PLASMA NANO COLLOID





Plasma Nano Colloid maker (PNC) is an nanomaker machine has been developed by PNF Co. PNC is utilized to produce a wide range of metallic Nano-Colloids via under water wire explosion process. Average particle size of nanoparticles produced by this method is under 100 nm. In this method, the parameters such as colloids size; concentration of nano particles in liquid, type of surface treatment and additives can be controlled.







Nano Colloid

APPLICATIONS

The production of a wide range of nano colloids with different concentration in various media

FUNDAMENTAL STUDIES

- Synthesis of nano engine oil additive to reduce coefficient of friction
- Synthesis of anti fungal nano silver colloids
- Synthesis of Aluminum Nitride by Aluminum wire, Heptan and hexamethylenetetramine

<mark>))</mark> Features

- Ability of producing a wide range of metallic nano-colloids which can be provided in thin wire shape.
- A wide range of liquid media including Water, Alcohol, and Glycerin and etc can be applied
- Excellent dispersion of Metallic nano particles in related liquid
- Ability of producing in laboratorial scale with different concentrations
- Environmental friendly
- High productivity

SPECIFICATIONS

MODEL		PNC1K	PNC8K	
Output voltage		0.5-1KV	8 KV	
Input power		1P 220 VAC	1P 220VAC	
Power consumption		500W	2KW	
Shot period		1-5 sec	1-5 sec	
Wire	Max. diameter	0.25mm	0.4mm	
	Exploding length	1-5mm	2-4cm	
Input Wire		most of conductiv	most of conductive metal	
Average Particle Size		< 100 nm	< 100 nm	
System weight		15kg	30kg	

Nano silver colloids





Synthesis of anti fungal nano silver colloids by PNC1K with average particle size of 15nm

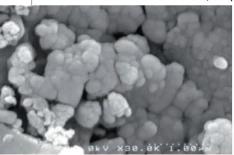
Nano motor oil additive

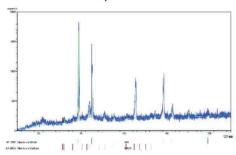




Synthesis of nano engine oil additive with dispersed metallic nano powder with average size of 10-15 nm

Nitride from Aluminum wire, Heptan and hexamethylenetetramine





Synthesis of Aluminum Nitride by PNC1K with particle size range of 50-90 nm



