

Site of torus surface on the extended network

Участок торовой поверхности на расширенной сети

The example demonstrates the ability to model surface with fixed tangent vectors at boundary points of the base network.

Пример демонстрирует возможность моделирования поверхности с фиксированными касательными векторами в граничных точках базовой сети.

Select a sample 'Extended Base 3D Mesh Part of Torus' from the list Samples.

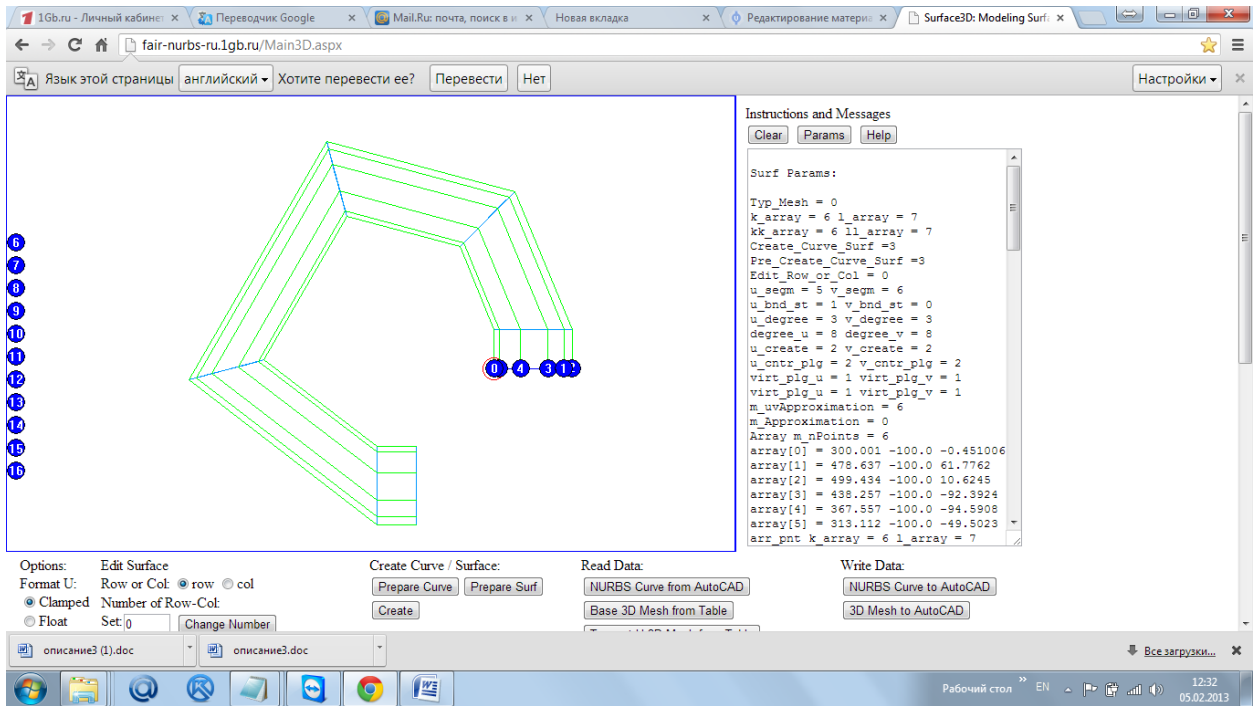
Выберите пример из списка Samples 'Extended Base 3D Mesh Part of Torus'

