

Zaporednostna pnevmatična krmilja in kaskadna metoda

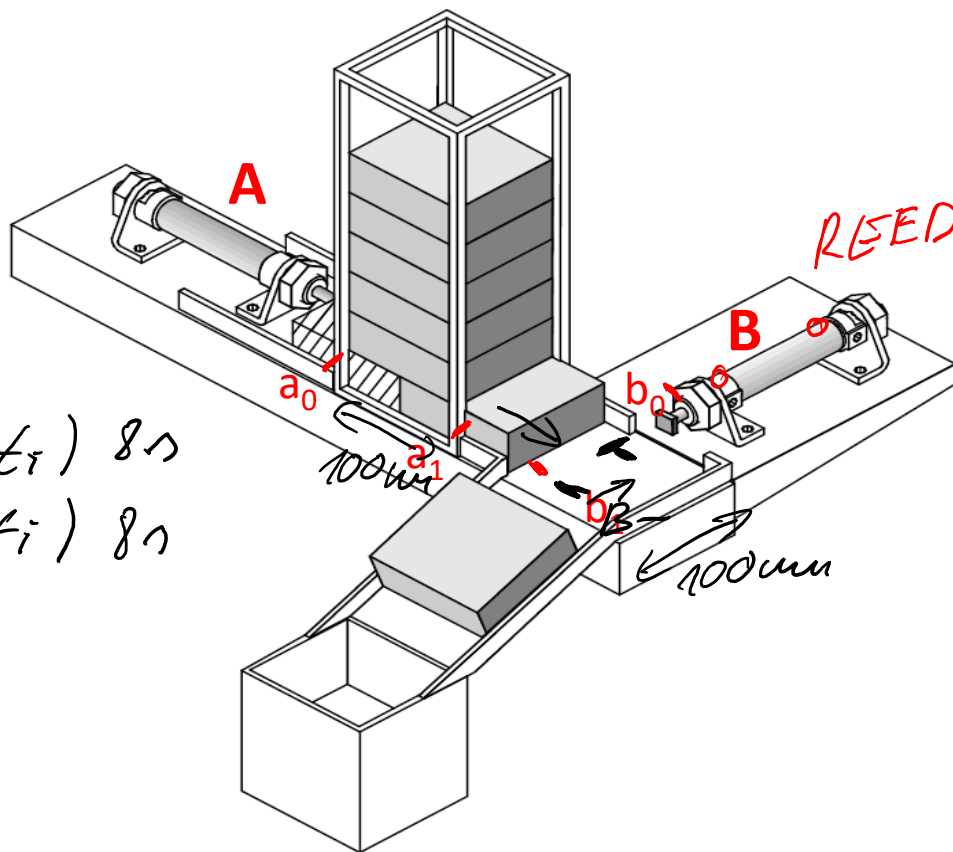
Zaporednostna pnevmatična krmilja

2 s / gib (A ali B)

① $A+ B+ A- B-$ ($\leq t_r$) 8 s

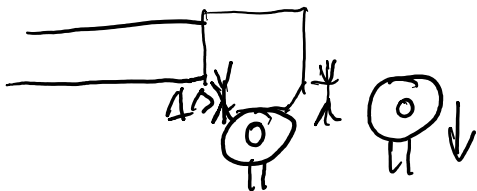
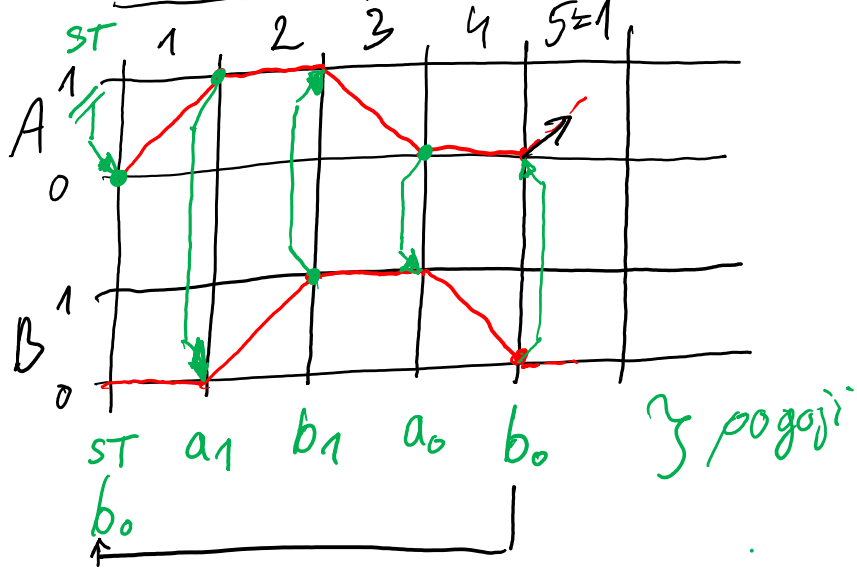
② $A+ A- B+ B-$ ($\leq t_i$) 8 s

