

HYDROMECHANICKÉ PROCESY

Náplňové a patrové kolony (přednáška)

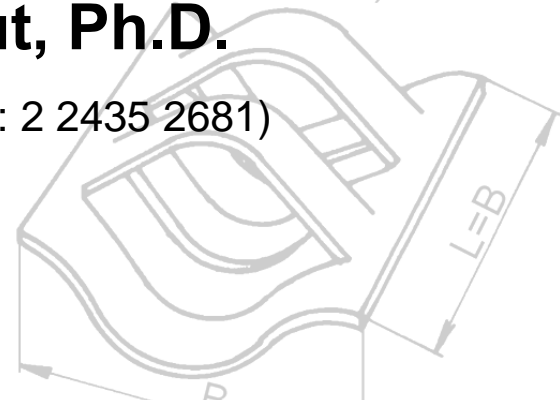
a)

b)

c)

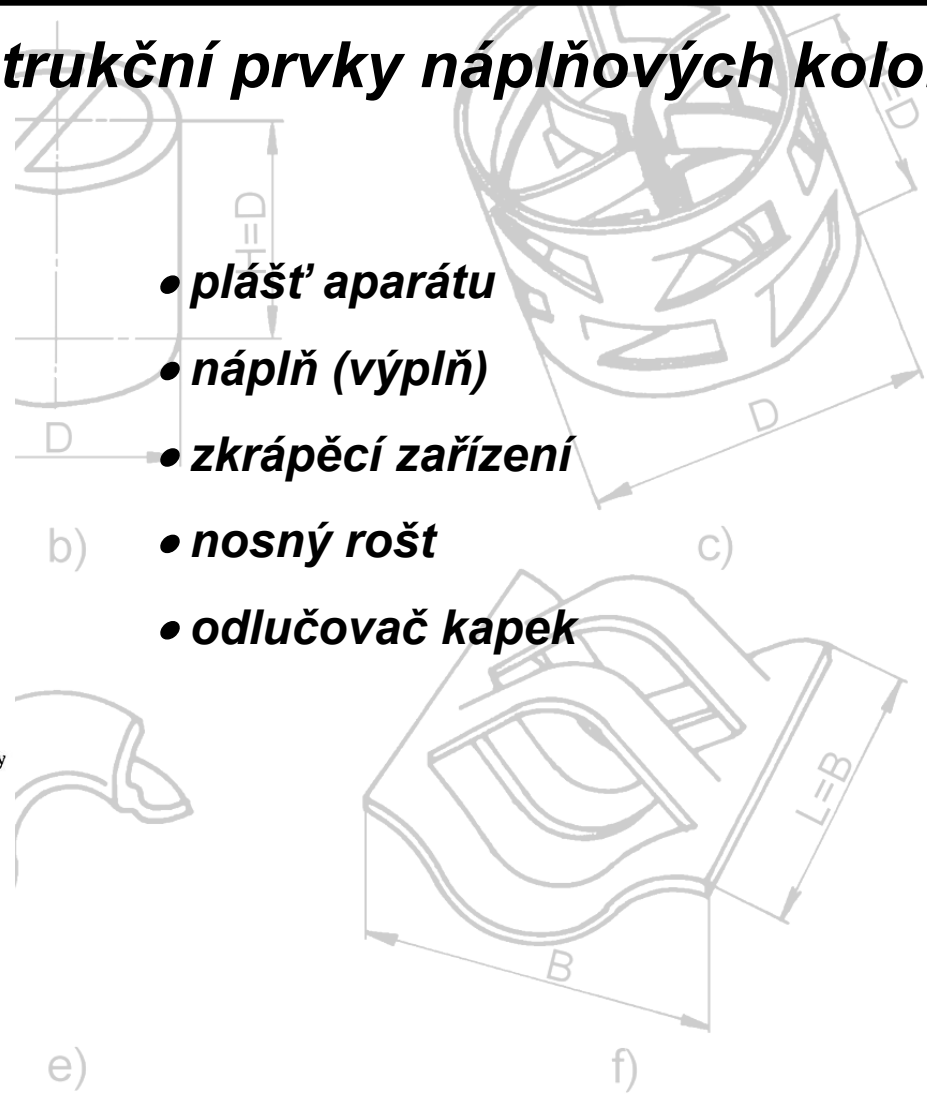
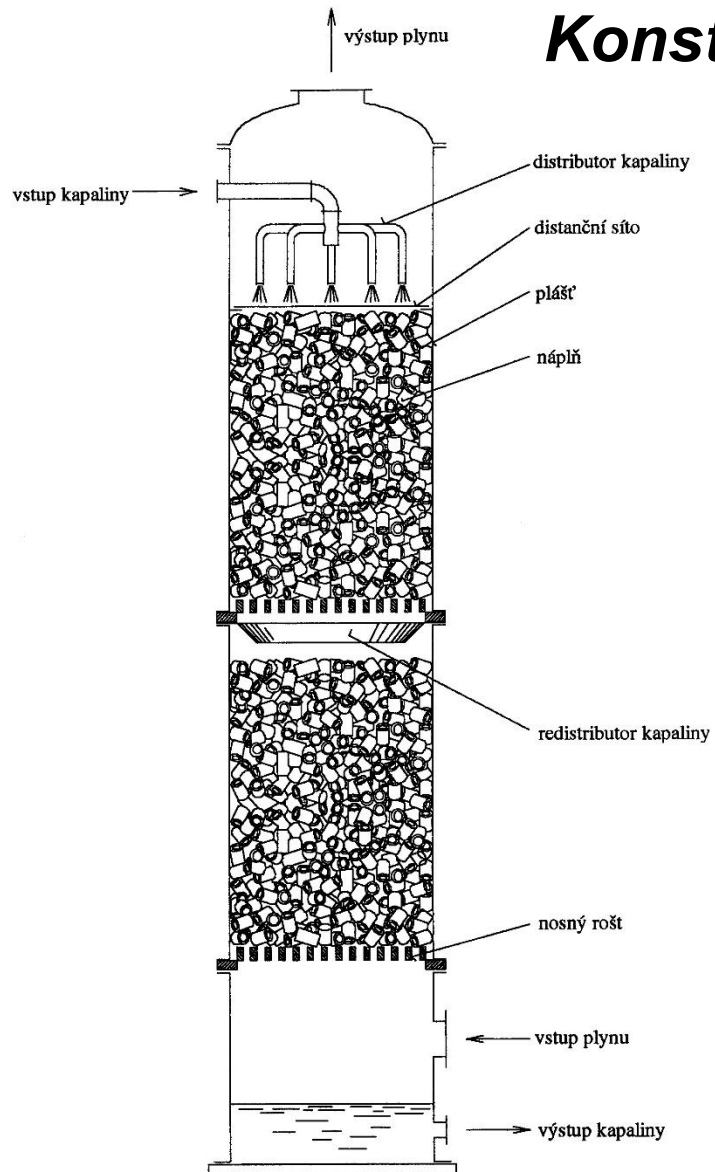
Prof. Ing. Tomáš Jirout, Ph.D.