The screenshot shows the 'Surface3D: Modeling Surf' software interface. The main window displays a 3D model of a torus surface on an extended network. The model is rendered in a perspective view, showing a grid of control points. The interface includes a command window on the right with a list of commands, a toolbar at the bottom, and a status bar at the bottom right showing the date 05.02.2013.

```
6 ("command" crt_uv) ("Login"
muftejev) ("Email" login@mail.ru)
("typ_mesh" 0) ("k_array" 6)
("l_array" 7) ("multiply_u" 1)
("multiply_v" 1) ("smooth_u" 1)
("smooth_v" 1) ("virt_plg_u" 1)
("virt_plg_v" 1) ("degree_u" 3)
("degree_v" 3) ("Switch_Ing_U0" 0)
("Switch_Ing_V0" 2) ("vector_vp" 0.0
0.0 0.0) ("vector_vk" 0.0 0.0 0.0)
("m_WSC_O_X" -393.7602688017515)
("m_WSC_O_Y" -237.96893691393798)
("m_dScale_X" 0.7333095686713856)
("m_dScale_Y" -0.7333095686713856)
("ed_mode" 0) ("index" 0)
("spl_index" 0) ("cvt_cv_sf" 1)
("edt_rv_cl" 0) ("i_row" 0)
("kk_array" 6) ("l_array" 7)
("mode_mlt_u" 1) ("mode_mlt_v" 1)
("View_Mode" 1) ("iso_geom" 0)
("mode_edit_bnd" 1) ("u_degree" 3)
("v_degree" 3) ("u_cntr_plg" 3)
("v_cntr_plg" 3) ("u_delta" 1e-7)
("u_itera" 500) ("u_segmn" 5) ("v_segmn"
6) ("u_bnd_st" 1) ("u_bnd_end" 1)
("v_bnd_st" 0) ("v_bnd_end" 0)
("u_create" 3) ("v_create" 3)
```

Change the projection plane on the XZ.

Измените плоскость проекции на XZ.



Extended Set V

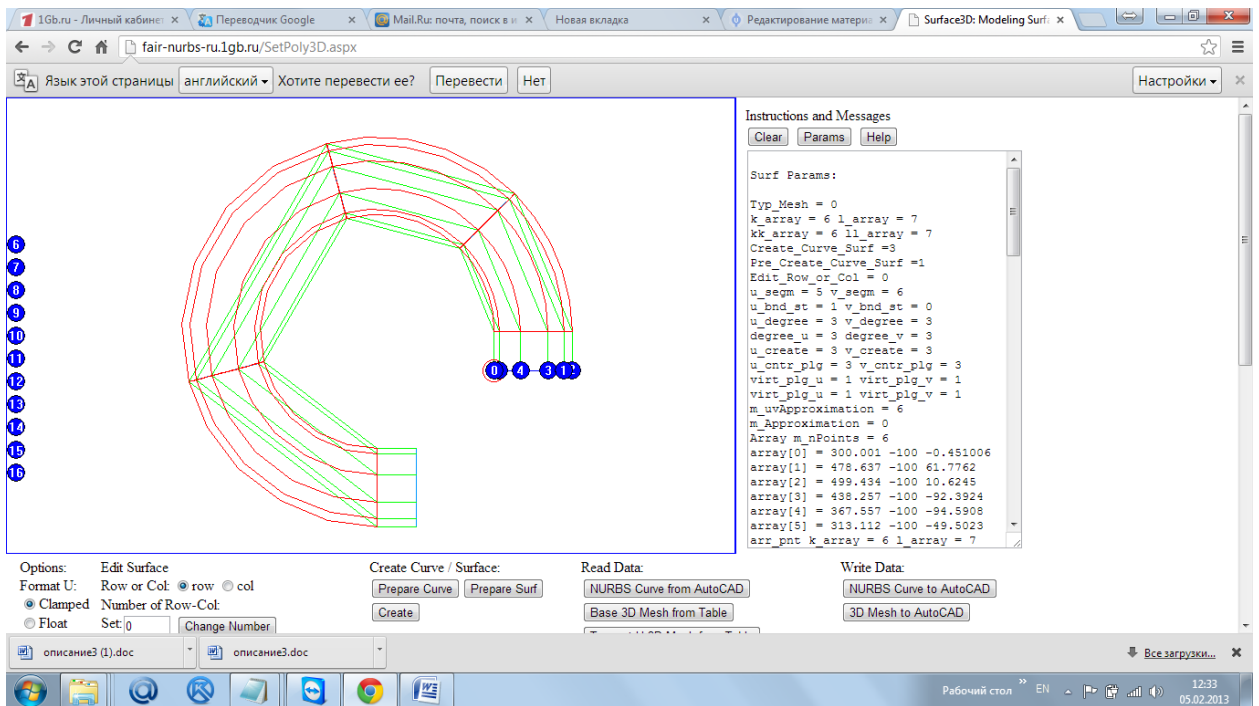


Ensure that switch (*) on is turned on in the region 'Extended net v'.

