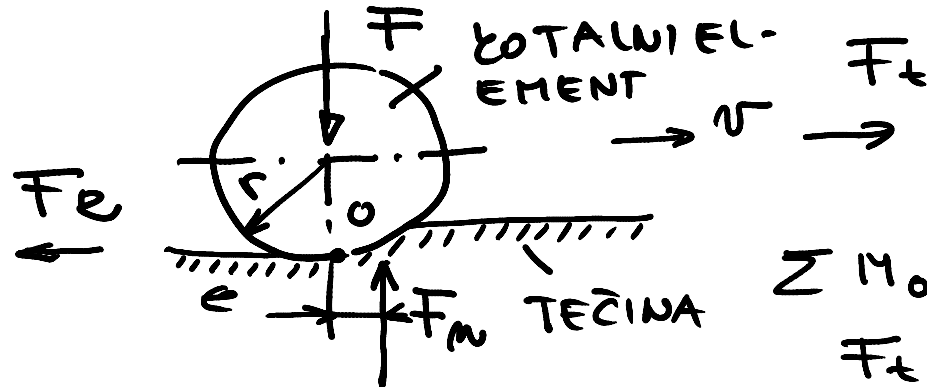


ΣΤΑΤΙΚΗ ΛΕΓΑΤΗ



$$F = F_n$$

$$F_t = F_e$$

$$\sum M_o = \phi = F_t \cdot r - F_n \cdot e$$

$$F_t = \left( \frac{e}{r} \right) F_n$$

f - ΚΟΕΦΙCΙΕΝΤ  
ΣΤΑΤΙΚΗΣ  
ΥΠΟΡΑ

$$F_t = f F$$

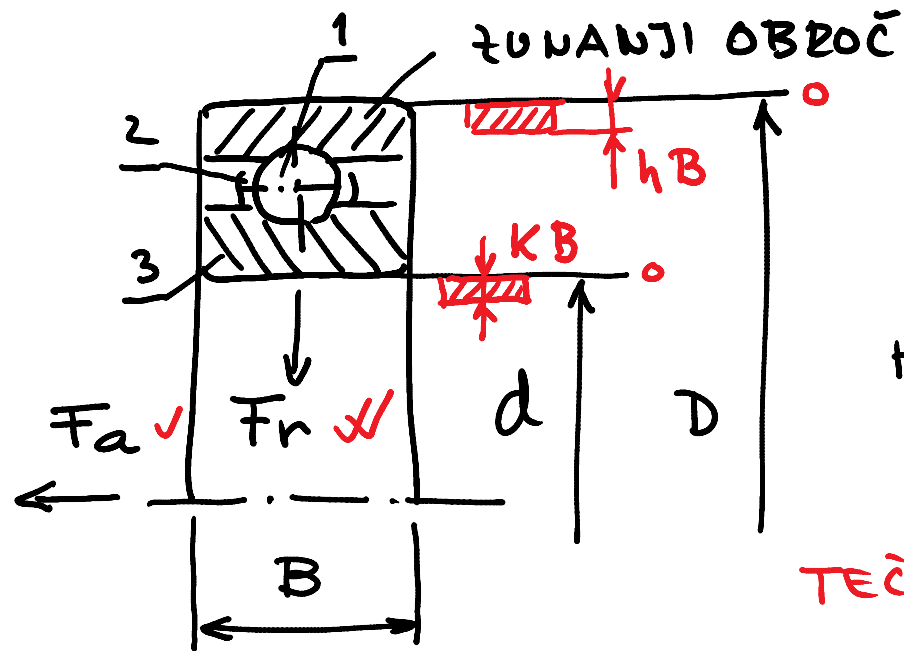
$$F_e = f \cdot F_n$$

$$f \ll \mu$$

f ↓ → e ↓ ΤΡΕΔΕ ΠΟΥΡΣΙΝΕ ✓

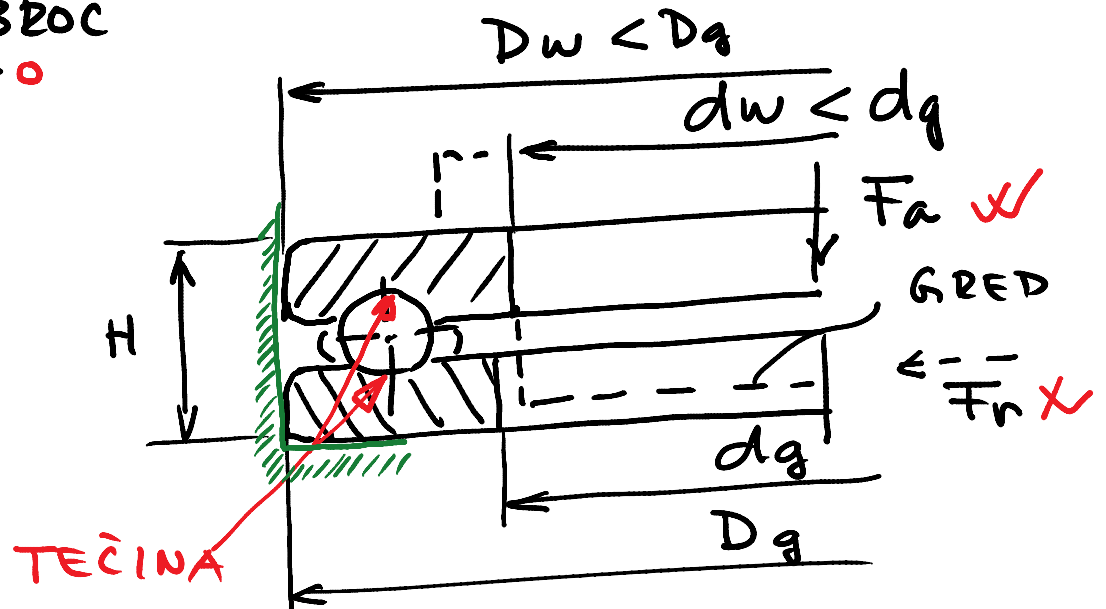
r ↑ ΒΕΛΙΚ ΠΡΕΜΕΡ ΣΤΑΤΙΚΗΣ ΕΛΕΜΕΝΤΑ ✓

ΜΕΣΑΝΟ ΤΡΕΝΣΕ U ΛΕΓΑΤΗ



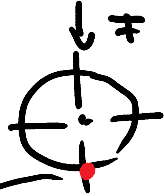
RADIALNI  
ZOTALNI  
LEŖAJ

- 1 ZOTALNI ELEMENT
- 2 KLETĀA