③ $\left[\begin{array}{c} A+ A- B- \\ B+ \end{array} \right]$ optimizirani gibovi 6 s

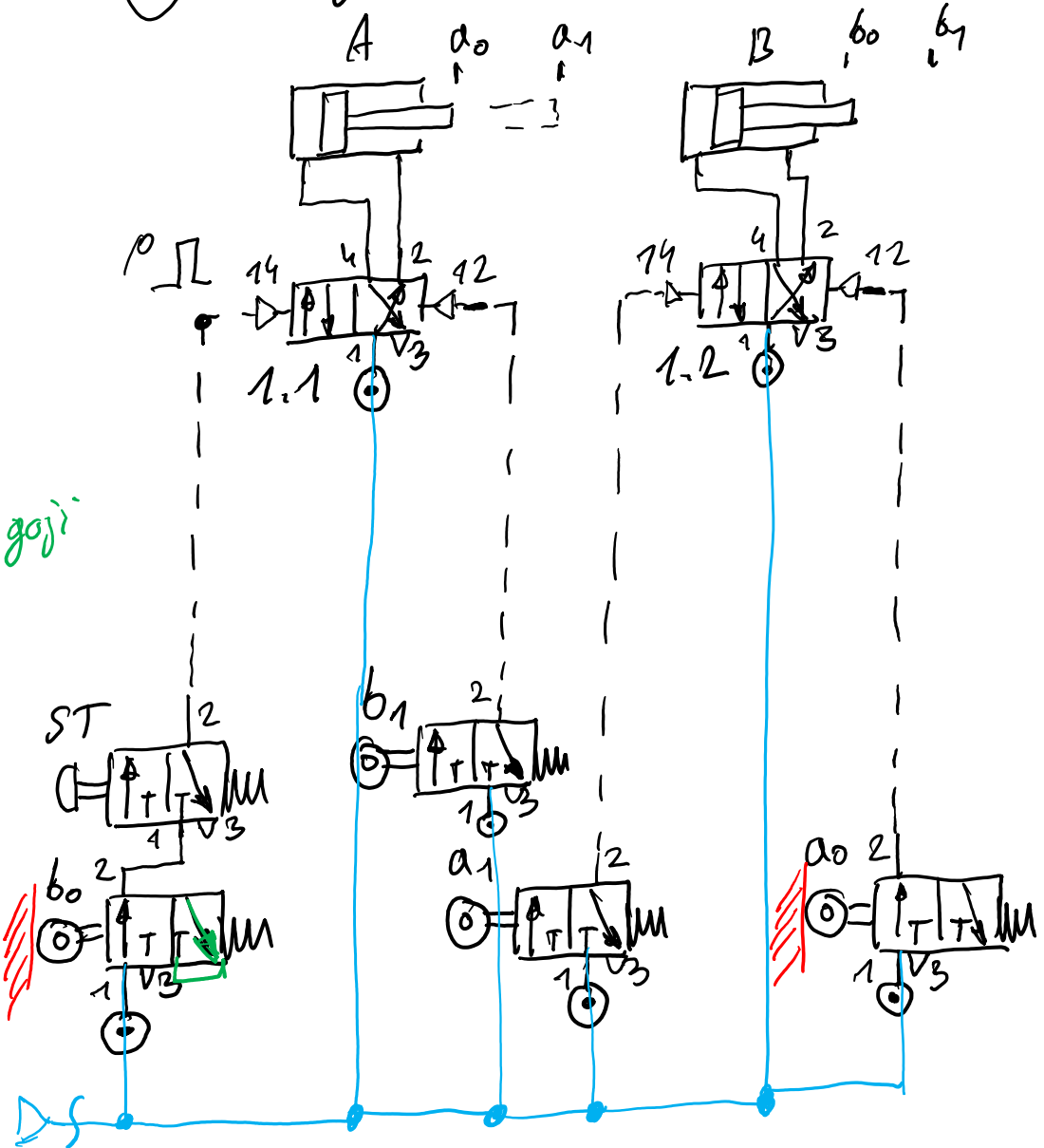


① Zaporedje gibov A+ B+ A- B-

② Diagram ~~pot~~-korak



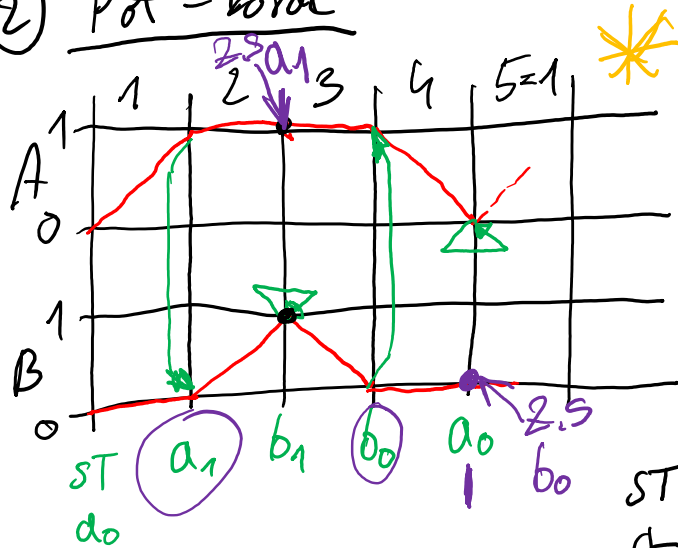
③ Risanje pnevmatične sheme