Убедитесь, что переключатель (*) on в области 'Extended net v' включен.

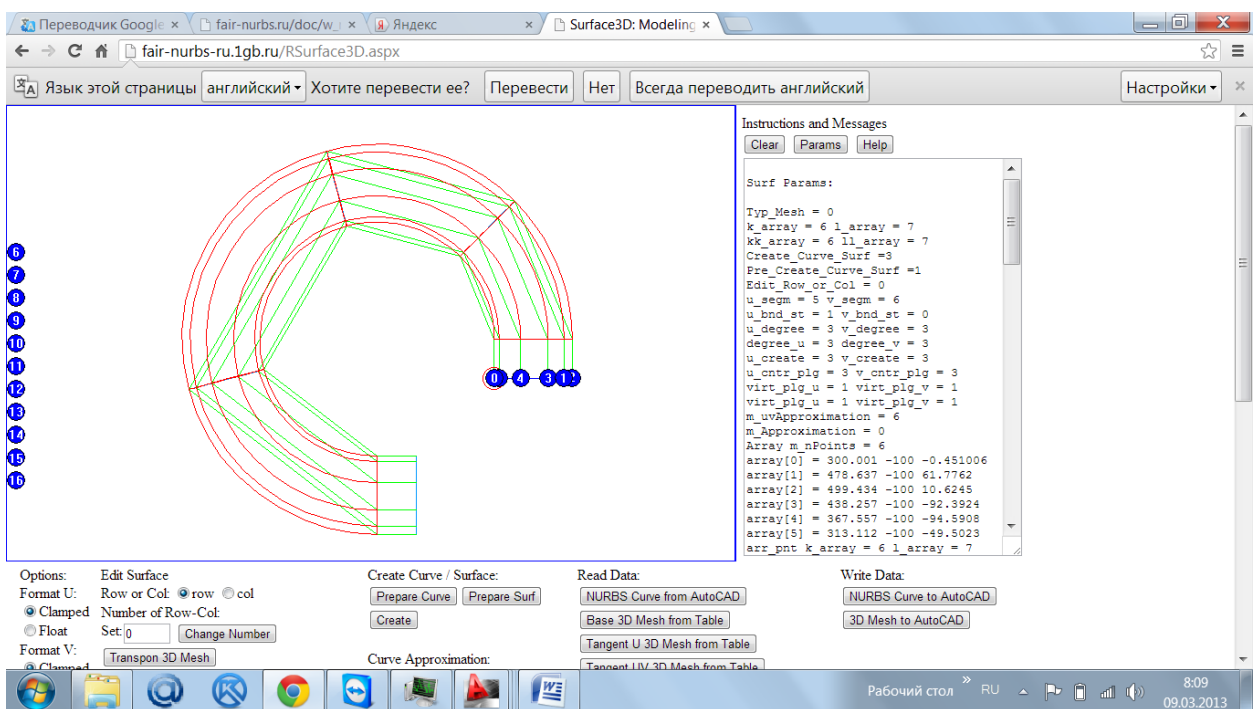
Create surface.

Постройте поверхность.



Rebuild the surface with steps of interpolation $h_s = 0.1$, $h_t = 0.1$.

Перестройте поверхность с шагами интерполяции $h_s=0.1$, $h_t = 0.1$



Transfer network of interpolated points of surface to the AutoCAD [Interpolated Surf to DXF] > Download file DXF_int.dxf > Open file DXF_int.dxf in AutoCAD.

Перенесите интерполированную сеть точек поверхности в AutoCAD [Interpolated Surf to DXF] > Download file DXF_int.dxf > Open file DXF_int.dxf in AutoCAD.

