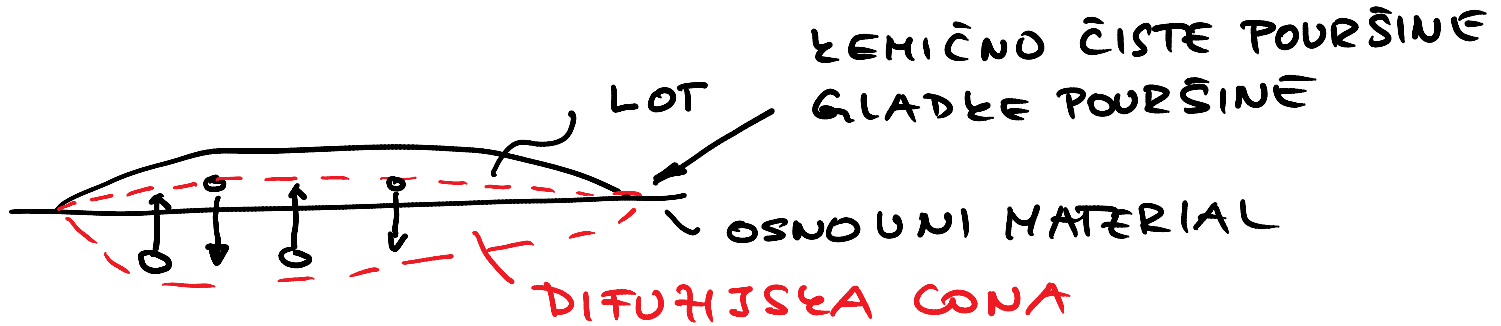
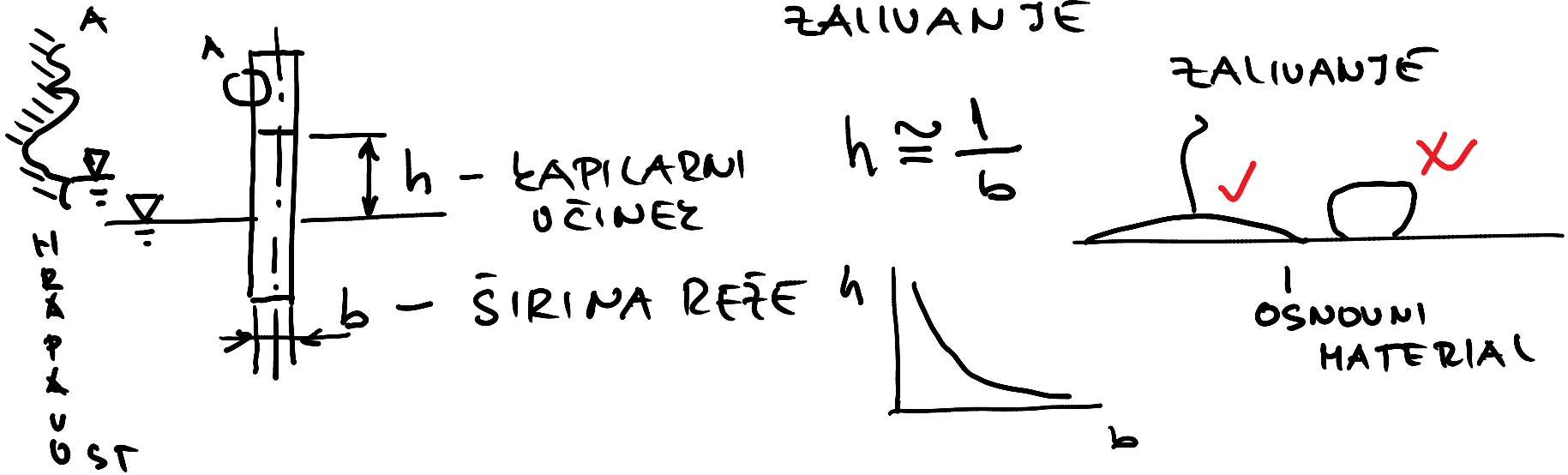


