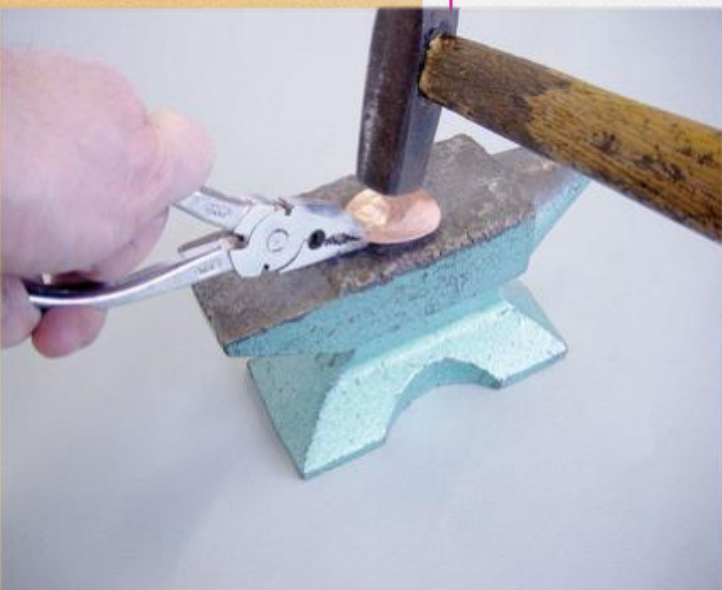


OBDELOVALNI POSTOPKI KOVIN



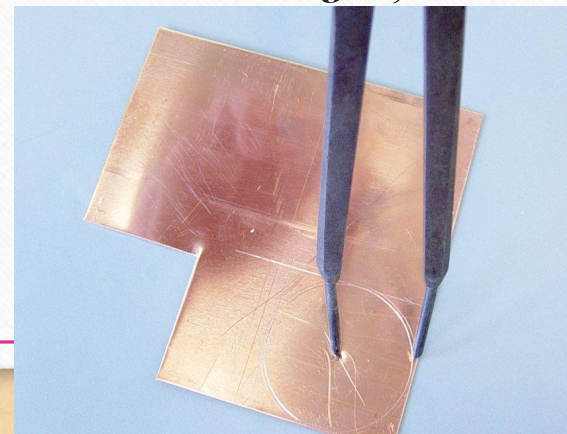
MENTORICA: NATALIJA LOKAR

**AVTORJI: LARA BREGAR, JAN
KOVAČIČ, LANA SLAK**

RAZRED 8.B

ZARISOVANJE

- **IGLA:** ZARISOVATI ZAČNEMO NA ROBU, NAREDIMO LE TOLIKO ČRT KOT JIH POTREBUJEMO, ČRT SE NE MORE IZBRISATI.
- **ŠESTILO:** ZARISUJEMO KROGE ALI PRENAŠAMO REZAJE, KONICA MORA BITI GRAFITNA.



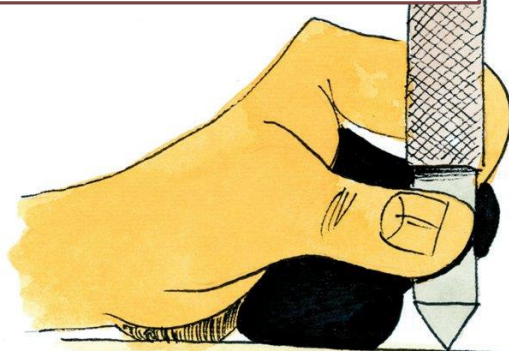
TOČKANJE S TOČKALOM

- TOČKALO NASTAVIMO POŠEVNO.
- PREDEN UDARIMO TOČKALO ZRAVNAMO.

TOČKALO



TO NI PRAVILNO
TOČKANJE.



TO JE PRAVILNO
TOČKANJE



STRIŽENJE

<https://www.youtube.com/watch?v=nVB0ZYgMHQg>

- UPOŠTEVATI MORAMO FIZIKALNE ZAKONE.
- DALJŠI JE VZVOD MANJŠA SILA JE POTREBNA ZA TEČAJ.
- VZVODNE ŠKARJE SO BOLJ NATANČNE.

