

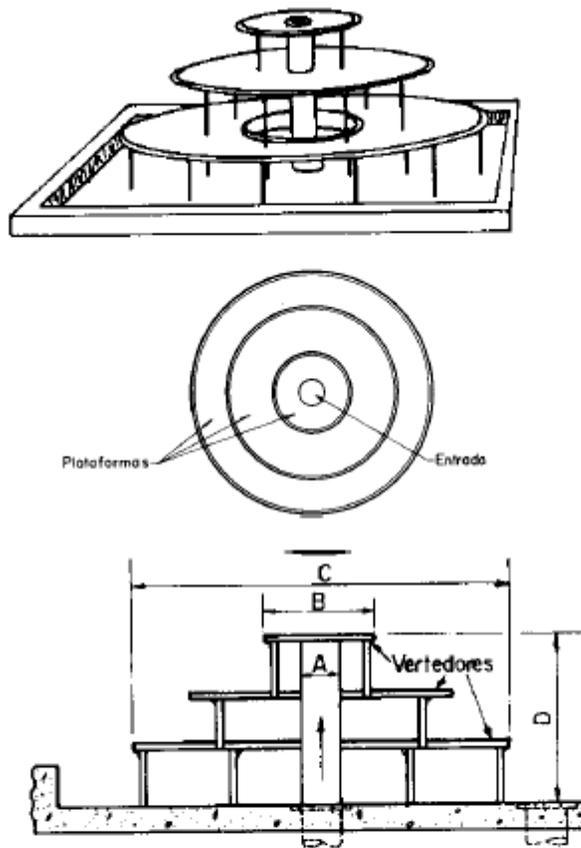
UNIVERSIDADE ESTADUAL DE MARINGÁ
CURSO: ENGENHARIA AGRÍCOLA

AERADORES E FLOCULADORES

EDMILSON CESAR BORTOLETTO

2017

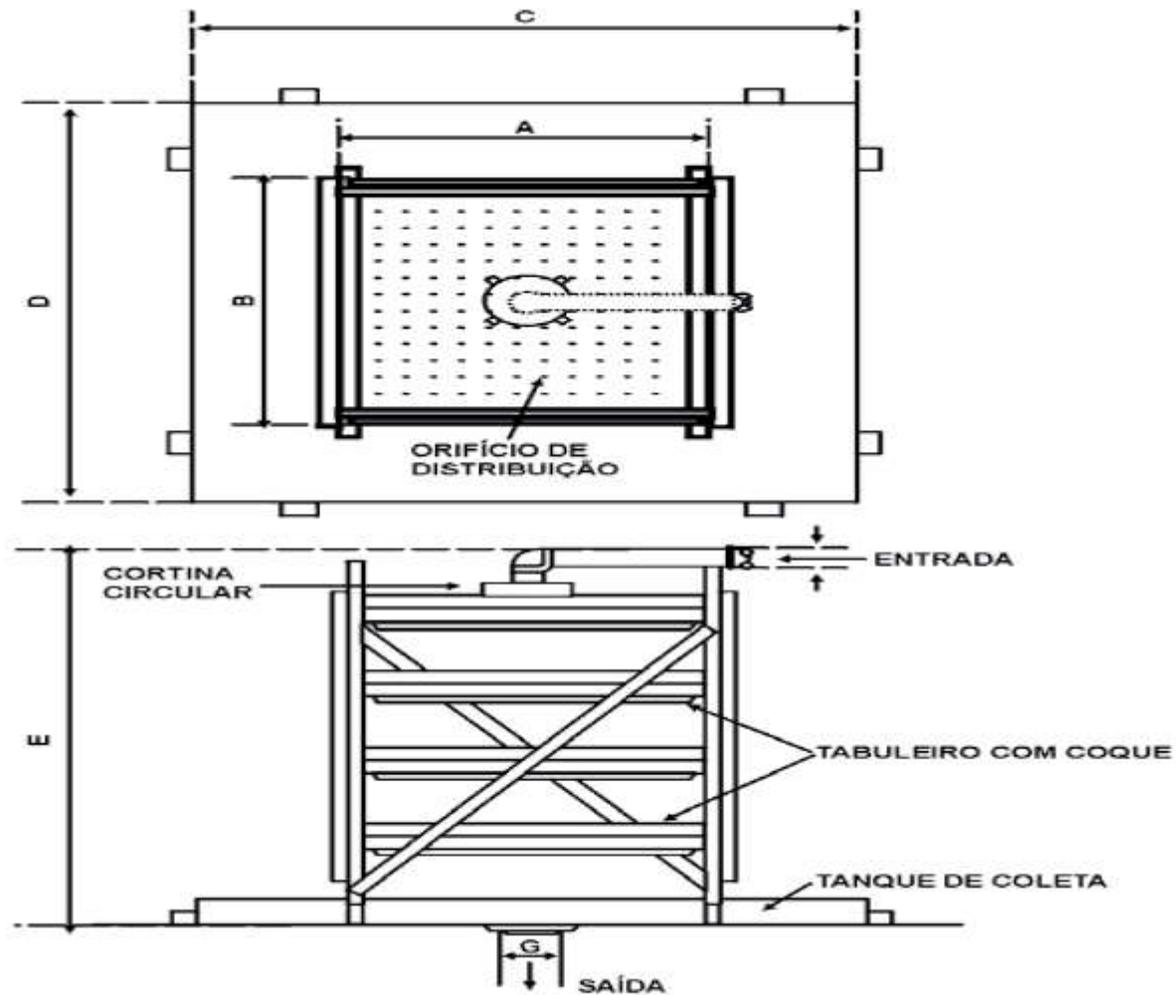
Aerador tipo cascata



Capacidade litros/seg	A mm	B m	C m	D m
7	75	0,30	1,40	0,75
14	100	0,60	1,70	0,75
21	150	1,00	2,00	0,75
35	200	1,60	2,65	0,75