LOTAM SPOJI

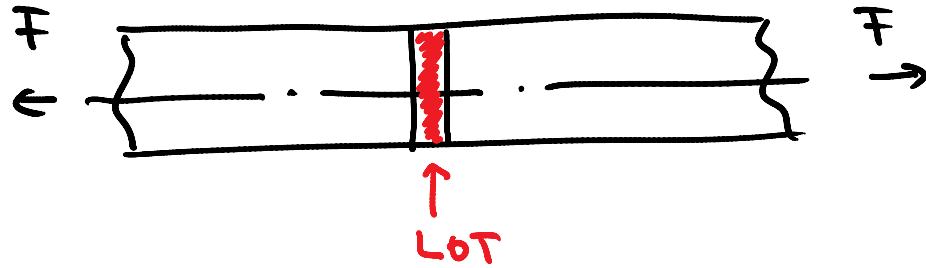
FIZIČNE OSNOVE LOTANJA



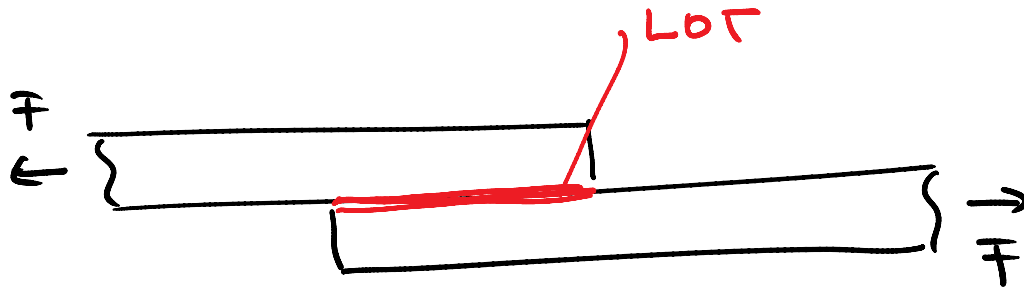
IZKORISĆAMO DVA POJAVU : KAPILARNI UČINEK
KALIVANJE



OBREMNITVENI PRIMERI



NATEG ✓



STRIG ✓✓



LUPILO
OBREMNITEU

VEČJA KONTAKTNA
POVRŠINA!

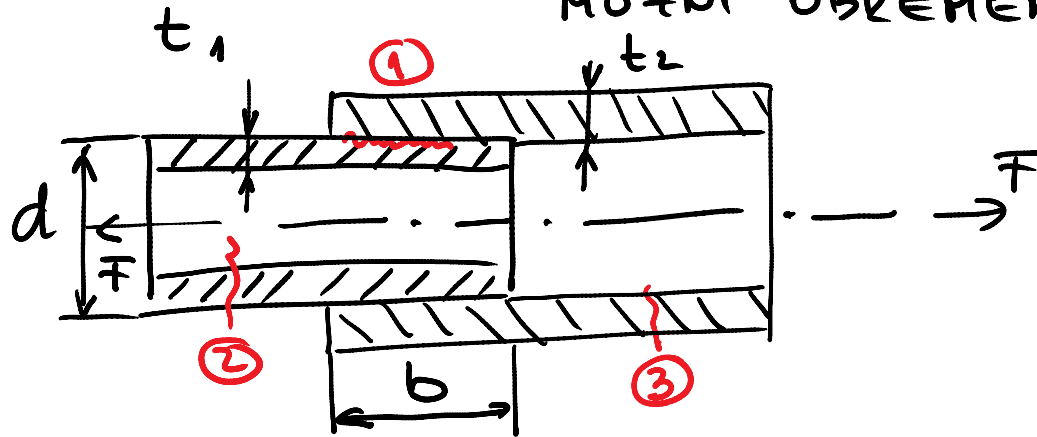
MEHĀI LOTI DO 450°C — ZA TESNILNE SPOJE,
ELETRONIKA

TRDI LOTI DO 900°C

VIŠO TEMPERATURNI NAD 900°C

ZA NOSILNE SPOJE

MOŽNI OBREMITIUVENI PRIMERI



$$\sigma_2 = \frac{F}{\pi \left(\frac{d^2}{4} - \frac{(d-2t_1)^2}{4} \right)}$$

$$\sigma_3 = \frac{F}{\pi \left(\frac{(d+t_2)^2}{4} - \frac{d^2}{4} \right)}$$

$$\sigma_1 = \frac{F}{\pi d \cdot b} \leq \sigma_{dop}^L$$

$$\sigma_2 \leq \sigma_{dop}^{om}$$

$$\sigma_3 \leq \sigma_{dop}^{om}$$

IMAMO LAHKO
RAZLIČNI
DOPUSTNI
NAPETOSTI
ZA CEVI 1 IN

$t_1 = t_2 = t$, DEBELINA STENE CEVI JE MAJHNA

$$\sigma_1 = \frac{F}{\pi d \cdot b}$$

$$\sigma_2 \approx \frac{F}{\pi d \cdot t}$$

OBE CEVI IZ
ISTEGA MATERIALA

----- VEŠJA SAMO ZA MAJHEN T

$b_{opt} = ?$ $\sigma_1 = \sigma_{dop}^L$ $\sigma_2 = \sigma_{dop}^{om}$

$$F = \pi d \cdot b \cdot \sigma_{dop}^L$$

$$F = \pi d \cdot t \cdot \sigma_{dop}^{om}$$

$$\cancel{\pi d} b \cdot \sigma_{dop}^L = \cancel{\pi d} t \cdot \sigma_{dop}^{om}$$