- 3 NOTRANJI OBROČ

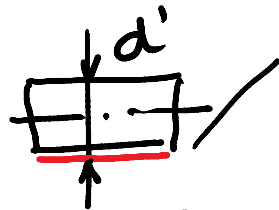


AKSIALNI  
ZOTALNI  
LEŖAJ

ΣΤΑΤΙΚΑ ΕΛΕΜΕΝΤΑ



ΣΦΑΙΡΙΚΑ



ΥΑΛΙΝΕΣ

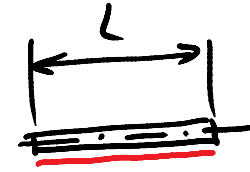
ΛΙΝΙΣΕΙΣ ΚΟΝΤΑΚΤ



ΣΦΑΙΡΕΣ

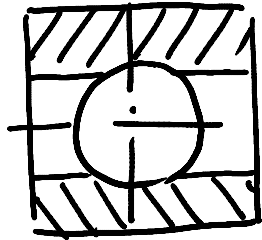


ΚΩΝΕΣ



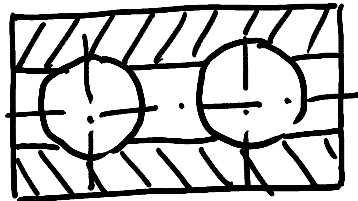
ΠΛΑΤΑ

ΤΟΧΕΟΥΝΙ ΚΟΝΤΑΚΤ



ΕΝΟΡΕΔΝΙ

$$i = 1$$



ΔΥΟΡΕΔΝΙ ΛΕΓΑΤ

$$i = 2$$

ΥΠΟΚΑΤΑΣΤΑΣΗ =

$f(d', L, i, \text{ΥΡΣΤΑ}$

ΣΤΑΤΙΚΩΝ ΕΛΕΜΕΝΤΩΝ,

$d, D, B, \dots)$

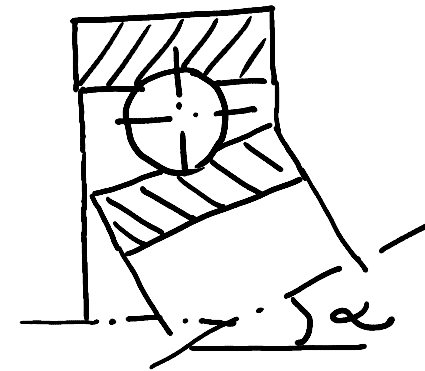
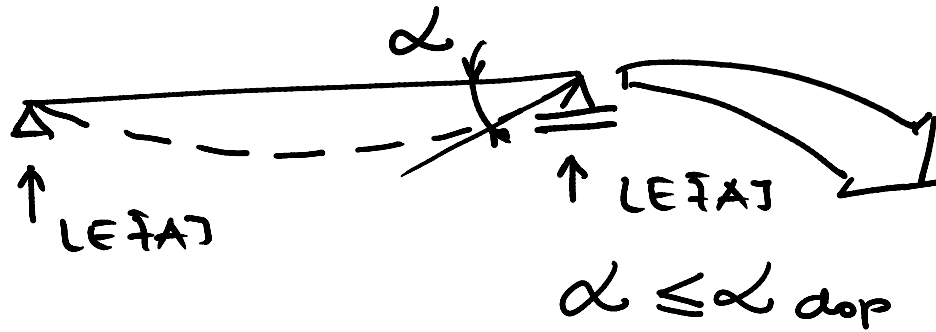