(e-mail: Tomas.Jirout@fs.cvut.cz, tel.: 2 2435 2681)



NÁPLŇOVÉ KOLONY

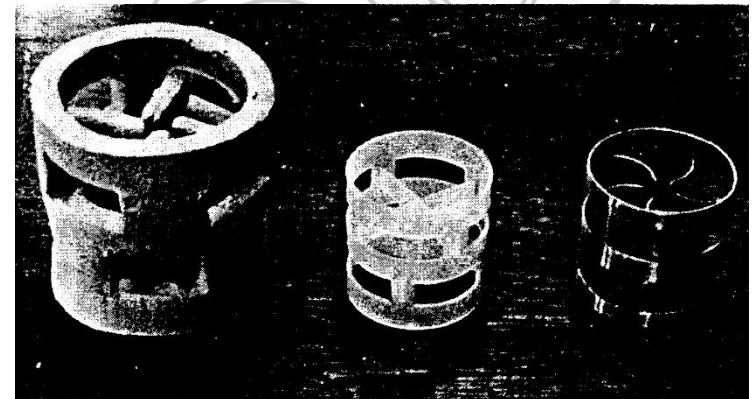
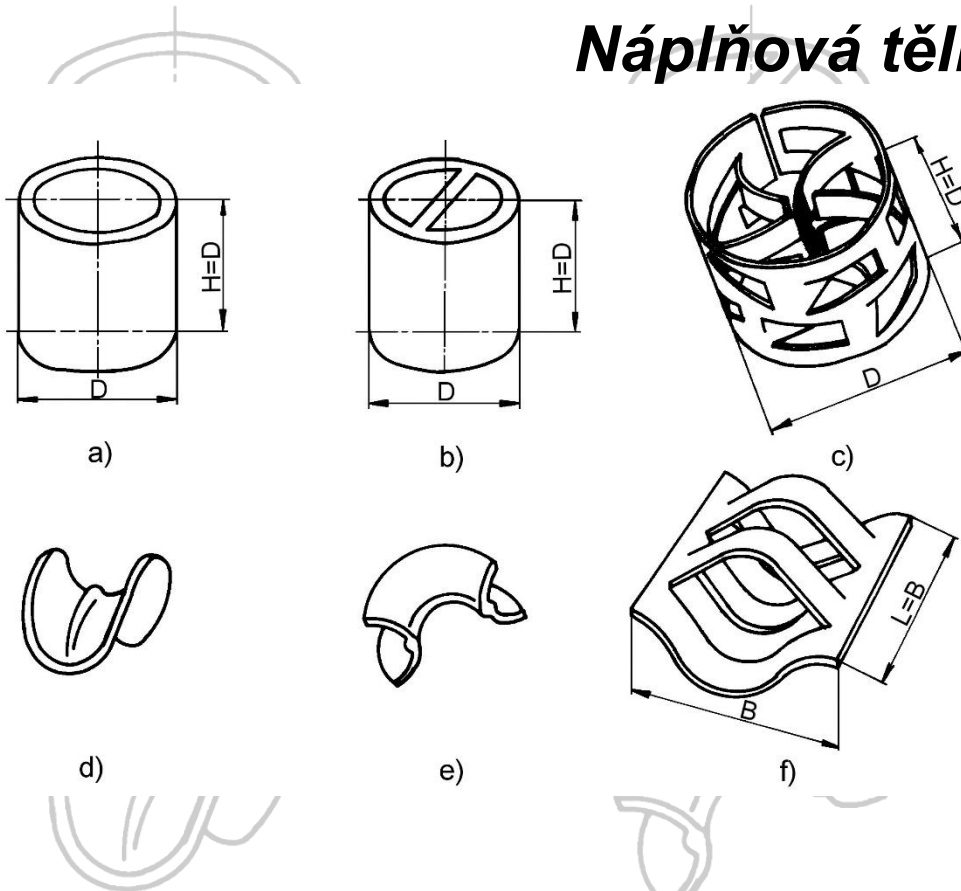
Konstrukční prvky náplňových kolon



- plášť aparátu
- náplň (výplň)
- zkrápěcí zařízení
- nosný rošt
- odlučovač kapek

Náplň (výplň)

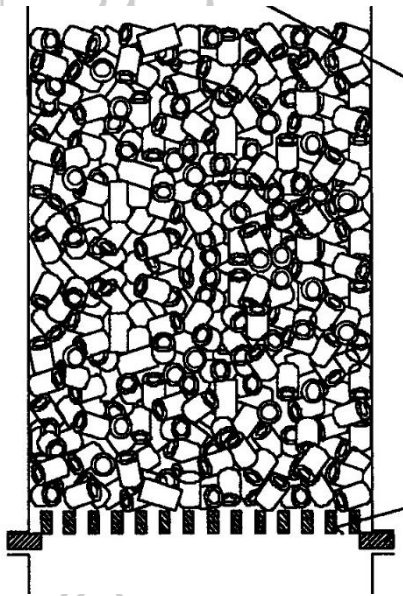
Náplňová tělíska



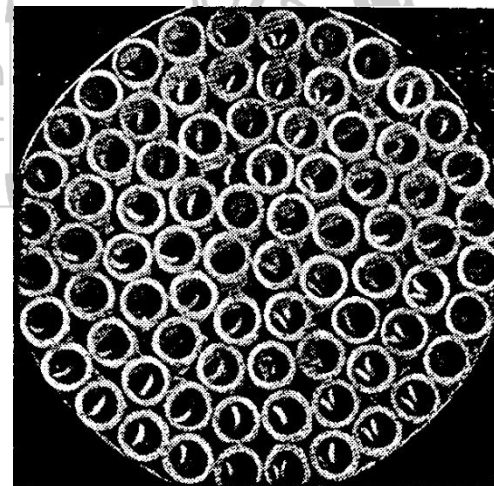
a – Raschigův kroužek, **b** – Lessingův kroužek, **c** – Pallův kroužek, **d** – Berlovo sedlo, **e** – sedlo Intalox, **f** – tělísko Interpack

Vrstva náplňových tělísek

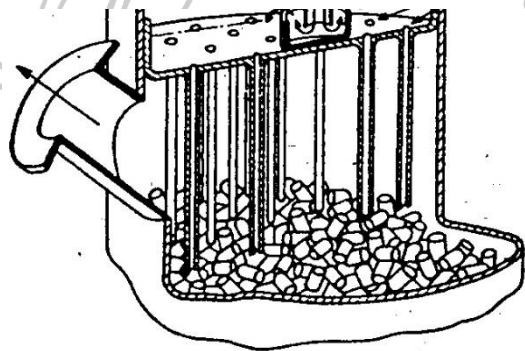
Volně sypaná vrstva



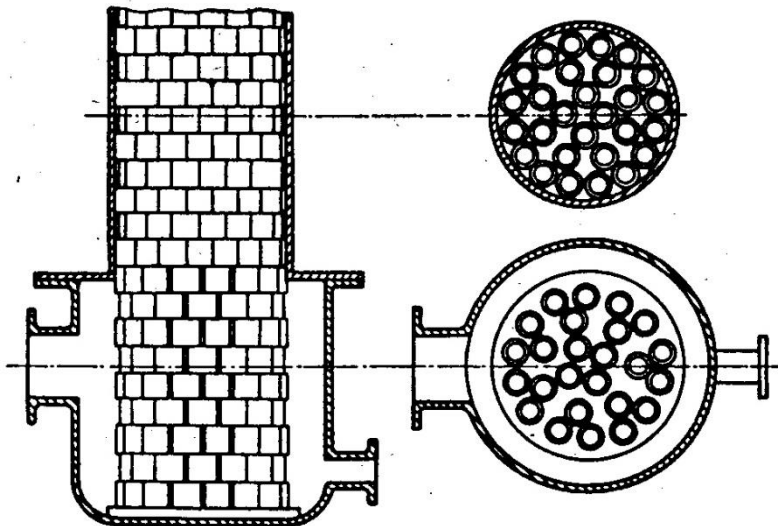
Pravidelně ukládaná vrstva



b)

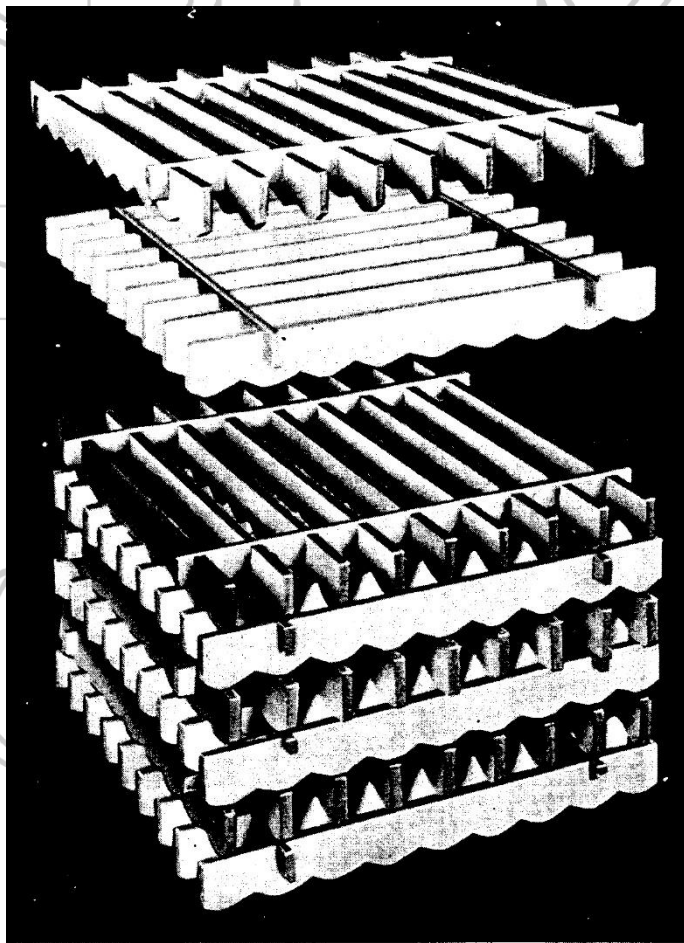


e)