$$b_{opt} = \frac{t \cdot \sigma_{dop}^{om}}{\sigma_{dop}^L} = b$$

$$\sigma_{dop}^L = \int \frac{\sigma_m^L}{\gamma}$$

STRIŽNA
TRDNOST
LOTA

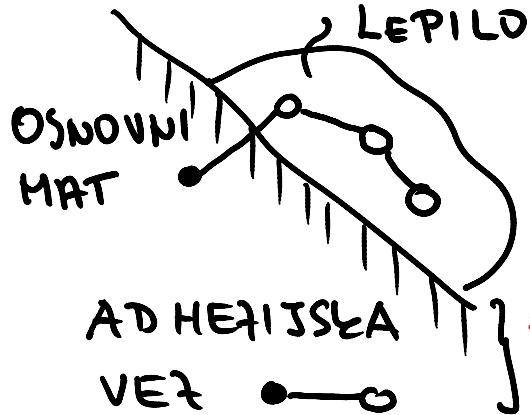
$$\sigma_{dop}^L = \frac{\sigma_m^L}{\gamma}$$

NATEŽNA TRDNOST
LOTA

$$\sigma_{dop}^L \approx 1,5 \sigma_{dop}^L$$

LEPLJENI SPOJI

FIZIČALNE OSNOVE LEPLJENJA



ADHEZIVNA

VEZ

KOHEZIVNA

VEZ

FIZIČALNA
ZEMIČNA
MEHANIČNA

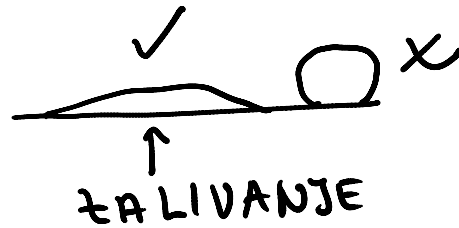


NEČISTOĆA

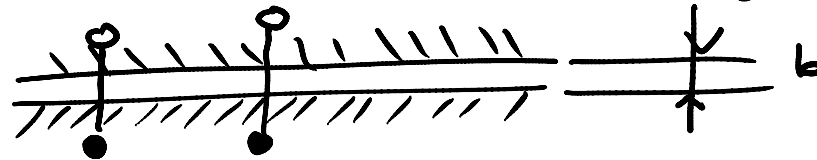
HEPAVA
POURŠINA

ZEMIČNO

ČISTA POURŠINA



FIZIČALNA
VEZ

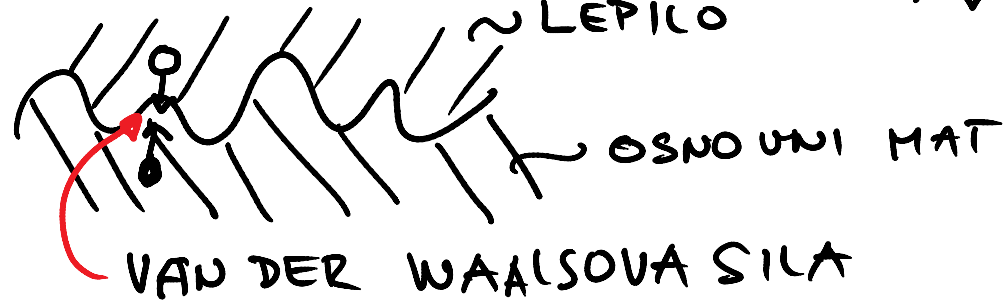


$b < 3 \cdot 10^{-6}$ mm

b

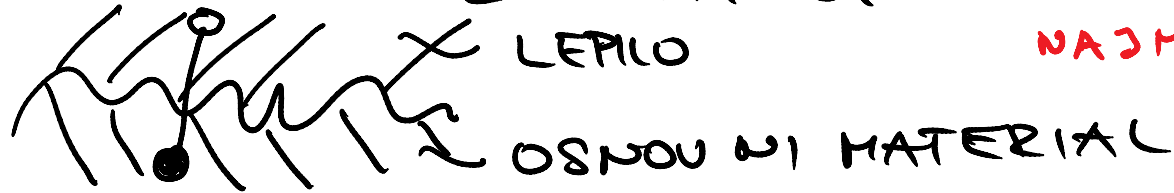
ADHEZIJSKA VEZ

FIZICALNA VEZ



HEMIČNA
REAKCIJA

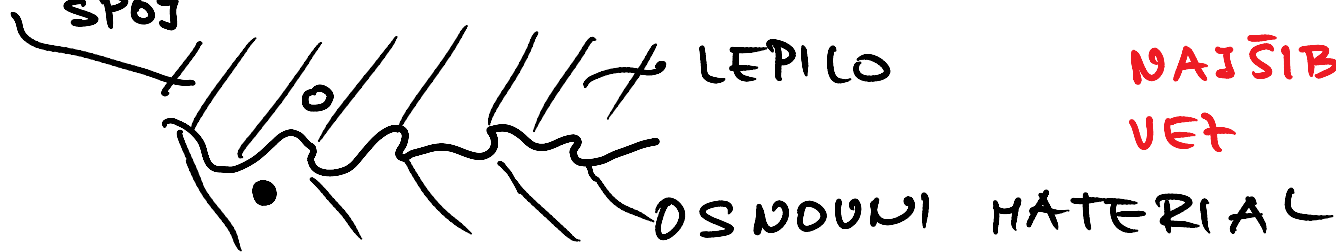
HEMIČNA VEZ



NAJMOČNJEJŠA
VEZ

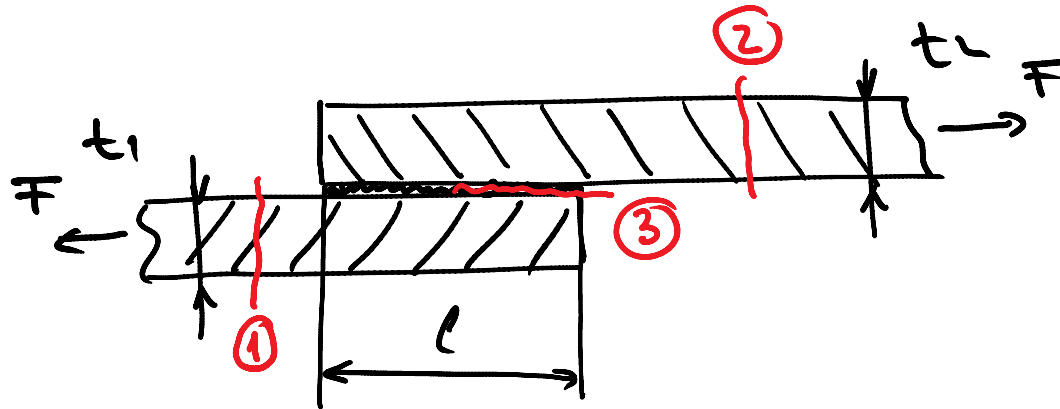
OBLIKOVNI
