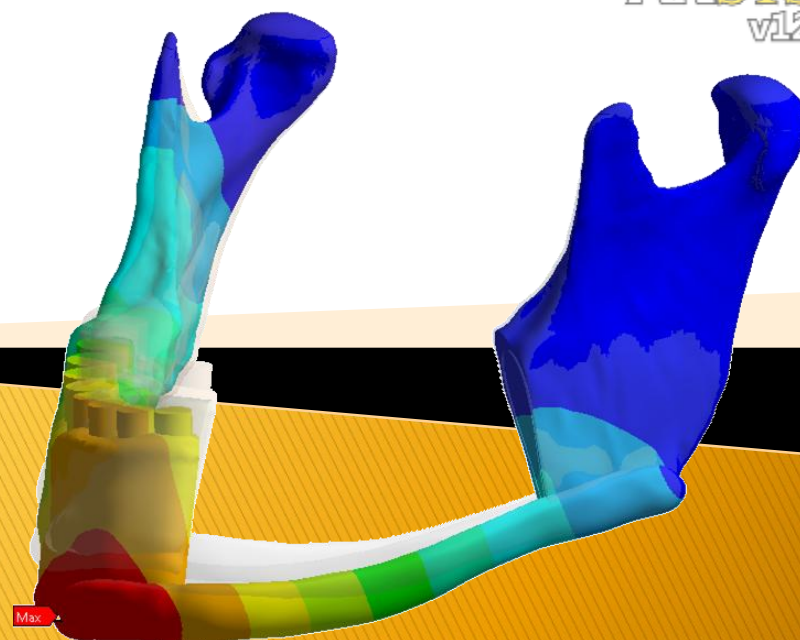


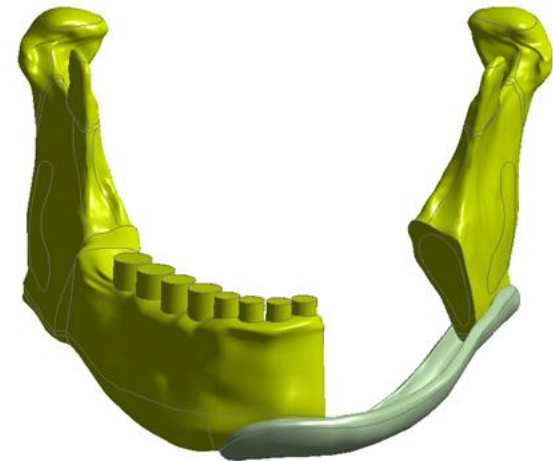
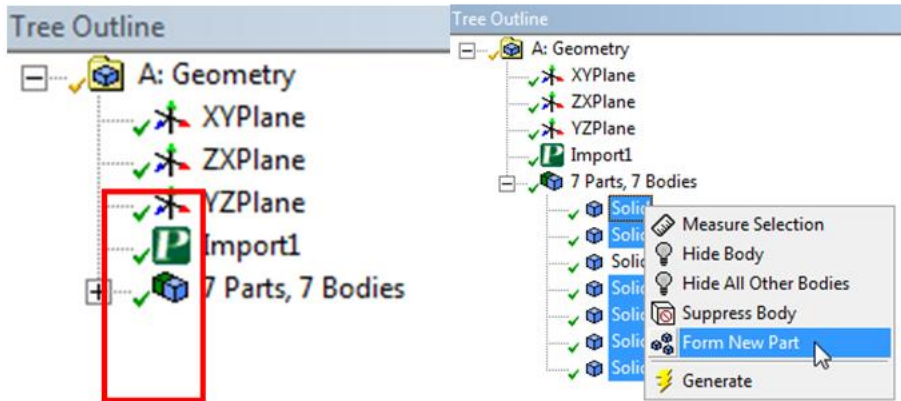
