

# Generalized Möbius-Liesting's Body, with Regular Six-Angular Radial Cross Section: Analytic Representation and "Cutting"

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In the presented work, analytic representation of generalized Möbius-Liesting's body, with regular six-angular radial cross section is given.

$$\begin{aligned}X(\tau, \theta) &= \left[ R + p(\tau, \psi) \cos\left(\psi + \frac{n\theta}{6}\right) \right] \cos(\theta) \\Y(\tau, \theta) &= \left[ R + p(\tau, \psi) \cos\left(\psi + \frac{n\theta}{6}\right) \right] \sin(\theta) \\Z(\tau, \theta) &= p(\tau, \psi) \sin\left(\psi + \frac{n\theta}{6}\right),\end{aligned}$$

Also was studied geometric objects whose appears after cutting along parallel lines of the boundary and with different number of torsion (n) (in total 37 cases). It is shown that in four cases there is Möbius phenomenon. In 3 cases 4 objects appear and in 8 cases 3.

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## References:

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