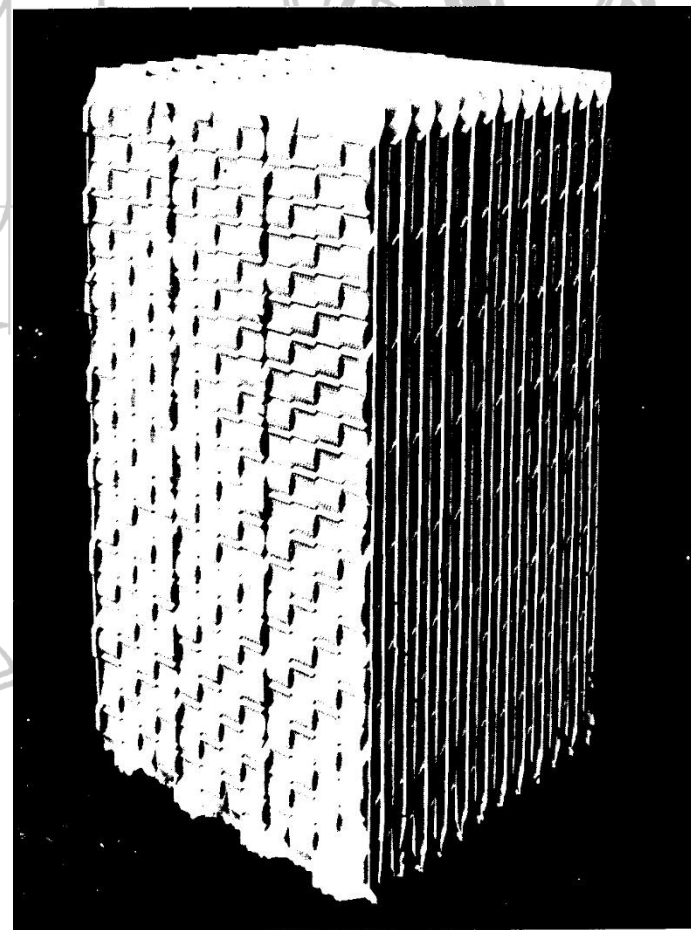


Výplně

Hladké a tvarované rošty

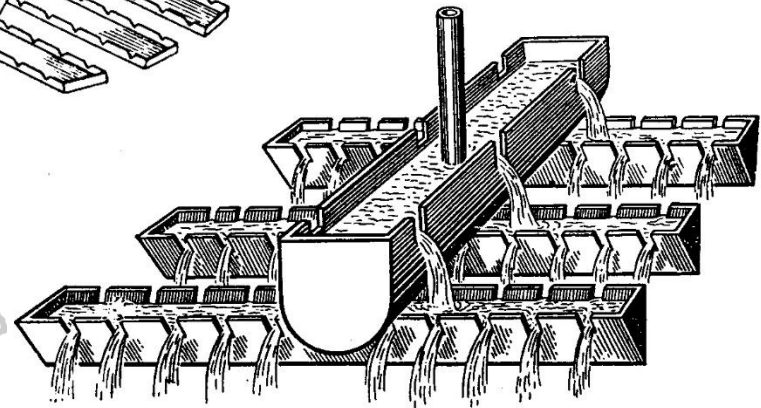
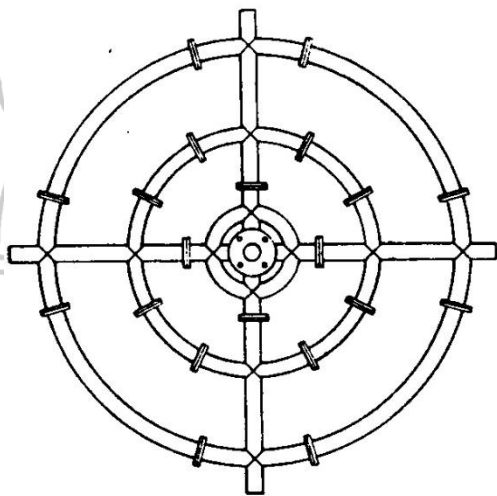
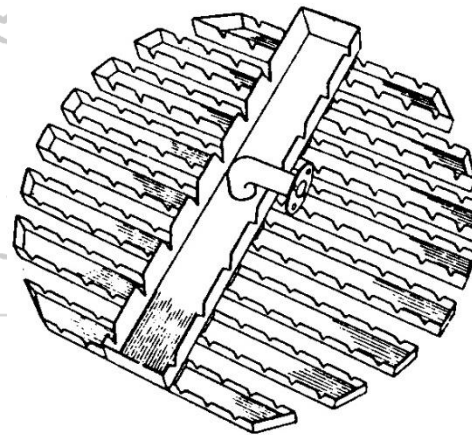
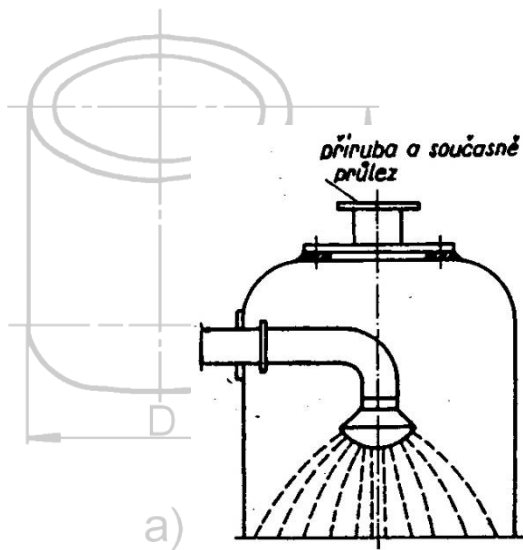


