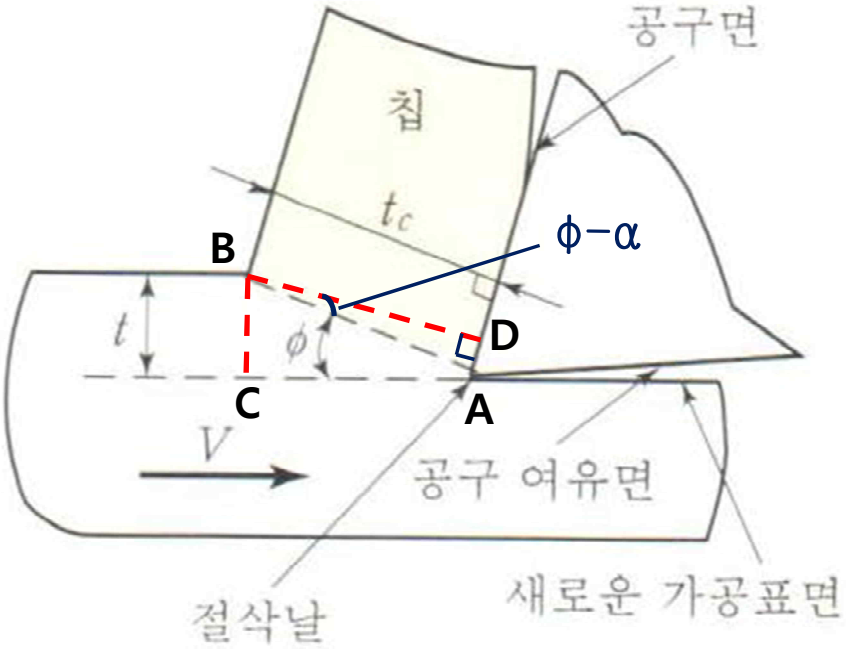
절 삭 비



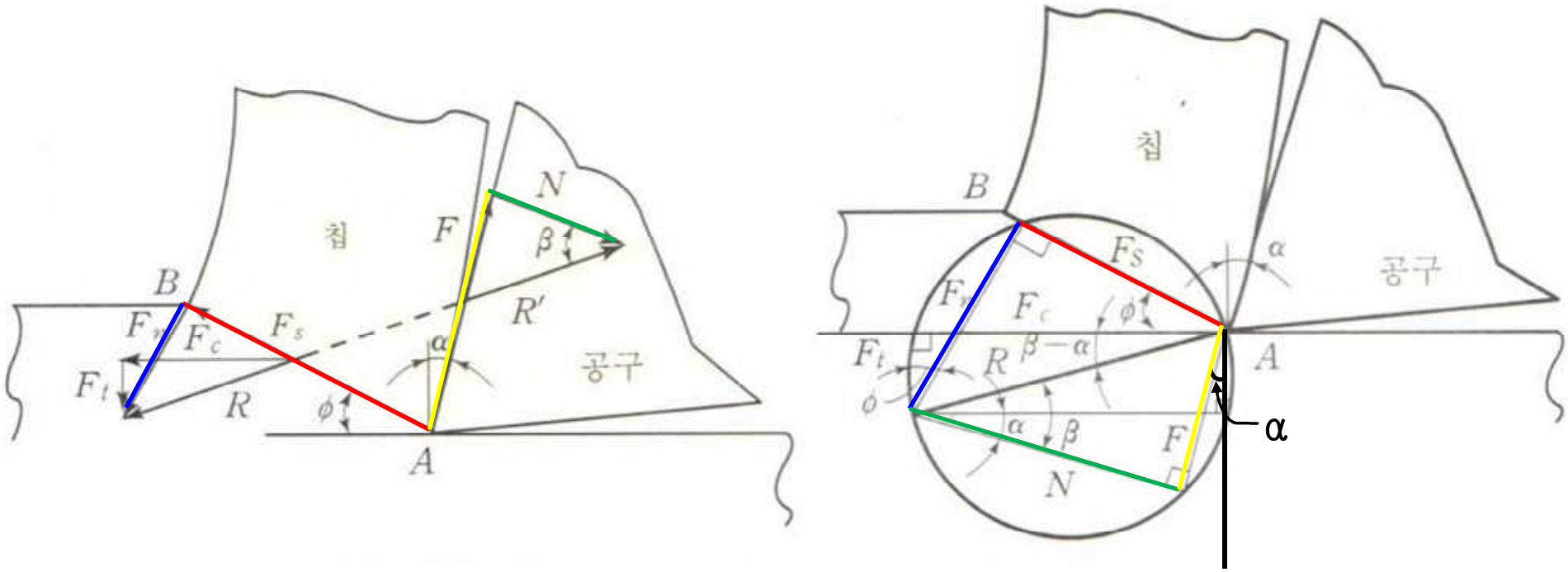
$$r_c = \frac{t}{t_c} = \frac{BC}{BD} = \frac{AB\sin\varphi}{AB\cos(\varphi-\alpha)} = \frac{\sin\varphi}{\cos(\varphi-\alpha)}$$

