

4. Vaja

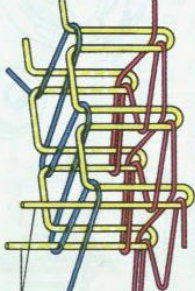
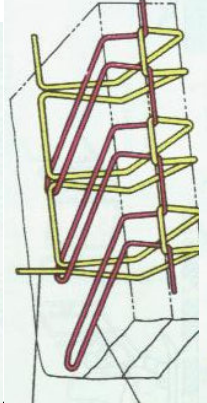
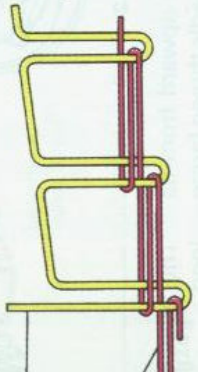
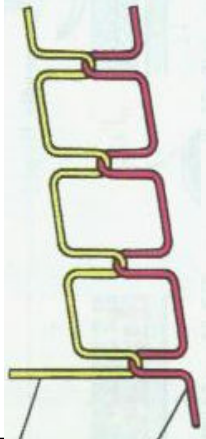
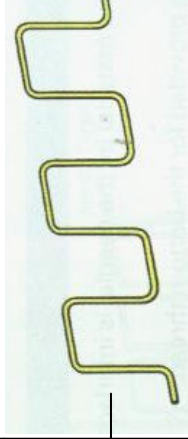
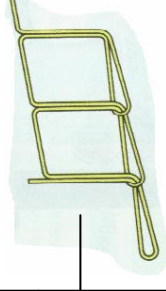
Spoznavanje šivalnih vbodov

Naloga

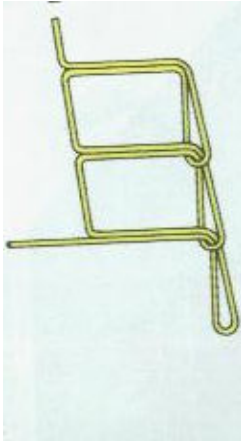
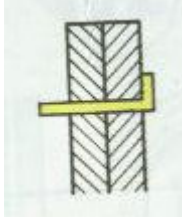




- Namen vaje je določiti porabo sukanca za tip vboda, **301, 304, 401, 404, 501, 502, 503, 602**, če debelina materiala D_m znaša 3 mm, gostota vboda je 4 vb/cm, koeficient stisljivosti pa 1. Razdalja med šivalnima iglama je 4,8 mm, širina vboda pa 4 mm.
- Izračunane dolžine porabe sukanca podaj grafično glede na uporabljen tip vboda in analiziraj.
- V drugem delu naloge izračunaj porabo sukanca pri sestavljanju zunanjega stranskega šiva hlač s kombiniranim vbodom 401+504.

Preglednica 1: Prikaz skupin strojnih vbodov ISO 4915

Številčna oznaka skupine	Vrste in tipi vbodov
<i>Skupina 100</i>	Eno- ali dvoigelni eno- ali večnitni verižni vbodi (npr. tip vboda 101 in 103)
<i>Skupina 200</i>	Enoigelni vbodi brez prepletanja (prvotno ročni vbodi, danes jih izdelujemo deloma tudi strojno s šivalno iglo z dvema konicama), tip vboda 209
<i>Skupina 300</i>	Eno- do triigelni prešivni vbodi oblikovani iz dveh nitnih sistemov, igelne niti in lovilčeve niti, tip vboda 301.
<i>Skupina 400</i>	Eno- do triigelni ojačeni verižni vbodi iz dveh nitnih sistemov, tip vboda 401.
<i>Skupina 500</i>	Eno- in dvoigelni ometični verižni vbodi iz enega ali dveh nitnih sistemov pri čemer prenaša poseben lovilnik petlje čez rob šivanca, da se zapletejo z igelnim sukancem, tip vboda 502.
<i>Skupina 600</i>	Dvo- do štiriigelni kritni verižni vbodi, izdelani iz treh nitnih sistemov, igelne niti, lovilčeve niti in kritne niti, tip vboda 602.

