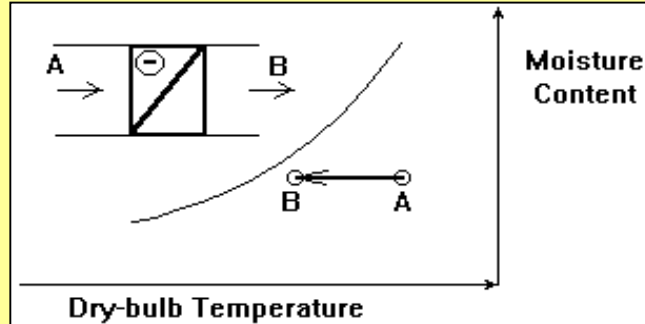This document shows how **Thermo Utilities, MS Excel Add-ins** can be used for calculation of sensible cooling process.
In an air conditioning plant, air flow rate of 2 kg/s passes through a coil. The dry-bulb temperature decreases from 25 C to 10 C.
The moisture content of the air is 0.005. Determine the load on the coil. Surface temperature of the coil is above the dew-point temperature i.e.
the moisture content is constant.

Inputs		Units
on-coil air, DBT	25.00	C
on-coil air, moisture content	0.005	
on-coil air, mass flow rate	2.00	kg/s
off-coil air, DBT	10.00	C
off-coil air, moisture content	0.005	
off-coil air, mass flow rate	2.00	kg/s
Atmospheric pressure	1.01	bar
Output		
Dew-point temperature	4.0	C
Specific enthalpy of the on-coil air	37.7592	kJ/kg
Specific enthalpy of the off-coil air	22.6280	kJ/kg
Load on the coil	30.2625	kW

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If you want to know more about "Taftan Data" or other software developed by this company please visit our website:

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