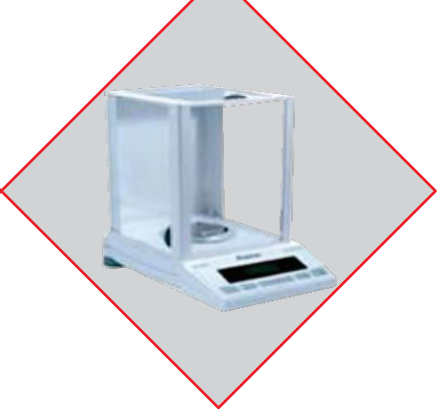
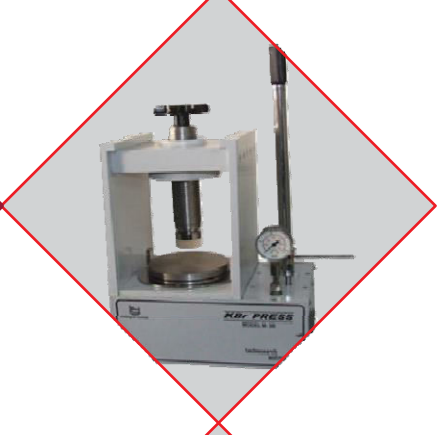
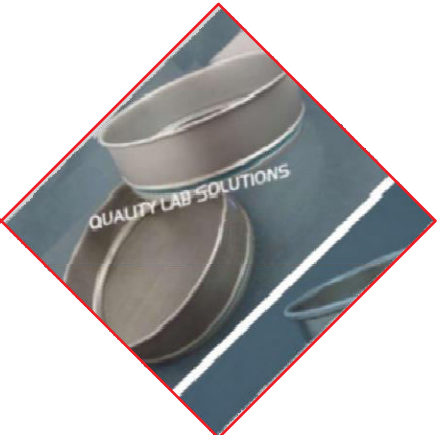




# ARROW PHARMATECH



# ELECTROMAGNETIC SIEVE SHAKER MODEL – i- Premium & i- Control

**Smart Sieve** Software data downloading with **Graphical** analysis and Program storage up to 16 different entries.



Dry Sieving	Standard
Wet Sieving	Optional Kit
Mode of Operation	Continuous and Intermittent and Advance
Intermittent Operation	At intervals up to 0.5 seconds
Capacity	Up to 8 sieves of 50 mm height
	Up to 16 sieves of 2.5 mm height
Shake Time	Programmable from 1 min to 99 min
Amplitude Level	Programmable from 0.1 to 3
Display	16 x 2 character alphanumeric LCD
Noise Level	Less than 61 dB without sieves at maximum amplitude
	Less than 71 dB with sieves and material at maximum amplitude
Power	220/230 VAC, 50 Hz, 600 VA
	100/110 VAC, 60 Hz, 600 VA
Primary Fuse	T 2.5 Amp (for input supply as 220/110 VAC, 60 Hz)
	T 5 Amp (for input supply as 100/110 v Ac, 60 Hz)
Dimension (mm)	L 339 x W 312 x H 270
Net Weight	50 kg without sieves (Approx)



**Test Sieve**

ISO NORMAL APERTURE SUPPLEMENTARY SIZE R40/3	(MESH SIZE) ASTM E11-01	BSS
4.00mm	No. 5	No. 4
3.35mm	No. 6	No. 5
2.80mm	No. 7	No. 6
2.36mm	No. 8	No. 7
2.00mm	No. 10	No. 8
1.70mm	No. 12	No. 10
1.40mm	No. 14	No. 12
1.18mm	No. 16	No. 14
1.00mm	No. 18	No. 16
850 µm	No. 20	No. 18
710 µm	No. 25	No. 22
600 µm	No. 30	No. 25
500 µm	No. 35	No. 30
425 µm	No. 40	No. 36
355 µm	No. 45	No. 44
300 µm	No. 50	No. 52
250 µm	No. 60	No. 60
212 µm	No. 70	No. 72
180 µm	No. 80	No. 85
150 µm	No. 100	No. 100
125 µm	No. 120	No. 120
106 µm	No. 140	No. 150
90 µm	No. 170	No. 170
75 µm	No. 200	No. 200
63 µm	No. 230	No. 240
53 µm	No. 270	No. 300
45 µm	No. 325	No. 350
38 µm	-	-
28 µm	-	-

## PORTABLE HARDNESS TESTER MODEL- QHT-01-500Nr



### TECHNICAL SPECIFICATIONS:

Hardness Range : upto 500 Newton

Measuring Units : N,kN,kg,lbs and oz

Min Load : 0.1 N

Accuracy :  $\pm 0.5$  %.