ZAPORNI SIGNALI

① Zaporedje gibov A+ B+ B- A-

② P_{14} - korak

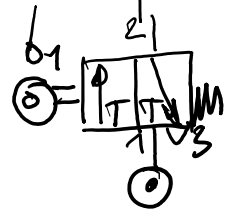
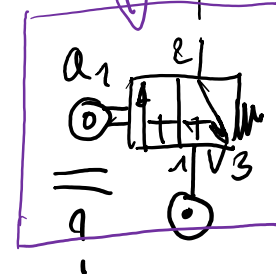
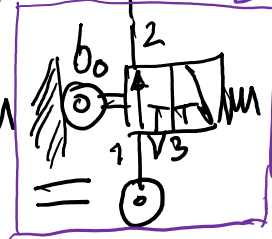
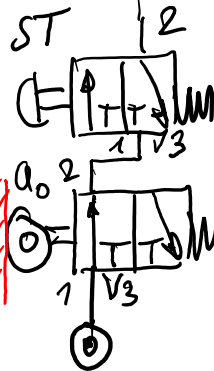
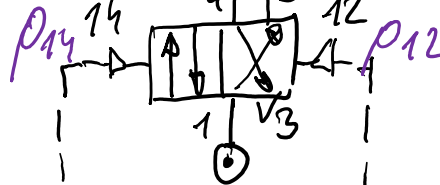


