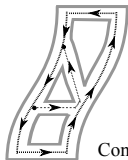


Thin-walled part

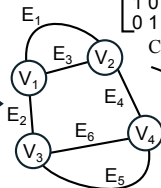


Consideration of the local rules

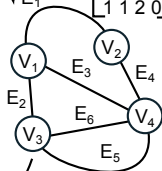
Real

topological skeleton

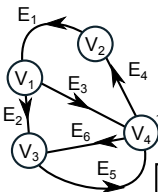
Initial graph model

$$\begin{bmatrix} 0 & 2 & 1 & 0 \\ 2 & 0 & 0 & 1 \\ 1 & 0 & 0 & 2 \\ 0 & 1 & 2 & 0 \end{bmatrix}$$


Consideration of the global rules

$$\begin{bmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 2 \\ 1 & 1 & 2 & 0 \end{bmatrix}$$


Random selection of an adapted path



$$\begin{bmatrix} -1 & 1 & 0 & 0 & 0 \\ 1 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 \end{bmatrix}$$

Virtual