Tvarovaná souvislá výplň

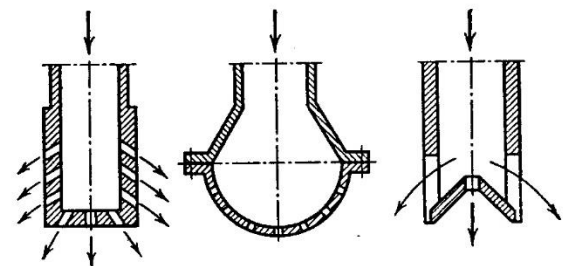


Zkrápěcí zařízení

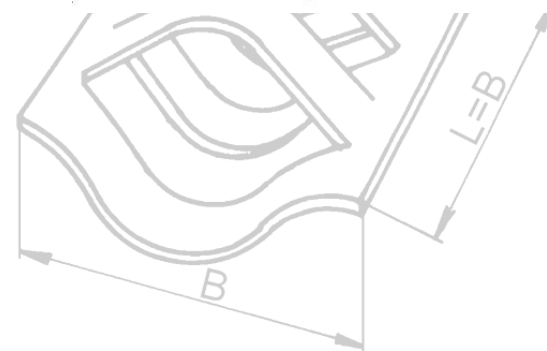
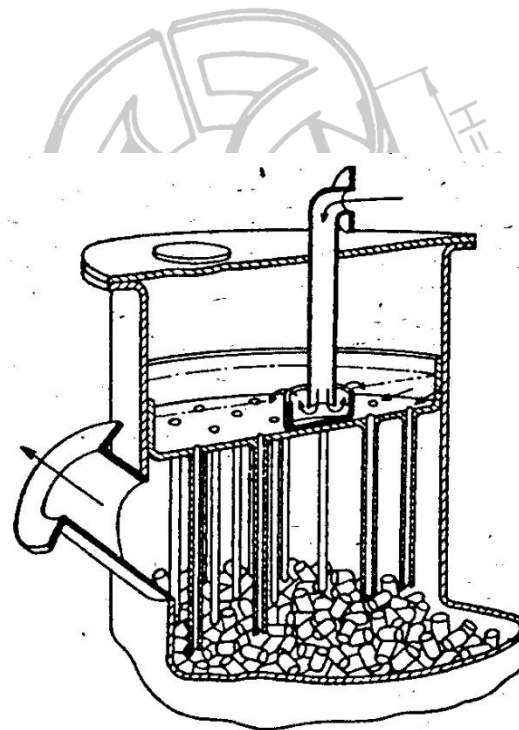
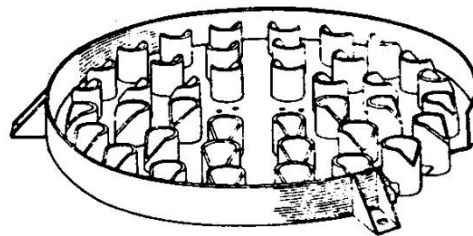
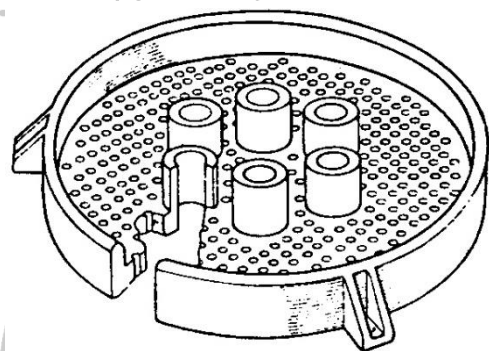
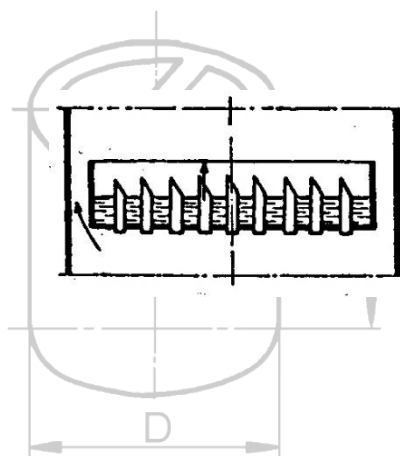
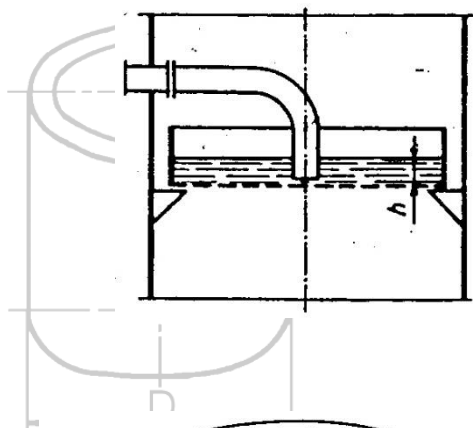
Zkrápěcí sprcha



e)



Zkrápěcí síta

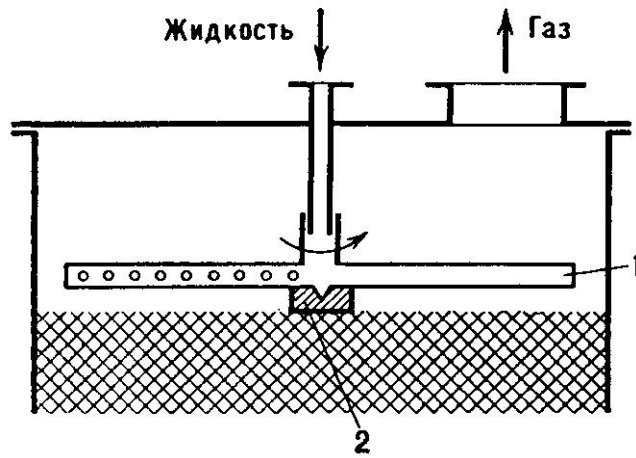


d)

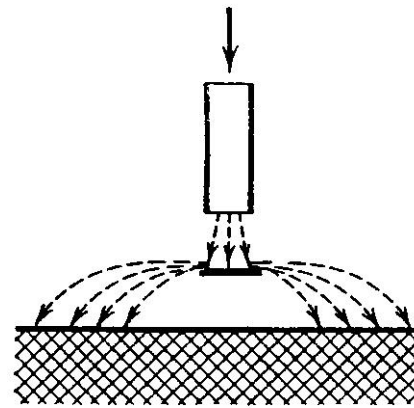
e)

f)

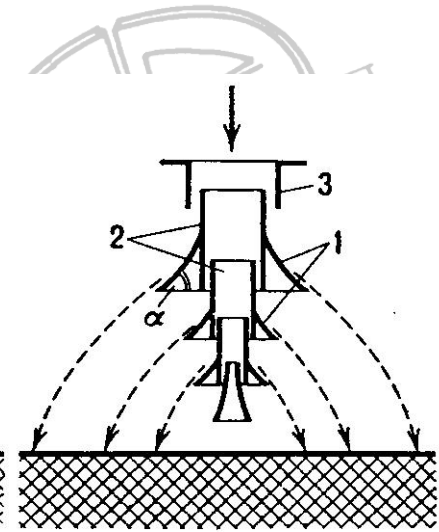
Rozstřikovací talíře



a)



a



б

b)

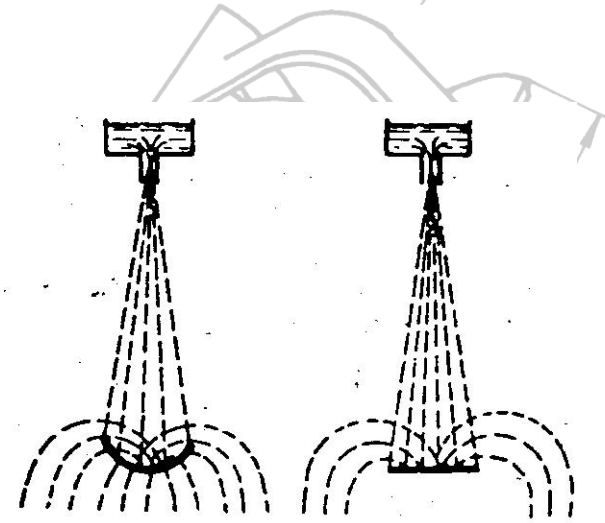
c)