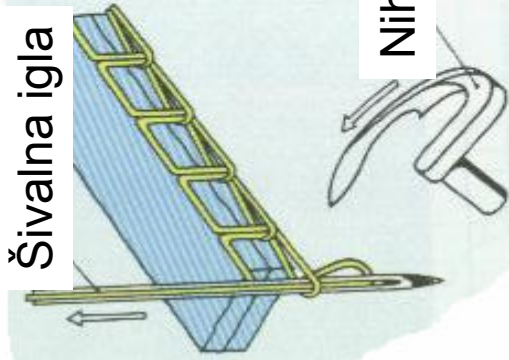


Tip vboda 101

Tip vboda	Prečni prerez	Izgled šiva z vbodom
101 		
103 		

Izdelava vboda ISO 101

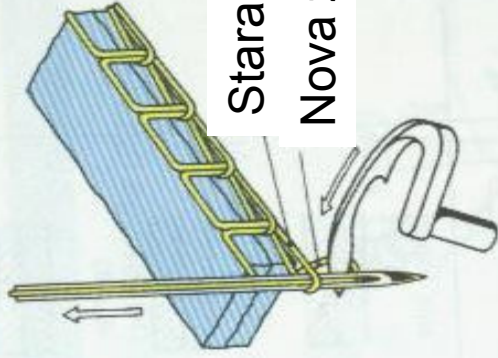
Šivalna igla



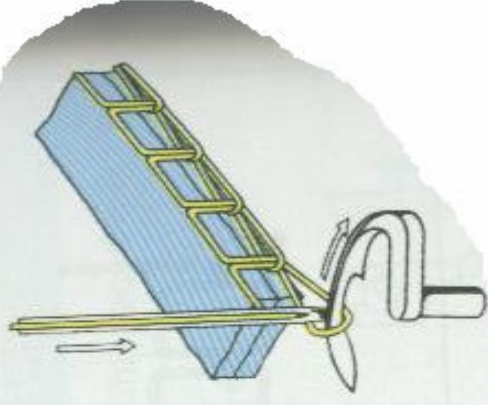
Nihajoči lovilec




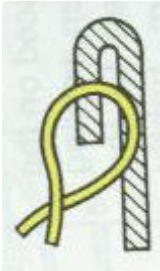

Stara zanka



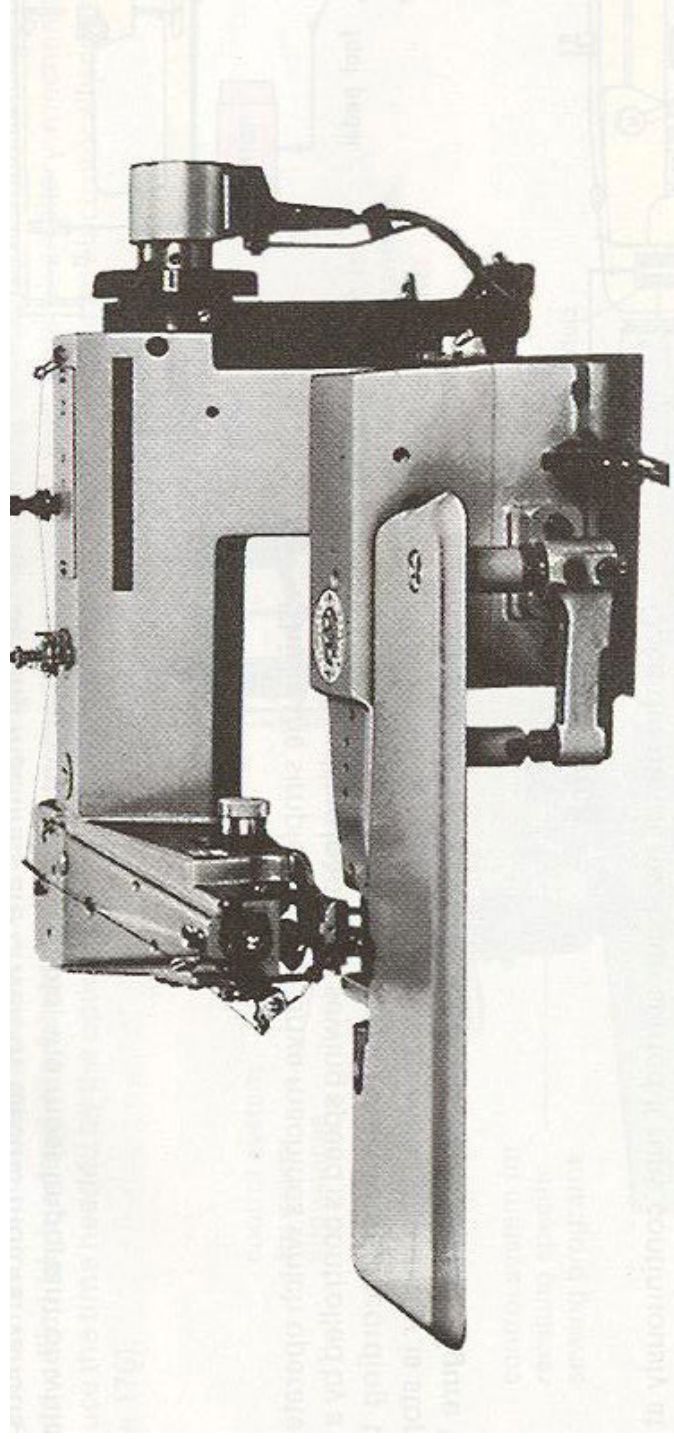
Nova zanka



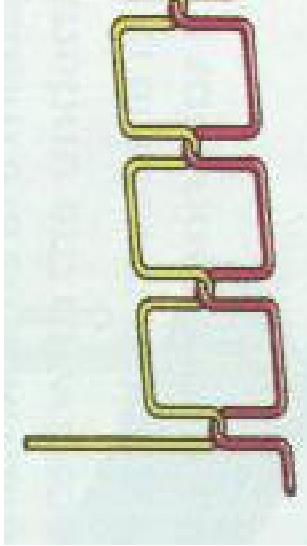
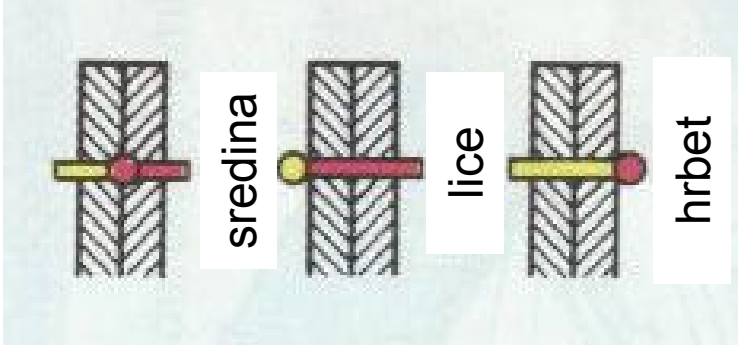
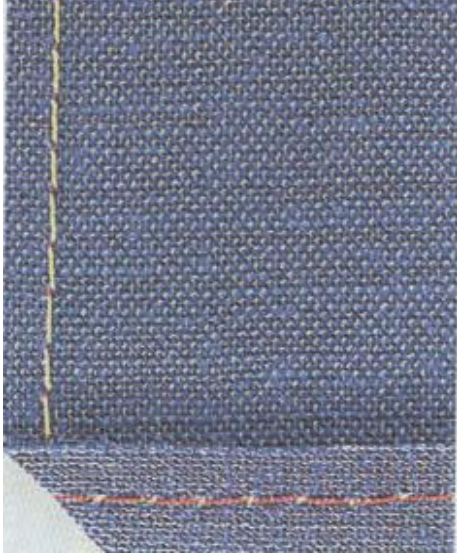
Tip vboda 103 –slepi vbod

Tip vboda	Prečni prerez	Izgled šiva z vbodom
103 		

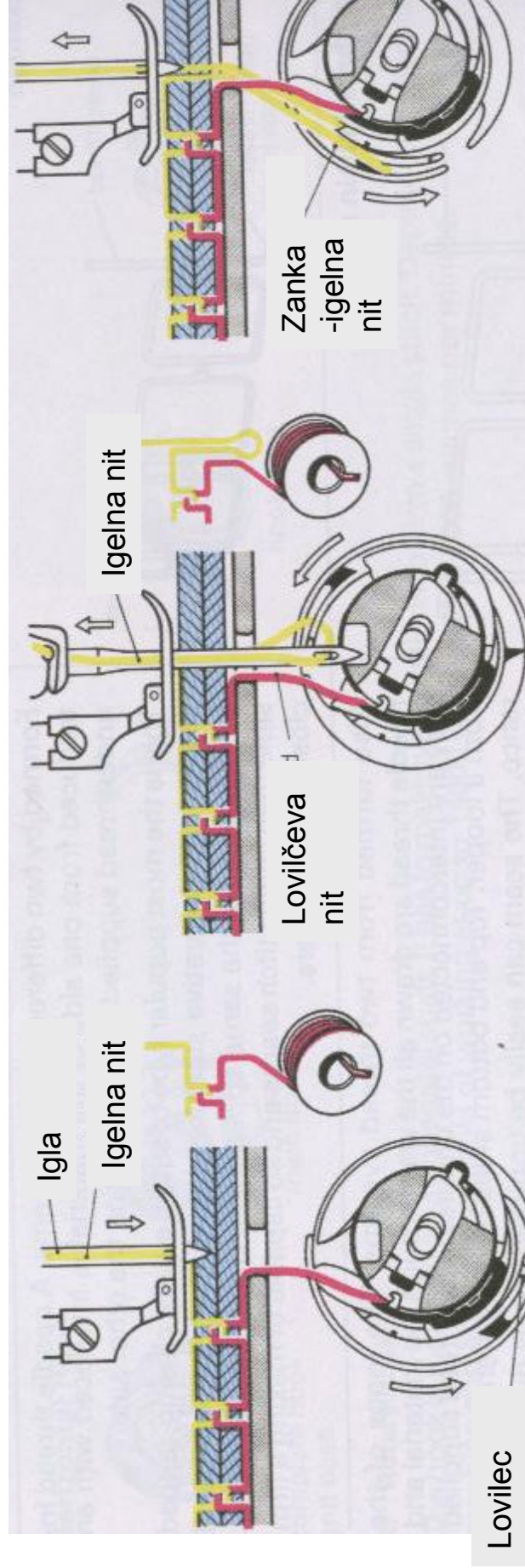
Šivalni stroj, ki šiva s slepim vbodom tip vboda 103