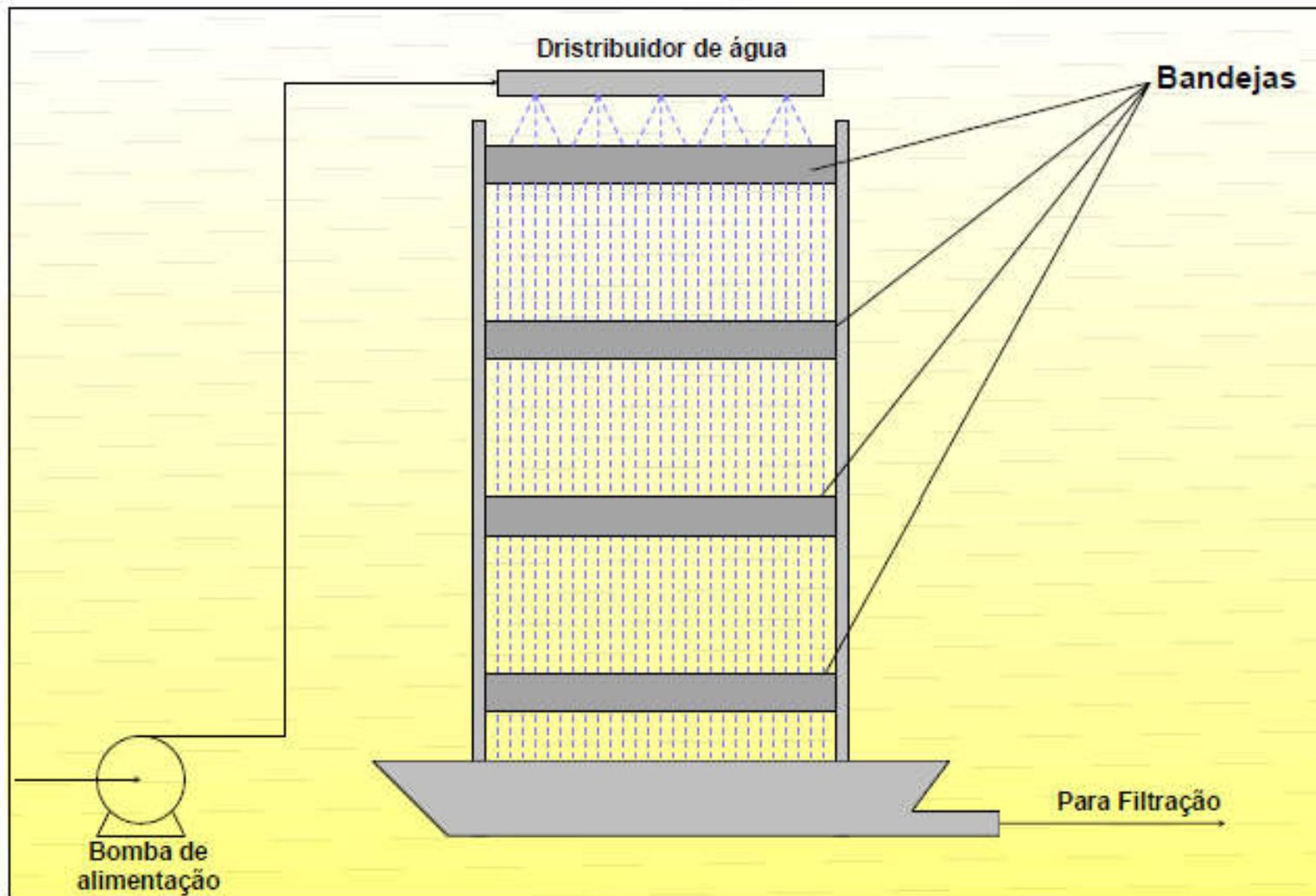
Richter e Azevedo Netto (2005)

Aerador tipo tabuleiro ou bandeja



CAPACIDADE LITROS / SEG.	A M	B M	C M	D M	E M	F M	G M
30	0,90	0,90	1,80	1,80	2,30	75	100
60	1,20	1,20	2,10	2,10	2,40	100	150
95	1,50	1,50	2,40	2,40	2,40	100	150
160	1,80	1,80	2,70	2,70	2,50	150	200
240	2,10	2,10	3,00	3,00	2,50	150	200
330	1,80	3,60	2,70	4,50	2,60	200	250
460	2,10	4,20	3,00	5,20	2,70	250	300

