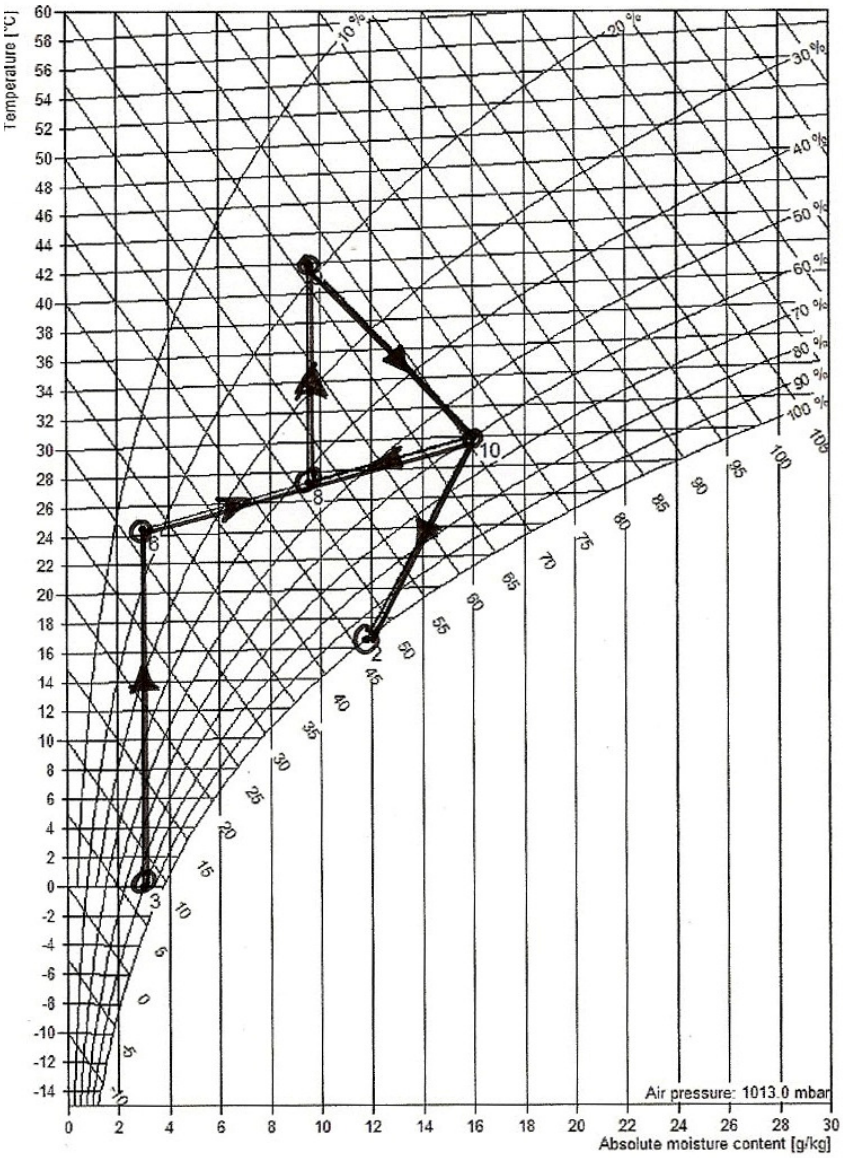
05-02-2012



Project
SVØMMEHAL
BASINKALKULATION

Notes

Remarks
VENTILATION
VARMEGENVINDING
AFFUGTNING
OPVARMNING

	Air path 1		Air path 2				Air path 3			
Point:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
t (°C)	30.0	16.6	0.0	24.4	24.4	24.4	30.0	27.3	42.0	30.0
φ (%)	60	100	80	16	16	16	60	42	19	60
x (g/kg)	16.0	11.8	3.0	3.0	3.0	3.0	16.0	9.5	9.5	16.0
h (kJ/kg)	71.0	46.4	7.5	32.1	32.1	32.1	71.0	51.5	66.5	71.0
$\dot{V}$*10³(m³/h)	12.5	11.9	11.0	12.0	12.0		12.5	24.5	25.7	25.0
$\dot{m}$ (kg/s)	3.94	3.94	3.94	3.94	3.94		3.94	7.88	7.88	7.88
Δt	-13.4		24.4	0.0	0.0		-2.7	14.7	-12.0	
Δx	-4.2		0.0	0.0	0.0		-6.5	0.0	6.5	
Δh	-24.6		24.6	0.0	0.0		-19.4	15.0	4.5	
Q (kW)	-96.8		96.8	0.0	0.0		-76.5	117.9	35.2	
Δx (kg/h)	-60.2		0.0	0.0	0.0		-92.3	-0.5	185.0	

Actions

Mixing
Start points 5 and 7; 12032 m^3/h volume flow from 5 to 8

Heat recovery
Start points 1 and 3; Recuperative HR with 82 % temperature efficiency