

# **Andrology Lab Setup** (Level -II)

## Andrology Lab Setup

### (A) Instrument & Accessories

- 1.0 Sperm Meter For Upright Microscope
- 2.0 Sperm Warmer
- 3.0 Sperm Vision
- 4.0 Androspin (Centrifuge Machine)
- 5.0 Andrology Station
- 6.0 DNA Warmer
- 7.0 Slide Warmer

### (B) Plastic Ware & Disposable

### (C) Kits & Media

### (D) Tests to Perform

- Diagnostic Level
- Treatment Level

(A) Instrument & Accessories :

1.0 Sperm Meter™ (Semen Analysis Chamber)

SP/INT/001-A

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

**Sperm Meter™** is designed and developed by Sperm Processor Pvt. Ltd.

- CE accredited product.
- ISO 13485:2003 Certified Product for Design, Development & Supply by Standard Australia International.
- Designed to suit Microscope stage and no need to use of 40x objective lens.
- Each Sperm Meter is uniquely numbered.
- Dimensional Consistency: – 10  $\mu$  depth, certified by competent authority.
- Defined Micrometric area on optically flat 1 mm thick cover slip,  
(1.0 mm x 1.0 mm) divided into 100 Square,  
0.10 mm<sup>2</sup> Micrometric area, certified by competent authority.



2.0 Sperm Warmer™

SP/INT/004-A

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

A precise microprocessor based temperature controller with digital temperature display (PT 100 sensor,  $\pm 0.4^{\circ}\text{C}$  accuracy) and digital key pad to set temperature. The dual temperature display system, displays actual & set temperature. Designed Aluminum block for holding semen collection Containers, centrifuge tubes vertically and  $30^{\circ}$  inclined angle for swim up technique.



### 3.0 Sperm Vision™ (103i)

SP/INT/005-A

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

### Phase Contrast Microscope :

#### Specification :

##### Part Frame :

- UCIS Infinity Independent Achromatic Optical System.
- WF 10x plan eyepieces, 20 mm field of view, high eye point up to 21 mm.
- Seidentopf Trinocular viewing head inclined 30°, Rotatable 360°.
- ± 5 diopter adjustment
- 0.5X CCD Camera mount
- Phase Contrast Slide
- Quadruple nosepiece inward facing with positive click Stops

##### Objective Lens :

- - 10 x & - 20 x : Positive Phase Contrast Objective Lens
- - 40 x (S) : Plan achromatic Objective Lens
- - 100 x (S): Plan achromatic Objective Lens
- Rackless mechanical stage : 156 x 138mm platform, with X / Y travel of 76 x 54mm by low-positioned X / Y coaxial control knob, with scale mark and specimen-slide clip, enough space to hold 2 specimen-slide.
- Coaxial coarse and fine focus mechanism with marking, Fine focus sensitivity 0.001mm.
- Centering Telescope to adjust phase contrast
- Dust Cover, Clear Blue Filter, Power Cord, Immersion Oil.





## 4.0 Androspin

SP/INT/006-A

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

### Specification :

- This centrifuge machine is designed to operate only at  $37^{\circ}\text{C} \pm 1^{\circ}\text{C}$  up to 2000 rpm
- Aluminum fixed angle rotor head with four (4) test tube holders.
- Maximum achievable RPM is 4000.
- Facility for additional programming ( time & RPM).
- Androspin is, 'ISO 13485 : 2003' & 'CE' accredited.



## 5.0 Andrology Station

SP/INT/003- A

**H. S. Code:** 901890

Ultra clean air unit with Pre-filter, HEPA filter, fully balanced motor blower set, stainless steel top with glass sides. Fitted with tube light, U V Light and castor wheels for easy movement. Class 100 Vertical model completely made up of mild steel (M.S.).



## 6.0 DNA Warmer :

SP/INT/004-C

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

### Specification :

- DNA Warmer is useful for carrying out “DNA Fragmentation Test”.
- Designed with preset 70°C & 37°C heating blocks in one single instrument with display units.
- The DNA Warmer is, ‘ISO 13485 : 2003’ & ‘CE’ accredited.





## 7.0 Slide Warmer :

SP/INT/004-B

**H. S. Code:** 901890

**Make :** Sperm Processor Pvt. Ltd., India

### Specification :

- Glass slide warmer useful for warming the slide after staining procedure.
- Designed to ergonomics.
- Dual Temperature Display (Actual & set).
- Facility to set desired temperature.
- Default set temperature 45<sup>0</sup>C



**ACCESSORIES & DISPOSABLE**

Trays :			
•	Slide Staining Tray	01	
•	DNA Slide Immersion Tray	01	
•	Glass Slide Tray Horizontal	01	
•	Glass Slide Tray Vertical	01	



↪ Accessory			
• Volumetric Pipette Set	01	SP/ACC/001 – A	
• Micro Tips Box	01	SP/ACC/012 – A	
• Glass Slide Stand (Horizontal)	01	SP/ACC/002-A	
• Glass Slide Stand (Vertical)	01	SP/ACC/002-B	
• Glass Slide Box	01	SP/ACC/003	
• Test Tube Stand	02	SP/ACC/004	
• Test Tube Holder	01	SP/ACC/005	
• Spirit Lamp	01	SP/ACC/006	
• Kidney Tray	01	SP/ACC/007	
• Coupling Jar	04	SP/ACC/008	
• Scissor	01	SP/ACC/009	
• Wash Bottle	01	SP/ACC/010	
• Marker Pen	01	SP/ACC/011	
• Waste Box	01	SP/ACC/013	
↪ Disposables :			
• Micro Tips	01	SP/PAD/011 – A	
• Glass Slide	01	SP/PAD/012	
• Cover Slip	01	SP/PAD/013	
• Hand Gloves	01	SP/PAD/021	
• Tissue Paper	01	SP/PAD/017	