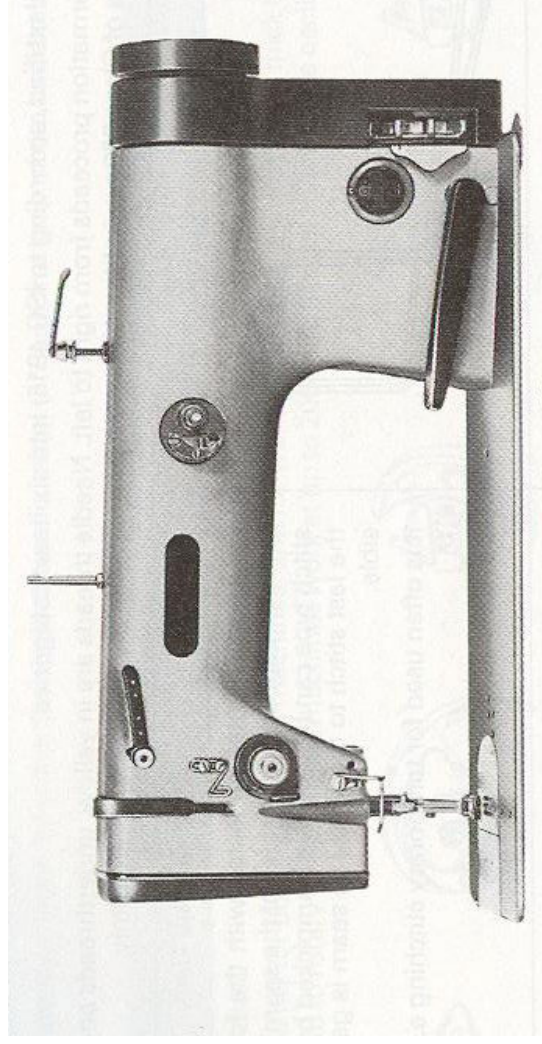
Pomembnejši vbodi po ISO 4915

Tip vboda	Prečni prerez	Izgled šiva z vbodom
301 		

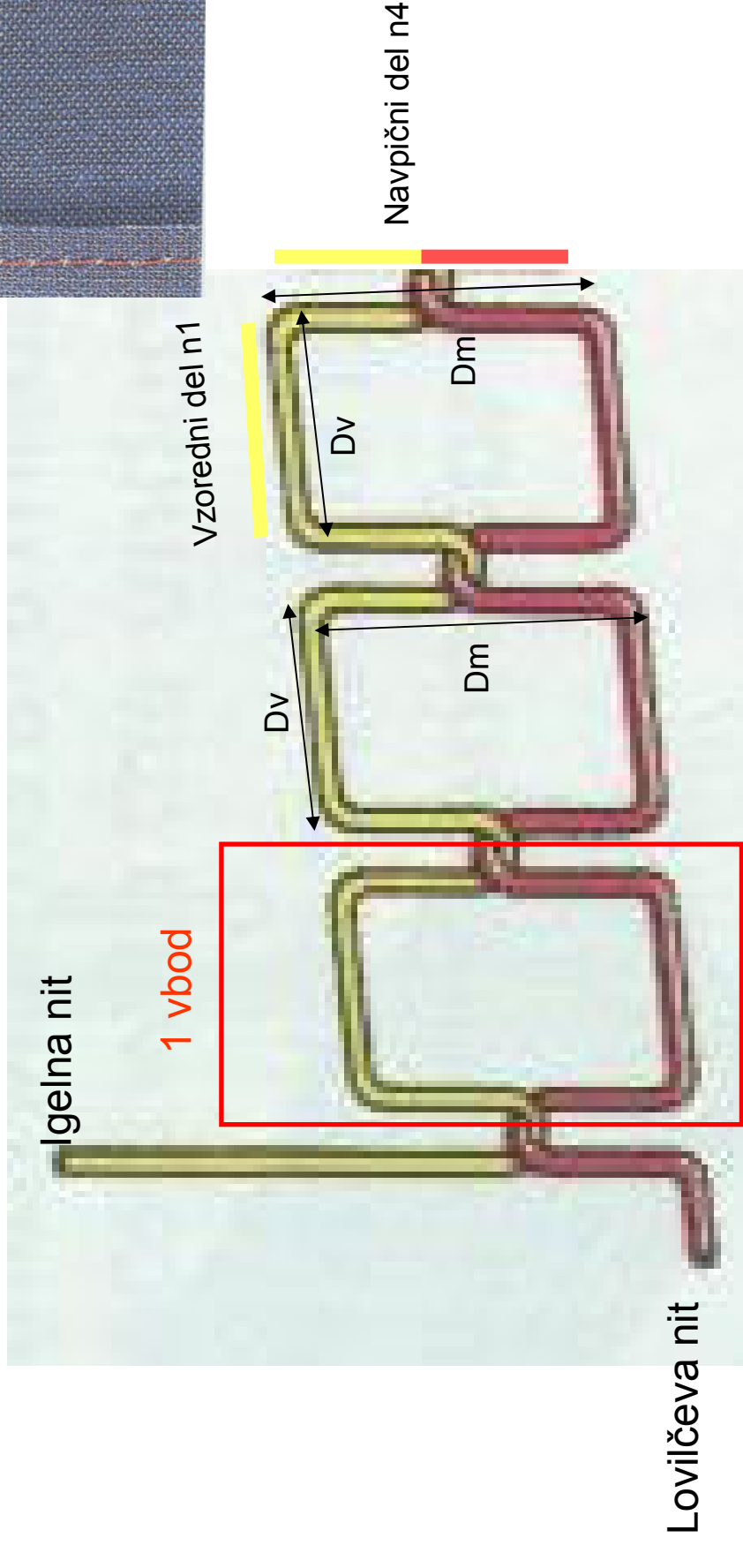
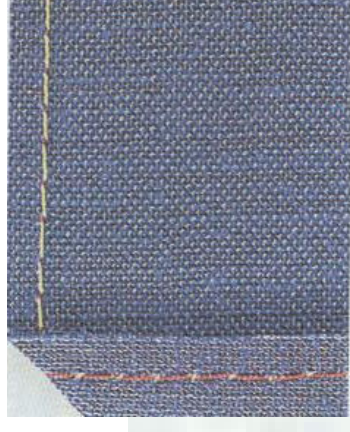
Izdelava vboda 301



Šivalni stroj, ki šiva s prešivnim vbodom tip vboda 301



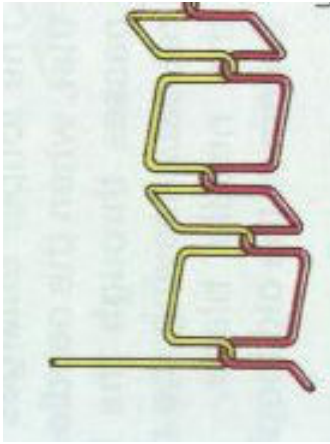
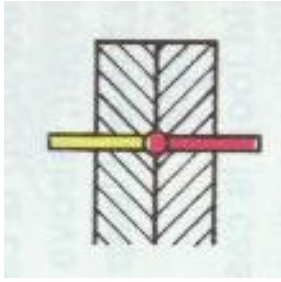

Izgled vboda 301



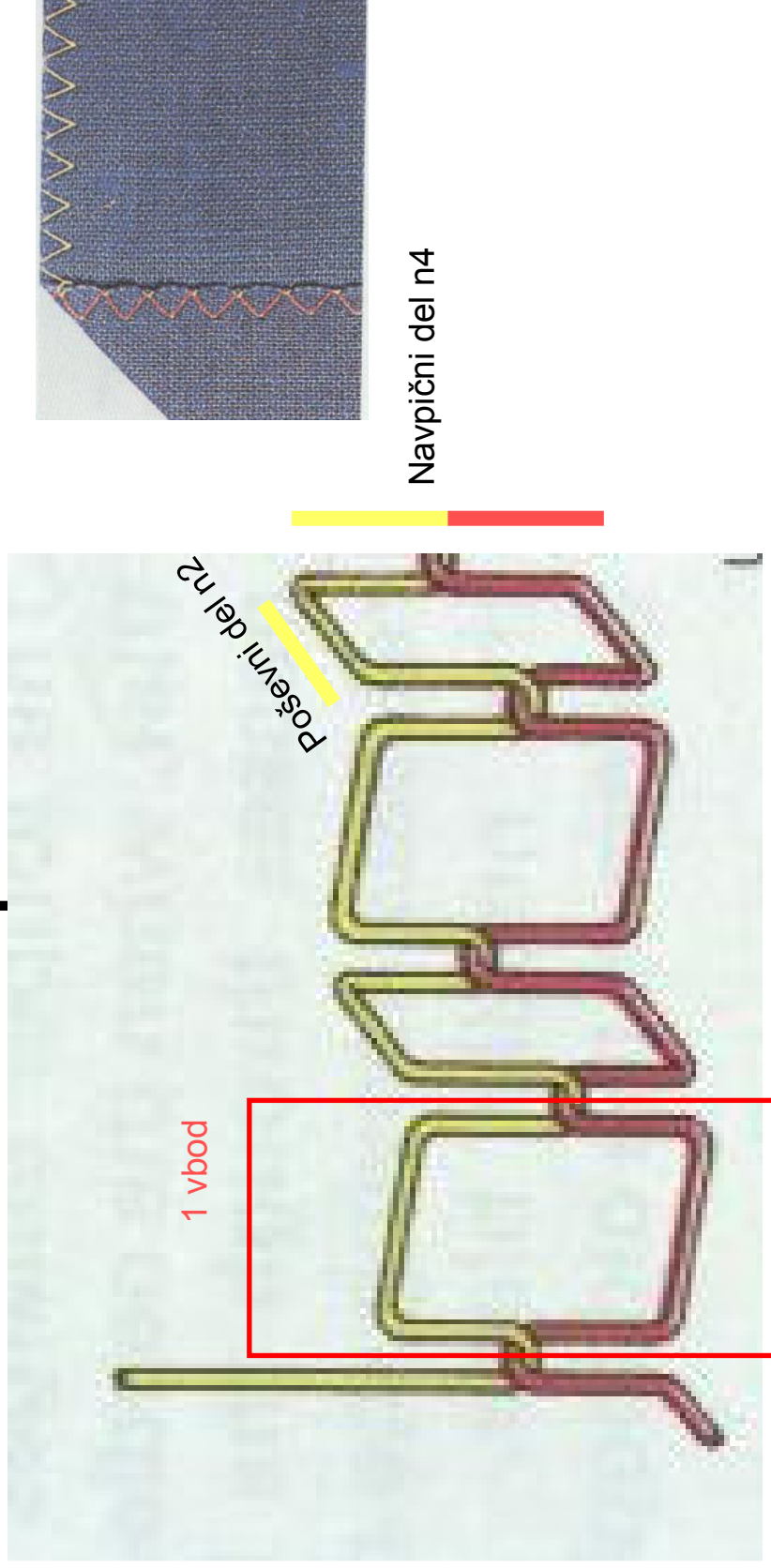
Izračun porabe sukanca za en vbod

~~$$L_{301} = N(n_1 \cdot D_v + n_2 \cdot \check{S}_v + n_3 \cdot \sqrt{D_v^2 + \check{S}_v^2} + n_4 \cdot k \cdot D_m)$$~~

Tip vboda 304 –cik-cak

Tip vboda	Prečni prerez	Izgled šiva z vbodom
<p>304</p> 		

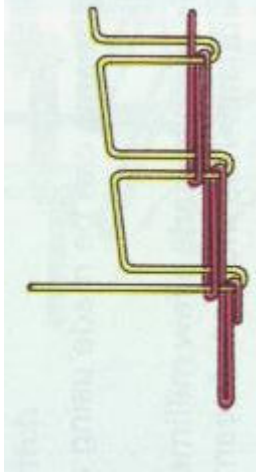
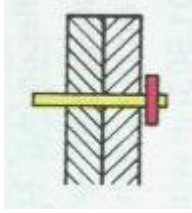