1. rešitev $\square$
klecna stikala

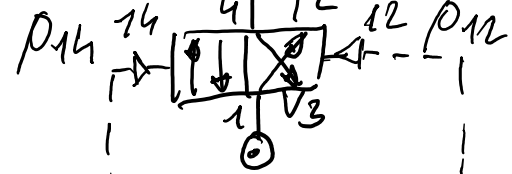


(Z.S.) zaporni signali

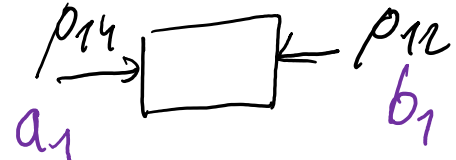
A a_0 a_1



B b_0 b_1



zavrnjenjova
za klecno
stikalo



Zaporni signali – KLECNA STIKALA

za domoio
naloge:
shema s
klecniimi
stikali

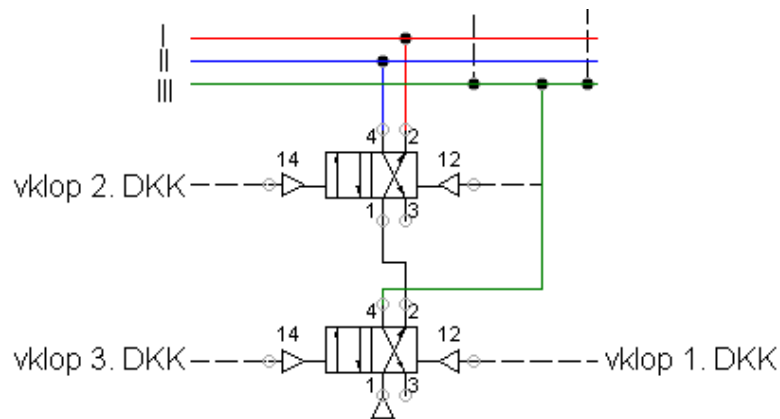
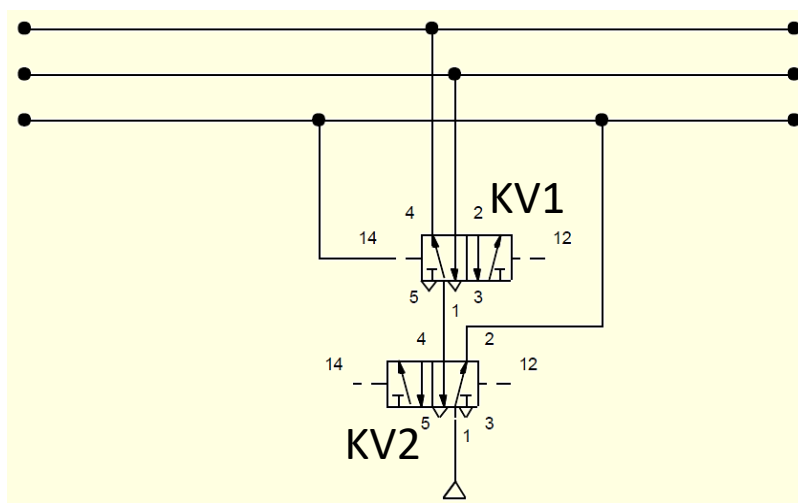
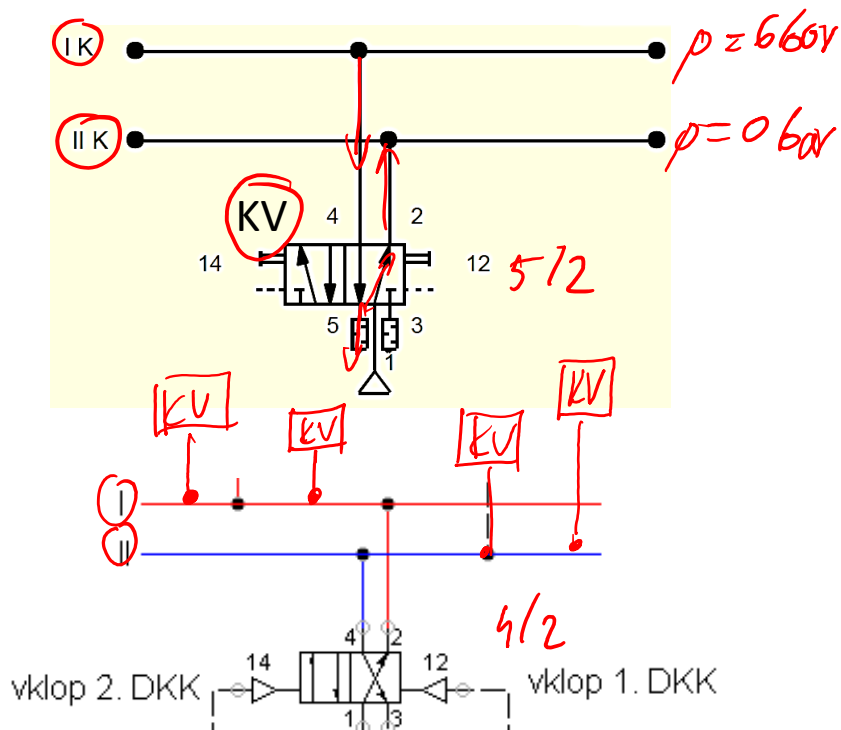
Kaskadna metoda

