棱台

Vtub=1/3\*(x(1)\*x(2)+x(3)\*x(4)+sqrt(x(1)\*x(3)\*x(2)\*x(4)))\*x(5);

Stub-air=x(1)\*x(2)

Stub=(x(2)+x(4))\*sqrt((x(1)-x(3))^2+x(5)^2)+(x(1)+x(3))\*sqrt((x(2)-x(4))^2+x(5)^2)+x(3)\*x(4)

x(1)>=1.25

x(3)>=0.6

x(2)>=0.5

x(4)>=0.29

x(5)>=0.4

Vtub>=0.2

x(1)>=x(3)

x(2)>=x(4)

圆角台

Vtub=1/3\*pi\*x(5)((x(2)/2)^2+(x(4)/2)^2+2\*x(2)/2\*x(4)/2)+1/3\*x(5)\*(x(1)\*x(2)+x(3)\*x(4)+sqrt(x(1)\*x(2)\*x(3)\*x(4)));

Stub-air=x(1)\*x(2)+pi\*((x(2))/2)^2

Stub=pi\*x(2)/2\*X(5)+pi\*x(4)/2\*sqrt((x(3)-x(1))^2+x(5)^2)+(x(1)+x(3))\*sqrt((x(3)-x(1))^2+x(5)^2)+x(3)\*x(4)+pi\*((x(4))/2)^2

x(1)+x(2)>=1.25

x(3)+x(4)>=0.6

x(2)>=0.5

x(4)>=0.29

x(5)>=0.4

Vtub>=0.2

X(1)+x(2)>=x(3)+x(4)

X(2)>=x(4)

椭圆台

Vtub=1/3\*pi\*(x(3)\*x(4)-x(1)\*x(2))\*x(5);

Stub-air=pi\*x(1)\*x(2)

Stub=pi\*sqrt((x(1)-x(3))^2+x(5)^2)\*((x(2))^2/x(1)-(x(4))^2/x(3))+pi\*x(3)\*x(4)

2x(1)>=1.5

2x(2)>=0.668

2x(3)>=0.8

2x(4)>=0.31

x(5)>=0.4

x(1)>=x(2)

x(3)>=x(4)

Vtub>=0.2