Power : 1.5V ("AA" battery) 4 nos

Optional Power : 6V DC adaptor ( on request )

Tablet Size : 2mm to 28mm ( Length /Diameter )

Work Temperature : 20

Dimensions (L x W x H ) : 247 mm X 76 mm X 91 mm

## PORTABLE HARDNESS TESTER MODEL - QHT-01P-500N



### SPECIFICATIONS:

Hardness Measurement by Load cell upto 500N.

Units of measurement in N,Kgf and lbf.

Printer connectivity through RS232- port.

Programmable upper T1 & lower T2 tolerance limits.

Display and print out of 10 test value and calculate the average of the memorized value

MIN LOAD:0.1N

ACCURACY:  $\pm 0.5$ % Full Scale.

Tablet Size : 2 mm to 28mm (length/diameter).

Power :Ni-Hi 8.4V,1200 ma.

Work temperature: 20C  $\pm$  10C

Dimension (LxWXH:350mm X 99mm X 110mm)

## Bulk Density Tester



### BULK DENSITY

The bulk density of powders can be extremely difficult to measure since the slightest disturbance may result in a change in the results. This is the result of the relationship between the particles that constitute the powder bulk. This same relationship effects the ability of the powder to flow.

The bulk density of a powder may be described as the density of the powder “as poured” into a measuring vessel.

## PHARMED & TYGON TUBING FOR PERSTALTIC PUMP



**Tygon Tube 1.52ID**



**Tygon Tube 2.08ID**



**Tygon Tube Type W**



## DISINTEGRATION TESTER ACCESSORIES



**BASKET ASSEMBLY**



**DT GUIDED DISC**



**DT GLASS TUBES**



**1000ML BEAKER**



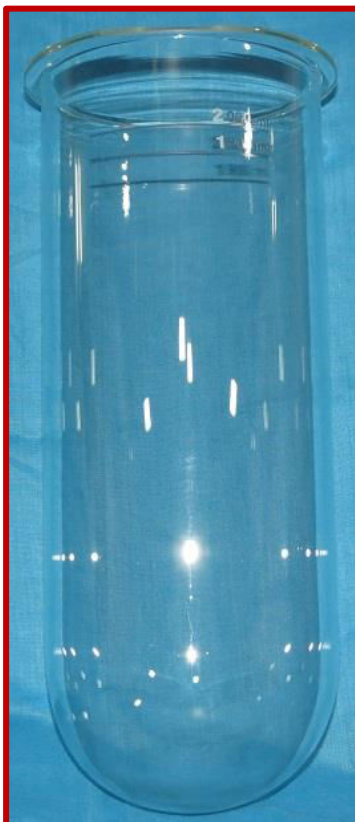
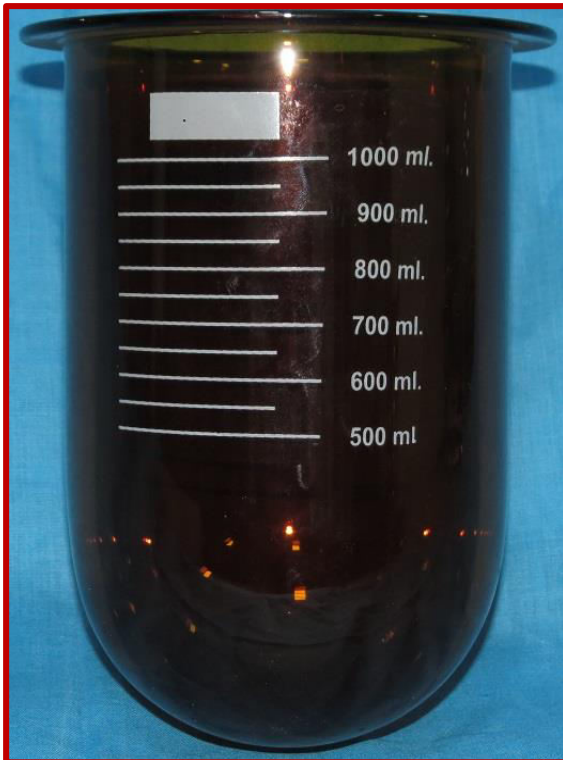
**Bolus 3 Tube Assembly**