SPOJ

MEHANSKA VEZ



NAJŠIBLEJŠA
VEZ

NOĀNI OBRĒMENITVENI PRIMERI



b - ŠIRINA PLOČEVINE

$$\sigma_1 = \frac{F}{b \cdot t_1} \leq \sigma_{dop}^{om}$$

$$\sigma_2 = \frac{F}{b \cdot t_2} \leq \sigma_{dop}^{om} \text{ LEPILO}$$

$$\sigma_3 = \frac{F}{b \cdot l} \leq \sigma_{dop}^k$$

$t_1 = t_2 = t$ OBE PLOČEVINI IZ ISTEGA MATERI-ALA

$$\sigma_1 = \sigma_2 = \frac{F}{b \cdot t} = \sigma_{dop}^{om}$$

$$F = b \cdot t \cdot \sigma_{dop}^{om}$$

$$F = b \cdot l \cdot \sigma_{dop}^k$$

$$\sigma_{m}^k \approx \sigma_{m}^k$$

$$L_{opt} = \frac{\sigma_{dop}^{om}}{\sigma_{dop}^k} t$$

$$\sigma_{dop}^k = \sqrt{\frac{\sigma_{m}^k}{\nu}}$$

STRIŽNA "ADHEZIJSKA" TRDNOST LEPLA

$$\sigma_{dop}^k = \frac{\sigma_{m}^k}{\nu}$$

MATERIJALNA TRDNOST LEPILA

UPLIV VRSTE LEPILA NA ADHEZIVNO TRDNOST LEPILA



UPLIV STARANJA NA ADHEZIVNO TRDNOST LEPILA