VZVODNE ŠKARJE



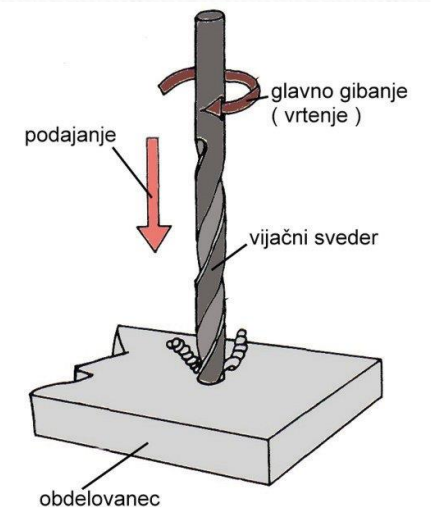
TO SO ŠKARJE ZA PLOČEVINO.





VRTANJE

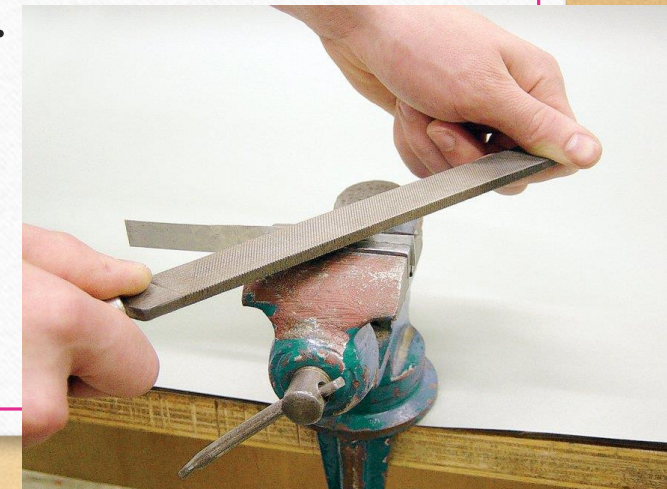
- SVEDER MORA BITI VIJAČNI.
- HITROST JE ODVISNA OD KOVINE.
- PREDMET MORA BITI VPET NA MIZO.
- **!POZOR!** KOVINO NIKOLI NE DRŽIMO Z ROKO, PRI VRTANJU OKOLI LETIJO ODRESKI!
- <https://www.youtube.com/watch?v=LWGnnMcxHuc>



PILJENJE



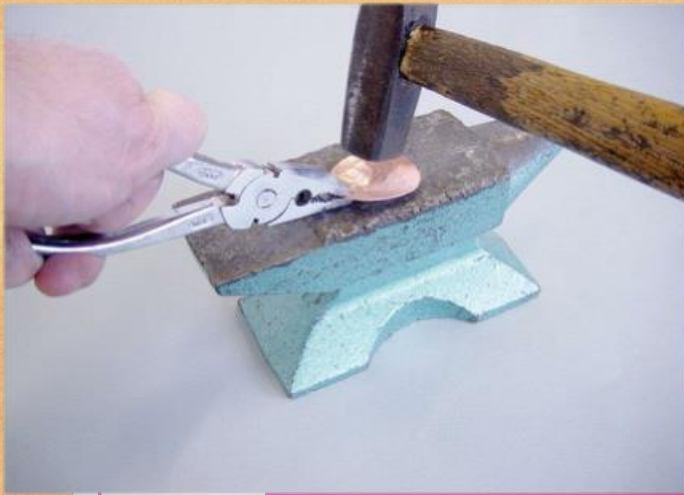
- S PILJENJEM DOKONČNO OBLIKUJEMO KOVINO.
- PILE SO RAZLIČNIH VELIKOSTI IN NASEKOV.
- **MEHKA TELESA;** GROB NASEK, MANJŠA KAKOVOST.
- **TRDA TELESA;** DROBAN NASEK, VEČJA KAKOVOST.



