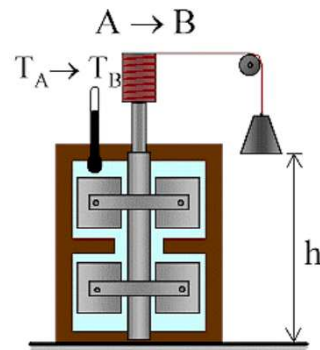


CORSO DI FISICA TECNICA II

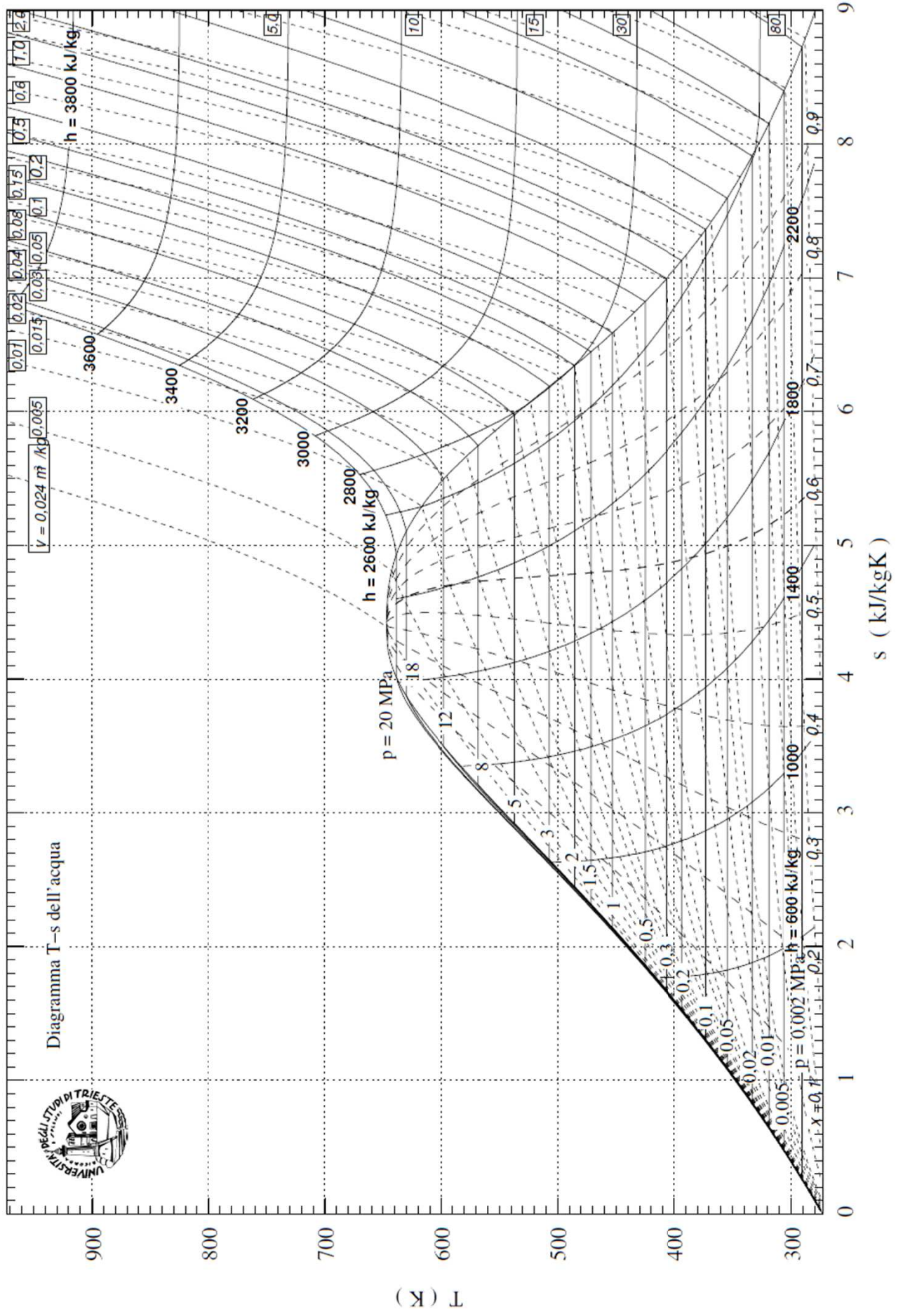


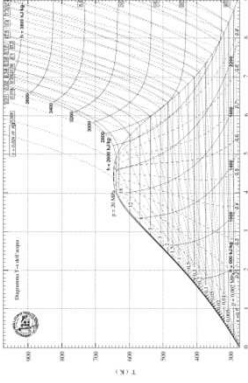
Miscela di aria e vapor d'acqua

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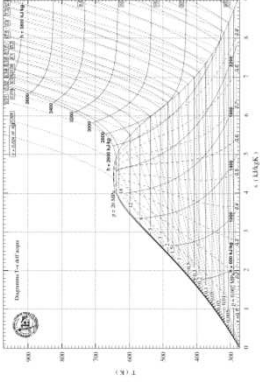


Diagramma T-s dell'acqua





t	p	volume	specific	Enthalpia	kJ/kg	Entropy	t/T	kJ/kg K	t
°C	bar	V_1	$(v_v - v_1)$	h_1	h_v	s_1		S_v	°C
0	0.006 017	0.001 000 2	206.298	-0.0	2501.6	-0.0	9.1578	9.1578	0
0.01	0.006 112	0.001 000 2	206.162	+0.0	2501.6	0	9.1575	9.1575	0.01
2	0.007 055	0.001 000 1	179.922	8.4	2496.8	0.0306	9.0741	9.1047	2
4	0.008 129	0.001 000 0	157.271	16.8	2492.1	0.0611	8.9915	9.0526	4
6	0.009 345	0.001 000 0	137.779	25.2	2487.4	0.0913	8.9102	9.0015	6
8	0.010 720	0.001 000 1	120.965	33.6	2482.6	0.1213	8.8300	8.9513	8
10	0.012 270	0.001 000 3	106.429	42.0	2477.9	0.1510	8.7510	8.9020	10
12	0.014 014	0.001 000 4	93.834	50.4	2473.2	0.1805	8.6731	8.8536	12
14	0.015 973	0.001 000 7	82.899	58.8	2468.5	0.2098	8.5963	8.8060	14