I. Način za odpravljanje zapornih signalov? Uporaba klecnih stikal

II. Način za odpravljanje zapornih signalov? Kaskadna metoda

Krmilne ventile razdelimo v skupine na način, da so vklopni ventili, ki povzročajo zaporne signale v različnih skupinah ventilov (kaskad). Pod tlakom je vedno le ena kaskada in s tem skupina vklopnih ventilov, druge kaskade (skupine vklopnih ventilov) so odzračane. Na ta način se izognemo zapornim signalom. Posamezne kaskade vklapljamo in izklapljamo s kaskadnimi ventili – to so 4/2 ali 5/2 ventili. Te rišemo vedno pod kaskadami.

Pravilo - Število kaskadnih ventilov (ŠKV) je za 1 manjše kot je število kaskad (N): **ŠKV = N-1**

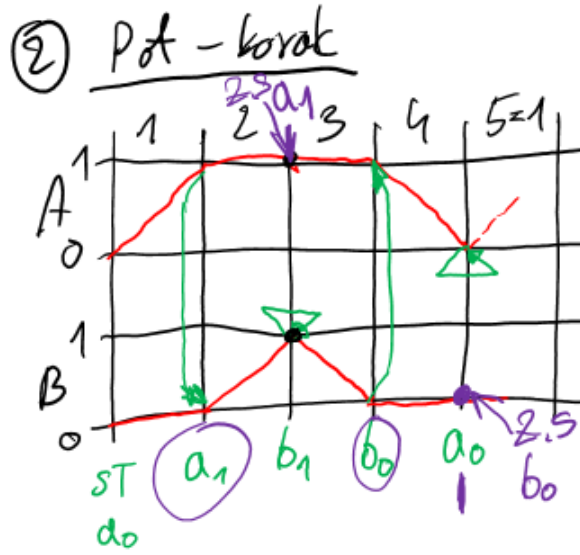


Postopek (zaporedje) risanja

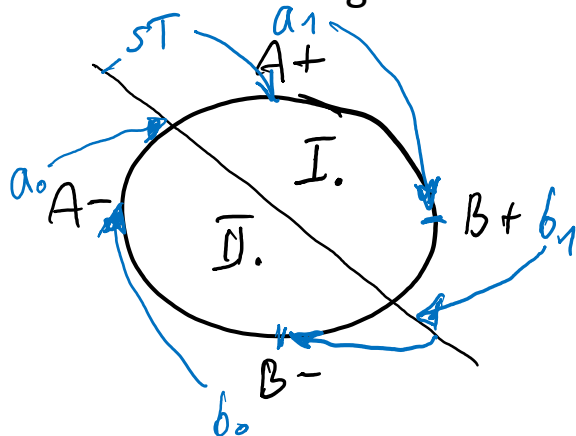
1. Zaporedje gibov

A+ B+ B- A-
I. II.

