Technical Specification of the Equipments/Instruments for Physiotherapy and Occupational

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Therapy

1. Short wave Diathermy (SWD) 500W/250W

(Solid State, With bulb and without bulb)

SWD 500 is a heavy duty short wave Diathermy unit that generates high frequency waves which are used for heating the body tissues deeply. High power medical diathermy incorporating a high power transmitting oscillator valve & solid state rectifiers; provides R.F. power up to 500 watts for intense deep tissue heating without discomfort at the surface.

Salient Features:

- Built in 4" heavy duty cooling fan and voltage stabilizer.
- Provision for delay circuitry.
- 30 minutes treatment timer.
- Built in Protective circuit breaker.

Technical Data:

•	Power output:
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500 Watts RF

• Operating Frequency:

27.12 MHz.

Wavelength:

11 meters

RF Power Source:

Vacuum generating Valve

• Fuse:

7 Amp

Main Supply:

220 V 50Hz

• Frequency:

27.12 MHz

Output:

Continuous, Maximum: 500 watts,

• Intensity:

Adjustable in 5 steps.

• Electrodes:

One pair Condenser pads with felt

Spacer & cover size: 15 cm X 25 cm.

Tuning:

Manual, with tuning control knob.

• Timer:

30 minutes timer with Auto-cut

Cooling:

with 10 cm dia. Instrumental fan.

Voltage:

220-240V. Selectable with inbuilt voltage selector switch.

Accessories:

A-one pair condenser Pads cable. B-One power Main cable.

C- Spare fuses. D- One Shortwave test tube. E, Two Velcro Strap.

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2. Ultra sound (Solid state digital)

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Technical Specification:

• Ultrasound frequency: 1 MHz and 3 MHz

• Effective Radiation Area of emitter heads (ERA): 1 cm² and 4 cm²

• BNR (Beam non-uniformity ratio) : 1 cm2 head <5.5

• Therapeutic session time: 0-25 min

Modes of operation

a. Continuous: Pulse-to- period ratio: 1:1 (Poser output control within 0.1-2.0 W/cm²

b. Pulse: Pulse-to-period ratio: 1:2, 1:4, 1:8, 1:16, Pulse frequency: 50 Hz or 100

Hz Power output control within 0.1-3.0 W/cm²

c. Mains supply: 198-252 V/50-60 Hz. 99-126 V/50-60 Hz

d. Safety: Class I Type BF, in conformity with EN 60 601-1, ISO 9001, EN 46001

3. Infra-Red Lamp

Floor stand model for IR radiation treatments.

- IR bulb of 150w fitted in metal casing with automatic cut off timer of 15 minutes.
- Adjustable arm permitting wide range of adjustments. Mounted on wide base with ball earing casters.

4. Electric Muscle Stimulator

Specification

- 1.Digital meter output
- 2. Galvanic, intermittent galvanic, faradic, surge faradic
- 3. Pulse duration 0.01, 0.03, 0.1, 0.3, 1, 3, 10, 30, 100, 300
- 4. Pulse rest time 1-6 seconds continuously adjustable 100 msec.
- 5. Visual & audio indicator.
- 6. Faradic frequency 50 Hz/0.7 msec.
- 7. Surge duration 1-6 sec. continuously adjustable.
- 8. Digital Timer
- 9. Accessories Two rubber electrodes with leads

One Pin electrode with lead

5. Multi Exercise Chair

• Tubular steel construction

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- Size 105cm long 68cm wide.
- The overhead bar to extend 90 cm beyond front portion of the frame. The unit having two stabilizing straps, two handles, two foot straps, ropes and pulleys.

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Chair with overhead pulley system which could be used for variety of exercises involving reciprocal motion for elbow, shoulder knees and hips, quadriceps and hamstring stretching and other resistive and assistive exercise.

6. Cervical & Lumber Traction.

Microprocessor controlled Traction system, with eight Traction Modes and operation through a large LCD display & Programmable Memory.

Traction Machine Features:-

Traction Force:

45 Kgs. Maximum.

Traction Modes:

Intermittent, Static, Harmonic

Traction Speed:

Variable Traction Speed.

Traction Memory:

Stores 20 Treatment Patterns.

Traction Safety:

A Self-diagnosis functions. Checking of the system when high force is set above 18 kg. Automatic tension release when emergencies occur. Display of error

contents and solutions.

Specification

Traction Force:

Hold 1.8 – 90 kg. Rest 0-45 kg.

Hold-Rest Time:

1-99 sec. independently set.

Treatment Time:

1-99 seconds to reach 45 kg.

Zero Calibration:

Automatic

Four fold normal & mounted on four locking casters.