Richter e Azevedo Neto



Representação Esquemática de um Aerador Tipo Bandeja

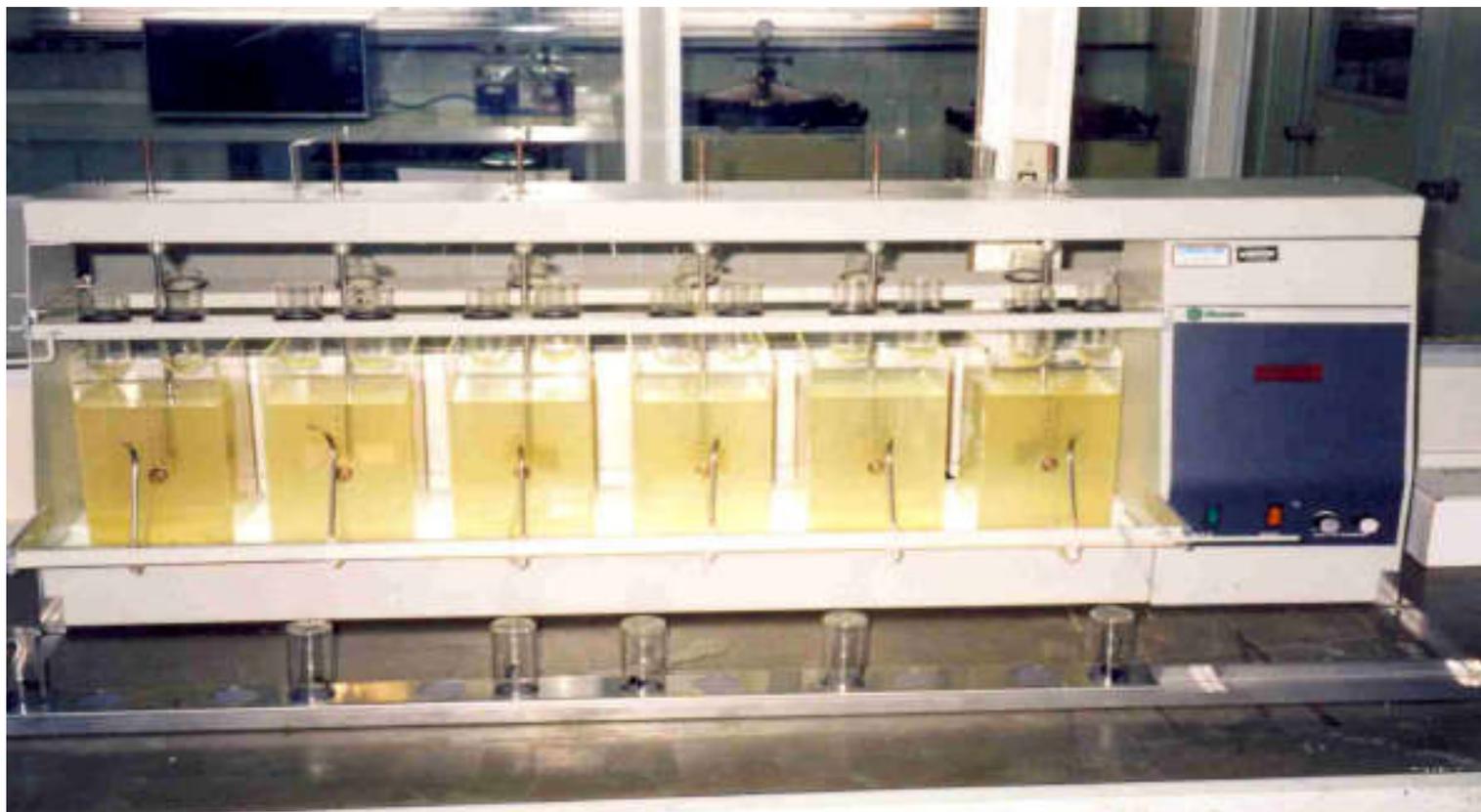
Tanque de aeração com sistema de ar difuso