$$F = \phi$$

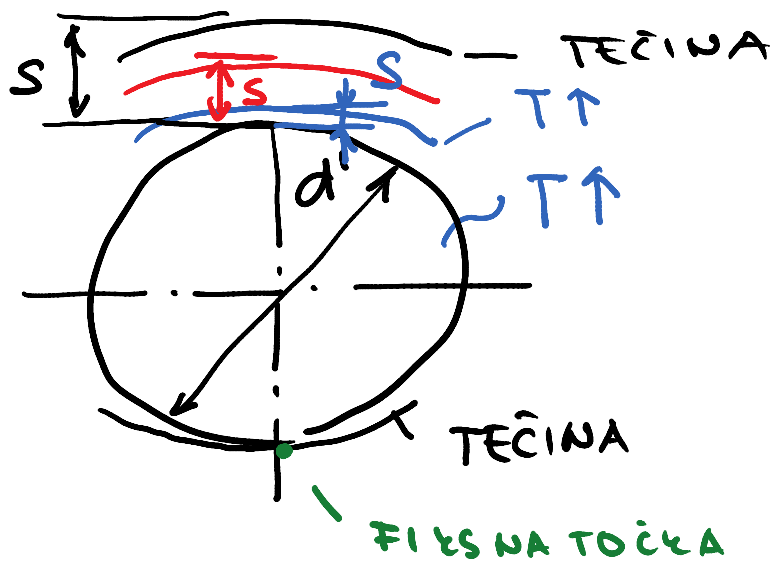


$$F > \phi$$

# OBČUTLJIVOST LEŽAJEV NA TAŠU

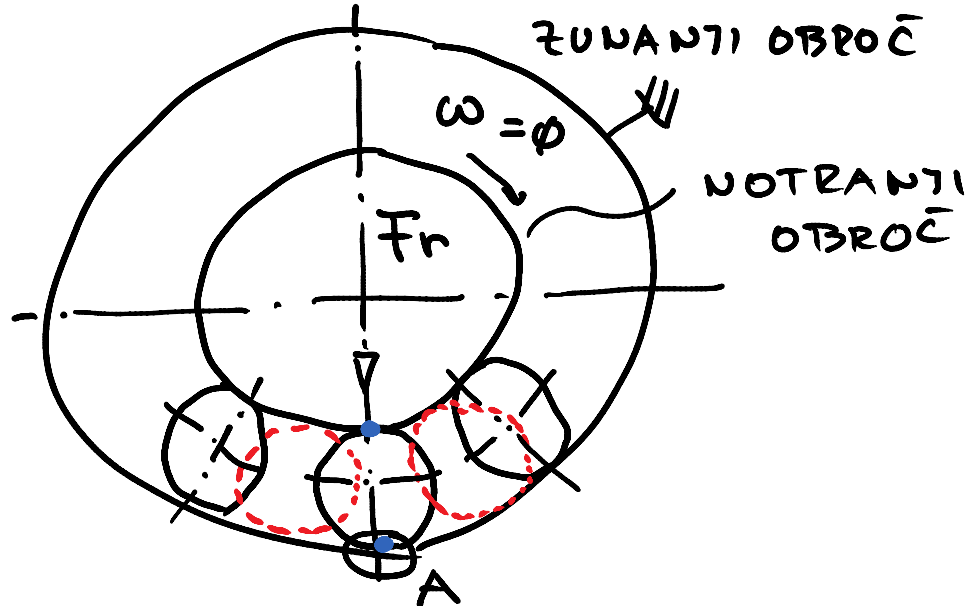


## ŽRČNOST U LEŽAJU



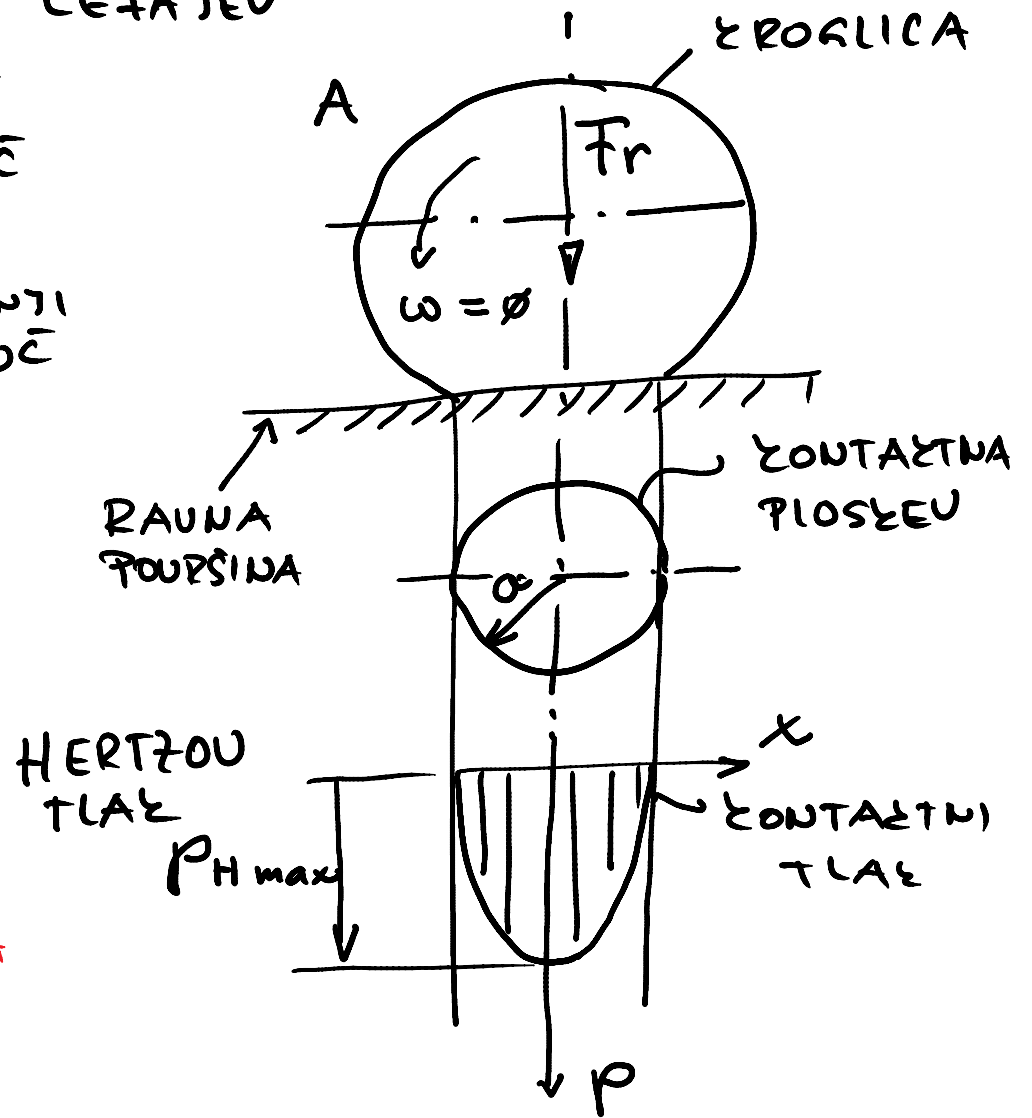
- RAZMERE PRED MONTAŽO
- RAZMERE PO MONTAŽI
- RAZMERE MED OBRATOVANTEM

ΥΡΕΔΝΟΤΗΤΕΣ ΚΟΤΑΛΝΗ ΛΕΓΑΤΕΥ  
 ΝΑ ΣΤΑΤΙΧΝΟ ΝΟΣΙΛΝΟΣΤ