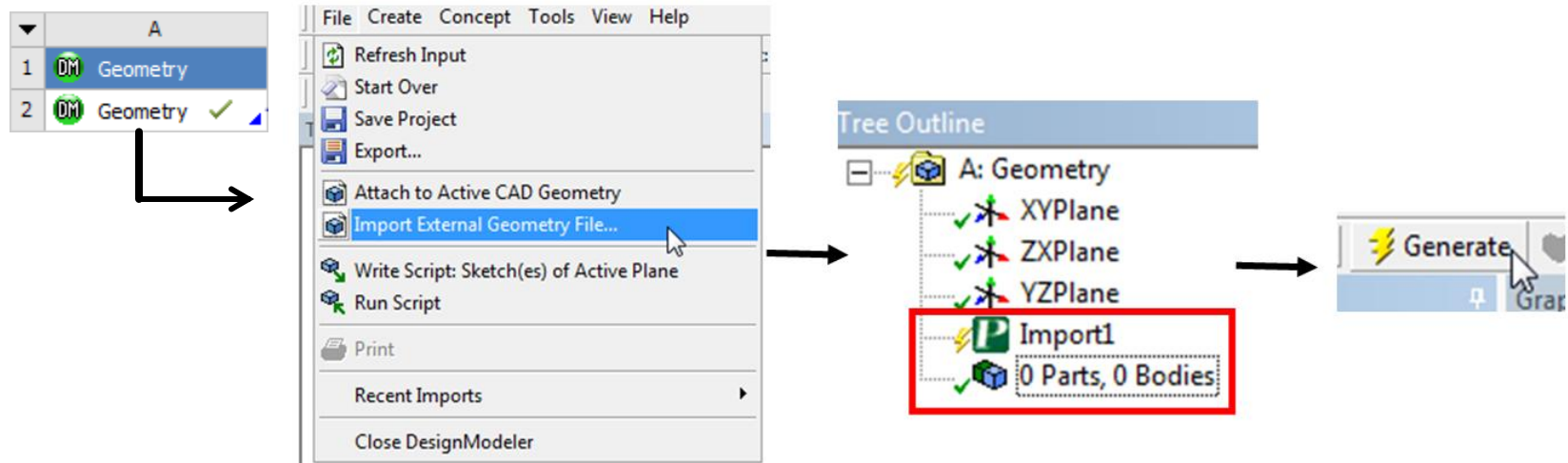
Tvorba výpočtového modelu v prostředí ANSYS Workbench

