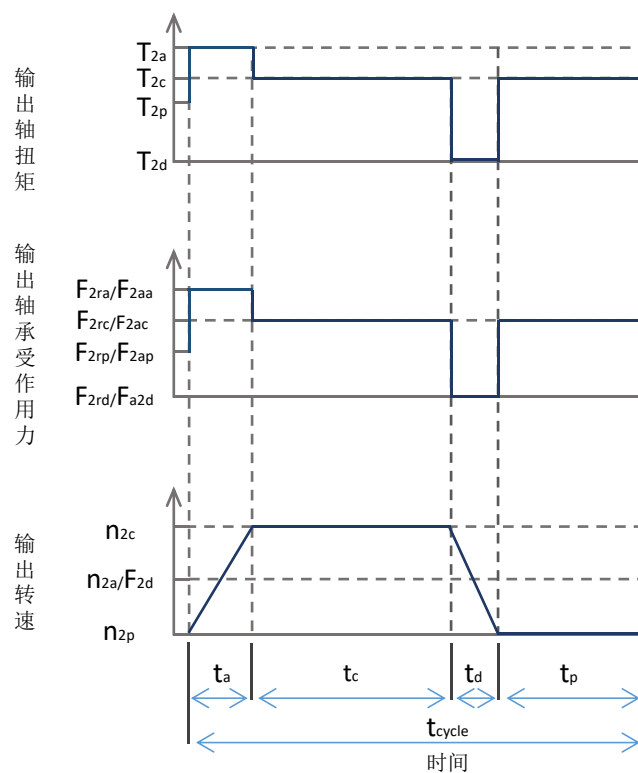


应用端运动模式



$$1. ED = \frac{t_a + t_c + t_d}{t_{cycle}} \times 100\%, \quad t_{work} = t_a + t_c + t_d$$

下标说明：a.加速，c.等速，
b.减速，p.停止

(Eq.1)

$$2. I = \frac{n_m}{n_{work}}$$

n_m 马达输出速度

n_{work} 实际应用速度

(Eq.2)

$$3. T_{2m} = \sqrt[3]{\frac{n_{2a} \times t_a \times T_{2a}^3 + n_{2c} \times t_c \times T_{2c}^3 + n_{2d} \times t_d \times T_{2d}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

(Eq.3)

$$4. T_{2Max} = T_{mB} \times i \times k_s \times n$$

$$4. \quad I_{2\text{Max}} = I_{\text{mB}} \times I \times K_s \times I_1$$

K_s 负载系数

K_s	周期次数/小时
1.0	0~1000
1.1	1000~1500
1.3	1500~2000
1.6	2000~3000
1.8	3000~5000

T_{mB} 马达最大输出扭矩

(Eq.4)

n 减速机运转效率

$$5. \quad n_{2a} = n_{2d} \times \frac{1}{2} \times n_{2c}$$

$$n_{2m} = \frac{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}{t_a + t_c + t_d}$$

(Eq.5)

$$n_{2N} = \frac{n_{1N}}{I}$$

$$6. \quad F_{2m} = 3 \frac{\sqrt{n_{2a} \times t_a \times F_{2ra}^3 + n_{2c} \times t_c \times F_{2rc}^3 + n_{2d} \times t_d \times F_{2rd}^3}}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}$$

(Eq.6)

$$F_{2am} = 3 \frac{\sqrt{n_{2a} \times t_a \times F_{2aa}^3 + n_{2c} \times t_c \times F_{2ac}^3 + n_{2d} \times t_d \times F_{2ad}^3}}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}$$