

■技术资料及常用公式

① 切削速度: $V_c = \frac{\pi \times D_c (\text{刃径}) \times N (\text{转速})}{1000} \quad (\text{min}^{-1})$

② 球头切削速度: $V_a = \frac{2 \times \pi \times a_e (2 \times R - a_p)}{1000} \quad (\text{min}^{-1})$

③ 进给速度: $F = N (\text{转速}) \times Z (\text{刃数}) \times f_z (\text{每刃进给量}) \quad (\text{mm/min})$

④ 每刃进给量: $f_z = \frac{F (\text{进给速度})}{N (\text{转速}) \times Z (\text{刃数})} \quad (\text{mm/z})$

⑤ 材料切除率: $MRR = F \times a_e \times a_p \quad (\text{mm}^3/\text{min})$

⑥ 加工时间: $T = \frac{60 \times L (\text{工作台总进给距离})}{N (\text{转速}) \times Z (\text{刃数}) \times f_z (\text{每刃进给量})} \quad (\text{s})$

⑦ 所需动力: $PHP = \frac{6120}{4500} \times PKW \quad (\text{KW})$