

JIP - ohřev a vlhčení

Povrchová teplota chladiče: 5 °C

A psychrometric chart for air conditioning process. The chart shows the relationship between dry-bulb temperature (t_{db}) and wet-bulb temperature (t_{wb}) for air. The horizontal axis represents dry-bulb temperature (t_{db}) in $^{\circ}\text{C}$, ranging from 0 to 25. The vertical axis represents wet-bulb temperature (t_{wb}) in $^{\circ}\text{C}$, ranging from -20 to 55. The chart includes a grid of constant wet-bulb temperature lines (labeled 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110) and constant dry-bulb temperature lines (labeled 20, 30, 40, 50, 60, 70, 80, 90, 100, 110). A saturation curve is shown on the right side. A process line is drawn from point 1 (22, 22.69) to point 2 (22, 22.02), indicating a constant dry-bulb temperature process (cooling and dehumidification). Point 3 is located at (22, 22.02) and point 4 is at (22, 22.69). The process line is labeled with the values 22, 22.69 and 22, 22.02. The chart also includes a label $\phi=10\%$ at the top right and a label $h=0 \text{ kJ/kg s.v.}$ near the bottom left.

			1	2	3	4	5	6	7	8	9	10
				Rekup								
Teplota	t	°C	-21,0	-5,0	22,0	22,0						
rel.vlhkost	φ	%	95%	22%	3%	40%						
měr. vlhkost	x	g/kg s.v.	0,6	0,6	0,6	6,7						
entalpie	h	kJ/kg s.v.	-19,8	-3,7	23,6	39,1						
hustota	ρ	kg/m3	1,38	1,30	1,18	1,18						
t.vlhkého tepl.	tv	°C	-21,1	-8,3	7,4	13,8						
Skut. průtok	Vs	m3/h	4 817	5 122	5 638	5 693						
Norm. průtok	Vn	m3/h	5 540	5 540	5 540	5 540						
Předaný výkon	P	kW		29,9	50,4	28,6						
Odpařené vody	qw	kg/h		0,0	0,0	40,5						