Tip vboda 304



Izračun porabe sukanca za en vbod (N=1)

$$L = N(n_1 \cdot D_v + n_2 \cdot \check{S}_v + n_3 \cdot \check{S}_v + n_4 \cdot k \cdot D_m)$$

Tip vboda 401

Tip vboda	Prečni prerez	Izgled šiva z vbodom
401 		

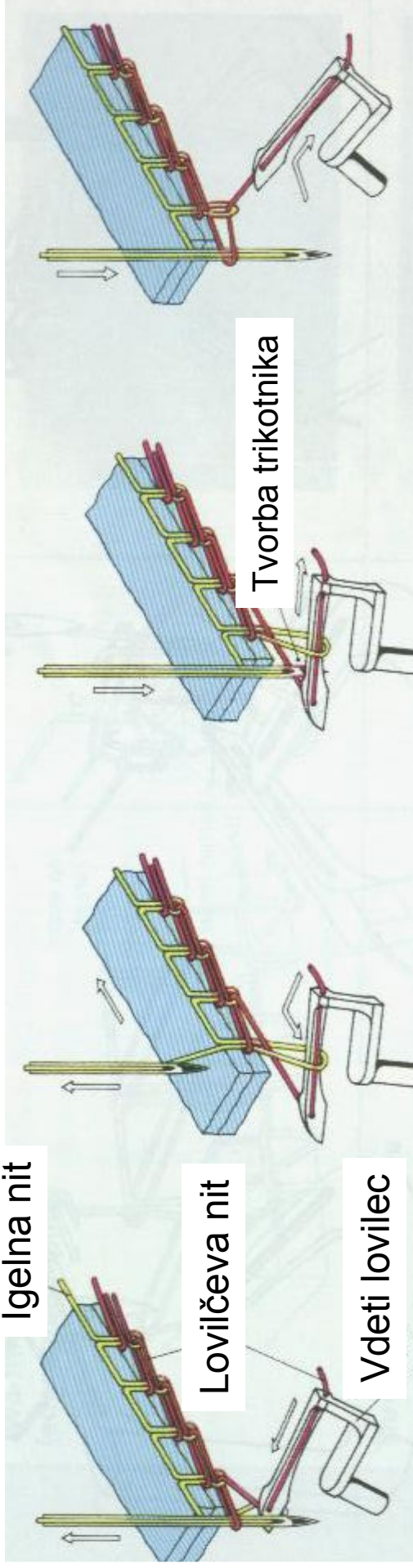
Izdelava vboda 401

Igelna nit

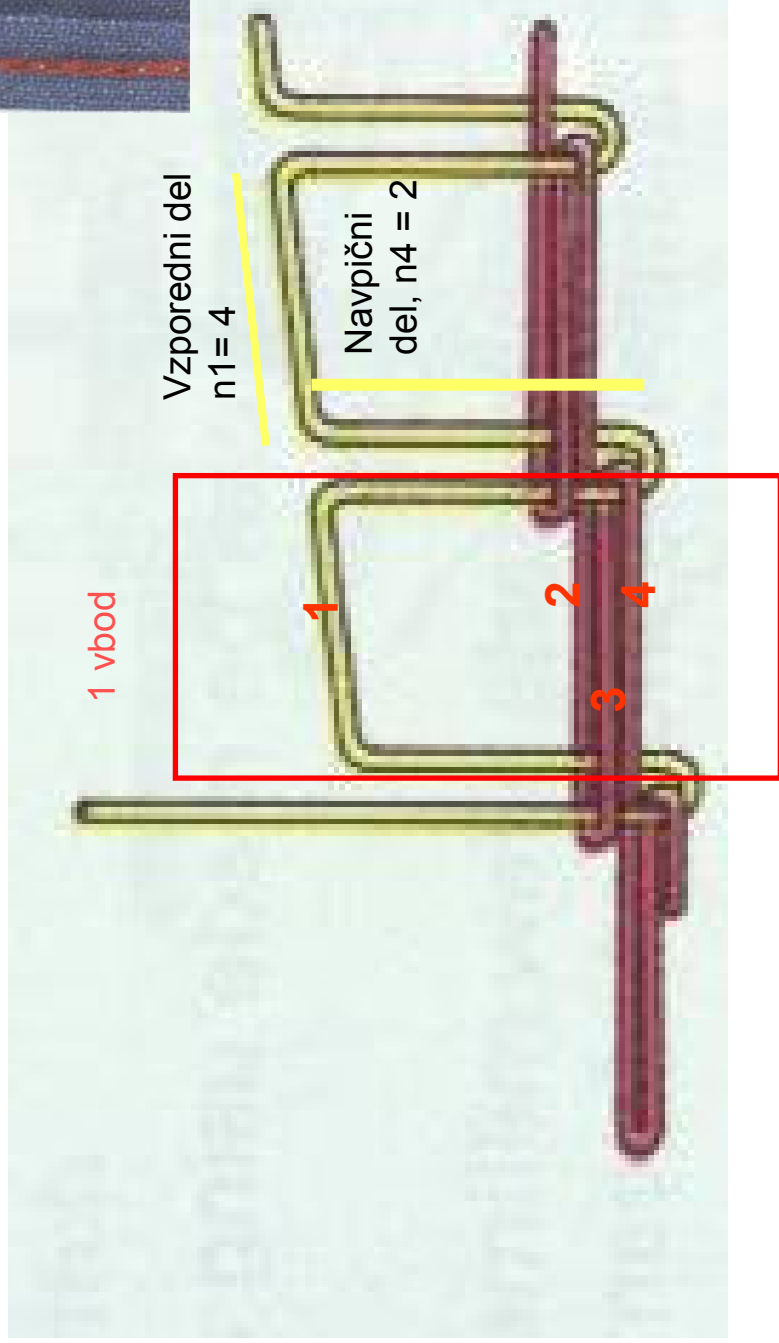
Lovilčeva nit

Vdreti lovilec

Tvorba trikotnika

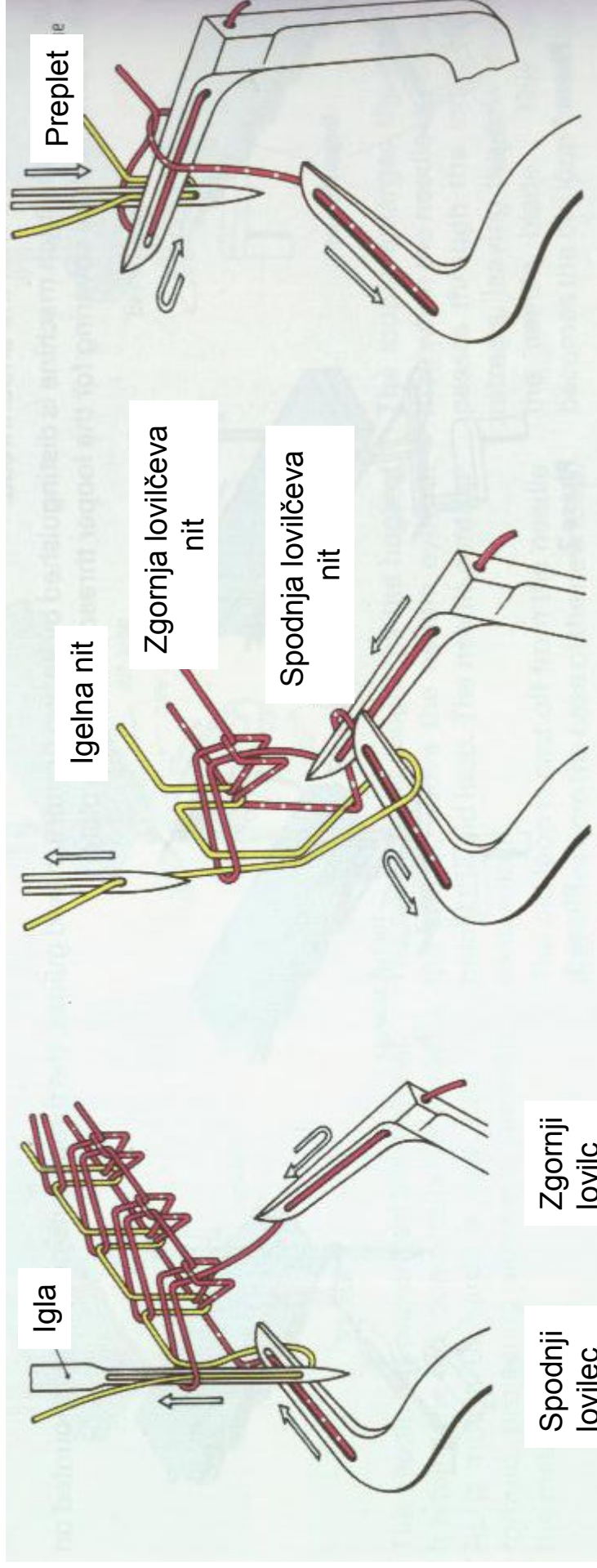


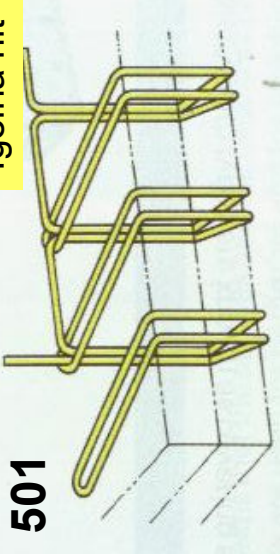
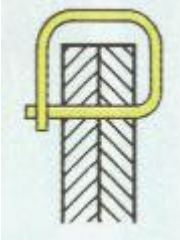