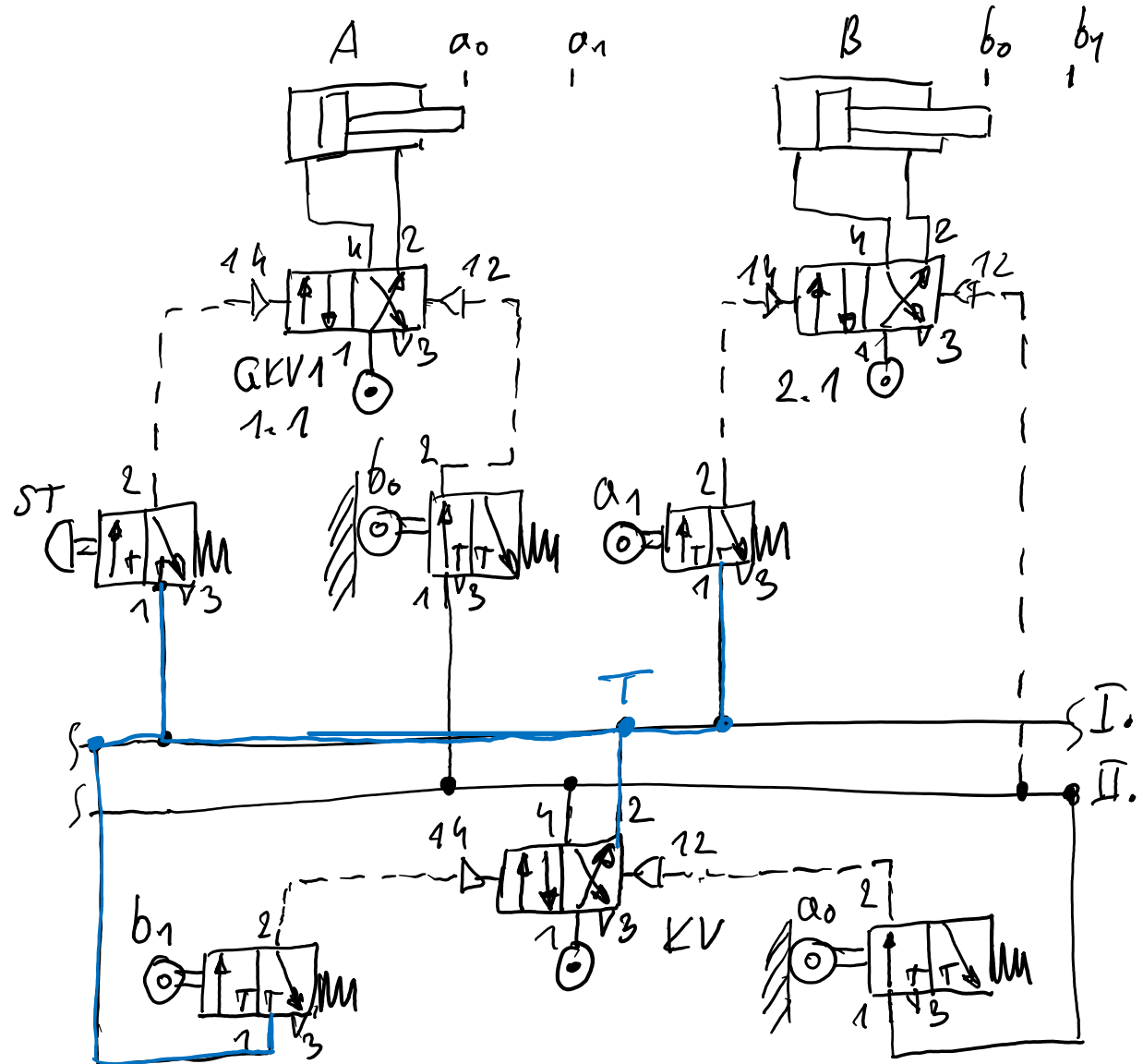
2. Diagram Pot-Korak



3. Kaskadni krog



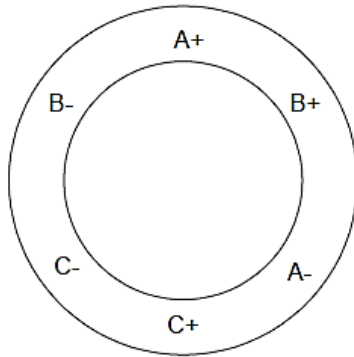
4. Pnevmatična krmilna shema



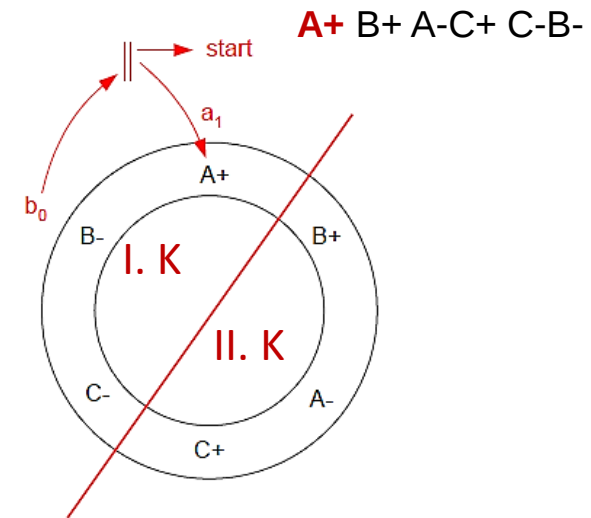
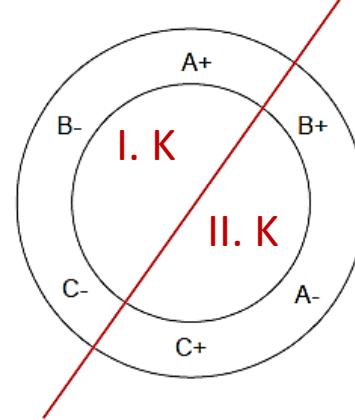
Risanje kaskadnega kroga