ANSYS
v12

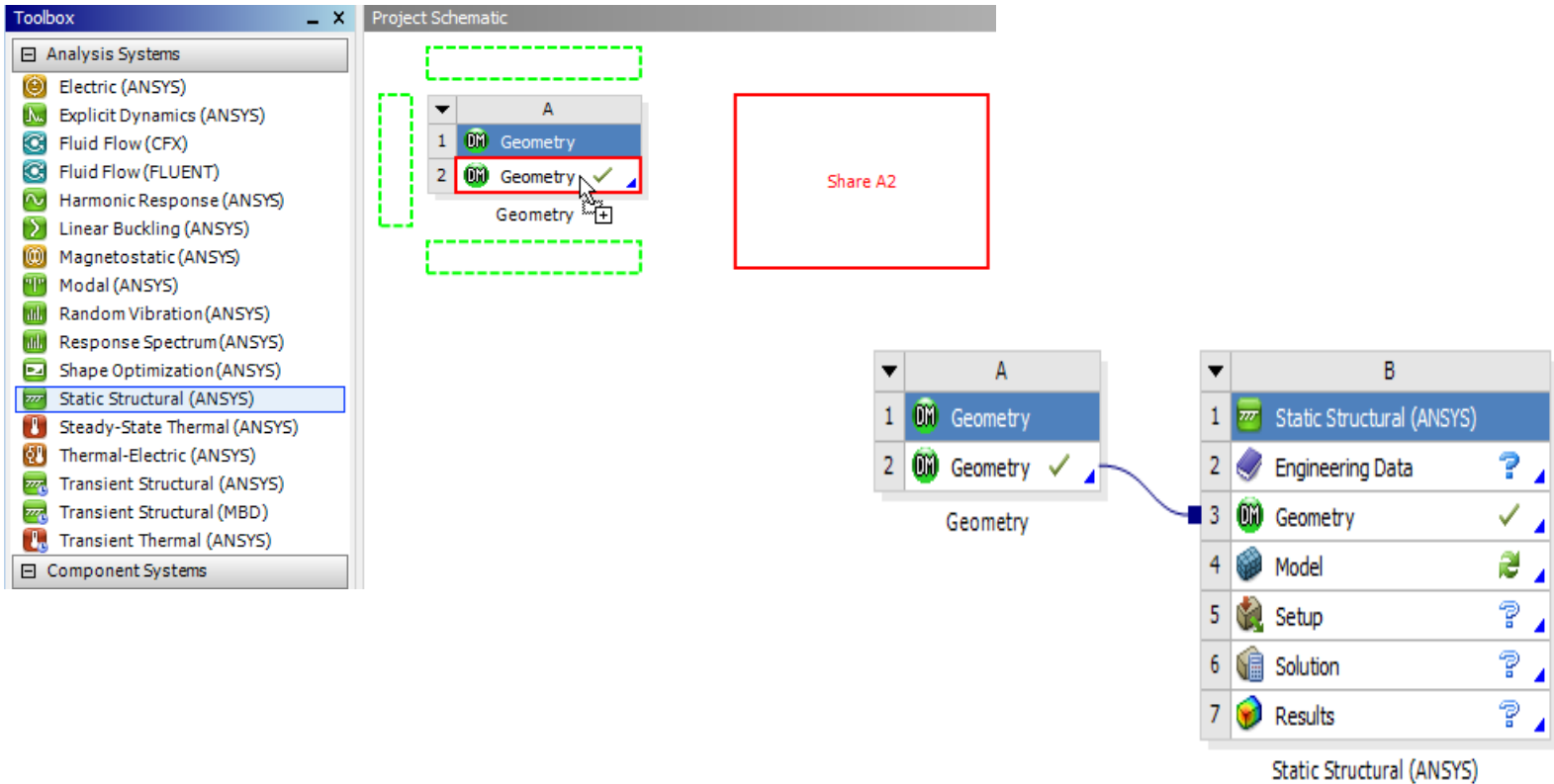
FRVŠ 2829/2011/G1



Import modelu geometrie do ANSYS WB



Vybrání řešené analýzy



Zadání modelu materiálu

celist - Workbench

File View Tools Units Help

New Open... Save Save As... Reconnect Refresh Project Update Project Import... Return to Project Compact Mode

Toolbox X

Outline Filter

	A	B	C	D
1	Data Source	Location		Description
2	Engineering Data	B2		Contents filtered for Static Structural (ANSYS).
3	General Materials			General use material samples for use in various analyses.
4	General Non-linear Materials			General use material samples for use in non-linear analyses.
5	Explicit Materials			Material samples for use in an explicit analysis.
6	Hyperelastic Materials			Material stress-strain data samples for curve fitting.
7	Magnetic B-H Curves			B-H Curves samples specific for use in a magnetic analysis.
8	celist			
9	celist			
10	Favorites			Quick access list and default items

Click here to add a new library

Outline of celist

	A	B	C	D	E
1	Contents of celist	Add	S..		Description
2	Material				
3	kortika				
4	spongioza				
5	titan				

Click here to add a new material

Table of Properties Row 2: Isotropic Elasticity

	A	B	C
1	Temperature (C)	Young's Modulus (Pa)	Poisson's Ratio
2	1	1,37E+10	0,3
3			

No data

Outline of celist

	A	B	C	D	E
1	Contents of celist	Add	S..		Description
2	Material				
3	kortika				
4	spongioza				
5	titan				

B: Static Structural (ANSYS) - Mechanical [ANSYS Mechanical]

File Edit View Units Tools Help

Solve Virtual Topology Symmetry Remote Position

Model Construction Geometry Virtual Topology Symmetry Remote Position

Outline

Project

Model (B4)

Geometry

Solid

Part

Solid

Solid

Solid

Solid

Solid

Solid

Coordinate Systems

Connections

Mesh

Static Structural (B5)

Analysis Settings

Solution (B6)

Solution Informs

Details of "Model"

Details of "Solid"

Graphics Properties

Definition

Suppressed No

Stiffness Behavior Flexible

Coordinate System Default Coordinate S...