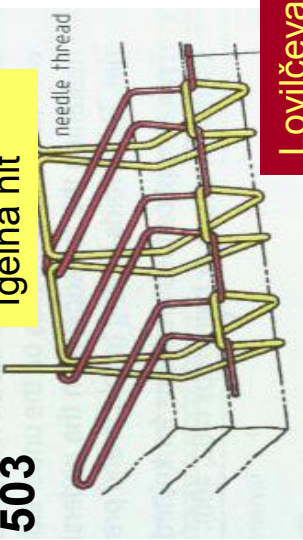
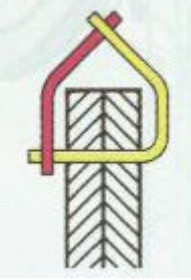

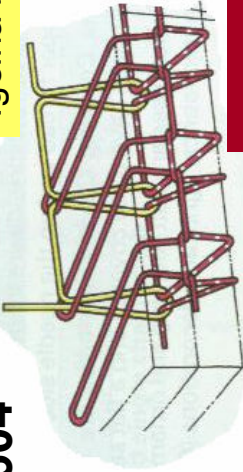
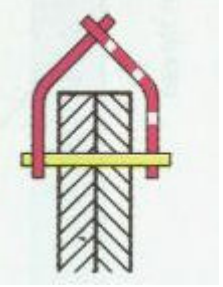
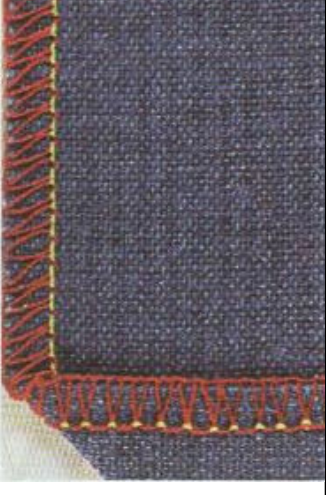
Tip vboda 401



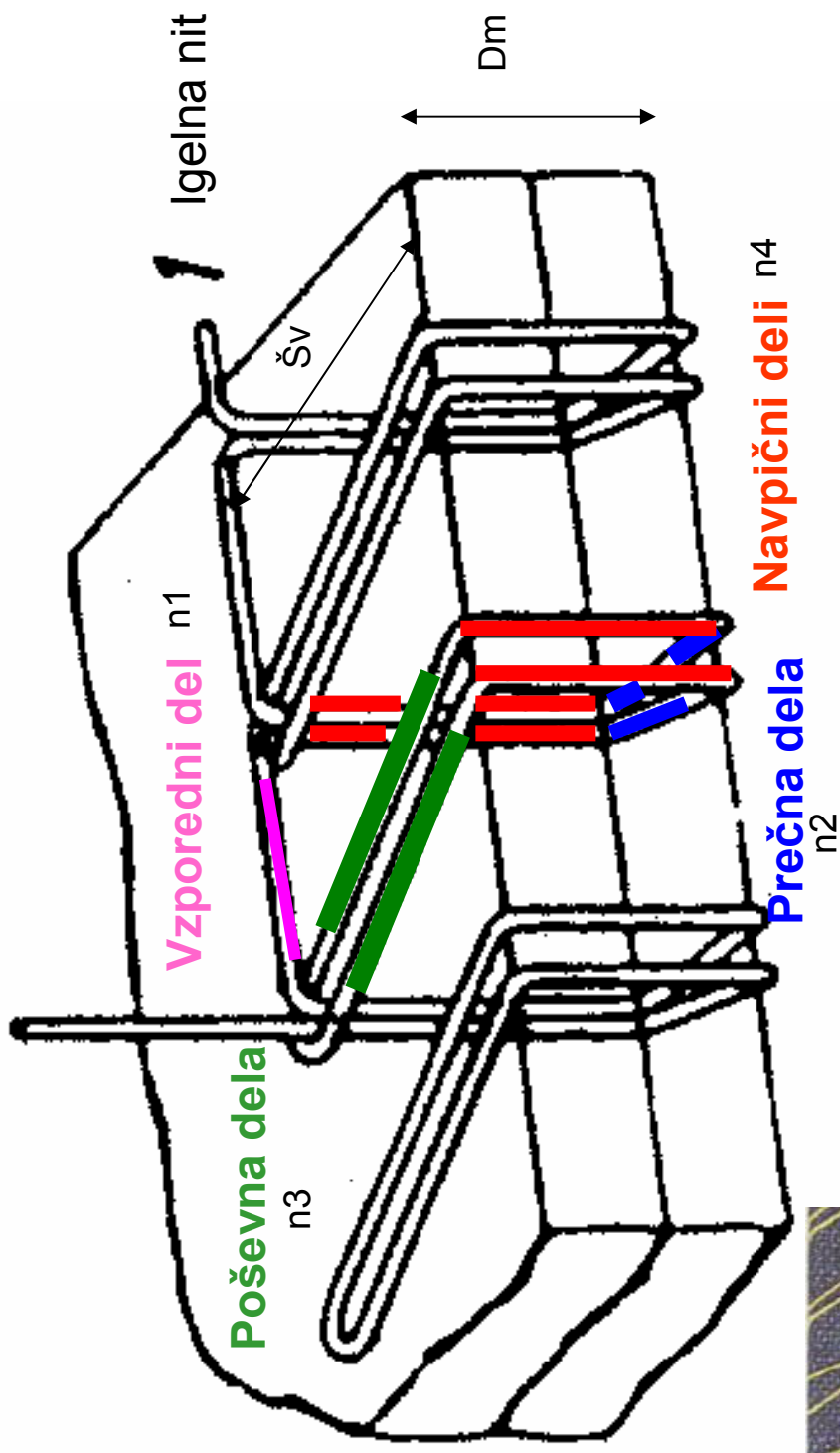
$$L = N(n_1 \cdot D_v + n_2 \cdot \check{S}_v + n_3 \cdot \sqrt{D_v^2 + \check{S}_v^2} + n_4 \cdot k \cdot D_m)$$

