

Prova Scritta del 08/09/2016

1

h1	3	m
h2	2	m
h3	2.5	m
L	0.8	m
β	45	°
β	0.78539816	rad
larghezza	1.5	m
P_atm	101325	Pa
γ_1	9810	N/m ³
γ_2	11772	N/m ³

2

h	8	m
L	1500	m
D	0.3	m
Ω	0.07068583	m ²
Δ	0.22	m
ϵ	0.0005	m
γ	9810	N/m ³
γ_{Hg}	133320	N/m ³

1.1	P_F rel	29430.0	Pa
	P_F ass	130755.0	Pa
1.2	St	2511.4	N
	Sr	18835.2	N
	S paratoia	21346.6	N
1.3	p. app.	0.42	m
	L_AB_1	8.20	m
1.4	S_AB_1	350026.8	N
	L_AB_2	3.54	m
	S_AB_2	78038.1	N
	S_AB	271988.694	N
	verso	dx	

2.1	λ_1	0.02231	
	u_1	1.18	m/s
	Q_1	0.0833	m ³ /s
	Re_1	353496	
	λ_2	0.02290	2.6%
2.2	u_2	1.16	m/s
	Q_2	0.0822	m ³ /s
	ΔH saracinesca	2.77	m
	u_1	0.95	m/s
	Q_1	0.0673	m ³ /s
	Re_1	285822	
	λ_2	0.02304	3.2%
u_2	0.94	m/s	
Q_2	0.0663	m ³ /s	

3

a	3	m
b	8	m
c	3	m
D	1.5	m
Ω	1.76714587	m ²
d	0.25	m
ω	0.04908739	m ²
γ	9810	N/m ³

3.1	Ω contratta	0.029943	m ²	
	u	8.14	m/s	7.67
	Q	0.24366	m ³ /s	0.2297
3.2	V	5.30	m ³	
	u_finale	14.69	m/s	
	G	52007.1	N	
	Mi	3579.6	N	3374.9
3.3	F	55586.7	N	55382
	t svuotamento	46.2	s	