Pravilo določitve števila kaskad – kje narisati črto oz. črte:
V eni kaskadi sme biti en cilinder zapisan LE ENKRAT !!!

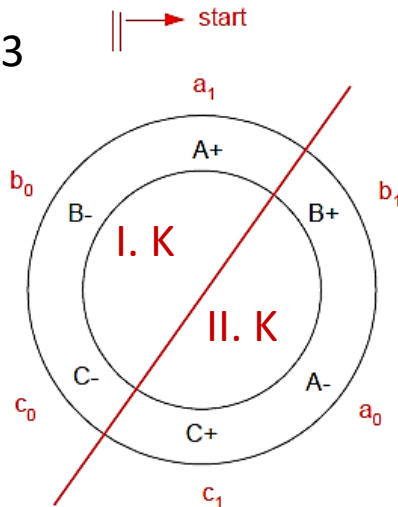
Korak 1



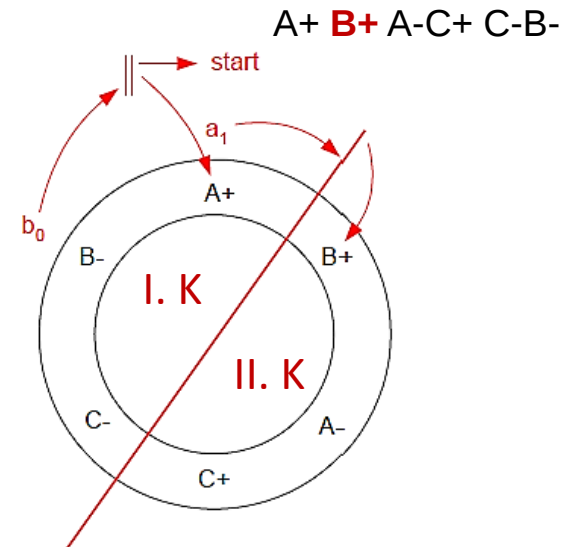
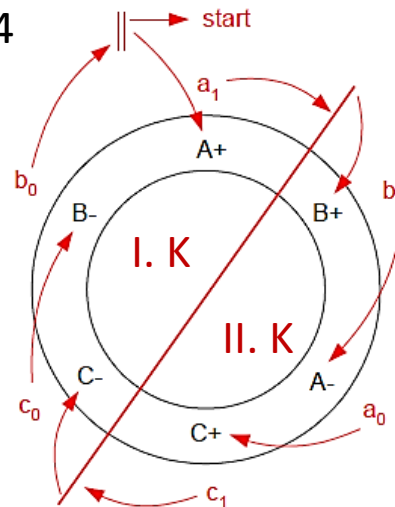
Korak 2



Korak 3



Korak 4



PRIMERI:

