بنام خدا

حسین شجاعی(۹۶۵۲۴۱۰۲۹)

پروژه طراحی اجزاء (۲)

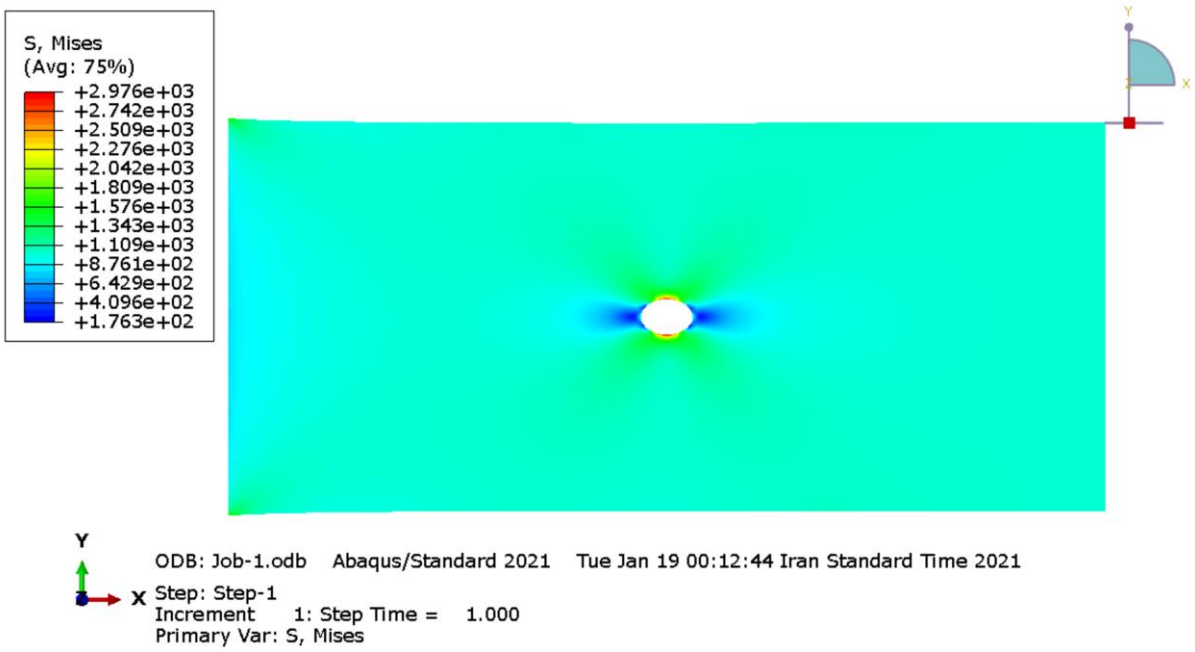
تعیین ضریب تمرکز تنش هندسی در صفحه سوارخ دار تحت کشش با استفاده از نرم افزار آباکوس