Reference Temperature By Environment

Material

Assignment

Nonlinear Effects Yes

Thermal Strain Effects Yes

Bounding Box

Properties

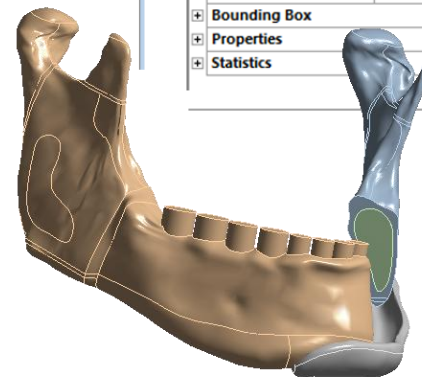
Statistics

Messages

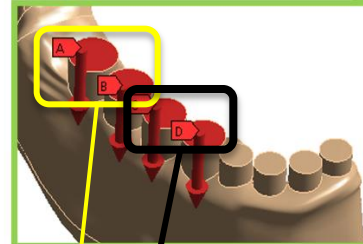
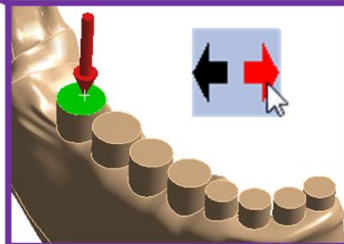
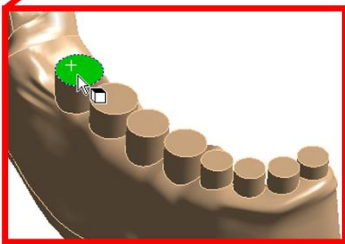
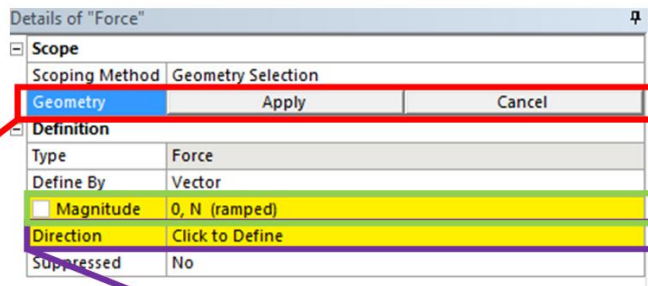
kortika