Izdelava vboda 504

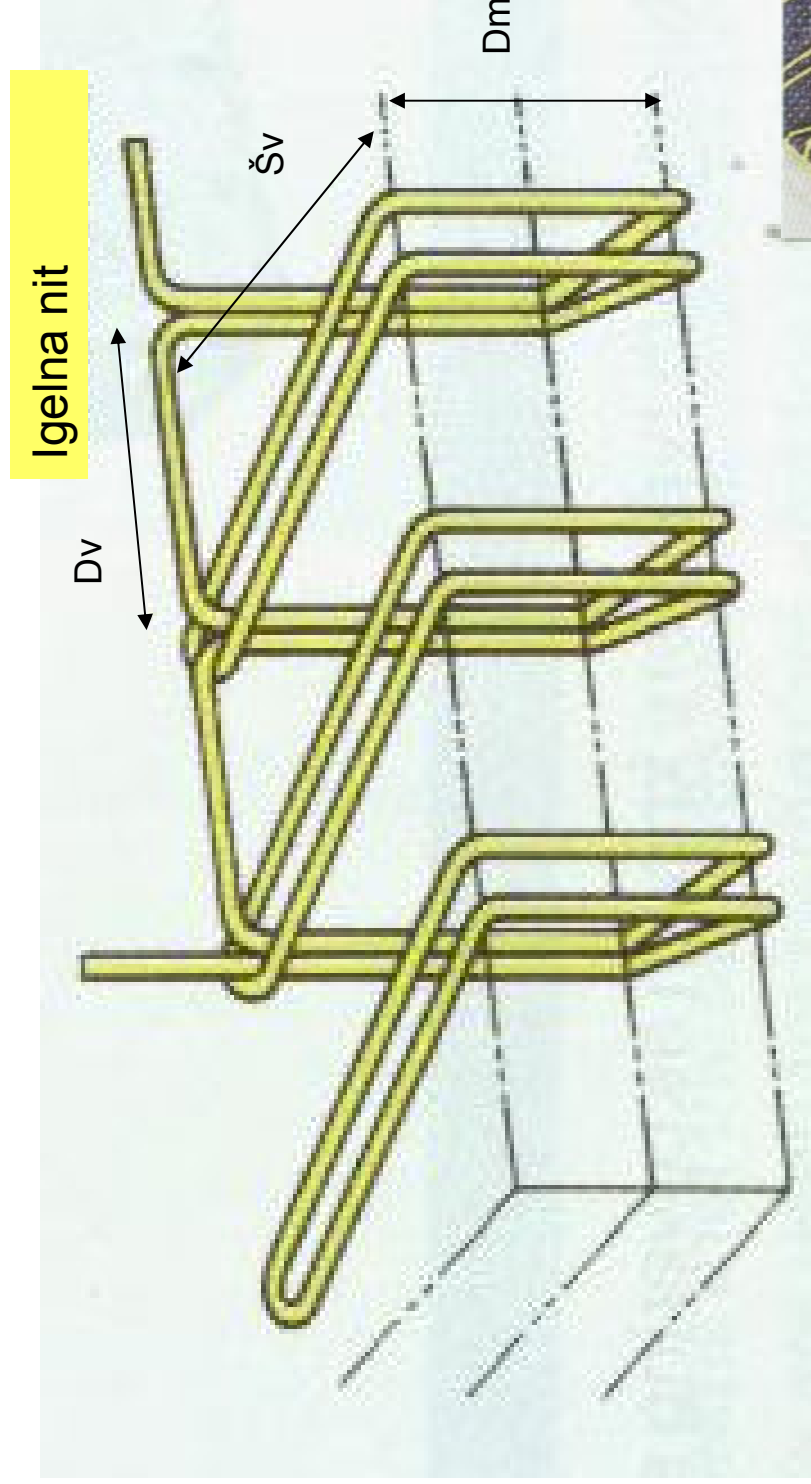


Tip vboda	Prečni prerez	Izgled šiva z vbodom
<p>501</p>  <p>Igelna nit</p>		
<p>503</p>  <p>Igelna nit</p> <p>needle thread</p>		
<p>504</p>  <p>Igelna nit</p> <p>Lovilčeva nit</p>		

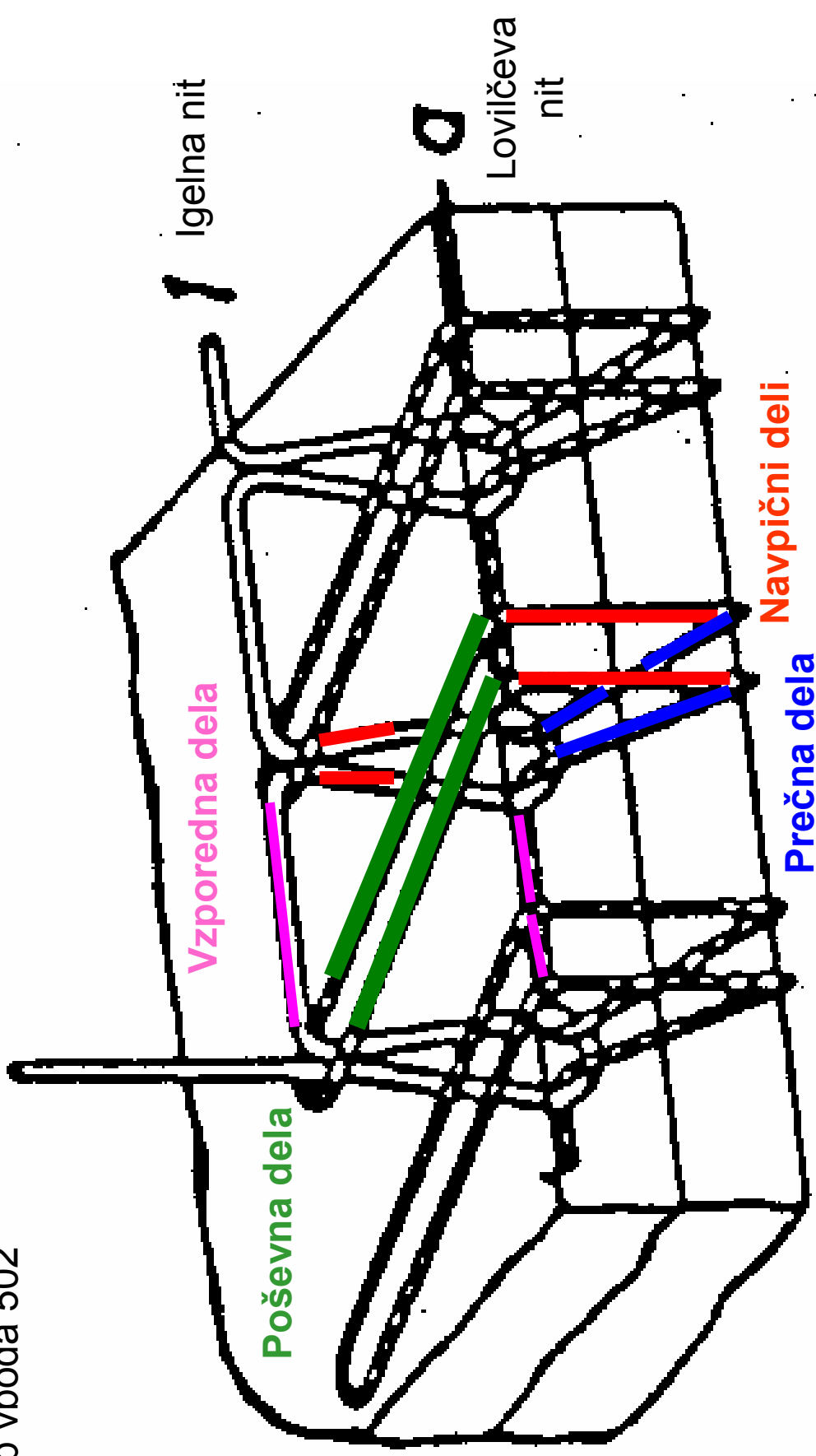
Tip vboda 501



$$L = N(n_1 \cdot D_v + n_2 \cdot \check{S}_v + n_3 \cdot \sqrt{D_v^2 + \check{S}_v^2} + n_4 \cdot k \cdot D_m)$$

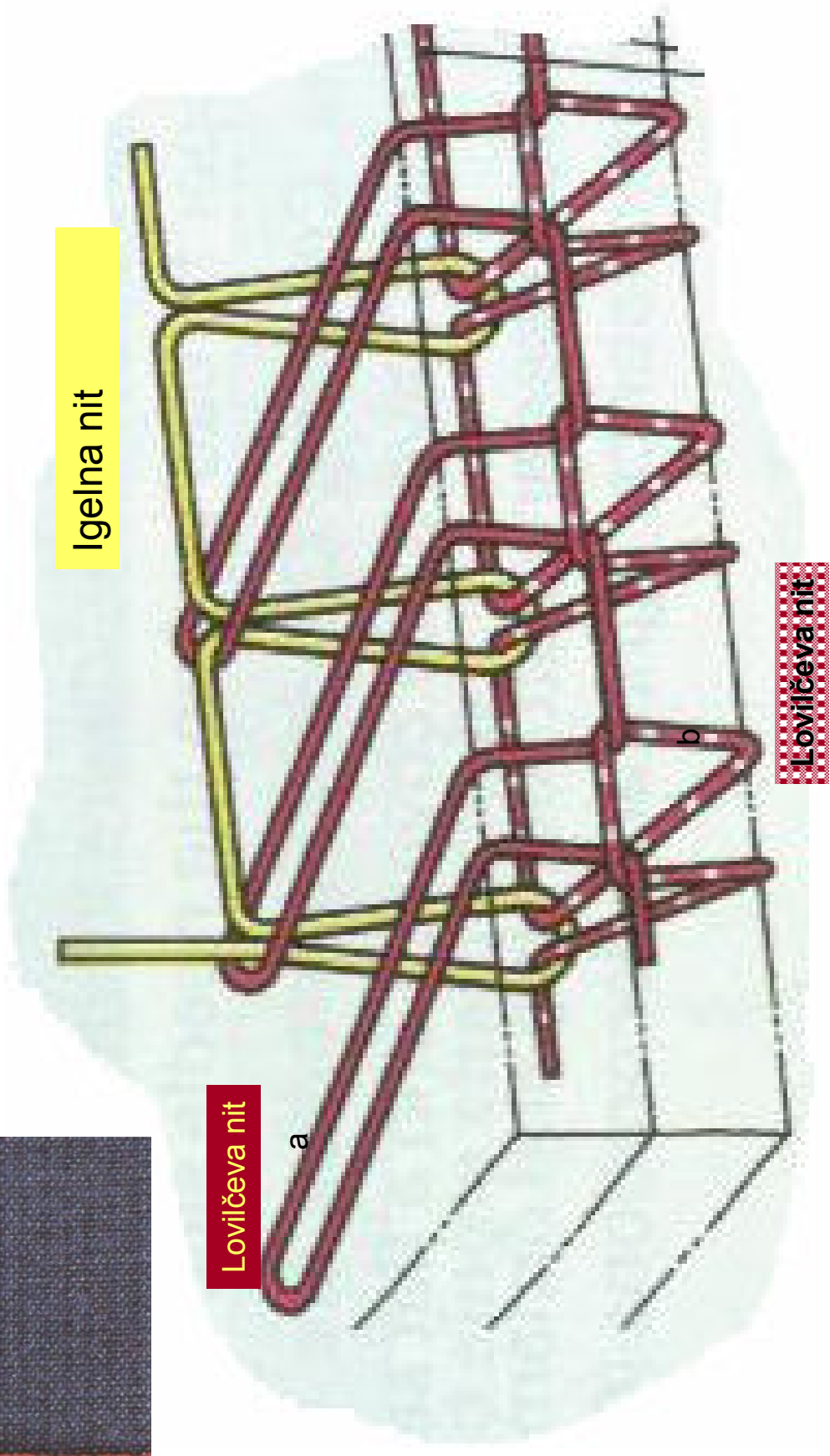
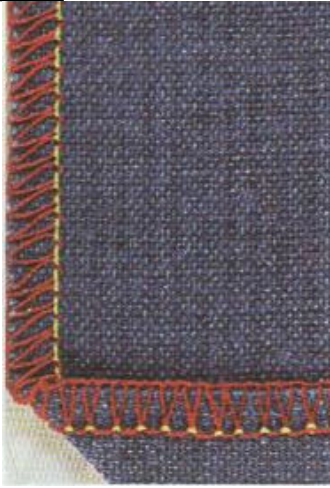