دکتر حسن بیگلری

دانشکده مهندسی مکانیک

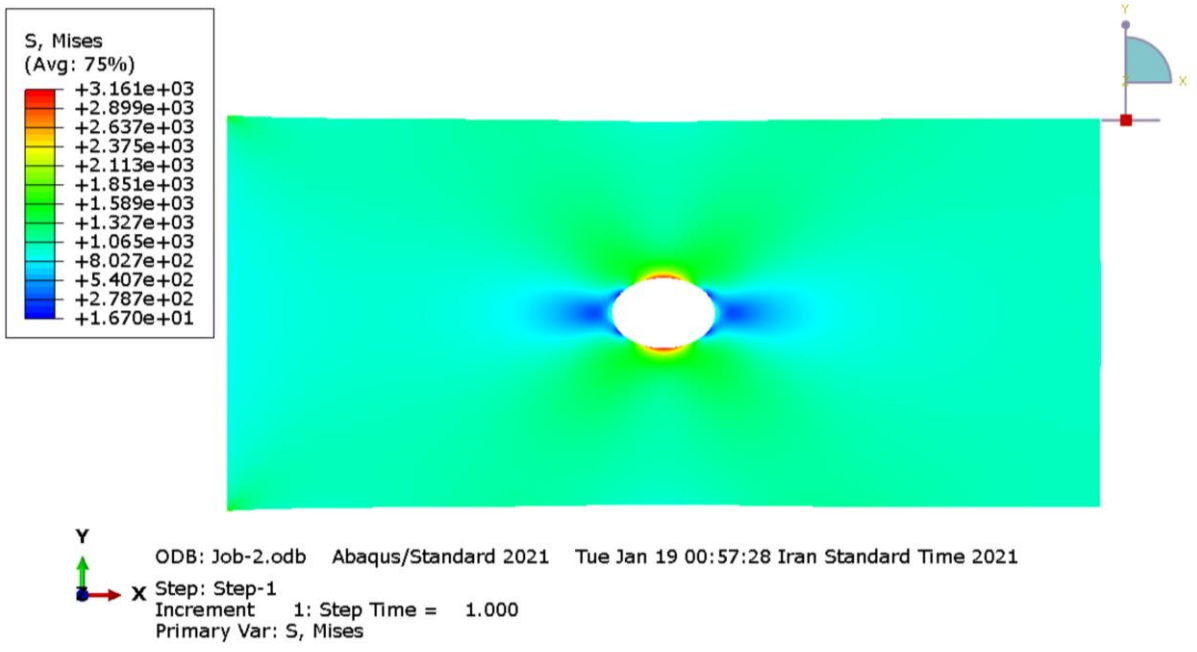
دانشگاه تبریز

d/w=0.1



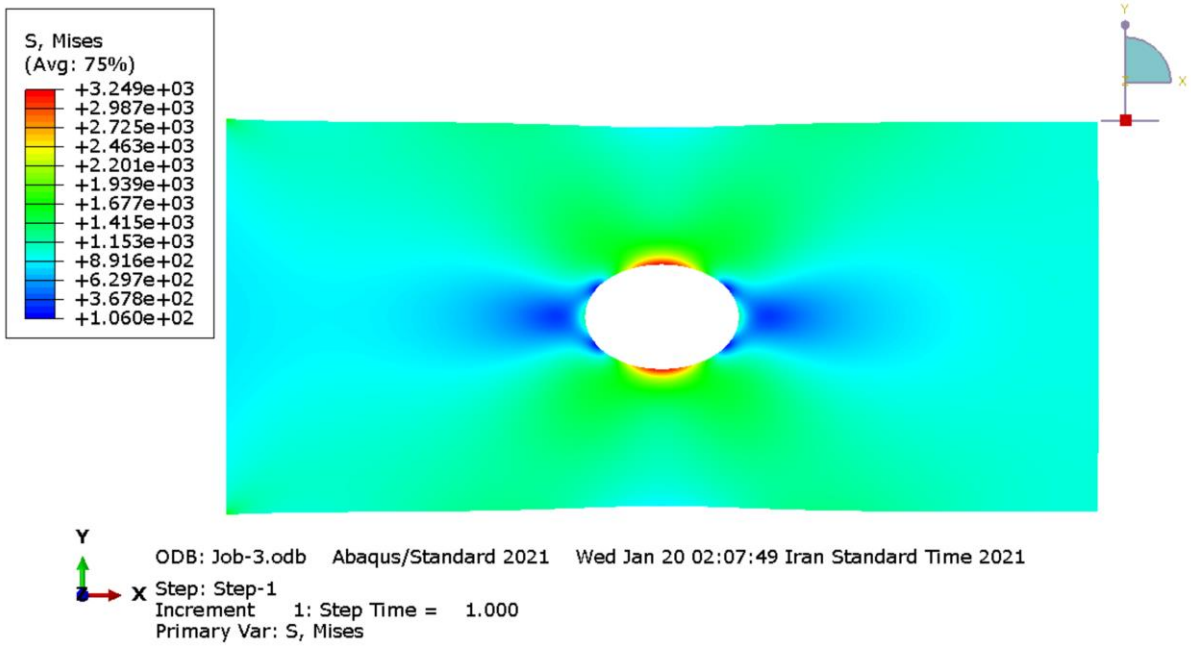
$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{2976}{1000\left(\frac{100}{100-10}\right)} \rightarrow K_t = 2.678$$