Mistura efetuada em calha Parshall



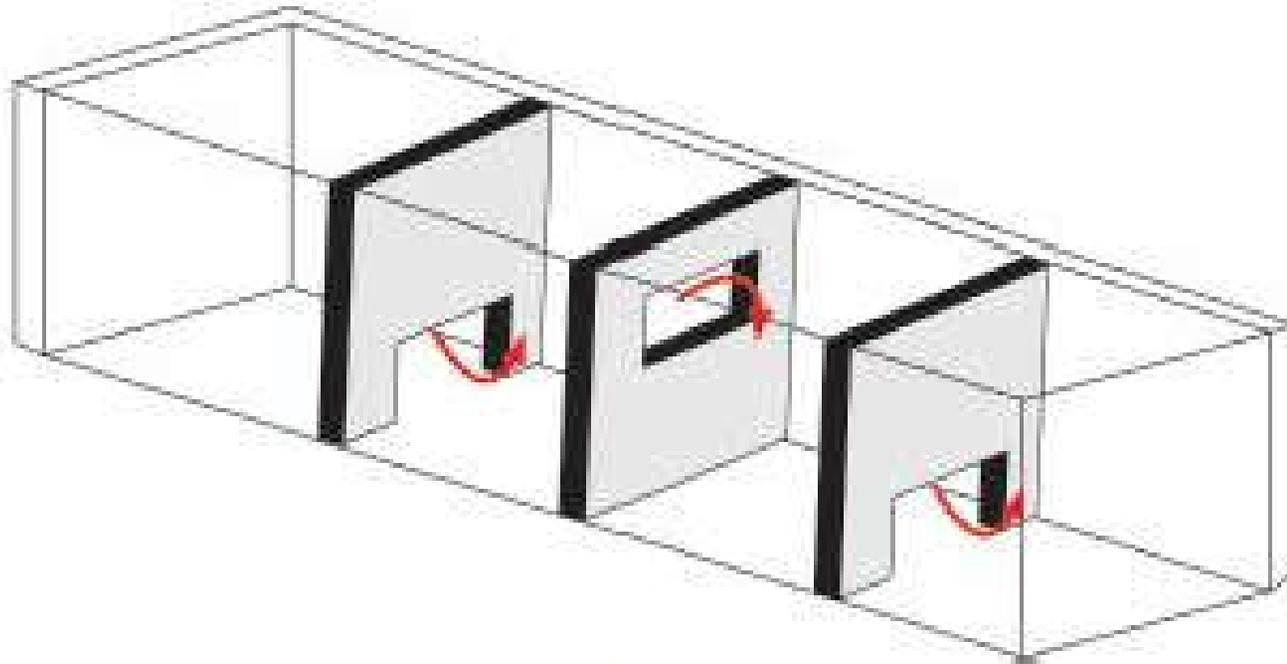
Coagulação – Aparelho de *Jar-Test*



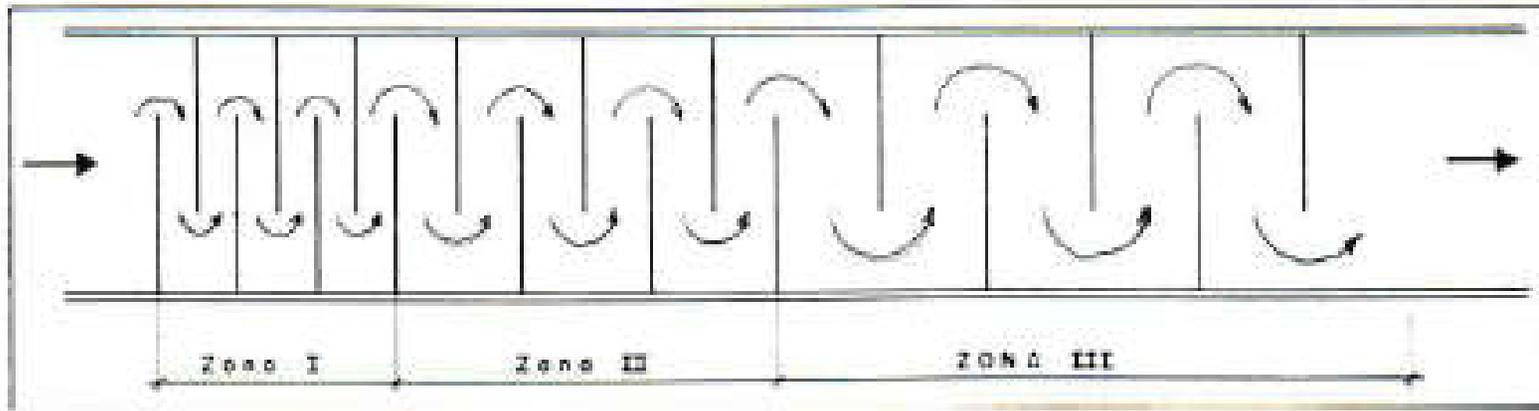
Floculação (Mistura Lenta)



