# TRASFORMAZIONI TERMODINAMICHE

## EQUAZIONE DI STATO DEI GAS

**PV=RT**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Pa(N/m²) | m³ | | J/K | K | | | | | |
| | | | | P | V | = | R | T | | R atmosfera = | 287,00 | J/K | |
| | | | | | | | | | | p atmosfera= | 101.325,00 | Pa(N/m²) | |
| $p_0$ | $p_1$ | | | | | | | | | | | | |
| 101.325,00 | 101.325,00 | | | ISOBARA | | | | | | | | | |
| $v_0$ | $v_1$ | | | $R_0T_0/V_0=R_1T_1/V_1$ | | | | | | | | | |
| 10 | 20 | | | | | | | | | | | | |
| $T_0$ | $T_1$ | | | | | | | | | | | | |
| 287,16 | **574,32** | | | $T_0/V_0=T_1/V1$ | | | | | | | | | |
| | | | | | | | | | | | | | |
| p | $v_0$ | $v_1$ | $T_0$ | $T_1$ | | | | | | | | | |
| 101.325,00 | 10 | 20 | 287,16 | 574,32 | | | | | | | | | |
| $v_0$ | | | | 10,00 | | | | | | | | | |
| $v_1$ | | | | | | | | | | | | | |
| $T_0$ | | | | | | | | | | | | | |
| $T_1$ | | | | **574,32** | | | | | | | | | |
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| | | | | | | | | | | | | | |
| | | | | ISOCORA | | | | | | | | | |
| | | | | $R_0T_0/P_0=R_1T_1/P_1$ | | | | | | | | | |
| $p_0$ | $p_1$ | | | | | | | | | | | | |
| 101.325,00 | 151.325,00 | | | | | | | | | | | | |
| $v_0$ | $v_1$ | | | | | | | | | | | | |
| 10 | 10 | | | | | | | | | | | | |
| $T_0$ | $T_1$ | | | | | | | | | | | | |
| 287,16 | | | | | | | | | | | | | |
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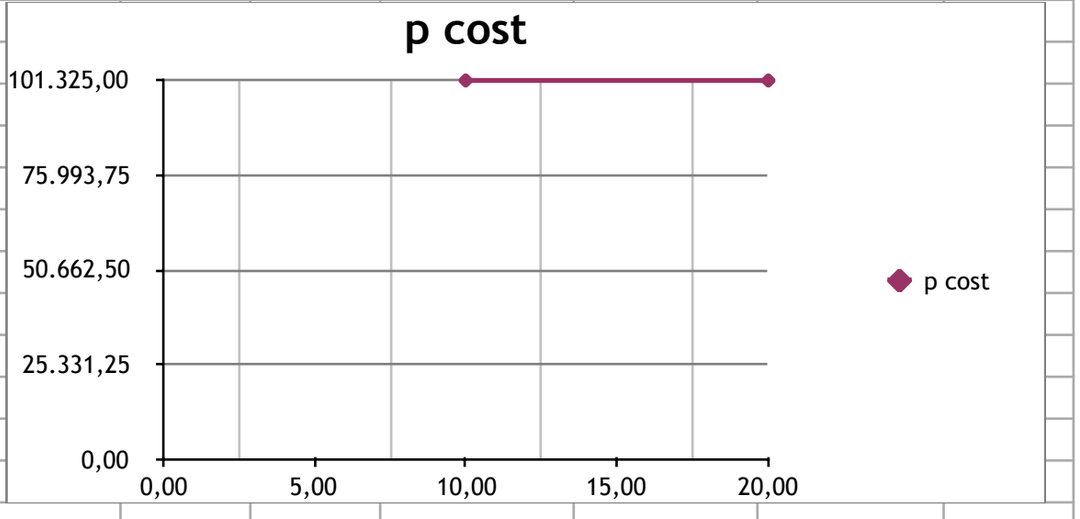
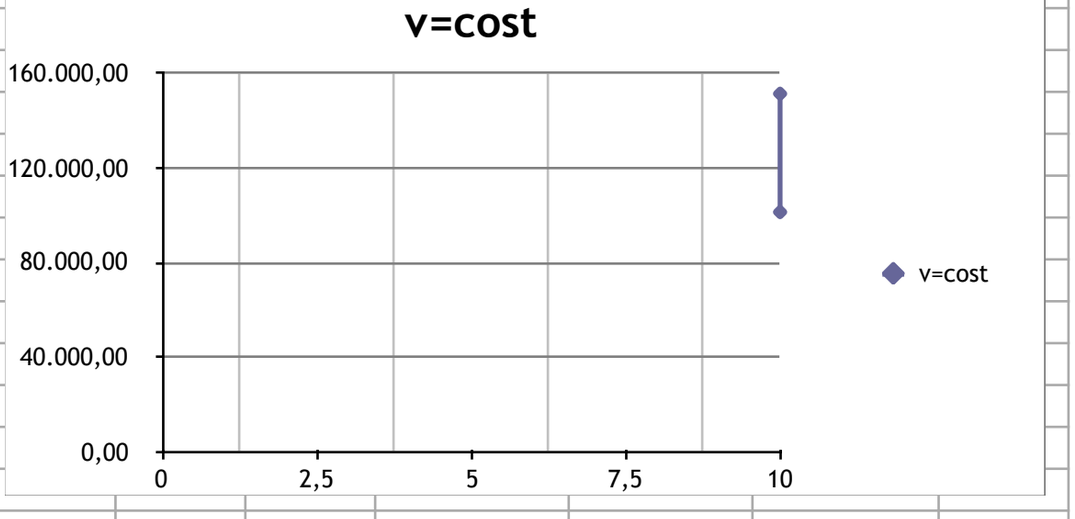
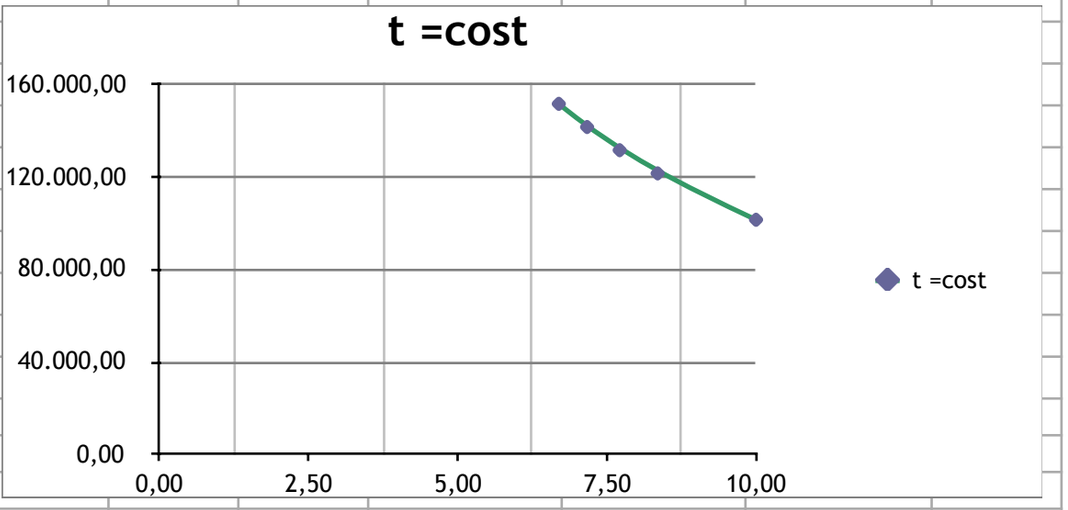


| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| | | | | | p1 xv1 | 1013250,00 | | | | | | | | |
| | | | | ISOTERMA | | | | | | | | | | |
| | | | | $P_0V_0=P_1V_1=RT$ | p2xv2 | 1013250,00 | | | | | | | | |
| $p_0$ | $p_1$ | $p_2$ | $p_3$ | $p_4$ | | | | | | | | | | |
| 101.325,00 | 121.325,00 | 131.325,00 | 141.325,00 | 151.325,00 | | | | | | | | | | |
| $v_0$ | $v_1$ | $v_2$ | $v_3$ | $v_4$ | | | | | | | | | | |
| 10,00 | 8,35 | 7,72 | 7,17 | 6,70 | | | | | | | | | | |
| $T_0$ | $T_1$ | $T_2$ | $T_3$ | $T_4$ | | | | | | | | | | |
| 287,16 | 287,16 | 287,16 | 287,16 | 287,16 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 10,00 | 101,33 | 20 | 4,12 | 82.414,92 | | | | | | | | | | |
| 8,35 | 121 | 18 | 4,58 | | | | | | | | | | | |
| 7,72 | 131,33 | 16 | 5,15 | | | | | | | | | | | |
| 7,17 | 141,33 | 14 | 5,89 | | | | | | | | | | | |
| 6,70 | 151,33 | 12 | 6,87 | | | | | | | | | | | |
| | | 10 | 8,24 | | | | | | | | | | | |
| | | 8 | 10,30 | | | | | | | | | | | |
| | | 6 | 13,74 | | | | | | | | | | | |
| | | 4 | 20,60 | | | | | | | | | | | |
| | | 2 | 41,21 | | | | | | | | | | | |



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