Tip vboda 502



Uporaba: robljenje tkanin in pletenin ter vseh sestavljanje vseh vrst usnja

Tip vboda 504

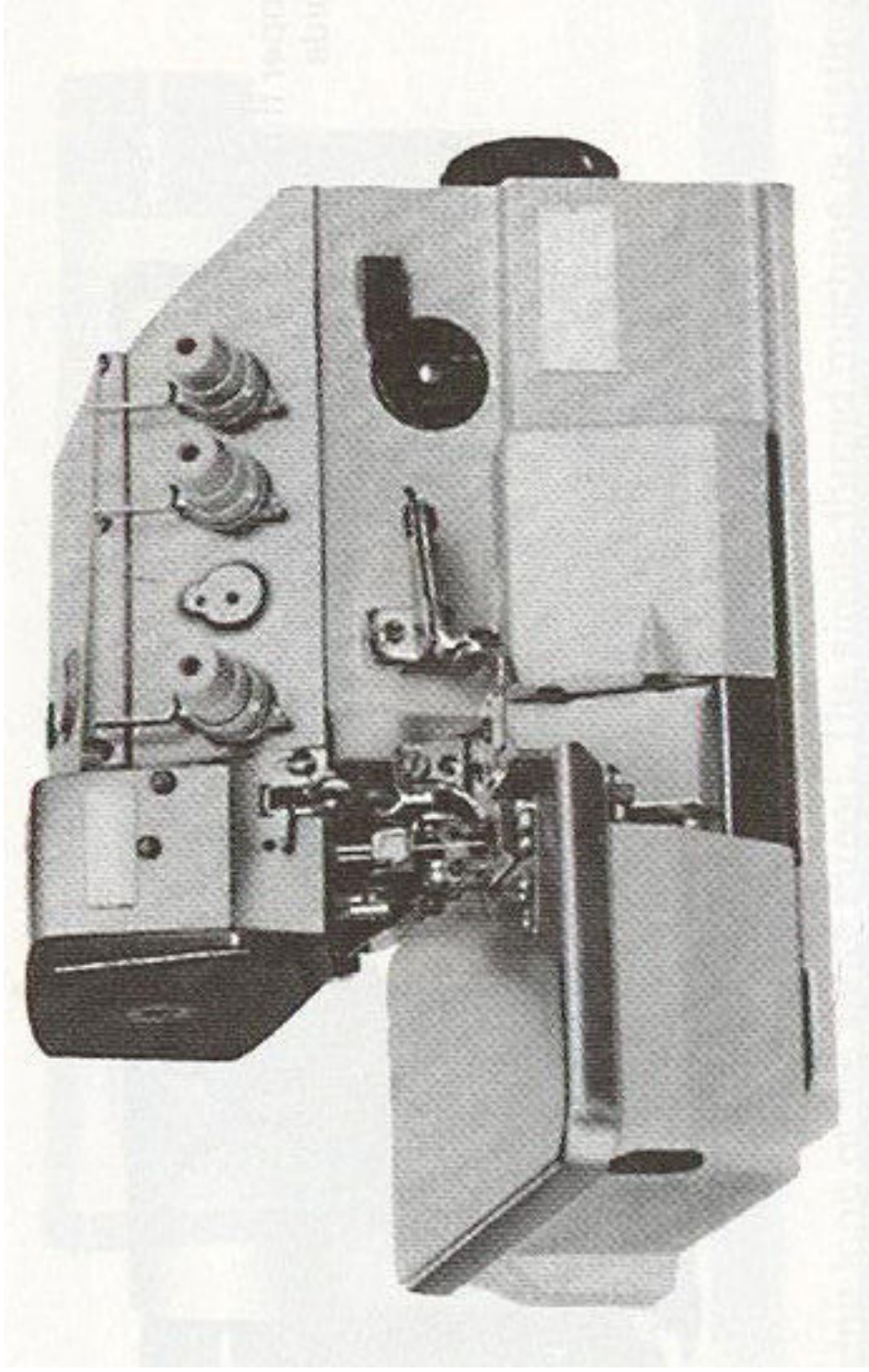


Igelna nit

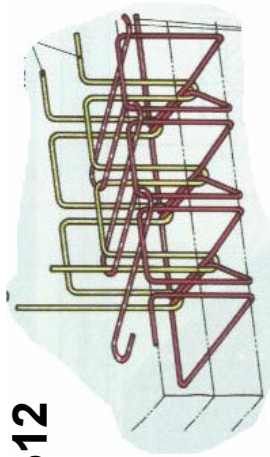
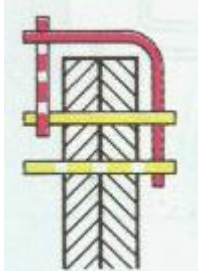
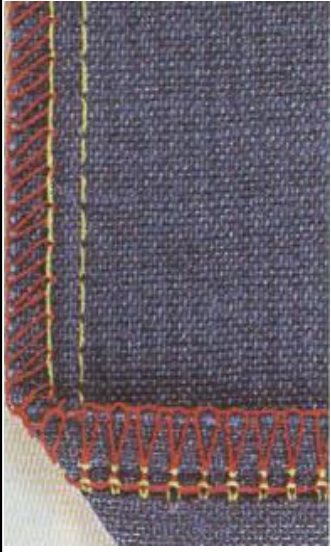
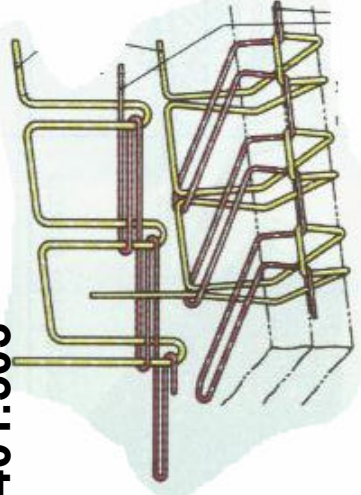
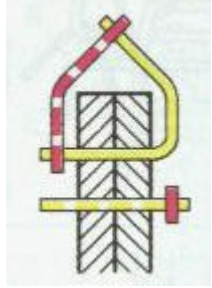

Lovilčeva nit

Lovilčeva nit

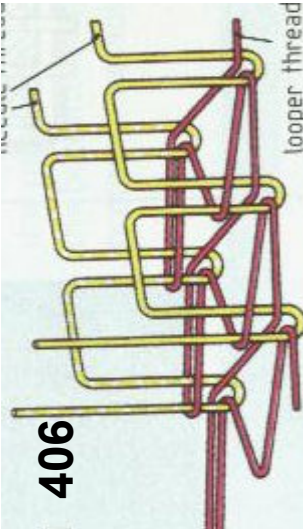
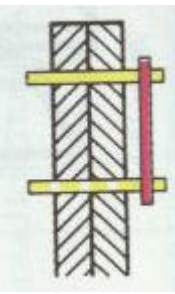