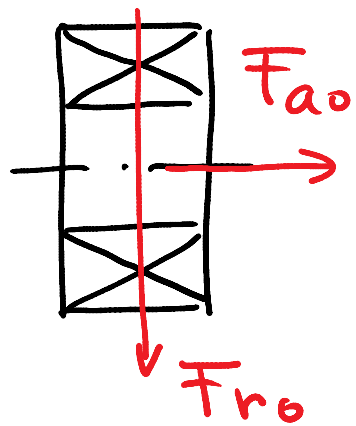


$$P_{Hmax} \leq P_{Hdop}$$

ΠΛΑΣΤΙΧΝΑ ΔΕΦΟΡΜΑΧΙΑ  
 ΚΟΤΑΛΝΗ ΕΛΕΜΕΝΤΟΥ  
 ΑΛΙ ΤΕΧΙΝΙ!



$C_0$  - STATIČNA NOSILNOST JE TIŠTA AŽSIJALNA ALI RADIJALNA  
 OBREHENTEVI, KI JO PRENESE 90% LEŽATEVI IN POUŽROČI  
 SKUPNO PLASTIČNO DEFORMACIJO ŠOTALNIH ELEMENTOV  
 V VELIČOSTI 0,01% PREHERA ŠOTALNEGA ELEMENTA.