d/w=0.2



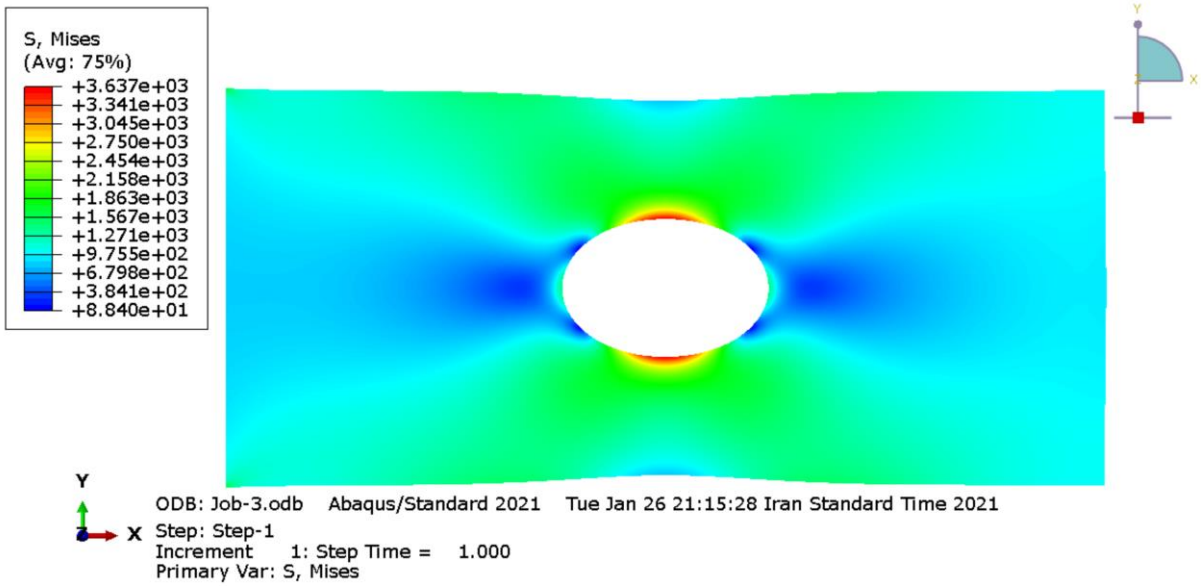
$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{3161}{1000\left(\frac{100}{100-20}\right)} \rightarrow K_t = 2.528$$

d/w=0.3



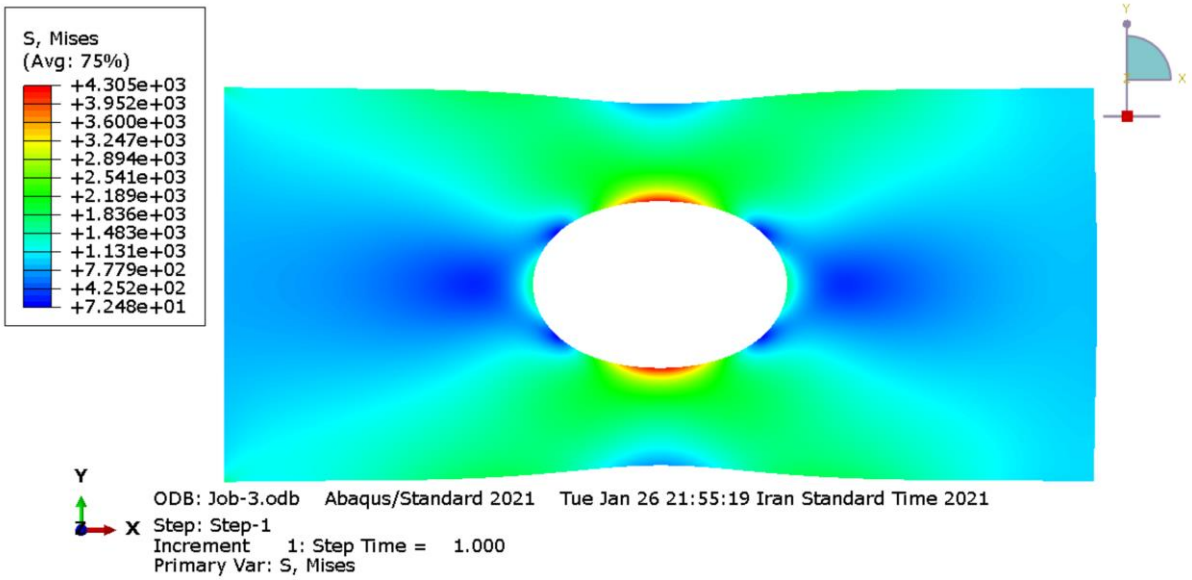
$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{3249}{1000\left(\frac{100}{100-30}\right)} \rightarrow K_t = 2.249$$