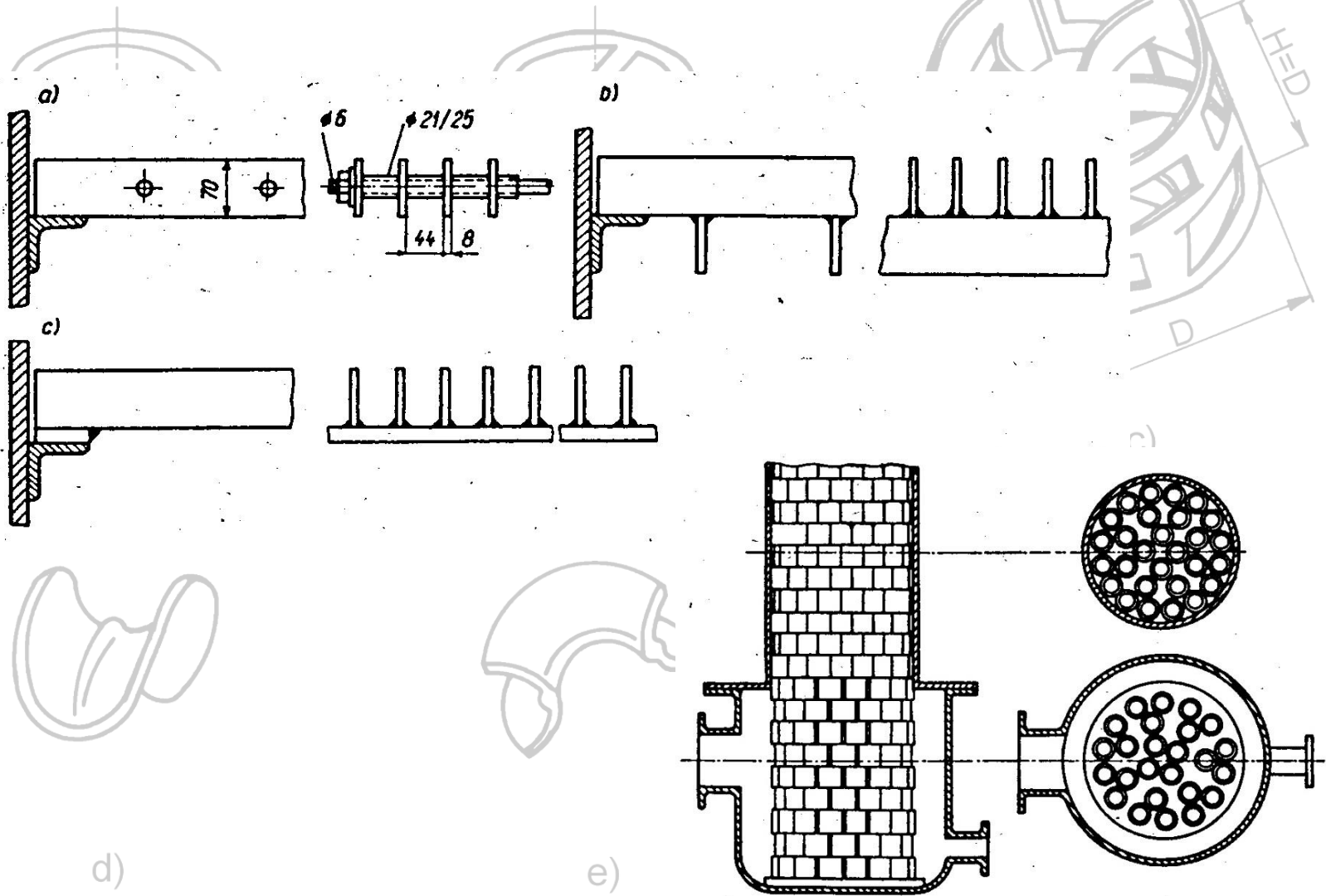
d)



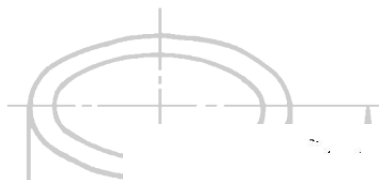
e)



Nosné rošty



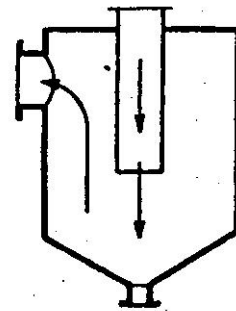
Odlučovače kapek



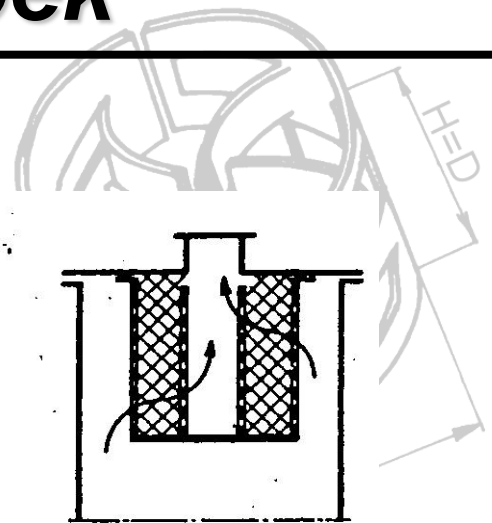
a)



b)



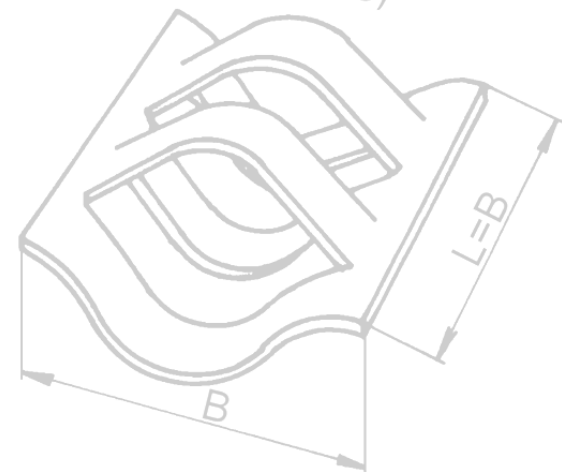
c)



d)

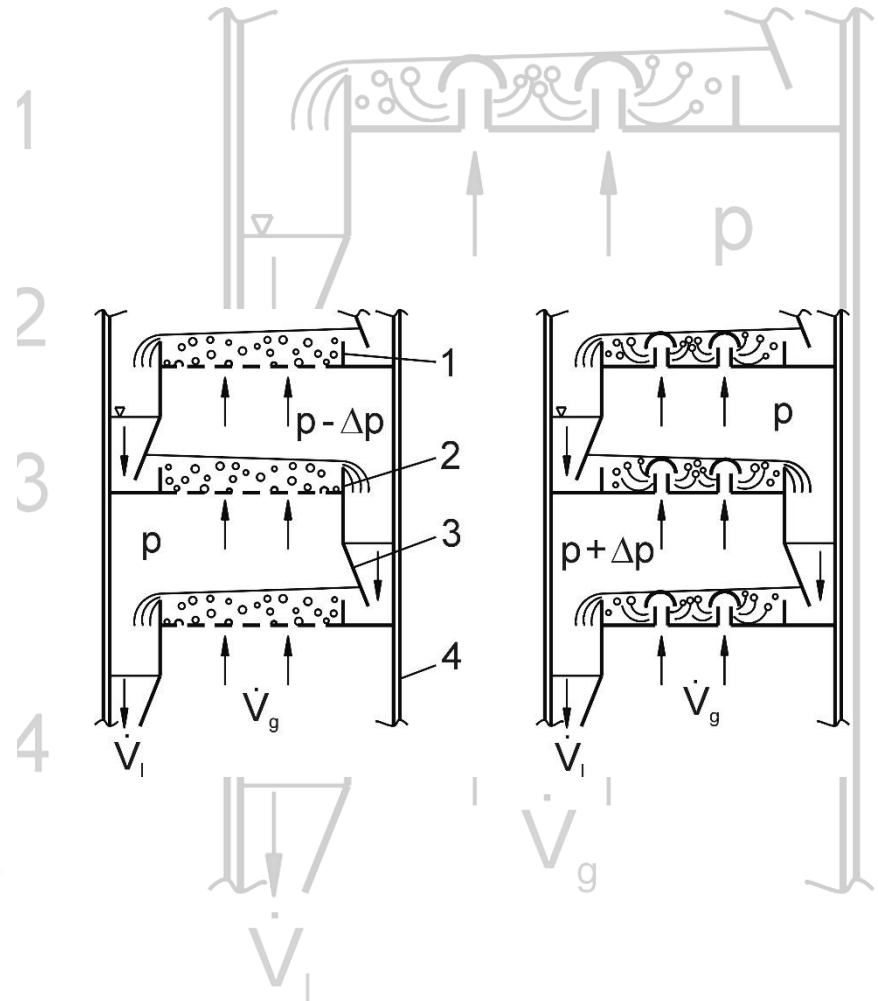
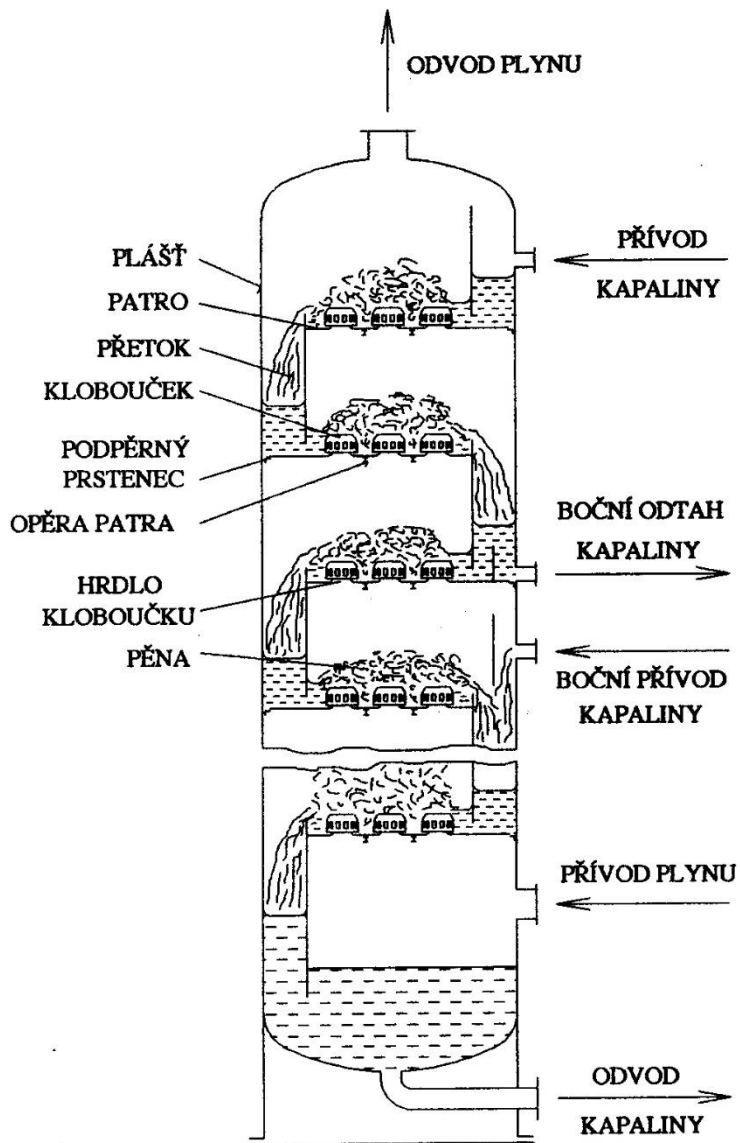


