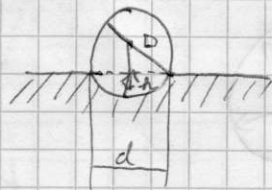


Keményseg mérés: Az anyag ellenállását vizsgáljuk a kénső behatásánál.

- Brinell eljárás (1905)



megadás helyére nézz a nyomóerőre.

$$h = D - x$$

$$x = \sqrt{\left(\frac{D}{2}\right)^2 - \left(\frac{d}{2}\right)^2} \quad (10)$$

$$HB = \frac{F}{A} = \frac{0,102 F}{A} = \frac{2 \cdot 0,102 F}{\pi D (D - \sqrt{D^2 - d^2})}$$

$$1N = 0,102 Kp \quad \downarrow$$

MPa

- 10
- 5

- 2,5

- 2

- 1 mm mélyű gölyösként mérjük a felületre

0,2-0,6 a vastagságtól függően

400 kg névterheléssel a mérővel

178 HB

5 mm-es

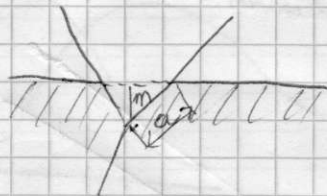
5/1750/10

D FI +

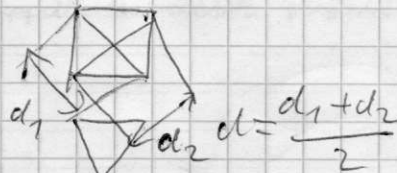
szilárdság

~~szilárdság~~ szilárdság

Az elmozdítás a szilárdság



$$\alpha = 136^\circ$$

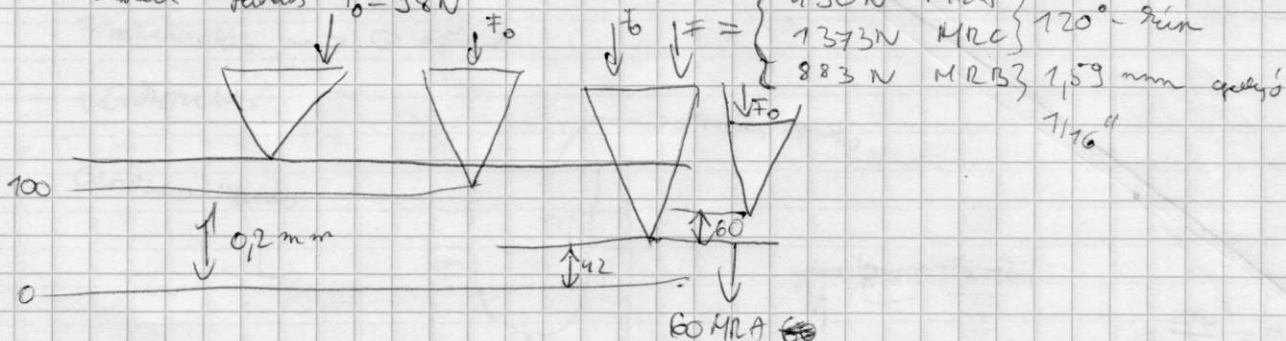


$$HV = \frac{0,102 F}{A} = \frac{0,189 F}{d^2}$$

$$\frac{4 \cdot 0,189}{2}$$

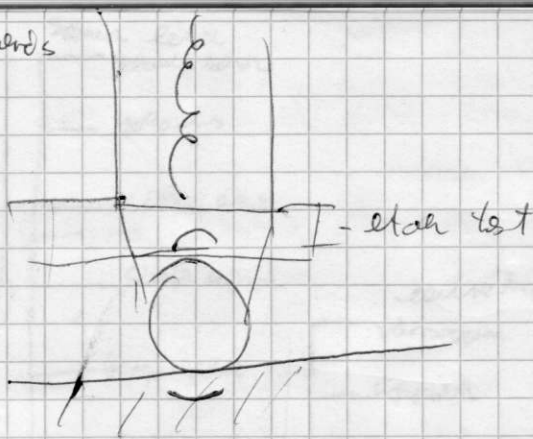
400 HV

Rockwell eljárás $F_0 = 98 N$

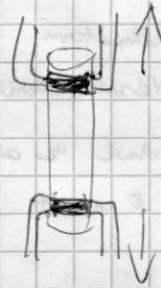
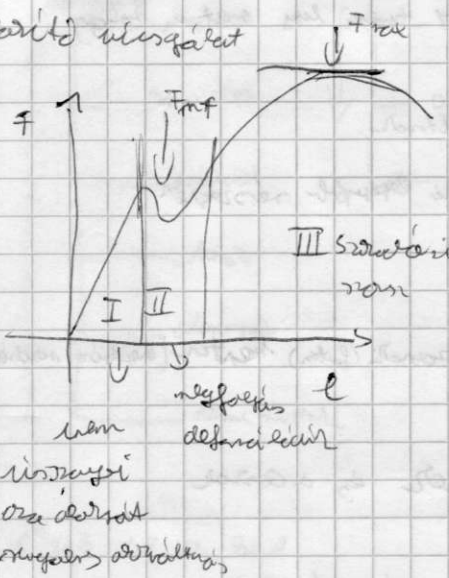


Predizobrods

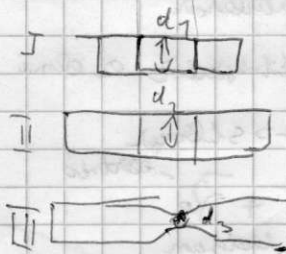
televizor skrin



Skriti nuzgaleit



06-8-10 mm x 10 mm



dLd_0

d_2Ld_1

d_3Ld_2

$$\epsilon = \frac{\Delta l}{l_0}$$

$$* A = \frac{\Delta l}{l_0} \cdot 100$$

$$* R_m = \frac{F_{max}}{S_0} = \left[\frac{N}{mm^2} \right]$$

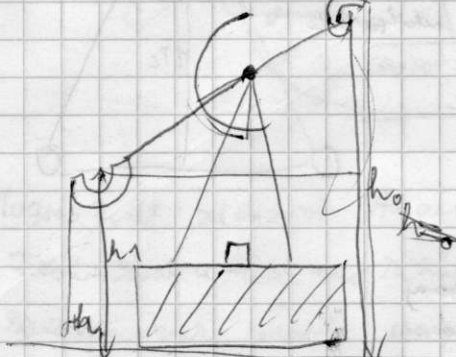
S = selibat

$$S_0 = \left(\frac{d_0}{2} \right)^2 \cdot \pi$$

$$* Z = \frac{\Delta S}{S_0} \cdot 100$$

$$R_p = \frac{F_{mp}}{S_0}$$

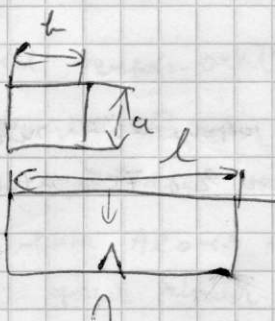
Toroti nuzgaleit



Clamp - kela
intirakais

$$h_0 - h_1 = w$$

$$E_{h_0} - E_{h_1} = w \cdot t$$



$$KV \ 150 / 7.5 = 90 \%$$

Wmax selibat
utirakais onelotat

$$KV \ 170 / 7.5 \cdot 11 = 78 \%$$

Wmax selibat
Vozni katalakais selibat