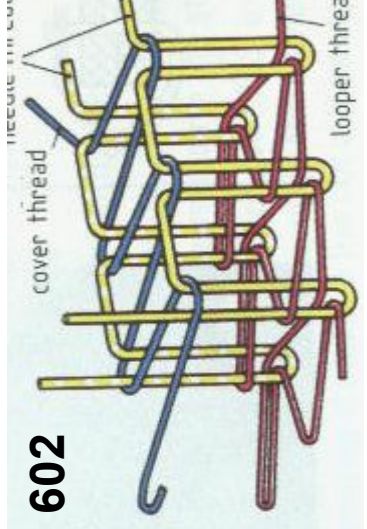
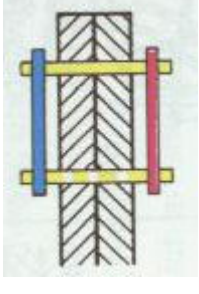

Stroj, ki šiva s tipi vbodov skupine 500



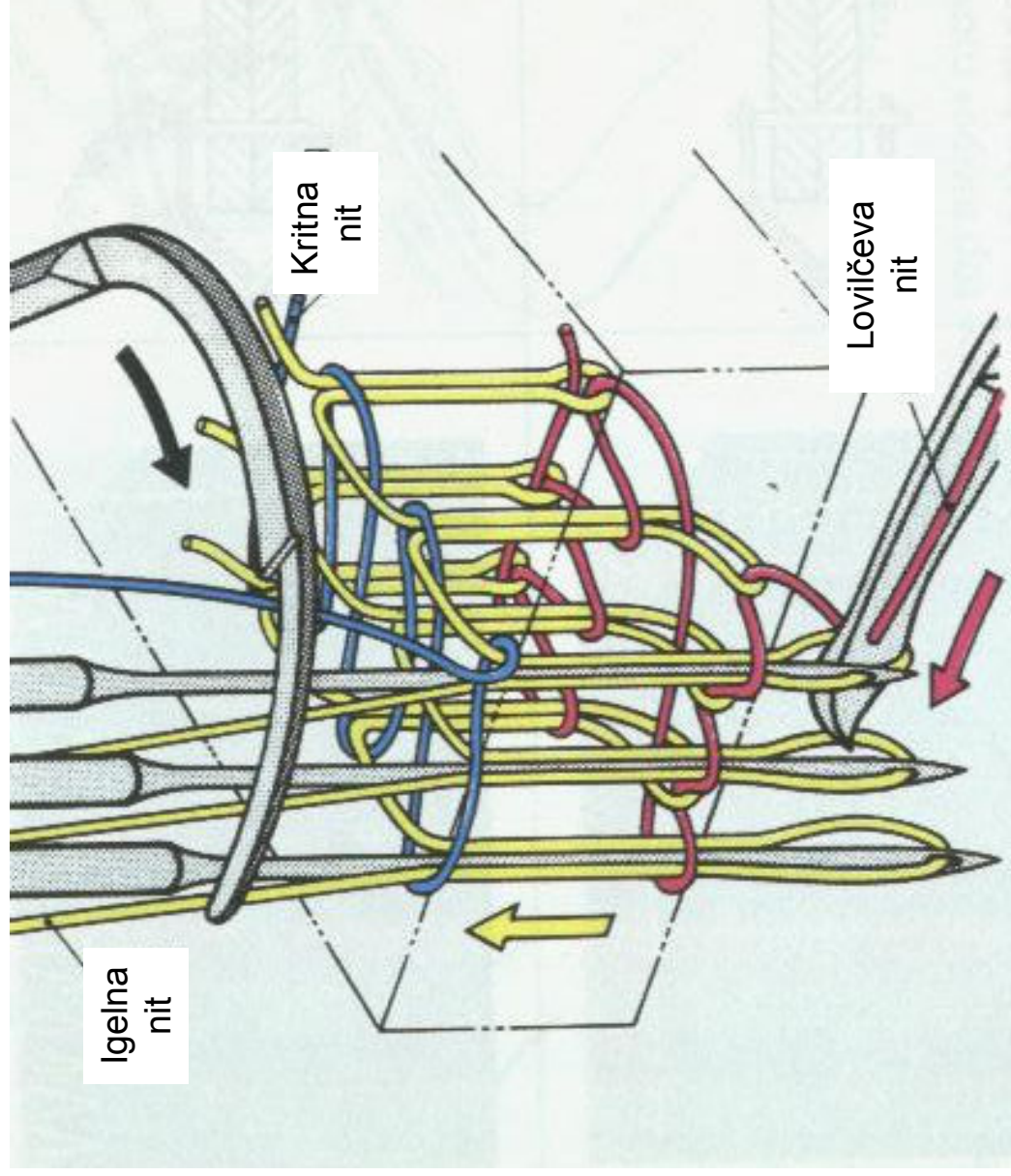
Kombinirani vbodi

Tip vboda	Prečni prerez	Izgled šiva z vbodom
512 		
401.503 		

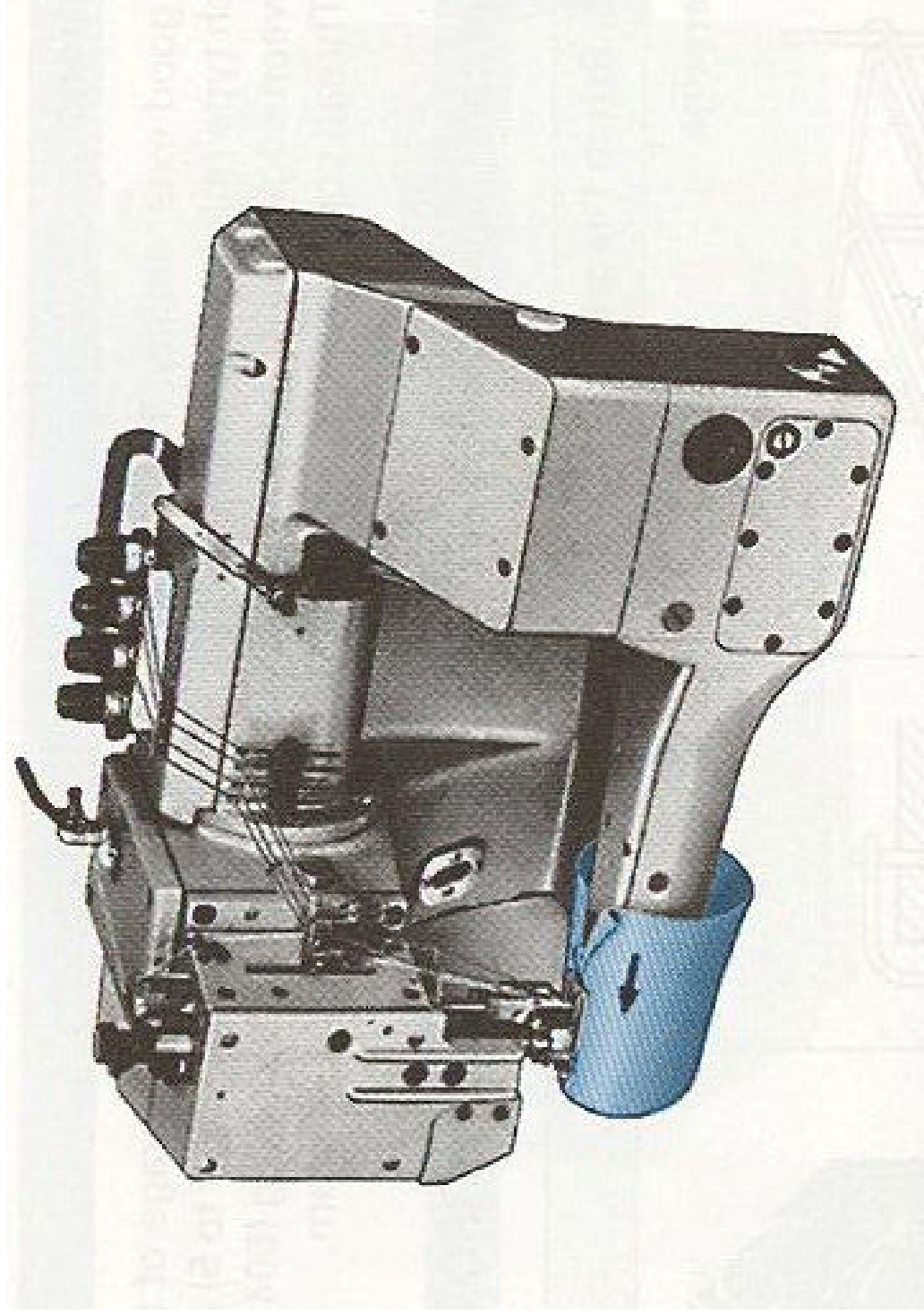
Kritni vbodi

Tip vboda	Prečni prerez	Izgled šiva z vbodom
 <p>406</p> <p>looper thread</p>		
 <p>602</p> <p>cover thread</p> <p>looper thread</p>		

Izdelava kritnih vbodov



Stroj, ki šiva s tipi vbodov skupine 600





Tip vboda 602