BRUŠENJE

- MAJHNE KOŠČKE NE BRUSIMO.
- NAJVAŽNEJŠI POSTOPKI; ROČNO, ZUNANJE, OKROGLO, BREZKONČNO BRUŠENJE...



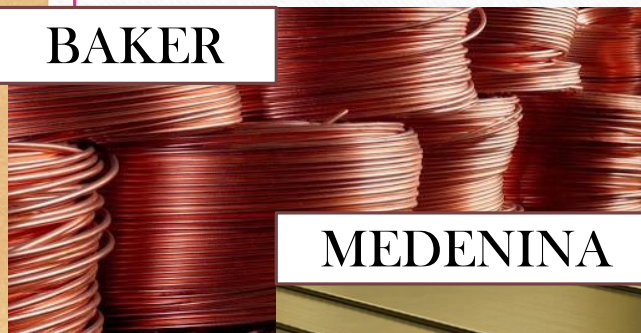


KLEPANJE



- ROČNO KLEPAJO LE ŠE V OBRTI.
- MED KLEPANJEM GRADIVO TALIMO ALI NAKRČIMO.
- KLEPAMO: BAKR, MEDENINO, ALUMINIJ, KOSITR, CINK.

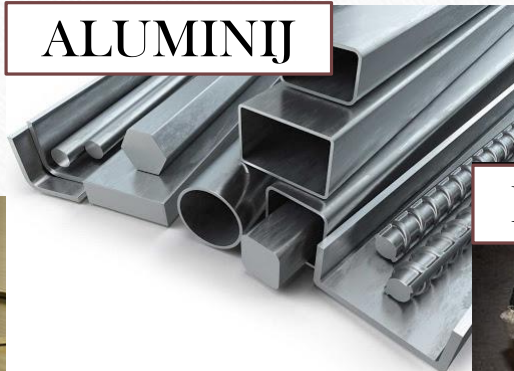
BAKER



MEDENINA



ALUMINIJ



KOSITER

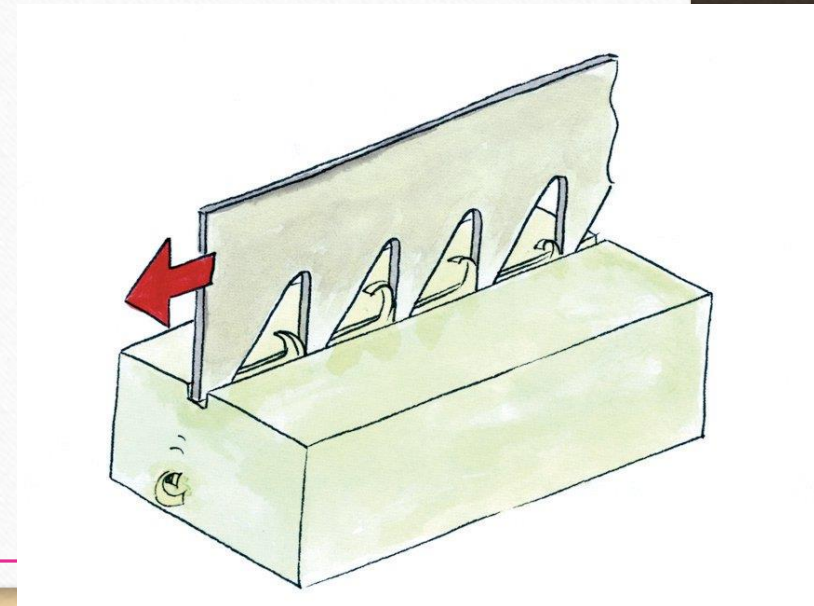


CINK



ŽAGANJE

- DEBELEJŠIH KOSOV NE MOREMO REZATI S ŠKARJAMI.
- ZOBJE ŽAGE SO PODOBNI MAJHNIM SEKAČEM.