**(B) Plasticware & Disposables :**

**1.0 Sperm Trans**

**SP/PAD/001**

**H. S. Code:** 901830

- Sperm Trans™ (Intrauterine Insemination Device) With CE (1299) accredited
  - ISO 13485 : 2003 certified product with following features
  - **Length** : 17 cms.
  - **Tubing** : Flexible tube; motile sperms do not stick to the tubing wall.
  - **Tip forming** : Smooth surface tip because of ultramodern technique used.
  - **Side holes** : Consistent sized holes without flush or burr.
  - **Hub design** : Facilitates the direction of IUID.
  - **Packing** : Tyvek pouches as per International norms.
  - **Sterilization** : Gamma irradiation.
- Sperm Trans is Registered Trademark of Sperm Processor Pvt. Ltd.
  - Sperm Trans, 'hub' design is Registered (No. 191777)



☛ All Are Individually Packed

☛ All Are Gamma Irradiated

**2.0 Semen Collection Container :**

Wide Mouth Container with Label

**SP/PAD/002**

**3.0 Test Tubes :**

15 ml Test Tubes with volume label marking.



**SP/PAD/003-A**

**4.0 Pasteur Pipette :**

1 ml capacity Pasteur pipette

**SP/PAD/004**

← All Are Individually Packed

← All Are Gamma Irradiated

**(C) Media & Kits :**

**MEDIA**



**Sperm™  
SAFE-2**

It is used as a Medium for **Swim Down Technique**.  
 The kit contains Density Gradient (2 layer) & Sperm Washing Media.  
**Density Gradient (Lower Layer - 90% & Upper Layer - 45%) :**  
 Colloidal suspension of silica particles stabilized with covalently bonded hydrophilic saline in a Hepes Buffered Human Tubule Fluid.  
**Sperm Washing Media :**  
 Modified Human Tubule Fluid composed of Inorganic Salt, Gultamax, Glucose, Hepes Buffer and Antibiotic.  
**One Kit Contains :**  
 Upper Layer - 10 Ampules of 1 ml, Lower Layer - 10 Ampules of 1 ml &

**Semen Processing Reagent**

**Swim-up**

**SP/MED/007**

**Sperm™  
SWIM**

It is used as a Medium for **Swim Up Technique**,  
 It is a Modified Human Tubule Fluid composed of Inorganic Salt, Gultamax, Glucose, Hepes Buffer and Antibiotic.






**One Kit Contains :**  
 Sperm Swim - 10 Ampules of 5 ml





**Density Gradient**

**SP/MED/008**




**Kits**

Sr. No.	H. S. Code	Product Code	Product Details	Pack Size
1.0	382200	SP/SFT/VS-001	 <p><b>Viscosity</b> reagent for hyper viscous semen</p>	2 ml
2.0	382200	SP/SFT/PH-002	 <p><b>Semen pH</b> semen pH determination</p>	1 Kit (50 Test)
3.0	382200	SP/SFT/V-003	 <p><b>Vitality</b> evaluation of sperm membrane structural integrity</p>	1 Kit (50 Test)
4.0	382200	SP/SFT/H-004	 <p><b>HOS</b> evaluation of sperm membrane structural &amp; functional integrity</p>	1 Kit (50 Test)
5.0	382200	SP/SFT/MP-005	 <p><b>Morphology</b> evaluation of sperm morphology by Diff-Quick Staining method</p>	1 Kit (50 Test)

Sr. No.	H. S. Code	Product Code	Product Details	Pack Size
6.0	382200	SP/SFT/F-012-A		1 Kit (50 Test)
7.0	382200	SP/SFT/L-007	 <p><b>Leukocytes</b> detection of leukocytes by using peroxidase test</p>	1 Kit (50 Test)
8.0	382200	SP/SFT/NP-009	 <p><b>Nuclear Protein Assay</b> sperm nuclear protein assay using "Aniline Blue" staining</p>	1 Kit (50 Test)
9.0	382200	SP/SFT/DNA-010	 <p><b>DNA Fragmentation</b> sperm chromatin dispersion test</p>	1 Kit (50 Test)
10.1	382200	SP/SFT/ASA-007-A	 <p><b>Antisperm - Antibody</b> MAR Test (mixed antiglobulin reaction)</p>	<b>IgG</b>
				1 Kit (50 Test)
10.2		SP/SFT/ASA-007-B		<b>IgA</b>
				1 Kit (50 Test)



Sr. No.	H. S. Code	Product Code	Product Details	Pack Size
11.0	382200	SP/MED/001	 <b>Sperm Function Test Kit™</b>	50 Test (1 Kit)
<b>Kit Contain :</b> • Viscosity, • Semen pH, • Vitality, • HOS, • Morphology, • Fructose (Qualitative)				
<b>Utility :</b> Used to determine Sperm Functions.				
12.0	-----	-----	<b>Normal Saline</b>	-----
13.0	-----	-----	<b>Immersion oil</b>	-----



**(D) Tests to Perform :**

**1.0 Diagnostic Level :**

- **Semen Analysis as per WHO Norms**
- **Sperm Function Test**
  - Viscosity
  - Semen pH
  - Vitality
  - HOS
  - Morphology
  - Qualitative estimation of Fructose
  - Nuclear Protein Assessment
  - DNA Fragmentation Test
  - Antisperm – Antibody Test
  - Leukocyte Detection Test



**2.0 Treatment Level :**

- **Husband's Semen Processing**
- **Retrograde ejaculation Semen Processing**
- **Aspirated Fluid Semen Processing**
- **AID (Donor Semen)**

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