d/w=0.4



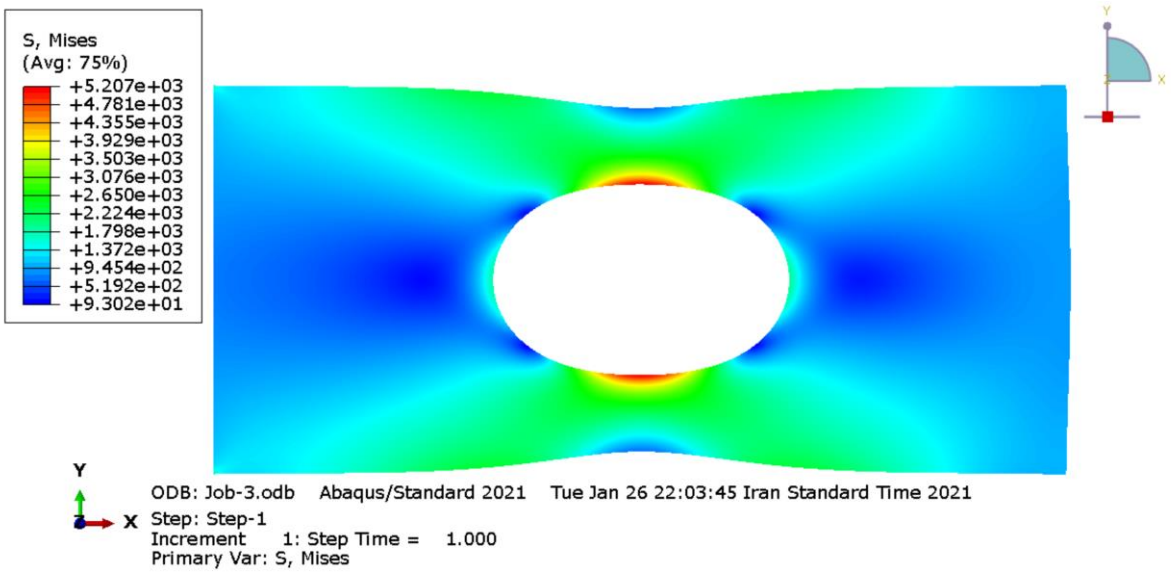
$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{3637}{1000\left(\frac{100}{100-40}\right)} \rightarrow K_t = 2.182$$

d/w=0.5

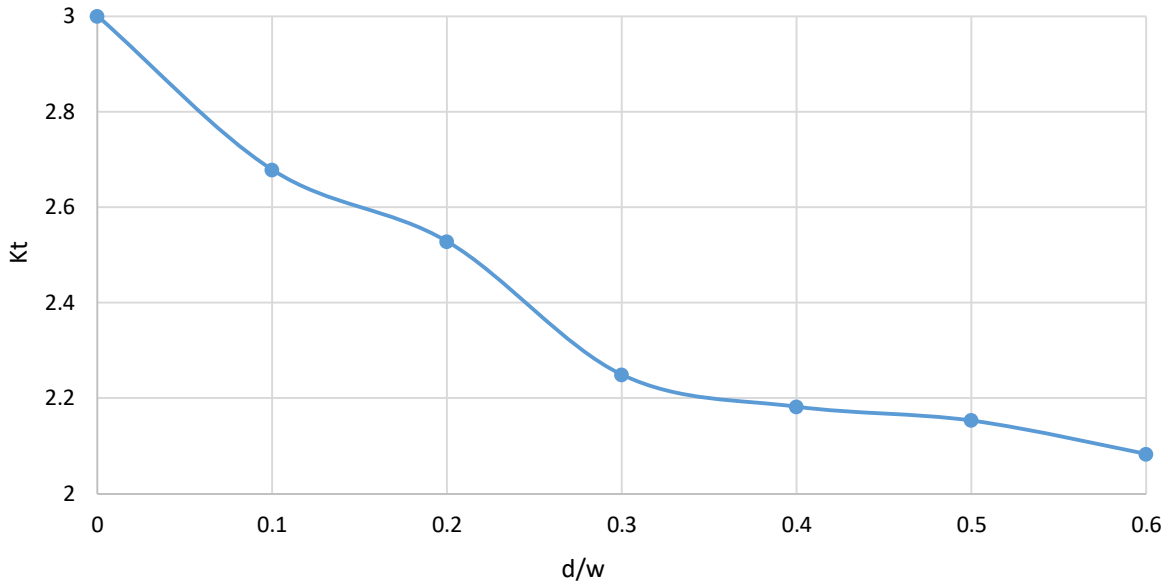


$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{4305}{1000\left(\frac{100}{100-50}\right)} \rightarrow K_t = 2.153$$

d/w=0.6



$$K_t = \frac{\sigma_{max}}{P\left(\frac{w}{w-d}\right)} \rightarrow K_t = \frac{5207}{1000\left(\frac{100}{100-60}\right)} \rightarrow K_t = 1.190$$


3
2.8
2.6
2.4
2.2
2
Kt
0
0.1
0.2
0.3
0.4
0.5
0.6
d/w