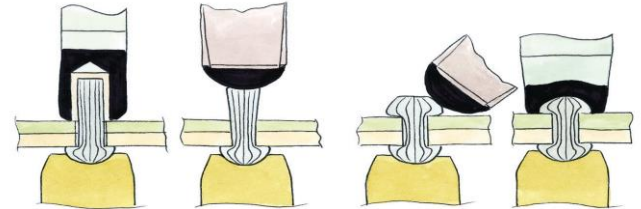


SPAJANJE KOVIN

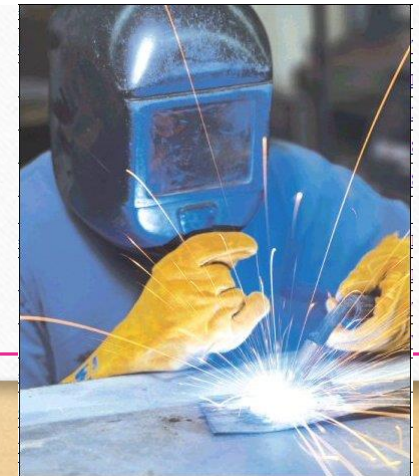
- **KOVINČENJE**; POZNAMO VROČE IN HLADNE, ZVEZE LAHKO RAZTAVIMO, ČE ODSEKAMO KOVNICO.



KOVNICE



- **VARJENJE**; DOSEŽEMO S TOPLOTO, PRITISKOM ALI S KOMBINACIJO OBEH SKUPAJ.



SPAJANJE KOVIN

- **LOTANJE;** SPAJANJE DVEH MATERIALOV,
OMOGOČA SPAJANJE Z BARVNIMI KOVINAMI.
- **VIJAČENJE;** RAZSTAVLJANJE ZVEZ,
POZNAMO: VIJAKE Z MATICO, Z ZAREZO.



VIRI:

- UČBENIK ZA TEHNIKO IN TEHNOLOGIJO 8
- https://dijaski.net/gradivo/kem_ref_kovine_05
- POWER POINT-KOVINE

