

DuoVap

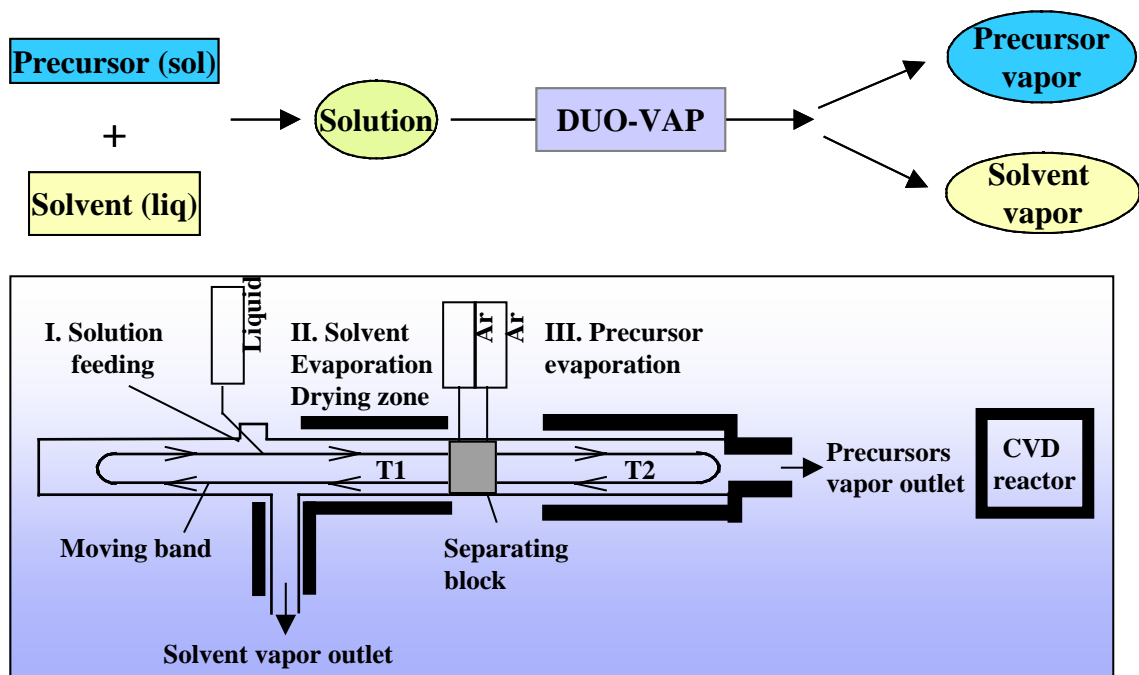
New

Innovative fractionated vaporization system for MOCVD.

The Jipelec DuoVap evaporator (patent pending) allows liquid and solid precursors dissolved in carrier liquid (solvent) to be used for CVD and MOCVD processes. This innovative system, based on a fractionated vaporization, has been specially developed for:

- Low vapor pressure CVD precursors
- CVD processes where solvent presence is detrimental

In CVD processes, solutions are the best way to handle solid precursors. DuoVap allows to eliminate solvent vapors before evaporating the precursors.



Jipelec DUO-VAP is particularly well-adapted to avoid:

- Carbonates contamination when working at low pressure and high temperatures.
- Explosive regime when working oxidizing atmosphere close to atmospheric pressure.

Applications:

Mechanical coatings :	Cr_2O_3 , Fe_2O_3 , ZrN, TiN, NbN
Superconductors:	YBaCuO;
Optical coatings :	TiO_2 , Ta_2O_5 , Y_2O_3 , Sc_2O_3
Thermal coatings :	CeO_2 , Y_2O_3 , MgO, Al_2O_3 , ZrO_2 , SiO_2
Colossal magnetoresistant:	$\text{BaFe}_{12}\text{O}_{19}$, LaMnO
Piezoelectric:	$(\text{Pb,Sr})(\text{Zr,Ti})\text{O}_3$
Conductive membranes:	$\text{La}_{1-x}\text{Sr}_x\text{Ga}_{1-y}\text{MyO}_3$ (M=Fe, Co, Ni) $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$, $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$
Transparent conductive oxides:	ITO
Anticorrosion, hard coating, etc.	

Performance:

Liquid lines:	up to 2 lines
Liquid feeding rate:	up to 50g/hr
Temperature range:	up to 300°C