e)



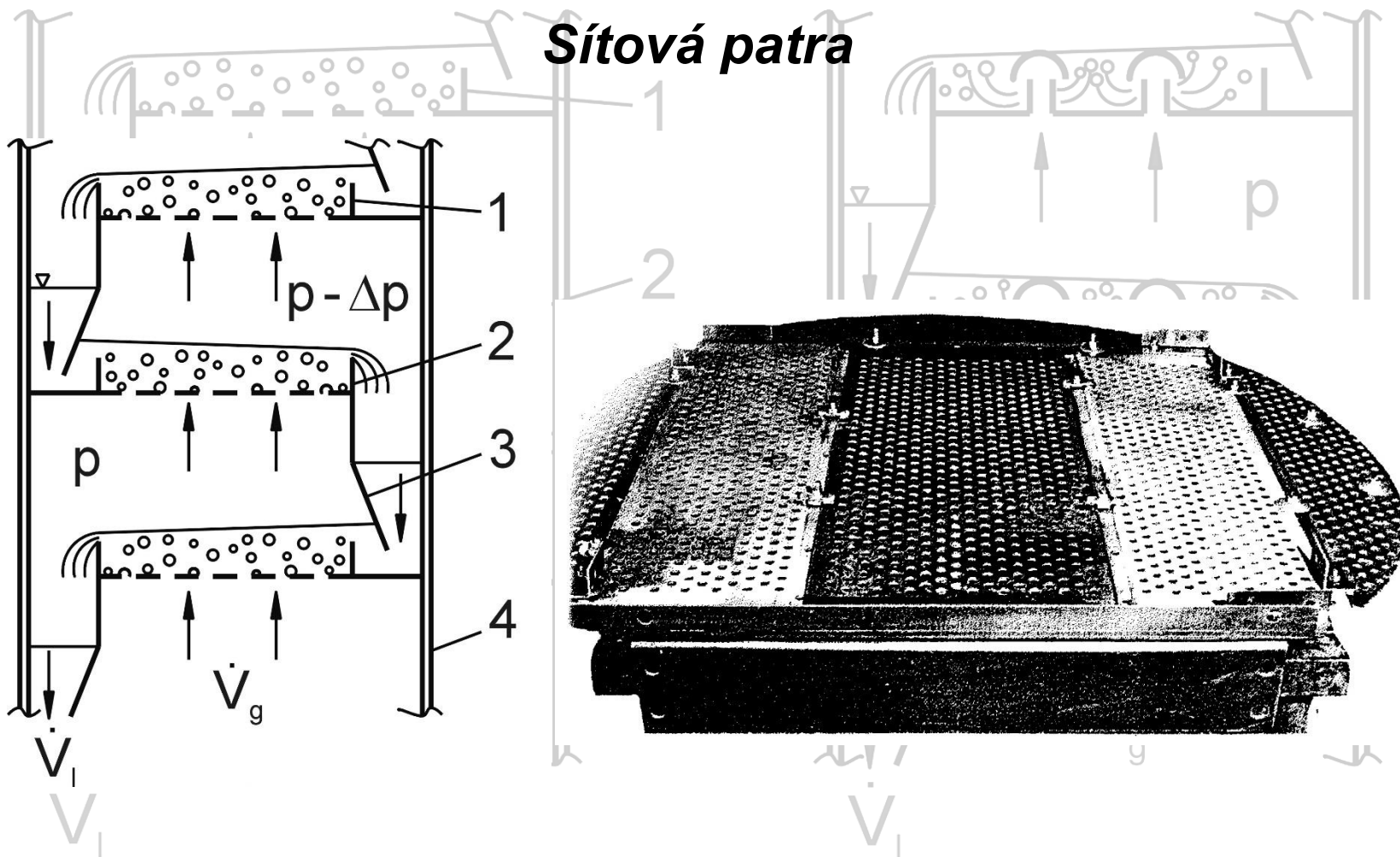
f)