## TAP DENSITY ACCESSORIES



**TAP DENSITY CYLINDERS**

## DISSOLUTION GLASS BOWLS FOR ALL TYPES



**Available  
in Clear  
& Amber  
Color**



# DISSOLUTION TESTER ACCESSORIES





## DISSOLUTION TESTER ACCESSORIES



**BASKET 10 MESH**



**BASKET 20 MESH**



**BASKET 40 MESH**



**BASKET 60 MESH**



**BASKET 100 MESH**



**BASKET D- 10 MESH**



**BASKET D- 20 MESH**



**BASKET D- 40 MESH**



**TEFLON BASKET 40 MESH**



**BASKET SHAFT**



**SS FILTER & ADAPTOR**



**TEFLON PADDLES**



## KBr PRESS (MANUAL)



The press is capable of producing maximum pressure upto 15 tons. It is compact in construction & occupies very little bench space. Acrylic screens are provided for the safety of the operator. The base plate has a provision for bench mounting. A pressure gauge for indication of pressure release valve is provided. A telescopic handle is used for extra leverage.

KBr Press Model APM-15, fixing bolts for table mounting. Rubber anti slide sheet, Oil Bottles -2 Nos., Safety sheets-2 Nos.

There are 3 methods by which a solid material is brought to the form acceptable to the instrument.

- \* KBr Disc Technique
- \* Mull Technique
- \* Liquid sampling

## KBr PRESS (AUTOMATIC)



This is electrically operated version of the manual press. The pumping is done by gear motor drive. Simply press a button & it will start building pressure & will stop automatically at set pressure by means of a pressure switch.

KBr Press Model APA-15, Oil Bottles-2 Nos., Safety Sheets-2 Nos., Allen Key for pressure Adjustment.

NOTE :

Higher capacity press with larger plate size are available for specific applications. Ask for specifications giving details of your requirement.

## POLYMER PRESS (MANUAL)



The Polymer Film Making equipment is intended for preparation of cast Films or sheets from Polymers like LDPE, HDPE, PP, POLYSTYRENE etc.

To prepare the film or sheet from granules or from small pieces it is necessary to heat the sample & simultaneously apply pressure. Suitable dies are to be used to obtain required thickness depending upon applications. Temperature & pressure conditions can be set as per the required sample.

### Specifications (Model PF – M15)

Press	15 Ton max pressure
Temperature	Ambient to 450° C
Temp. Controller	Digital Indicating
Platen Size	100 mm X 100 mm
Cooling	By Water Circulation
Overall Dimensions Including Press	380 X 240 X 350 MM
Wt. including Press	40 Kg
Power	230 V,50 HZ, 300W.

Applications:-

# To prepare cast films for studies in IR/FTIR Spectrometers.

# To prepare cast sheets for measurement of physical properties such as tensile strength, elongation etc.

The equipment consist of :

15 ton Laboratory Hydraulic Press. Heating arrangement with temperature controller indicator & necessary for water circulation for cooling plumbing.