1. A+ B+ B- A- C+ C-


št. koskod

2

št. koskadnih
ventilov

1

2. A+ A- B+ B- C+ C-

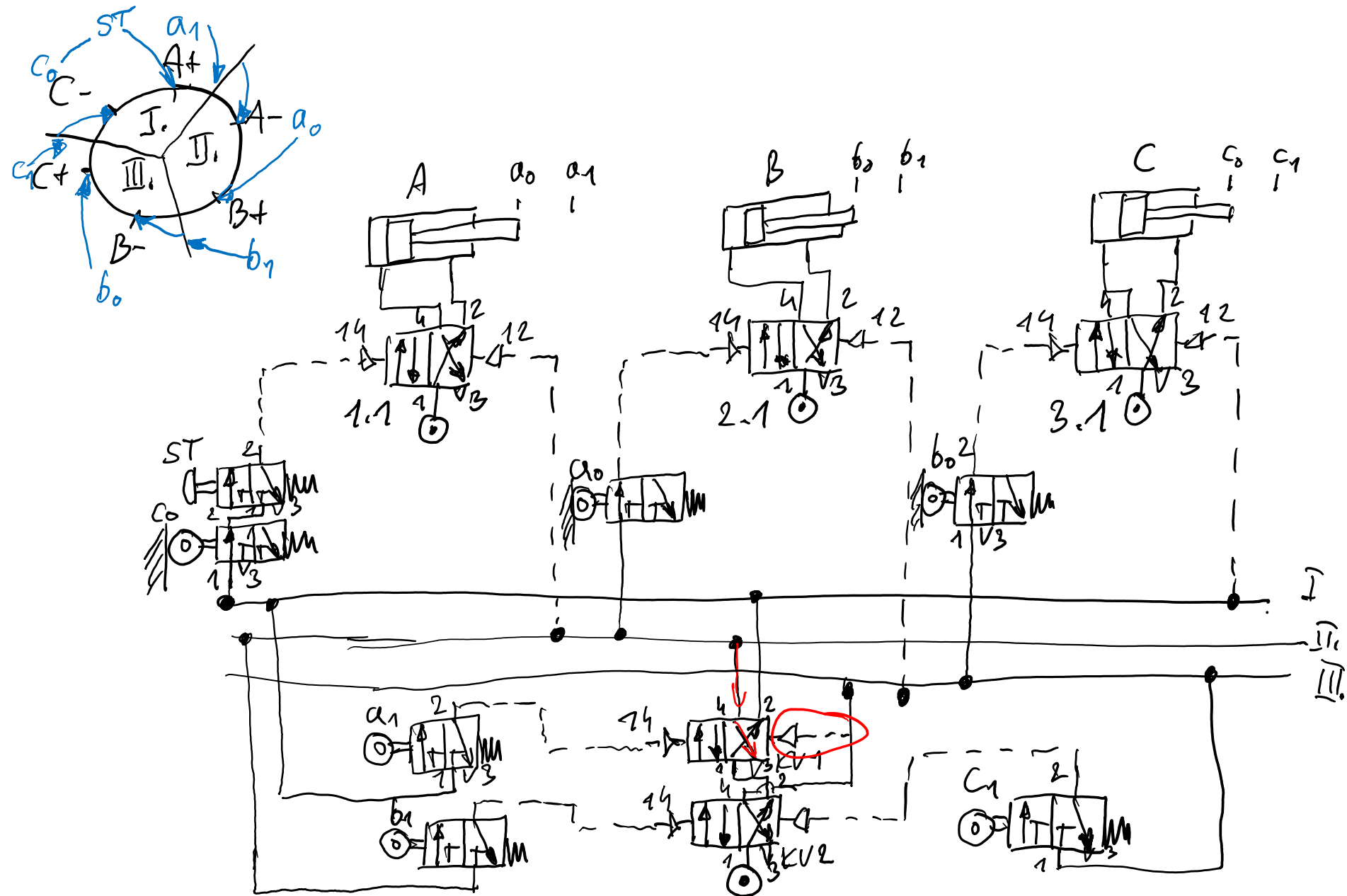

3

2

*

Primer 2

REŠITEV: Pnevmatična krmilna shema s kaskadno metodo za zaporedje: A+ A- B+ B- C+ C-



REŠITEV: Pnevmatična krmilna shema s kaskadno metodo za zaporedje: $A^+ B^+ B^- A^- C^+ C^-$
za vajo, doma

$\overline{A} \cdot \overline{B} \cdot \overline{C} \cdot \overline{D}$