PATROVÉ KOLONY



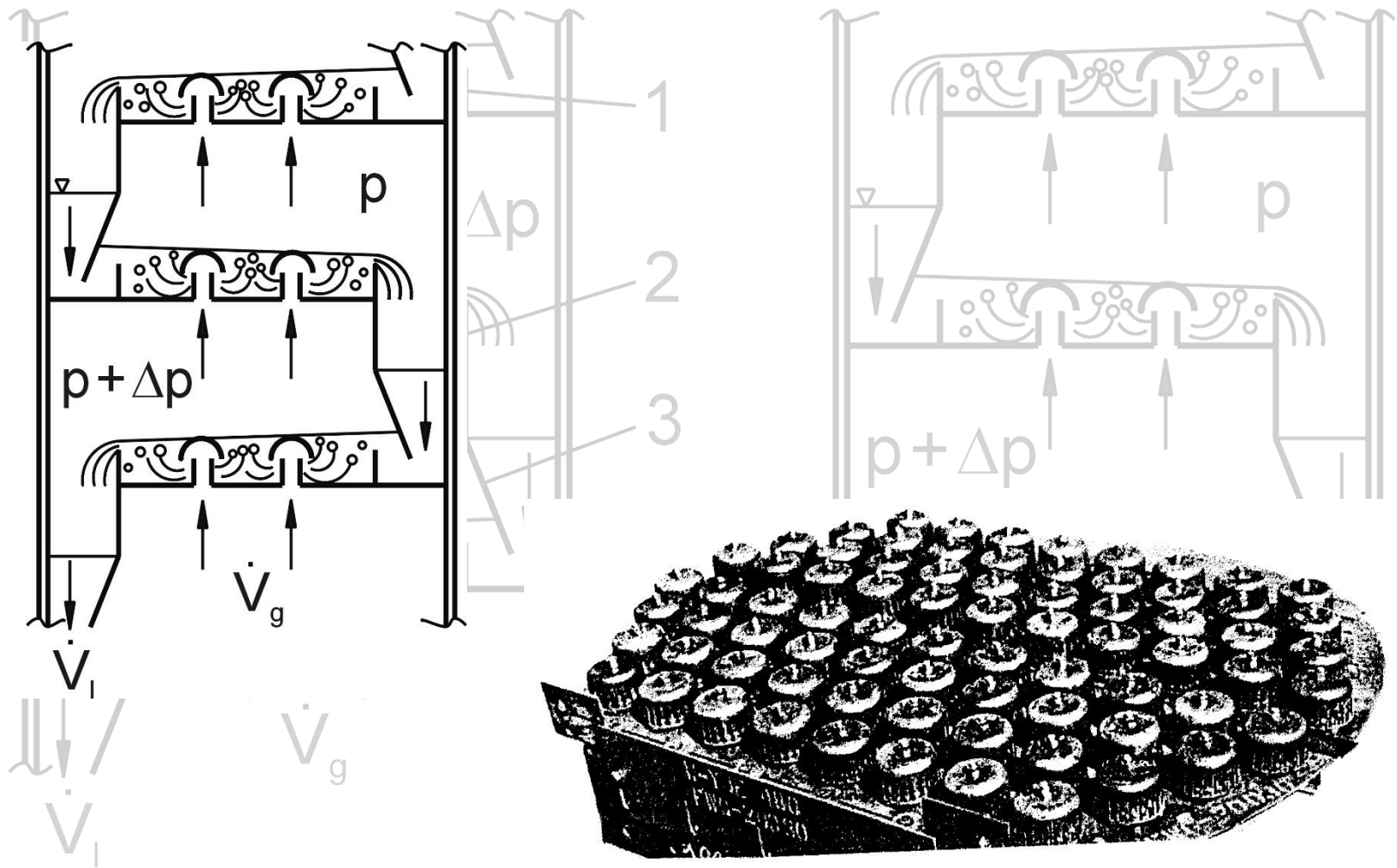
Typy pater

Sítová patra

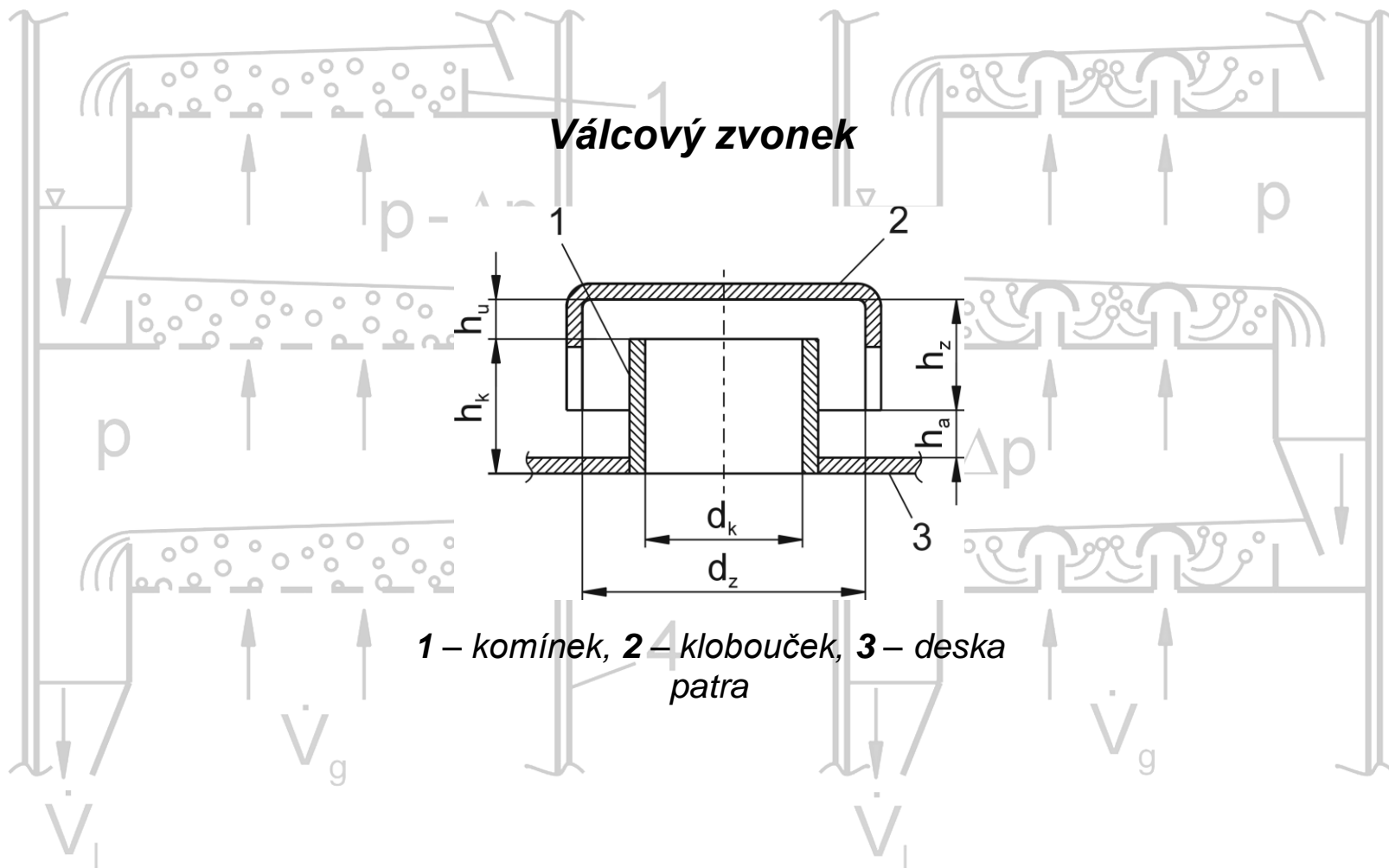


1 – přítokový jez, 2 – odtokový jez, 3 – přepadová přepážka, 4 – kolona

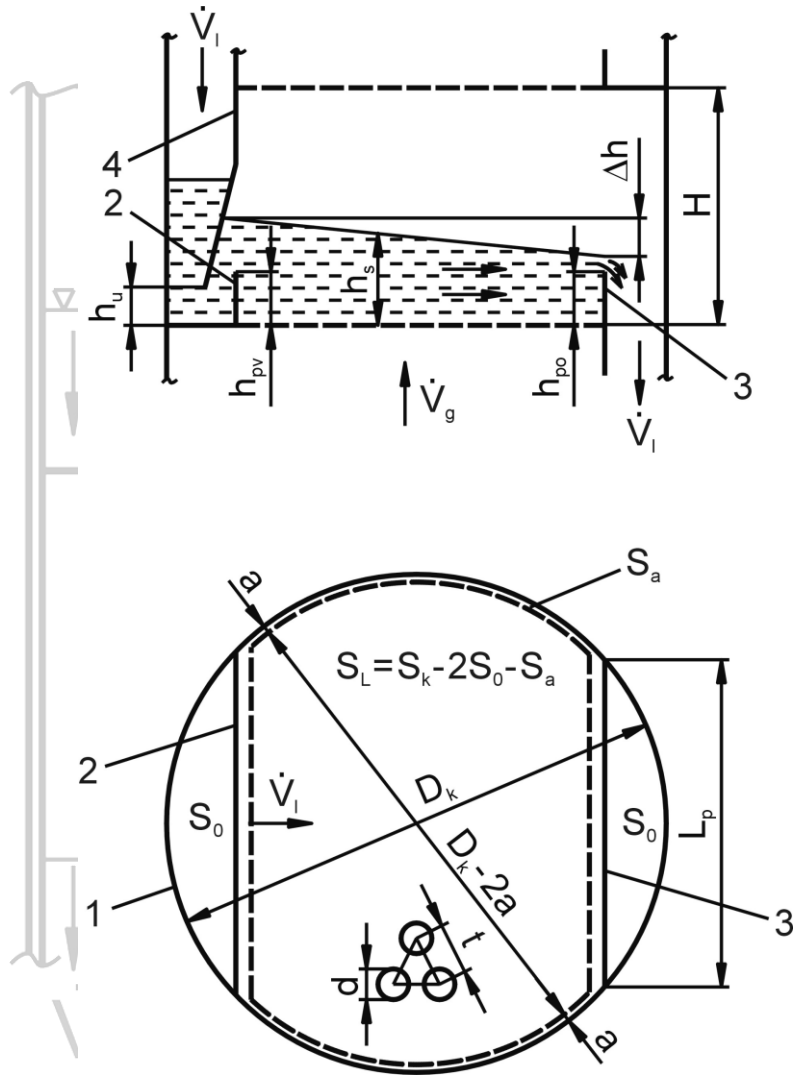
Zvonková (kloboučková) patra



Konstrukční provedení pater

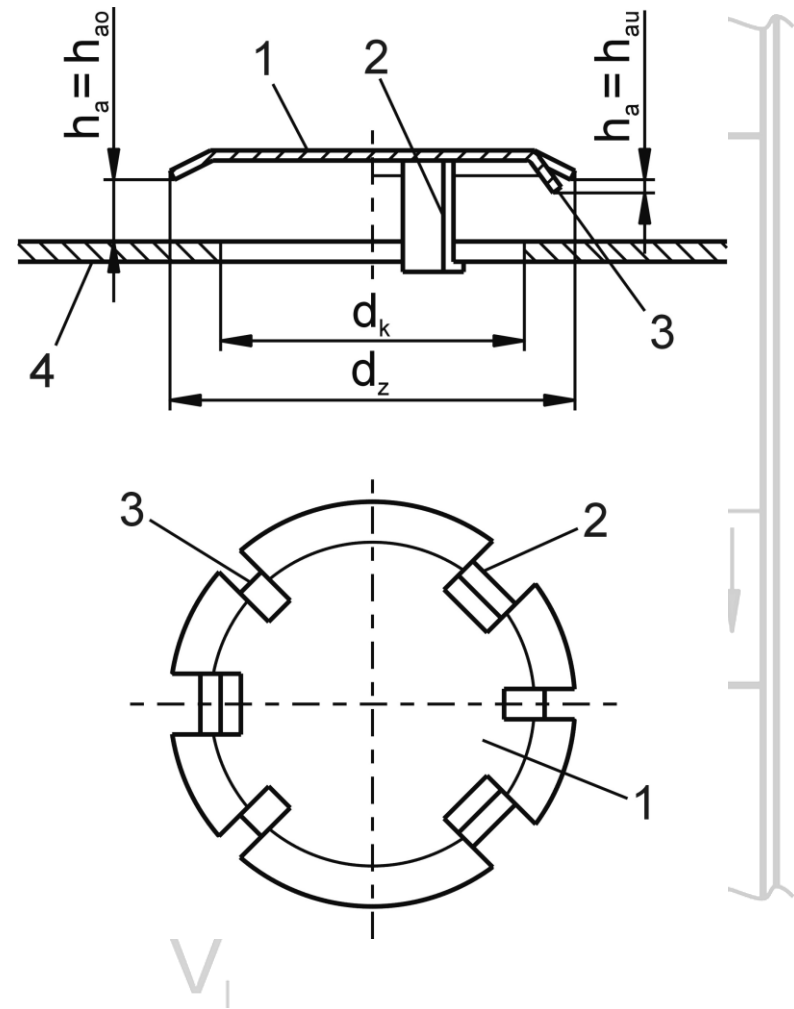


Sítové patro