## POLYMER PRESS (AUTOMATIC)



### Specification (Model PF-A15)

Max. Pressure	: 15 Ton
Temperature	: Ambient to 450°C (Adjustable)
Temperature	: Digital Indicating Controller
Cooling	: Arrangement for water circulation
Platen Size	: 100 mm X 100 mm

## SPRAY DRYER - (Model-SPD-D-111)



Spray drying is the most widely used industrial process involving particle formation and drying. It is highly suited for the continuous production of dry solids in either powder, granulate or agglomerate form from liquid feed stocks as solutions, emulsions and pump able suspensions. Therefore, spray drying is an ideal process where the end-product must comply to precise quality standards regarding particle size distribution, residual moisture content, bulk density, and particle shape in crystalline or amorphous powder. Spray drying involves the atomization of a liquid feedstock into a spray of droplets and contacting the droplets with hot air in a drying chamber. Evaporation of moisture from the droplets and formation of dry particles proceed under controlled temperature and airflow conditions. It is the ultimate solution to R&D and analytical needs and is the key for standardization of product.

## DRY BOX - Model (Regular)



The dry box is specifically designed for the storage of accessories & windows which are affected by moisture. Transparent lid gives a clear view of the contents.



Usable Volume	: 450 X 250 X 150 mm.
Temperature	: ambient to 45°C,
Power	: 230 V, 50 Hz, 100 W

## Kbr DIES



Die 6 mm



Die 8 mm



Die 10 mm



Die 12 mm



Die 13 mm



Die 15 mm



Die 20 mm

- It is used for preparing pellets for Lab applications.
- Die MOC
- Die Bottom - SS 202 Hardened.
- Die Top - SS 316.
- Anvil & Plunger - HSS M2 Hardened.

## XRF DIE



Die 25 mm



Die 30 mm



Die 32 mm



Die 40 mm



Die 45 mm



Die 50 mm



Die 55 mm



Die 58 mm



Die 60 mm

- It is used for preparing pellets for XRF applications.
- Die MOC
- Die Bottom - SS 202 Hardened.
- Die Top - SS 316.
- Anvil & Plunger - HSS M2 Hardened.

## TORRODIAL DIE 10mm



- ❖ It is used for preparing pellets for special Applications.
- 10mm Max load 2.5mm.

## TORRODIAL DIE 20mm

- ❖ It is used for preparing pellets for special Applications.
- 20 mm Max load 2.5mm.

## HIGH PRESSURE CLEANER MACHINE



integrated trolley takes steps and rough ground in its stride



integrated hose drum with foldable crank and 15m steel braided high-pressure hose



5m power lead with cable reel (12/150 TS T:7.5m)



Receptacles for trigger gun with safety catch, Dirt killer lance and lance with flat jet



nozzle High pressure detergent valve



Shock absorbing buffers, front and rear



Rectangular Windows For FTIR - NaCl / KBr / AgCl/ CaF2/ZnSe



Rectangular Windows For FTIR - NaCl / KBr / AgCl/ CaF2/ZnSe

## WINDOWS FOR FTIR

Windows for Mull Cells (25 x 5 Round)

NaCl (Part No: IR 001) (Part No: IR 001A) 1 No.  
KBr (Part No: IR 002) (Part No: IR 002A) 1 No

Spare Windows for Liquid Cells

NaCl (Part No: IR 003) 38 x 19 x 4	Rectangular	(Undrilled)
NaCl (Part No: IR 004) 38 x 19 x 4	Rectangular	(Drilled)
NaCl (Part No: IR 005) 32 x 4	Round	(Undrilled)
NaCl (Part No: IR 006) 32 x 4	Round	(Drilled)
KBr (Part No: IR 007) 38 x 19 x 4	Rectangular	(Undrilled)
KBr (Part No: IR 009) 32 x 4	Round	(Undrilled)
Kbr (Part No: IR 0010) 32 x 4	Round	(Drilled)



## IR - CELLS



### Demountable Mull Cell Circular Windows - NaCl / KBr / AgCl / CaF<sub>2</sub> / ZnSe

This cell is conventionally for qualitative analysis of liquids and Nujol Mull. Standard 25mm windows are used. If spacers are required, order pack of Round spacers separately, refer table No.4 for spacers available, clear 22mm opening makes it suitable for both FTIR and depressive IR.



### Fixed Thickness Liquid Cell (Rectangular) - NaCl / KBr / AgCl / CaF<sub>2</sub> / ZnSe

The cell is similar in constructions semi permanent except that the windows and lead spacers are cemented together. Must be ordered with specific path length.

NOTE : Teflon coated cell mounts are available for specific applications.



