

$$\cot \beta = \frac{R+r-(b+c)}{d}$$

$$= \frac{10,835 - 2,8428}{1,716}$$

$$= \frac{7,9922}{1,716} = 4,657 \text{ und}$$

$$\beta = 12^{\circ} 7'$$

Nach man den Umkreisungsdurchmesser

$(\frac{a}{2}) = y$ so hat man:

$$FH = \sqrt{CH^2 + CF^2 - 2 \cdot CH \cdot CF \cdot \cos(\beta + \gamma)}$$

und da $\gamma = 9^{\circ} 44' 8''$

$$CH = R - b = 6 - 2,5 = 3,5$$

$$CF = f = \sqrt{d^2 + (R+r-(b+c))^2} = \sqrt{1,716^2 + 7,9922^2} = \sqrt{66,817}$$

$$f = 8,174 \text{ ist, so wird:}$$

$$FH = g = \sqrt{(R-b)^2 + f^2 - 2(R-b)f \cdot \cos(\beta + \gamma)}$$

$$= \sqrt{12,25 + 66,817 - 53,107}$$

$$= \sqrt{25,960}$$

$$= 5,095$$

Es wird ist:

$$\cos \delta = \frac{FH^2 + FL^2 - HL^2}{2 \cdot FH \cdot FL}$$

$$= \frac{g^2 + r^2 - a^2}{2gr}$$

$$= \frac{25,960 + 23,377 - 3,0645}{49,2666}$$

$$= \frac{46,273}{49,2666} = 0,939$$

$$\delta = 20^{\circ} 5' \text{ und}$$

$$\tan \varepsilon = \frac{(R-b) \sin(\beta + \gamma)}{f - (R-b) \cos(\beta + \gamma)}$$

$$= \frac{1,3026}{4,9254}$$

$$\varepsilon = 14^{\circ} 49'$$

$$\text{Nun } \gamma' = \beta + \varepsilon - \delta$$

$$= 12^{\circ} 7' + 14^{\circ} 49' - 20^{\circ} 5'$$

$$= 6^{\circ} 51'$$