15	0.017 139	0.001 000 8	77.977	62.9	2466.1	0.2243	8.5582	8.7826	15
16	0.018 168	0.001 001 0	73.383	67.1	2463.8	0.2388	8.5205	8.7593	16
18	0.020 624	0.001 001 3	65.086	75.5	2459.0	0.2677	8.4458	8.7135	18
20	0.023 366	0.001 001 7	57.837	83.9	2454.3	0.2963	8.3721	8.6684	20
25	0.031 660	0.001 002 9	43.401	104.8	2442.5	0.3670	8.1922	8.5592	25
30	0.042 415	0.001 004 3	32.928	125.7	2430.7	0.4365	8.0181	8.4546	30
35	0.056 216	0.001 006 0	25.244	146.6	2418.8	0.5049	7.8495	8.3543	35
40	0.073 750	0.001 007 8	19.545	167.5	2406.9	0.5721	7.6861	8.2583	40
45	0.095 820	0.001 009 9	15.275	188.4	2394.9	0.6383	7.5277	8.1661	45
50	0.123 35	0.001 012 0	12.045	209.3	2382.9	0.7035	7.3741	8.0776	50
55	0.157 41	0.001 014 5	9.577 9	230.2	2370.8	0.7677	7.2248	7.9925	55
60	0.199 20	0.001 017 1	7.677 5	251.1	2358.6	0.8310	7.0798	7.9108	60
65	0.250 09	0.001 019 9	6.201 3	272.0	2346.3	0.8933	6.9388	7.8321	65
70	0.311 62	0.001 022 8	5.045 3	293.0	2334.0	0.9548	6.8017	7.7565	70