### Semi Permanent Liquid Cell - NaCl / KBr / AgCl / CaF<sub>2</sub> / ZnSe

The cell mount is made of stainless steel with built-in teflon gasket. The assembly includes cell mount, front and rear gasket, teflon plug, one drilled and one undrilled window (NaCl or Kbr). When not specified 0.1mm spacer is installed. For spacers of other path-length refer table for Teflon.

Shape	Size (mm)	Thickness (mm)	Suitable
		0.1	
		0.2	
Round	25	0.3	Mull Cell
		Assorted	
Rectangular	8x19	0.1	Semi-permanent Liquid Cell

## VACCUM PUMP



It is a diaphragm type, oil free, portable vacuum pump, especially suitable for Solvent Filtration Kit for HPLC & for Evaluable Kbr Die for IR Spectroscopy.

Specifications:

Material of Construction: Graded Aluminum Casting Voltage : 230 Volts AC, 50 Hz Max.

Pressure : 25 Psig Max.

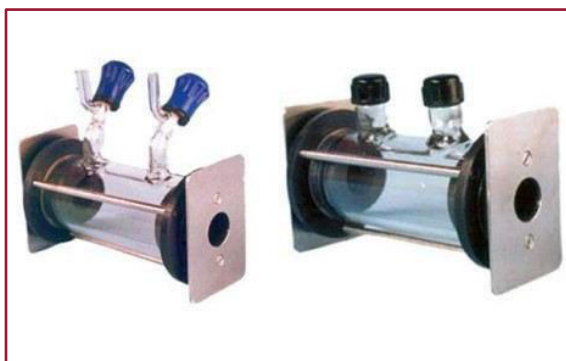
Vacuum : 22" Hg Flow : 15 Liters/min.

Diaphragm : Neoprene - Nylon-Reinforced Inlet / Outlet Port Size: 1/8" NPT, Female Approx.

Dimensions : 175 x 110 x 150 mm.

Approx. Weight : 2.7 Kg.

## Kbr /Nacl Gas Cell



### Specifications are as follow:-

The gas cell is for analysis of pure gases or gas mixture in which component gases are present at concentration of 5% or more. The gas cell has a fixed path length.

The window of the cell are easy remove for cleaning making the cell ideal for working with reactive gases.

The cell comes completely assembled in SS Universal mount. It included glass body, rubber or viton gaskets.

### GAS CELLTYPE - A

Gas cell offers the spectrosopes a relatively inexpensive method for infrared gas studies. The path length is 10 cm and 5 cm with plain tubular endings and Valve are supplied as standard.

### GAS CELLTYPE -B

Cell is similar to Type A expect that it is available in 5cms. & 10cms.and can be used at increased or decreased pressure and filled with gas tight syringe. The sample is introduced through septa which are fitted to inlet & outlet parts.

Windows Materials	Size (MM)	Type
NaCl	100	A
KBr	100	A
NaCl	50	B



## Nitrogen Inert Loop

Description: Inert loop is very essential with spray drying while spray drying of solvent based solutions to avoid atmospheric pollution, to evade oxidation of product being sprayed.

Technical Info: Added in catalogue.

Application: Spray Drying.

## HPLC Column Oven Accessories



### HPLC COLUMN OVEN-HS - 100

This is for regular use where the need is to control the temperature at least 10°C to 15° C above ambient. It uses heaters and PID controller to give the desire accuracy.

#### SPECIFICATIONS

Material Of Construction	: SS
Temp. Range	: 10° C above Ambient to 15° C
Accuracy	: + 0.2 C
Stability	: + 0.2 C
Temp. Control	: Digital indicating with LED Display Capacity
	: Single Column up to 20 mm Dia. each
Column Length	: Up to 30cm + Guard Column = up to 40cms.
Overall Dimensions	: 480Lx 85H x 100 W mm