VIRI SLIKE

- https://www.google.com/search?q=igla+zarisovalna&safe=active&rlz=1C1PRFI_enSI792SI792&sxsrf=ACYBGNSi2aCxzYsddV5j0Dh8jTUVXE8Dlw:1580197134974&source=lnms&tbm=isch&sa=X&ved=2ahUKEwjwpx6H5aXnAhUQaFAKHe23D44Q_AUoAXoECAsQAw&biw=1920&bih=969#imgrc=TAjwwZWSC9gjgM
- https://www.google.com/search?q=%C5%A1estilo+za+kovine&safe=active&rlz=1C1PRFI_enSI792SI792&sxsrf=ACYBGNQ4_n6faG627U2K0roruWwJIJ7GxQ:1580197392530&source=lnms&tbm=isch&sa=X&ved=2ahUKEwjAtlaC5qXnAhUCbIAKHfkZCtIQ_AUoAXoECAsQAw&biw=1920&bih=969#imgdii=OAIpylBkI1L3UM:&imgrc=ziObafbDASGjgM
- https://www.google.com/search?safe=active&tbm=isch&sxsrf=ACYBGNS0JTphYb_W0ve41Q5n0PWsjG9OQ:1580313169317&q=igla+za+zarisovanje+&chips=q:igla+za+zarisovanje,online_chips:kovine&sa=X&ved=0ahUKEwiR6dyolannAhWDPFAKHAvrAMwQ4IYLlgG&biw=1920&bih=967&dpr=1#imgrc=r1Xjkfat3cpmoM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNRAOVbGgxApSRPDLLTaz8gL5EmEeA%3A1580198058994&sa=1&ei=qugvXq2tPlyD8gLk8pP4Dw&q=sveder&oq=sveder&gs_l=img.3..0i67j0I9.139688.143675..144059...2.0..2.92.2206.37.....0....1..gws-wiz-img.....10..35i39j35i362i39j0i3.L3_hebW17oY&ved=0ahUKEwitguy_6KXnAhWMgVwKHWt5BP8Q4dUDCAc&uact=5#imgrc=0MyX8koWJzsrEM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNQeXCdAAnB9zYEj_DXeYIB0-Dyjqw%3A1580198611289&sa=1&ei=0-ovXpypEcHKgQb00Y3wCQ&q=piljenje+kovin&oq=piljenje+kovin&gs_l=img.3...96275.98558..99534...1.0..0.66.447.8.....0....1..gws-wiz-img.....35i39.tE8TlJVv7-0&ved=0ahUKEwjc3pnH6qXnAhVBZcAKHfRoA54Q4dUDCAc&uact=5#imgdii=j_1n0bBcSE0RPM:&imgrc=WfZL4ATFy7rcaM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNSEh3hdZS50wIVUS8b4fGT9V9sIXA%3A1580198940489&sa=1&ei=HOwvXtG4HYyO8gK0uJfgBg&q=klepanje+kovin&oq=klepanje+kovin&gs_l=img.3..35i39.0.0..59117...0.0..0.64.121.2.....0.....gws-wiz-img.IJbfcwCOFJbk&ved=0ahUKEwjRtpbk66XnAhUMh1wKHTTcBWwQ4dUDCAc&uact=5#imgrc=n3qfQvMORUC3dM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNSEh3hdZS50wIVUS8b4fGT9V9sIXA%3A1580198940489&sa=1&ei=HOwvXtG4HYyO8gK0uJfgBg&q=klepanje+kovin&oq=klepanje+kovin&gs_l=img.3..35i39.0.0..59117...0.0..0.64.121.2.....0.....gws-wiz-img.IJbfcwCOFJbk&ved=0ahUKEwjRtpbk66XnAhUMh1wKHTTcBWwQ4dUDCAc&uact=5#imgrc=n3qfQvMORUC3dM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNSEh3hdZS50wIVUS8b4fGT9V9sIXA%3A1580198940489&sa=1&ei=HOwvXtG4HYyO8gK0uJfgBg&q=klepanje+kovin&oq=klepanje+kovin&gs_l=img.3..35i39.0.0..59117...0.0..0.64.121.2.....0.....gws-wiz-img.IJbfcwCOFJbk&ved=0ahUKEwjRtpbk66XnAhUMh1wKHTTcBWwQ4dUDCAc&uact=5#imgrc=n3qfQvMORUC3dM
- https://www.google.com/search?safe=active&rlz=1C1PRFI_enSI792SI792&biw=1920&bih=969&tbm=isch&sxsrf=ACYBGNSEh3hdZS50wIVUS8b4fGT9V9sIXA%3A1580198940489&sa=1&ei=HOwvXtG4HYyO8gK0uJfgBg&q=klepanje+kovin&oq=klepanje+kovin&gs_l=img.3..35i39.0.0..59117...0.0..0.64.121.2.....0.....gws-wiz-img.IJbfcwCOFJbk&ved=0ahUKEwjRtpbk66XnAhUMh1wKHTTcBWwQ4dUDCAc&uact=5#imgrc=n3qfQvMORUC3dM
- https://www.google.com/search?safe=active&biw=1920&bih=967&tbm=isch&sxsrf=ACYBGNQx8ovs9yd3z1YU52YPjdlWS1ZMg%3A1580315091732&sa=1&ei=07ExXqisLln5wAL-iBc&q=kladivo&oq=klad&gs_l=img.1.0.0I10.6593.8278..10686...1.0..0.119.495.4j1.....0....1..gws-wiz-img.....10..0i7i30j0i30j0i24j35i362i39j0i67j0i131j0i3j35i39.XSOLa8VTSSQ
- https://www.google.com/search?q=%C5%BEaganje+kovin&safe=active&rlz=1C1PRFI_enSI792SI792&sxsrf=ACYBGNQNDAC-7R46cAuxekWidX_DTepbMQ:1580200644790&source=lnms&tbm=isch&sa=X&ved=2ahUKEwiv4-yQ8qXnAhVPJFAKHZRWCYIQ_AUoAnoECAwQBA&biw=1920&bih=969#imgrc=R82BfaHw2TO_cm

HVALA ZA VAŠO POZORNOST!

HVALA ZA
POZORNOST!