spongioza

titan



Okrajové podmínky a zatížení



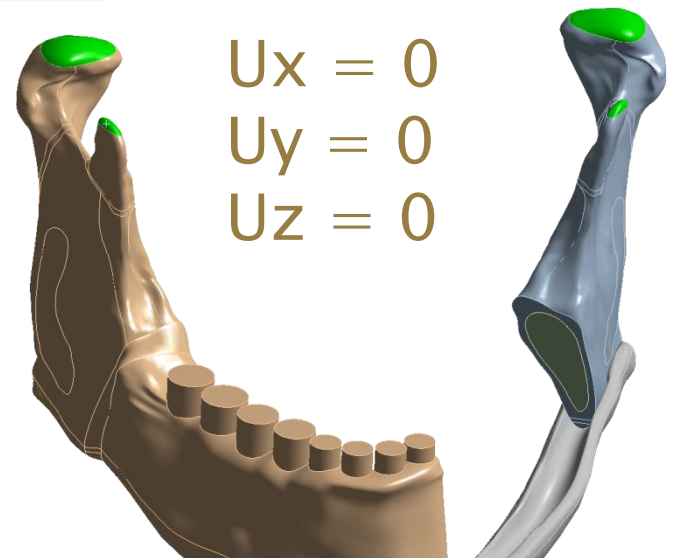
Žvýkácí síla v molárovém úseku 200N

Žvýkácí síla v premolárovém úseku 150N

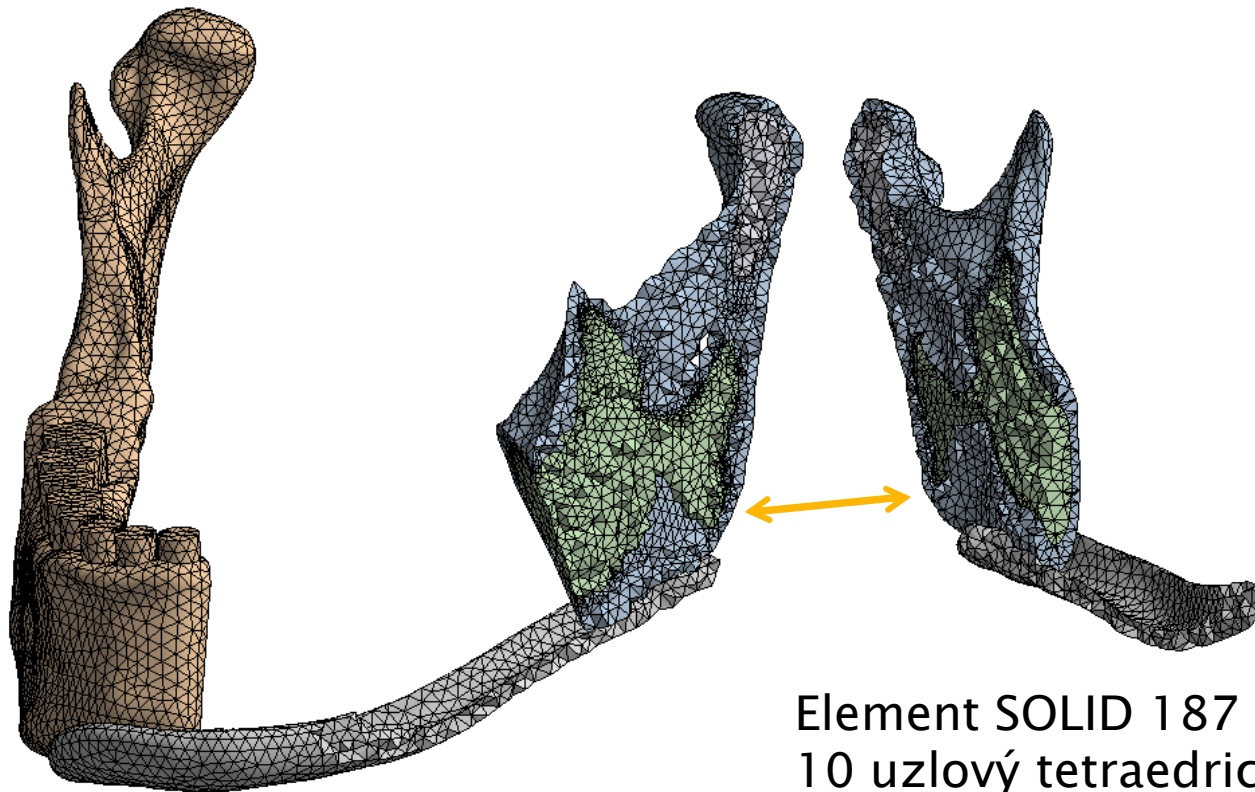
$$U_x = 0$$

$$U_y = 0$$

$$U_z = 0$$



Diskretizovaný model