$$\sin\varphi = r_c\cos\varphi\cos\alpha + r_c\sin\varphi\sin\alpha$$

$$(1 - r_c\sin\alpha)\sin\varphi = r_c\cos\varphi\cos\alpha$$

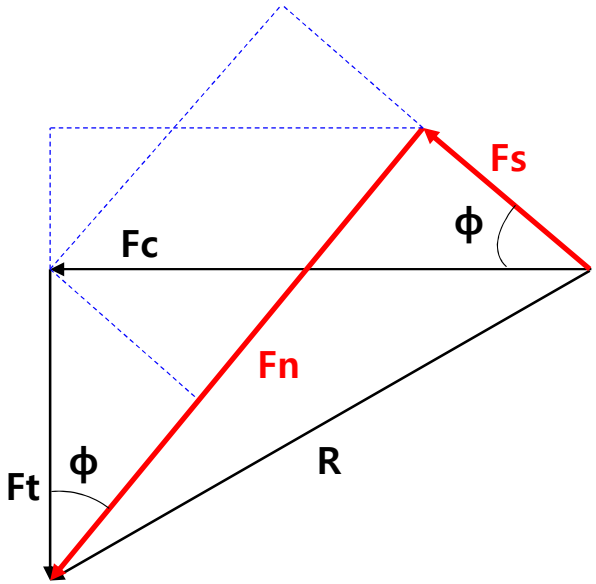
$$\tan\varphi = \frac{r_c\cos\alpha}{1 - r_c\sin\alpha}$$

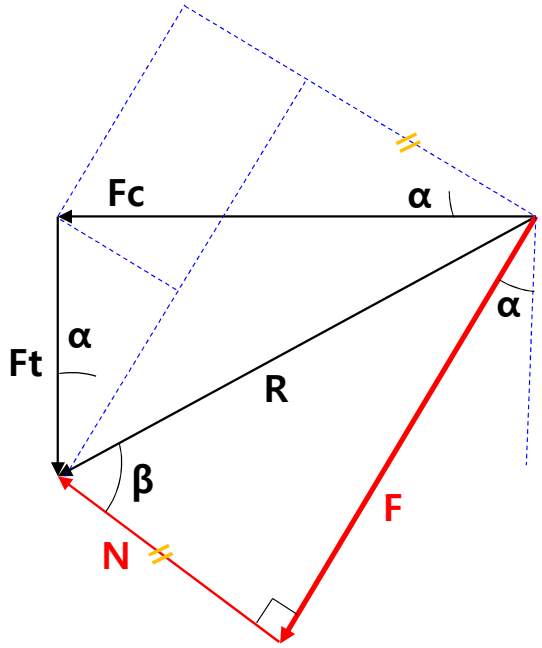
절 삭 력 원



$$F_s = F_c \cos\varphi - F_t \sin\varphi \qquad F = F_c \sin\alpha + F_t \cos\alpha$$

$$F_n = F_c \sin\varphi + F_t \cos\varphi \qquad N = F_c \cos\alpha - F_t \sin\alpha$$





$$F_s = F_c \cos\varphi - F_t \sin\varphi$$

$$F_n = F_c \sin\varphi + F_t \cos\varphi$$

$$F = F_c \sin\alpha + F_t \cos\alpha$$

$$N = F_c \cos\alpha - F_t \sin\alpha$$