## Filtration Kit, Solvent Filtration Kit, Inline Filter Holder, Inline Filter Holder

### SOLVENT FILTRATION KIT

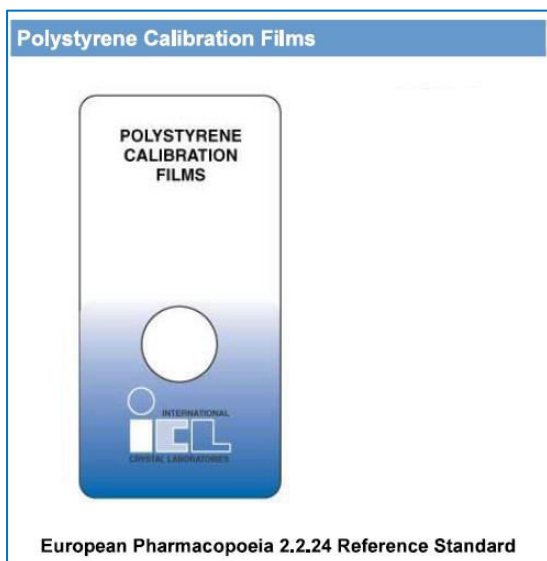
Consisting of:

- 1) All glass filtration assembly, containing 1 liter flask, 250ml vessel filter holder clamp.
- 2) Oil free vacuum pump.

### INLINE FILTER HOLDER

Suitable for 13mm die filter. Supporting SS mesh & "O" rings included.

## FTIR CALIBRATION STANDARD – NIST TRACEABLE POLYSTYRENE FILM



ICL's PhEur 2.2.24 Reference Standard is a calibration standard certified to conform to the requirements of Chapter 2.2.24 of the European Pharmacopoeia. Each of these polystyrene reference films is mounted in a convenient holder for easy insertion in the standard slide holder of any IR or FTIR spectrophotometer. PhEur 2.2.24 Reference Standards are certified to the following wave-numbers using a NIST 1921 certified film as a reference standard: 3060 cm<sup>-1</sup>, 2849.5 cm<sup>-1</sup>, 1942.9 cm<sup>-1</sup>, 1601.2 cm<sup>-1</sup>, 1583.0 cm<sup>-1</sup>, 1154.5 cm<sup>-1</sup> and 1028.3 cm<sup>-1</sup>. PhEur 2.2.24 calibration standards are certified to show a difference between the absorption maxima to absorption minima at 2849.5cm<sup>-1</sup> and 2870cm<sup>-1</sup> greater than 0,33 and a difference between the absorption minima and absorption maxima at 1589 cm<sup>-1</sup> and 1583 cm<sup>-1</sup> greater than 0,08 as required by PhEur 2,2,24.

## PH ELECTRODES



Electrodes are designed to be used in a variety of applications. These include water quality, soil pH, non-aqueous media, and education. Both glass and plastic body types are available.

### Features & Details:

1. Fitted with BNC Connector.
2. pH range 0 to 14 pH.
3. Low noise Coaxial Cable.
4. Operating Temperature 0 to 70°C



## CONDUCTIVITY CELL

### Features & Details:

1. Fitted with Banana Connector.
2. Cell Constant 0.1K & 1.0K
3. Operating Temperature 0 to 70°C



## ULTRASONIC EQUIPMENTS



Model	Size of the tank (MM)
1.5L 50H	240 x 140 x 65
2.25L 70H	235 x 135 x 100
3.5L 100H	300 x 150 100
5.5L 150H	250 x 150 x 150
6.5L 200H	300 x 150 x 150
8L 200H	300 x 180 x 150
9L 250H	300 x 200 x 150
10L 250H	300 x 230 x 150
13L 300H	300 x 300 x 150
21L 400H	350 x 300 x 200
24L 500H	400 x 400 x 150
30L 500H	400 x 300 x 250

## HIGH POWER ULTRASONIC ATOMIZER



With a motive to stand tall on all the prospects of our customers, we are engrossed in presenting High Power Ultrasonic Atomizer. In conformism with the developments taking place in this business domain, this is widely cherished for its high functionality, low maintenance and ruggedness. Also, these could be purchased from us at affordable costs.

High Power Ultrasonic Atomizer uses only low ultrasonic vibration energy for atomization. The liquid can be dispensed to the atomizing probe (Nozzle) by either gravity feed or a small-pressure metering pump, and atomized continuously intermittently. The amount of material atomized can be as little as 2 micro liters per second. Because the droplets typically drift downward, and air disturbances kept to a minimum.