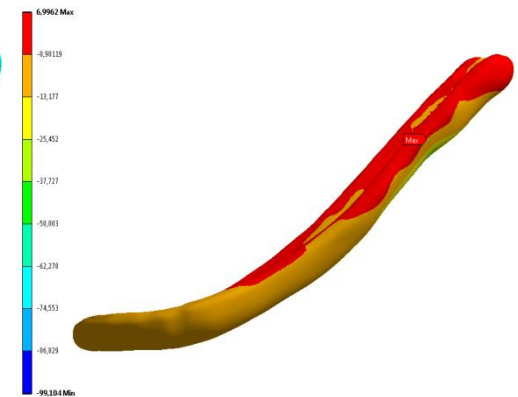
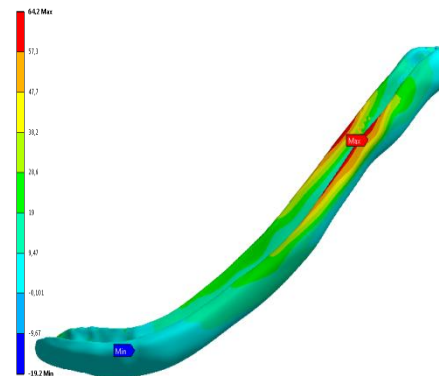
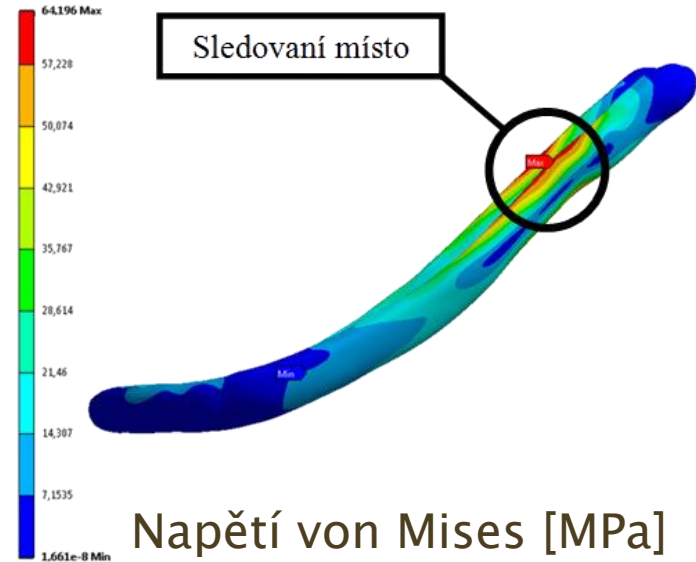
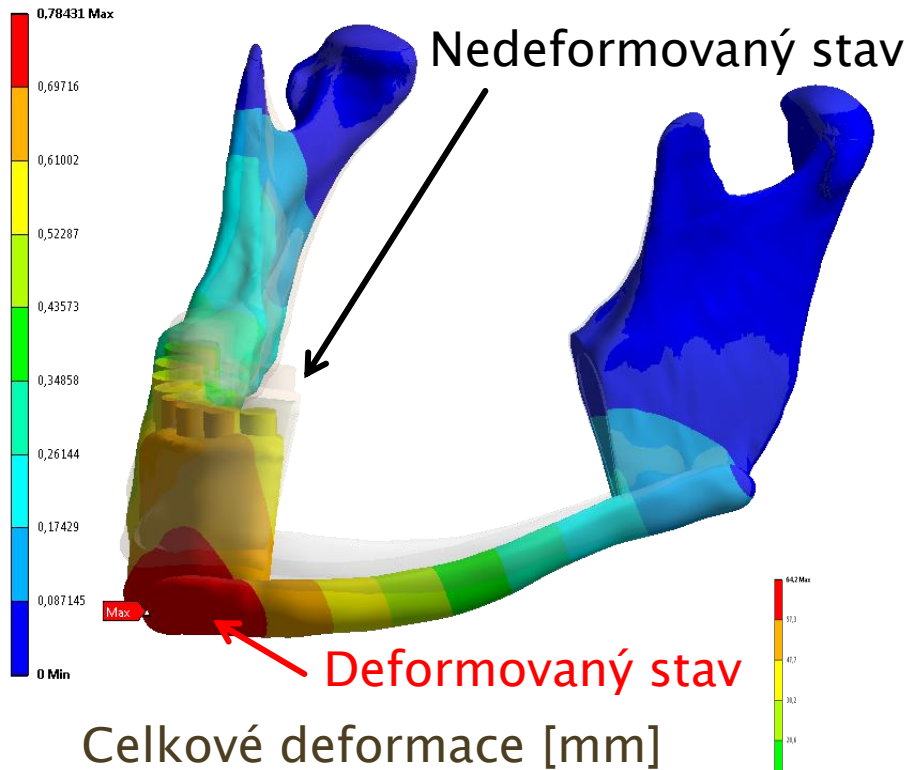


200 000 elementů

Element SOLID 187
10 uzlový tetraedrický prvek

Kontaktní prvky
TARGE 170 a CONTA 174

Analýza výsledků



Děkuji za pozornost.