EZUIVALENTNA OBREHENTEVI LEŽAJA

$$P_0 = X_0 F_{ro} + Y_0 F_{ao}$$

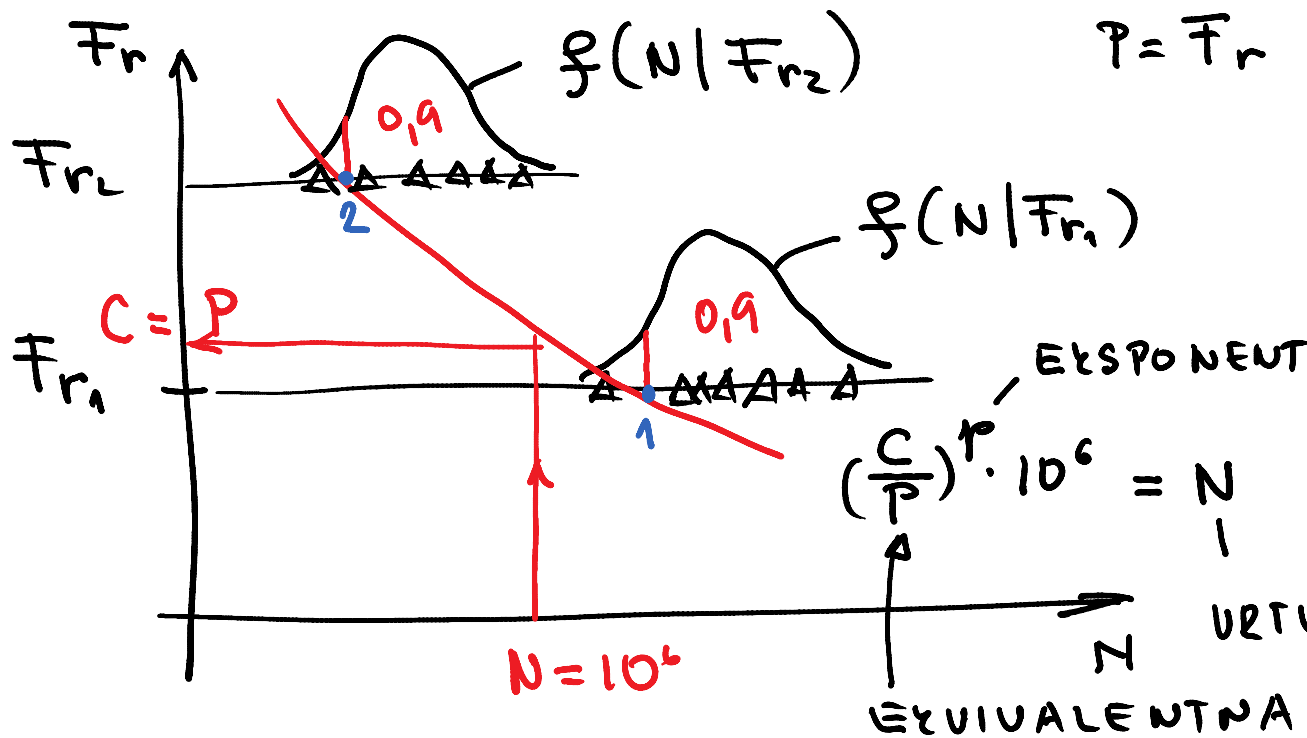
└──────────┘  
 ŠONSTANTI  
 LEŽAJA

$$V = \frac{C_0}{P_0} > V_{dop}$$

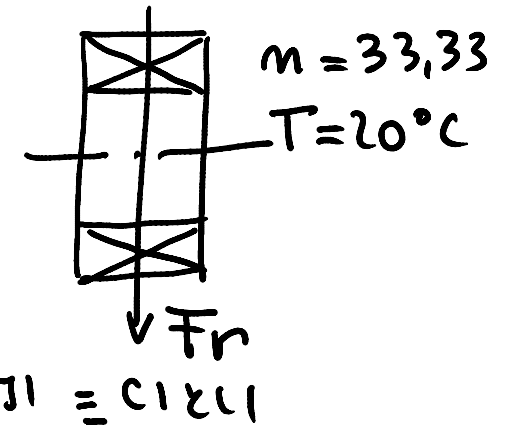
1  
 VARNOSTNI  
 FAKTOR

# NA DINAMIČNO NOSILNOST

C - DINAMIČNA NOSILNOST JE TISTA AΞΙΑ (NA ALI RADIALNA OBREMEHITEV), ΣΙ JO PRI STANDARDNIH POGOJIH PRESUSA ( $n = 33,33$  VRT/MIN,  $N = 10^6$ ,  $T = 20^\circ\text{C}$ ) DO TAČETA LUŠIENJA ZDRŽI 90% LEŽATEV.



N - ΣΤ. OBREMEI-TUENIH CΙΣΛΟΥ ΟΤ. VRTΛΑΓΕV



$$P = X \cdot F_r + Y F_a$$

↑  
 KONSTANTI LEŽAJA  
 EKUIVALENTNA OBREMENITEV

$$p = 3 \quad \oplus$$

$$p = \frac{10}{3} \quad \boxplus$$

$$L_{10} = \left( \frac{C}{P} \right)^p = \frac{N}{10^6} \left[ \frac{urt}{10^6} \right]$$

$$t = L_{10h} = \left( \frac{C}{P} \right)^p \frac{10^6}{n \cdot 60} [h]$$

FAKTOR  
 HAZARNOSTA

$$N = n t$$

$$n \left[ \frac{urt}{min} \right]$$

$$L_{mh} = L_{10h} a_1 a_{23}$$

$$t = \frac{N}{n}$$

↑  
 DOBA TRAJANJA  
 LEŽAJA V  
 URAH

↑  
 FAKTOR ZANESLJIVOSTI

10% VERTETNOST OBOARE  $a_1 = 1$



# POŠKODBE LEŃAJA ŽARADI DINAMIČNE OBREHENITVE