75	0.385 49	0.001 025 9	4.133 1	313.9	2321.5	1.0154	6.6681	7.6835	75
80	0.473 60	0.001 029 2	3.408 1	344.9	2308.8	1.0753	6.5380	7.6133	80
85	0.578 03	0.001 032 6	2.827 8	355.9	2296.1	1.1343	6.4111	7.5454	85
90	0.701 09	0.001 036 1	2.360 3	376.9	2283.2	1.1925	6.2873	7.4798	90
95	0.845 26	0.001 039 9	1.981 2	398.0	2270.2	1.2501	6.1665	7.4166	95
100	1.013 25	0.001 043 7	1.672 0	419.1	2256.9	1.3069	6.0485	7.3554	100
105	1.208 0	0.001 047 7	1.418 3	440.2	2243.6	1.3630	5.9331	7.2962	105
110	1.432 7	0.001 051 9	1.208 9	461.3	2230.0	1.4185	5.8203	7.2388	110
350	165.35	0.001 741 1	0.007 06	1671.9	895.7	3.7800	1.4376	5.2177	350
355	175.77	0.001 808 5	0.006 05	1716.6	813.8	3.8489	1.2953	5.1442	355
360	186.75	0.001 895 9	0.005 04	1764.2	721.3	3.9210	1.1390	5.060	360
365	198.33	0.002 016 0	0.003 99	1818.0	610.0	4.0021	0.9558	4.9579	365
370	210.54	0.002 213 6	0.002 76	1890.2	452.6	4.1108	0.7036	4.8144	370
374	220.81	0.002 842 7	0.000 63	2046.7	109.5	4.3493	0.1692	4.5185	374
374.15	221.20	0.003 17	0	2107.4	0	4.4429	0	4.4429	374.15