- **Features :** Lightweight / Rust Proof / Strong



Riding on immeasurable volumes of industrial expertise and understanding in this arena, we are engrossed in providing Ultrasonic Atomizer. In conformity with the standards as set by the market, these are well tested prior getting shipped. More to this, their obtainability with us in a consignment of provisions makes these highly recommended.

- **Features:** Durable, Reliable, Fine Finish

Processor: sample preparation, cellysing, organelle isolation, disaggregation, extraction, homogenization, particle size reduction, soil testing, acceleration of chemical reactions, testing for cavitation erosion, foam abatement, degassing de-aeration, cell disruption enzyme extraction and atomization. Our Ultrasonic Processors are vivid and multidimensional instruments meant to cover a variety of

samples such as aerated liquids, biological specimens, dyes etc. The equipment is basically used for research and small volume production. It comprises of an electronic generator that generate 250 watts of average electrical energy.

The transformer or velocity horn amplifies the small vibrations. Ultrasonic Processor / Ultrasonic Homogenizer / Ultrasonicator. It is also called Ultrasonic homogenizer, processor or disperser. A Sonicator system is comprised of 3 major corhponents: Generator, Converter and Horn (also known as a probe). The new model of the SKL-IIDN features: series is integrated with Temperature Monitor optional. LCD display screen clearly displays all operating parameters and options: Temperature, time, output power etc.

## Complete Environmental Testing Solution



Walk-in- Stability Chamber  
Walk-in- BOD Incubator  
Walk-in- Cold Chamber  
Stability Chamber  
Cold Chamber  
BOD Incubator  
Deep Freezer

Laboratory Oven  
Hot Air Oven  
Vacuum oven  
Water Bath  
Muffle Furnace  
Bacteriological Incubator  
Cooling Room



## 21 CFR Part 11 Compliance

WEB based SSDAS V1.0 Software is developed as a complete solution for online monitoring and recording data to meet 21 CFR part 11 compliance.

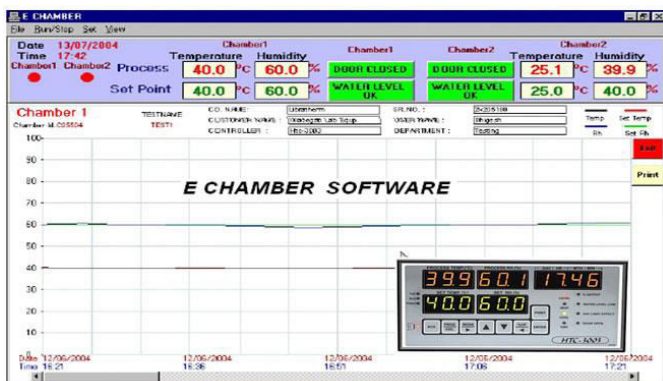
### 21 CFR Part 11 Compliance Software

#### Key Features

- Real Time Reading
- PLC Based SMS alert system and Software base report
- User Based Password Encryption
- System Administrator
- First Time User Login Password Change
- E-record & E- Sign with date and time

stamp

- Secured audit Trail



- Log data Event and Audit Trial data recording
- Data generated in PDF format
- Open Door with reason Master
- Automatic Backup Facility
- User based Alpha Numeric Password and Password Ageing

## AMC & Calibration

- We also undertake AMC and calibration of equipment's.
- Stability Spare part Services for All Manufacturer.



## Like to Know About Us.....

*ARROW Pharmatech is “Manufacturer & Complete Lab Solution”, that Provides a Variety of Instruments, consumables & accessories, designed Specially to meet all pharmacopeia Compliance.*

*All accessories designed & engineered by us surely Satisfy, Precise Specification of USP/BP/IP pharmacopeia .*

*ARROW Pharmatech always Prefers Client Satisfaction in Quality & Industrial Guidelines. We adhere to transparent Dealing & therefore always achieve strong bonding between our client and us.*

*Our prime target is “On Time Delivery”.*

*ARROW Pharmatech always keeps online track of changes and innovations that enable us to be improving and upgraded to latest Technology.*