Energia Hidráulica

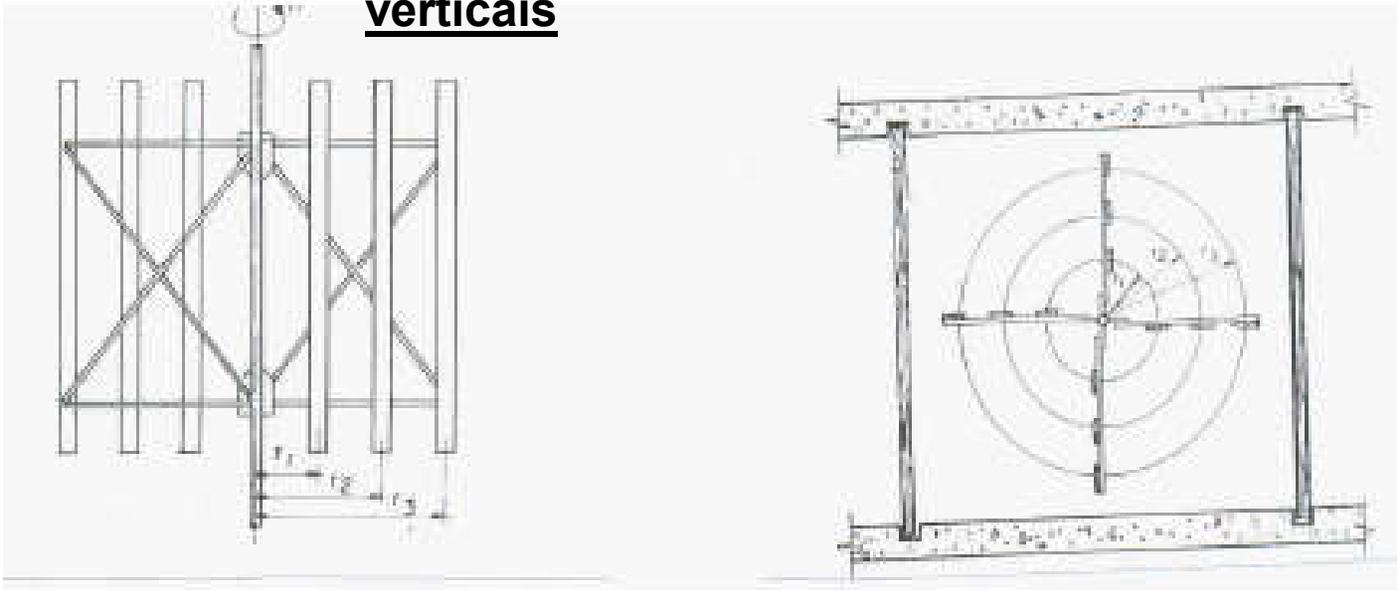


Floculador com chicanas de fluxo vertical

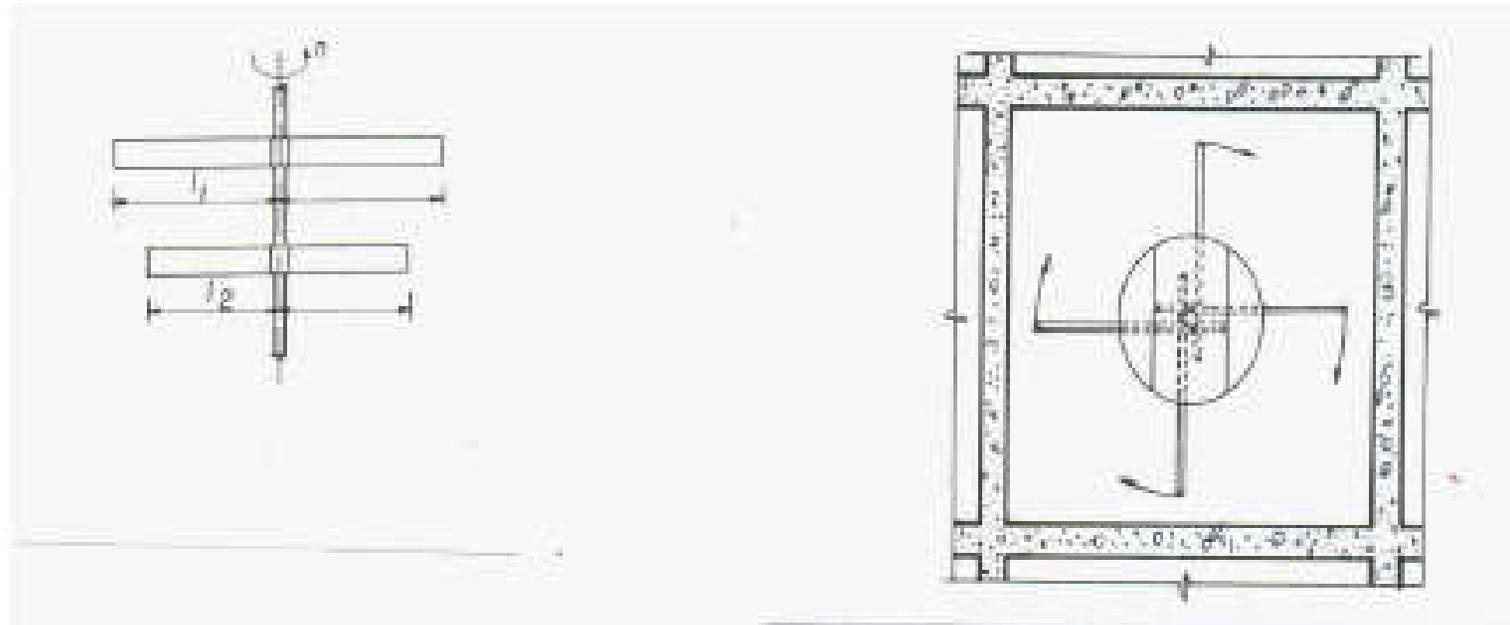


Floculador com chicanas de fluxo horizontal