p	t	Volume specifico m ³ /kg		Entalpia kJ/kg			Energia interna kJ/kg		Entropia kJ/kg K			p
		v _i	v _v	h _i	h	h _v	u _t	u _v	s _i	t/T	s _v	
0.006 02	0	0.001 000 2	206.298 7	-0.0	2501.6	2501.6	-0.0	2375.6	-0.0	9.1578	9.1578	0.006 02
0.006 11	0.01	0.001 000 2	206.162 9	+0.0	2501.6	2501.6	0	2375.6	0	9.1575	9.1575	0.006 11
0.010	6.98	0.001 000 1	129.210 7	29.3	2485.0	2514.4	29.3	2385.2	0.1060	8.8706	8.9767	0.010
0.020	17.51	0.001 001 2	67.011 6	73.5	2460.2	2533.6	73.5	2399.6	0.2606	8.4640	8.7246	0.020
0.030	24.10	0.001 002 7	45.670 0	101.0	2444.6	2545.6	101.0	2408.6	0.3543	8.2242	8.5785	0.030
0.040	28.98	0.001 004 0	34.803 3	121.4	2433.1	2554.5	121.4	2415.3	0.4225	8.0530	8.4755	0.040
0.050	32.90	0.001 005 2	28.194 5	137.8	2423.8	2561.6	137.8	2420.6	0.4763	7.9197	8.3960	0.050
0.060	36.18	0.001 006 4	23.740 6	151.5	2416.0	2567.5	151.5	2425.1	0.5209	7.8103	8.3312	0.060
0.070	39.03	0.001 007 4	20.530 4	163.4	2409.2	2572.6	163.4	2428.9	0.5591	7.7176	8.2767	0.070
0.080	41.54	0.001 008 4	18.103 8	173.9	2403.2	2577.1	173.9	2432.3	0.5926	7.6370	8.2295	0.080
0.090	43.79	0.001 009 4	16.203 4	183.3	2397.9	2581.1	183.3	2435.3	0.6224	7.5657	8.1881	0.090
0.10	45.83	0.001 010 2	14.673 7	191.8	2392.9	2584.8	191.8	2438.1	0.6493	7.5018	8.1511	0.10
0.15	54.00	0.001 014 0	10.022 1	226.0	2373.2	2599.2	226.0	2448.9	0.7549	7.2544	8.0093	0.15
0.20	60.09	0.001 017 2	7.649 2	251.5	2358.4	2609.9	251.5	2456.9	0.8321	7.0773	7.9094	0.20
0.25	64.99	0.001 019 9	6.204 0	272.0	2346.4	2618.3	272.0	2463.2	0.8933	6.9390	7.8323	0.25
0.30	69.13	0.001 022 3	5.229 0	289.3	2336.1	2625.4	289.6	2468.2	0.9441	6.8254	7.7695	0.30
0.35	72.71	0.001 024 5	4.525 5	304.3	2327.2	2631.5	304.3	2473.1	0.9878	6.7288	7.7166	0.35
0.40	75.89	0.001 026 5	3.993 2	317.7	2319.2	2636.9	317.7	2477.2	1.0261	6.6448	7.6709	0.40
0.45	78.74	0.001 028 4	3.576 1	329.6	2312.0	2641.7	329.6	2480.8	1.0603	6.5703	7.6306	0.45
0.50	81.35	0.001 030 1	3.240 1	340.6	2305.4	2646.0	340.5	2484.0	1.0912	6.5035	7.5947	0.50
0.60	85.95	0.001 033 3	2.731 7	359.9	2293.6	2653.6	359.8	2489.7	1.1455	6.3872	7.5327	0.60
0.70	89.96	0.001 036 1	2.364 7	376.8	2283.3	2660.1	376.3	2494.6	1.1921	6.2883	7.4804	0.70
0.80	93.51	0.001 038 7	2.086 9	391.7	2274.0	2665.8	391.6	2498.8	1.2330	6.2022	7.4352	0.80
0.90	96.71	0.001 041 2	1.869 1	405.2	2265.6	2670.9	405.1	2502.7	1.2696	6.1258	7.3954	0.90
1.00	99.63	0.001 043 4	1.693 7	417.5	2257.9	2675.4	417.4	2506.0	1.3027	6.0571	7.3598	1.00
1.013 25	100.00	0.001 043 7	1.673 0	419.1	2256.9	2676.0	419.0	2506.5	1.3069	6.0485	7.3554	1.013 25
1.20	104.81	0.001 047 6	1.428 1	439.4	2244.1	2683.1	439.3	2512.0	1.3609	5.9375	7.2984	1.20
1.40	109.32	0.001 051 3	1.236 3	458.4	2231.9	2690.3	458.3	2517.2	1.4109	5.8356	7.2465	1.40
1.60	113.32	0.001 054 7	1.091 1	475.4	2220.9	2696.2	475.2	2521.6	1.4550	5.7467	7.2017	1.60
1.80	116.93	0.001 057 9	0.977 18	490.7	2210.8	2701.5	490.5	2525.6	1.4944	5.6677	7.1622	1.80
200.00	365.71	0.002 037 4	0.005 874 5	1826.6	591.6	2418.2	1785.9	2300.7	4.0151	0.9259	4.9410	200.00
210.00	369.79	0.002 201 8	0.005 022 5	1886.3	461.2	2347.5	1840.1	2242.0	4.1040	0.7172	4.8222	210.00
220.00	373.78	0.002 667 5	0.003 734 7	2010.3	186.3	2196.6	1951.6	2144.4	4.2934	0.2881	4.5814	220.00
221.20	374.15	0.003 170 0	0.003 170 0	2107.4	0	2107.4	2037.1	2037.3	4.4429	0	4.4429	221.20

