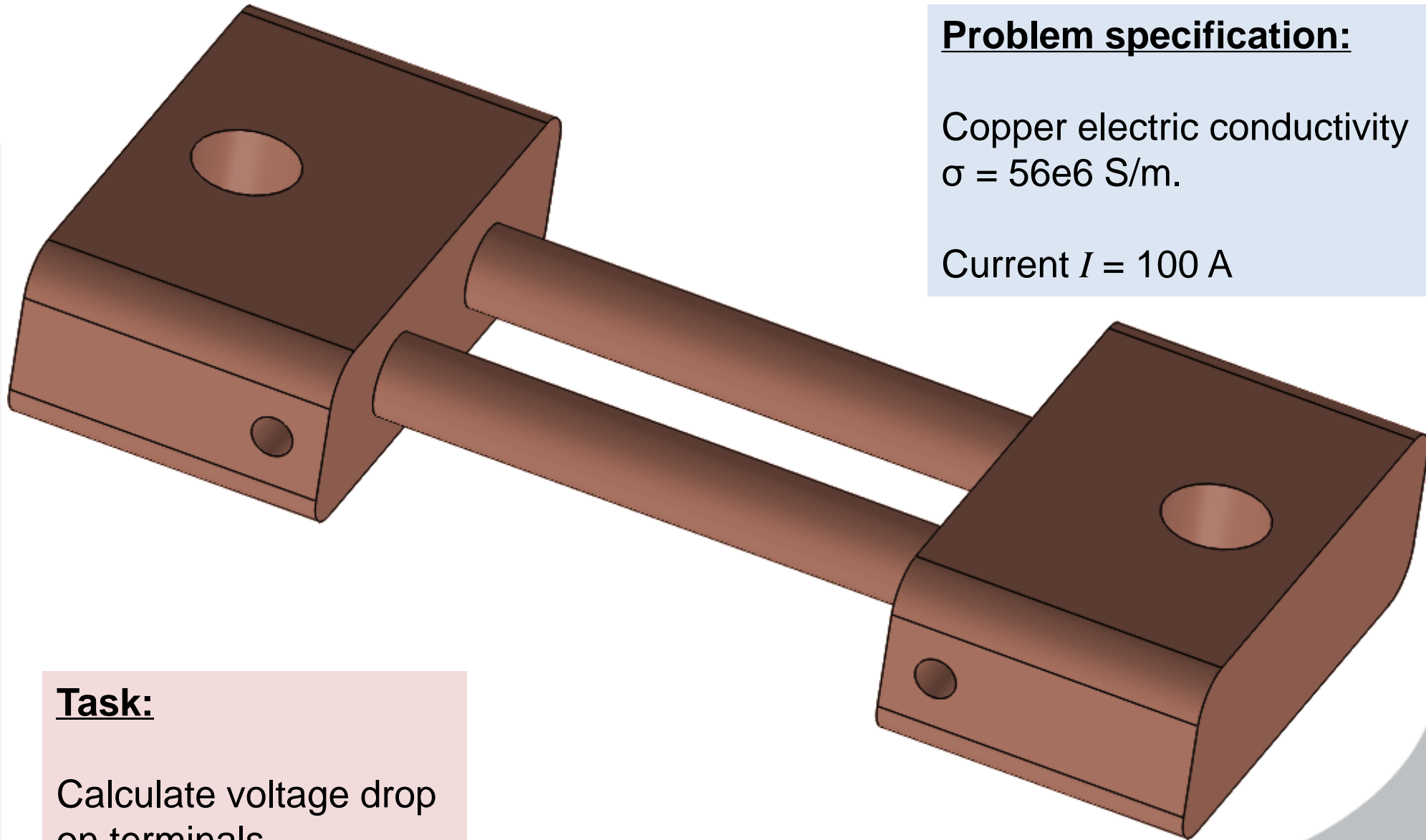
17

d15

T = 20°C
h = 20 W/Km²

Problem specification:

Heat loss in load mode
$Q = \rho \cdot j^2 = 360$ [mW/cm³]

Task:

Calculate temperature distribution during load period and after switching off

DC shunt resistance

Problem specification:

Copper electric conductivity σ = 56e6 S/m.

Current I = 100 A

Task:

Calculate voltage drop on terminals