Floculador mecânico de eixo vertical e paletas verticais

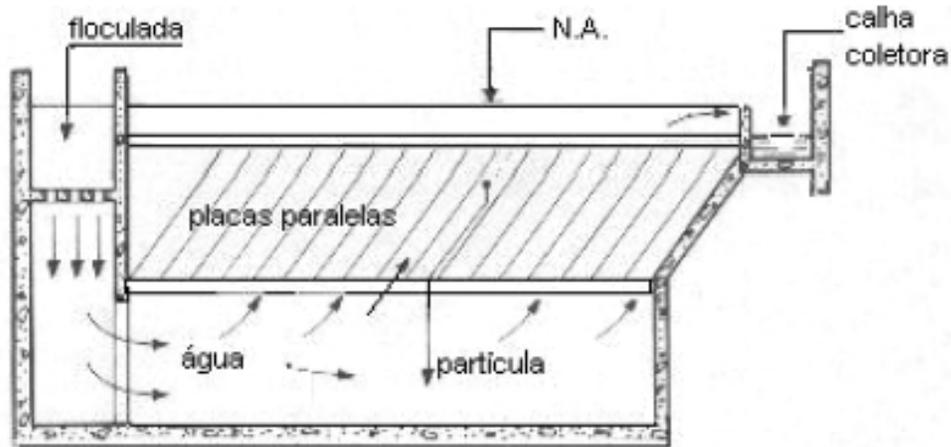


Floculador mecânico de eixo vertical e paletas horizontais



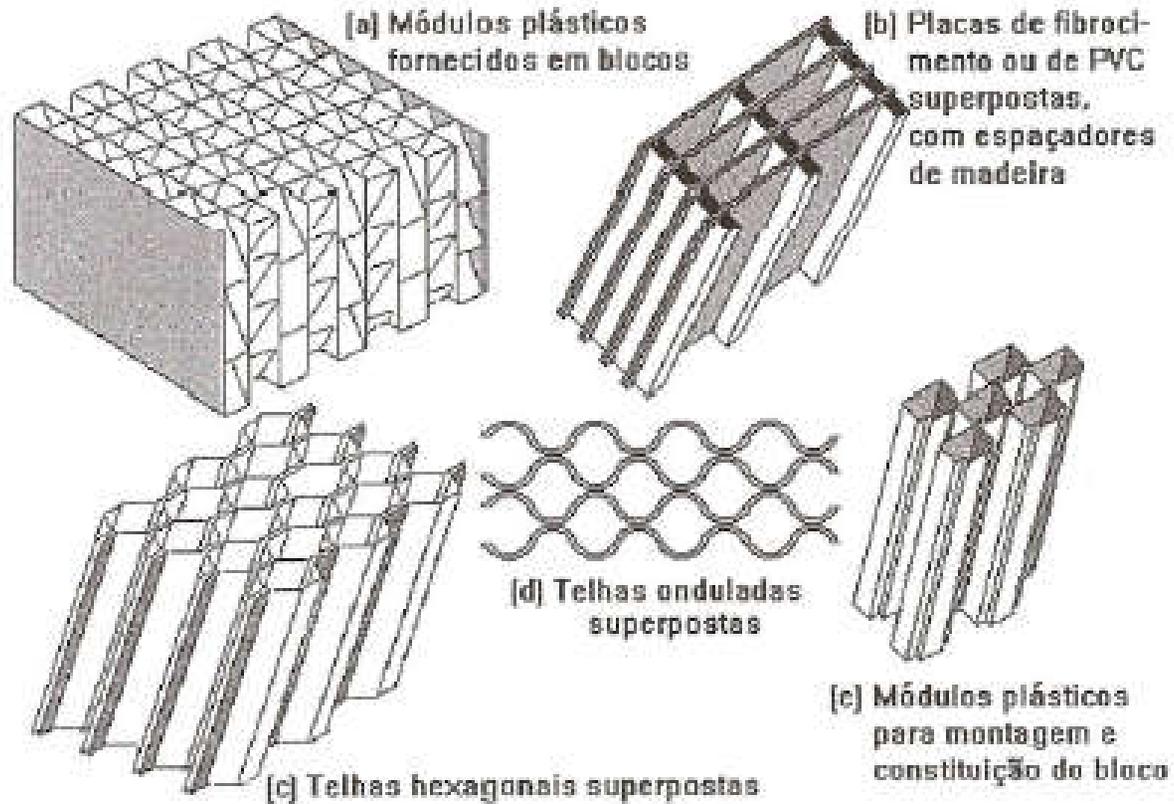