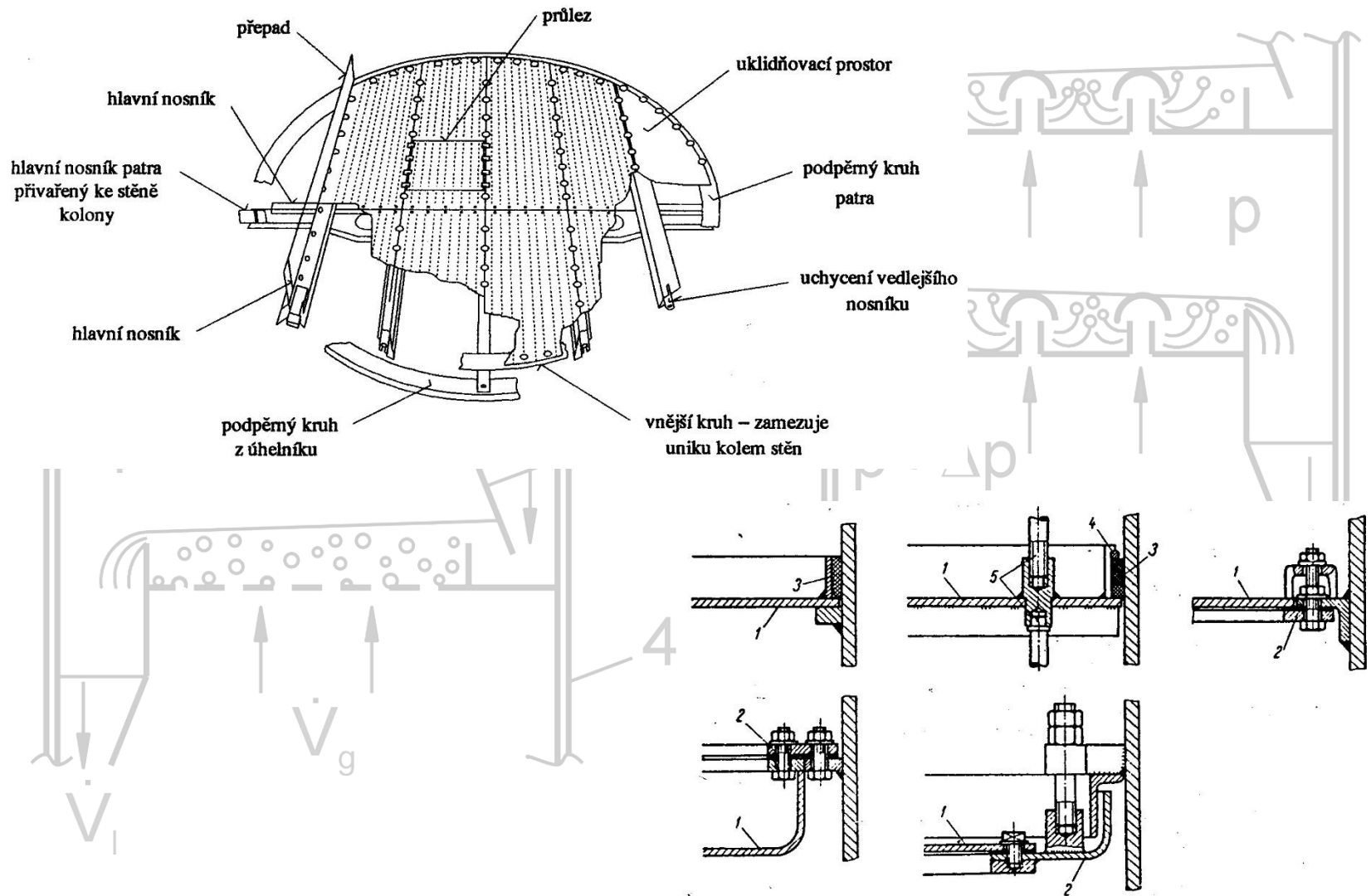
1 – plášť kolony, 2 – přítokový jez, 3 – odtokový jez, 4 – přepadová přepážka

Ventilové patro



1 – ventil, 2 – vodící nožky, 3 – výstupek, 4 – patrová deska

Uchycení a utěsnění pater



Obr. 7-25. Konstrukce utěsnění pater:

1 - patro, 2 - dělený prstenec, 3 - těsnění, 4 - přitlačný prstenec, 5 - distanční svorníky