DECANTAÇÃO

Decantador vertical

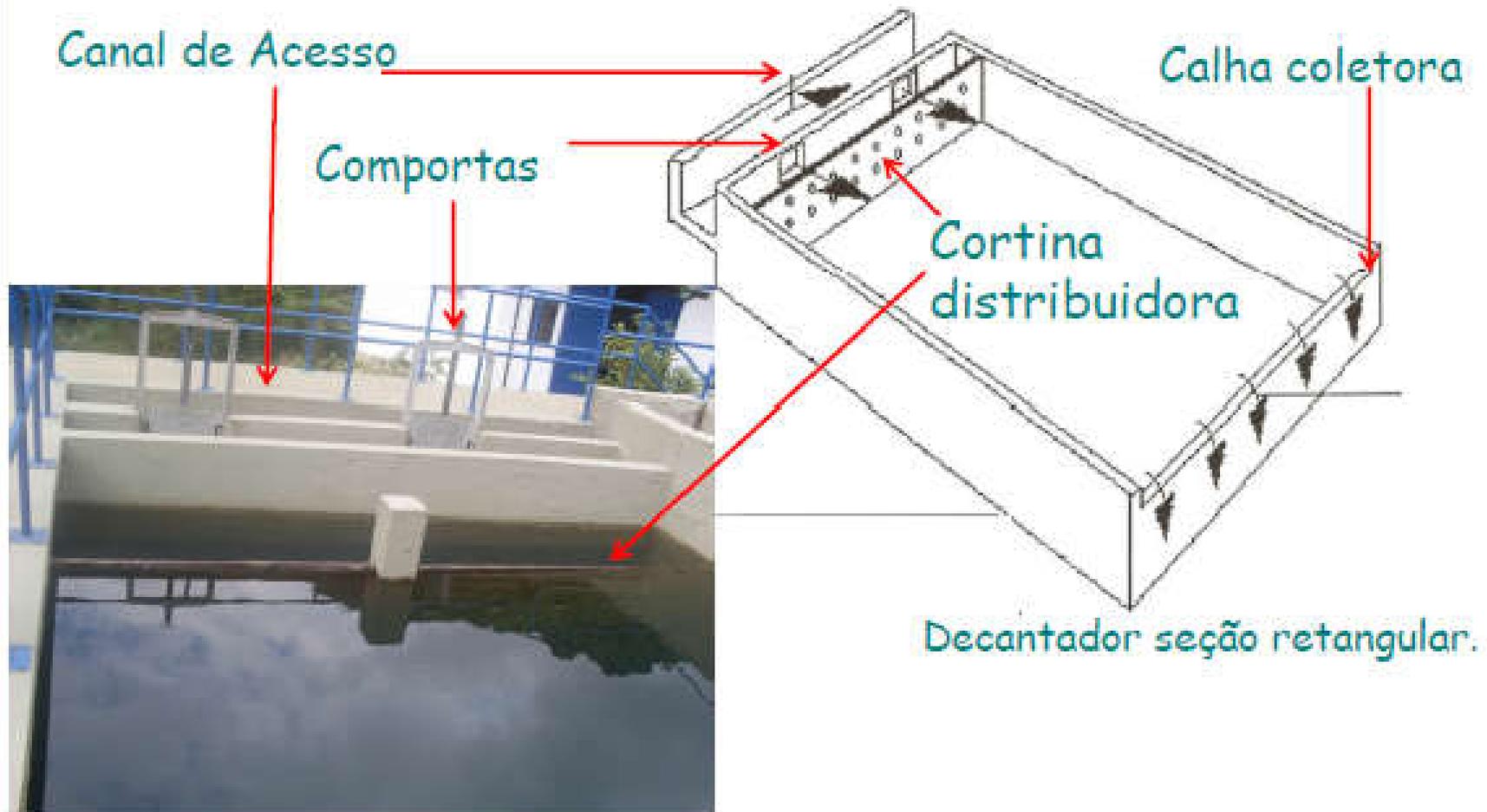




Módulo tubulares

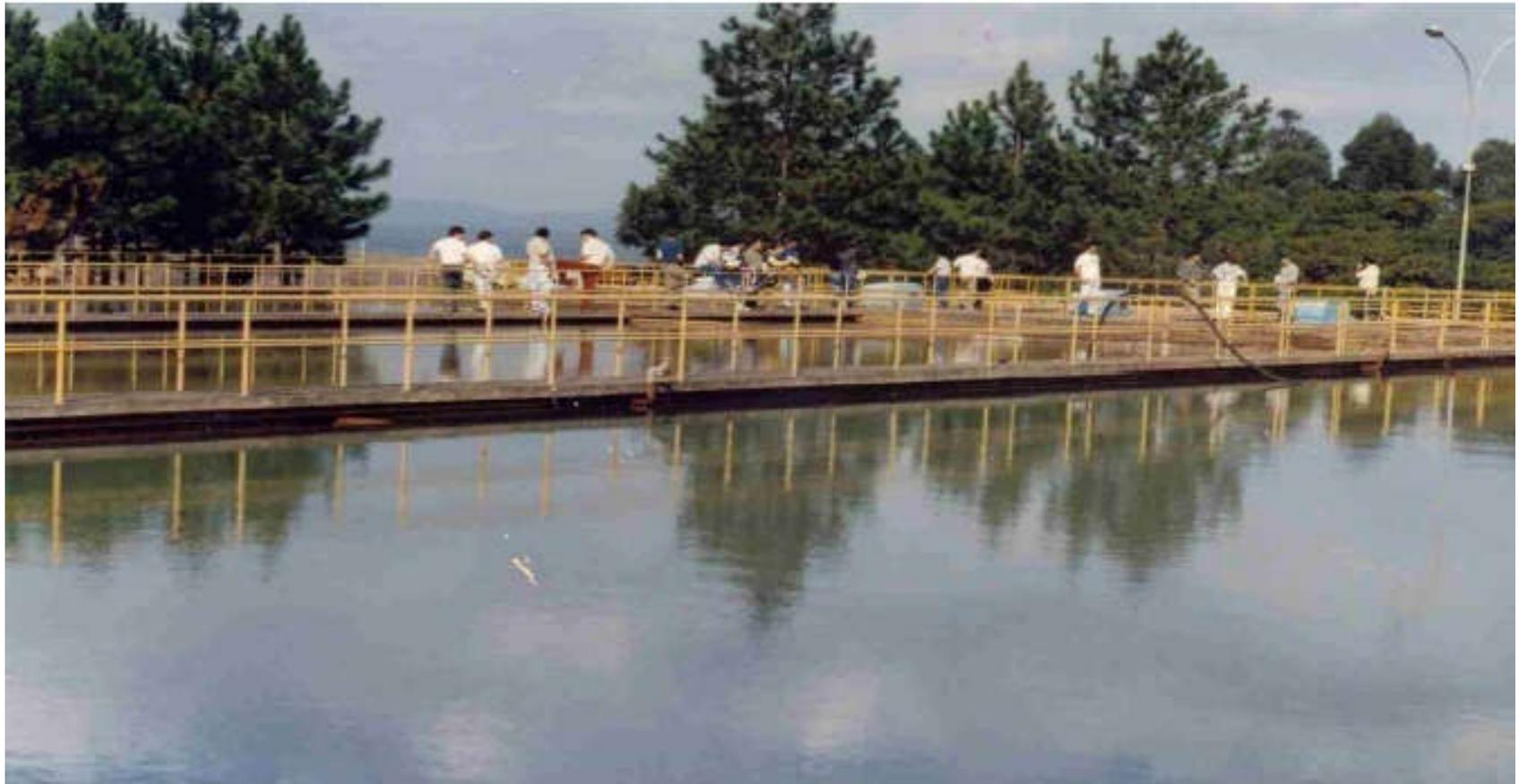


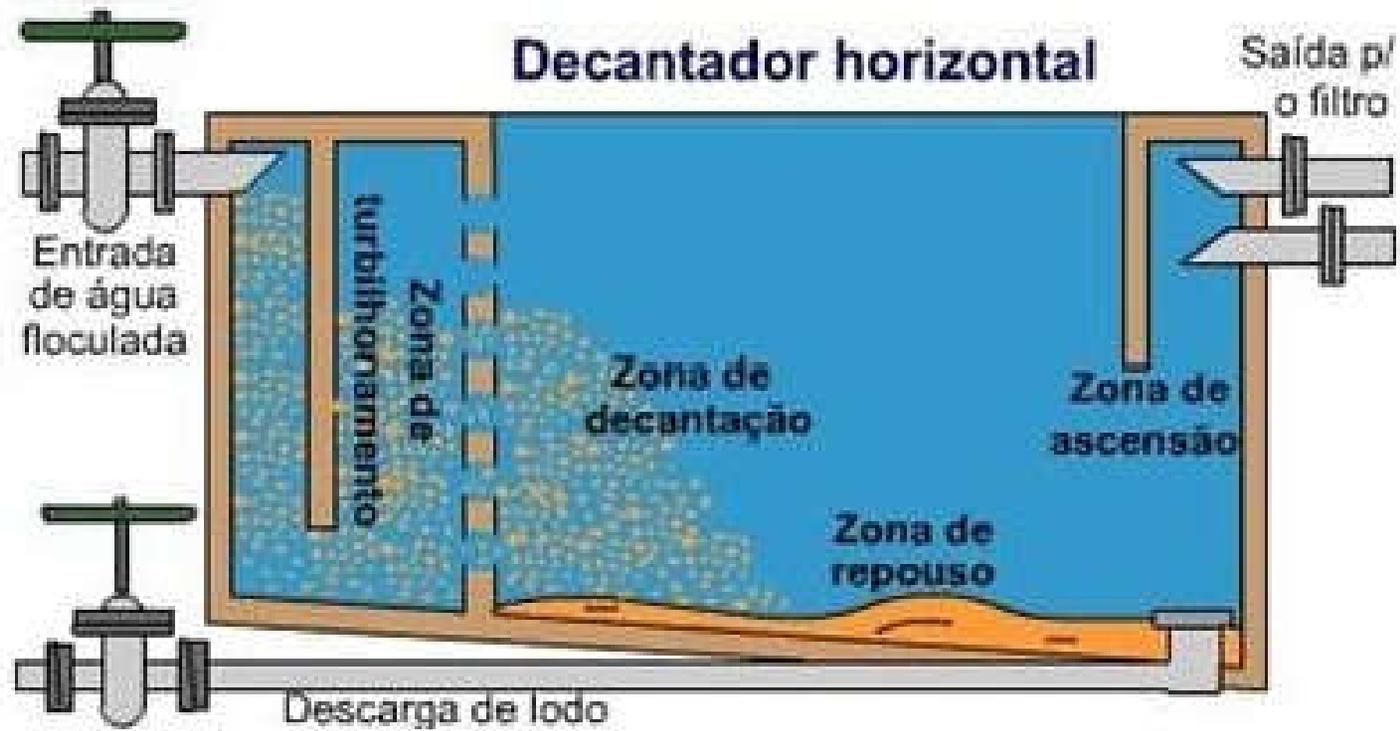
Decantador horizontal





Decantador de fluxo horizontal do tipo convencional – ETA Taubaté





Calha coletora - Decantador – ETA Taubaté



Operação de limpeza - Decantador – ETA Taubaté