Head End:

Adjusts from -20 to +20 degree.

Lumber Section:

Friction free rolling lumber Section with adjustable Machine

Mount top.

Accessories:

Adjustable Flexion stool, Head-Halter, Pelvic & Thoracic belt

set with Bar.

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7. Static Bicycle

Ruggedly built tubular steel frame stands solidly on four rubber tipped properly balanced legs. Provided with adjustable standard cycle seat and specially designed adjustable handle. Fitted with one hard rubber tired cycle wheel and standard chain and sprocket for bicycle drive. Chrome plated wing nut, pressure rod and ball bearing resistance roller which permit controlled variation in ridding effort. Odometer showing speed and kilometer done. Oven baked finish with working parts finish with chrome plating.

- Quadriceps table with back rest (Imported type) with weights
- Static bicycle with speedometer handle & seat height adjustable.

Sliding Seat

Tubular frame with chrome plated finish. Specially designed foam padded seat is mounted on 4 big nylon castors and slides smoothly provided for resistive leg. And arm exercise.

8. Weighing Machine (Analog)

0 to 120 kg weight:

- (i) Adult weighing machine scale (Mechanical) should be suitable for weighing upto 120 kg. weight. Weighing scale should be having graduations of 500gm. Base, top. Cover should be made of steel approximately 1 mm thick. The design of the scale should be portable. The scale mechanism protected against rust & corrosion and sprayed in enamel colours having attractive finish. Their should be arrangement for Zero adjustment. The reading scale should be clearly visible having plastic magnifying lens. Top of the scale should be fixed with good quality well affixed rexine. Approximate size L-300mm, W 300mm.
- (ii) Manufacturer shall submit certificate of approval of module from Weights & Measures Department at the time of supply.

9. Parallel Bar

- i. Length of the Parallel walking bar should be 3.75 metres.
- ii. Hand-rail made of chrome plated steel tubing 1.5" outer dia.
- iii. Outer uprights made of thick steel tubing (2" dia.)
- iv. Mounted on a wooden platform with rubber inclination settings.
- v. Height adjustable with rubber from 30" to 44"
- vi. Width adjustable from 15" and 25"
- vii. Adjustment should be easily done by means of setting pins at the required holes and can further be stabilizing by tightening the screws.
- viii. Should come with detachable polished teak wood abduction board covered with non-slip matting, which fits on the holes in the middle of the platform steel uprights and hand rails are painted.
- ix. Postural Mirror (With Stand)
- a. Protected by 5cms wide hardwood frame with back covered by Ply board
- b. Fitted with Angular and tubular stand
- c. Frame mounted on 4 ball bearing castors
- 10. Shoulder Wheel (Wall Mounting): All steel construction, tubular circle of 100 cm dia., mounted on bush bearing and fitted with calibrated sensitive resistance mechanism controllable from zero to maximum. The 360 degree scale, enables degree of revolution to be read from either direction. Arc of motion can be varied from 30cm to 80cm dia. Fitted with attachment to raise or lower the wheel as much as 50cm, permits setting wheel at the desired height for each patient. Mounted on 3 hardwood wall boards, oven baked finish, wooden parts finished natural. Jurdall- Hil

11. Paraffin Wax Bath Unit

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Internal wax tank made out of stainless steel sheet. The top having aluminum cover and the edges of the bath having laminated wooden rim, works on electricity 220-240V. Provided with special wax immersion type heater and thermostat to control temp. Externally finished oven baked Wax chamber size 50x35x25cm comes with six kg wax.

Paraffin Wax: Special quality with low melting point (52 degree C) for use in Paraffin Wax Bath.

- 12. A. Inclined Sanding Unit: Consists of two wooden hinged planks. Upper plank's angle of inclination can be adjusted from horizontal to vertical position. Two pulleys are fitted at the top of 30 cm wide upper plank for reciprocal hand-shoulder exercise three sets of sanding hand blocks with different grasp hold are provided with the unit sanding blocks create resistance for exercises. Unit is finished in natural wood polish.
- 12. B. Horizontal Sanding Unit: Wooden sanding top fitted on a tubular frame, having two cut-outs to accommodate two patients. One side fitted with bar to attach elastic straps for resistive exercises. Complete with two sanding blocks and four elastic straps. Size 46" X 30" X 30" high.
- 12. C. Vertical Sanding Unit: With weight changer and blocks of different handle adjustment and comes with weight plates for angle adjustment and comes with weight plates for resistance. Comes with one sanding roller.

13. Pegs board/Perceptual Motor

Multi Shaped Peg Board

A. Square Peg Board (20pegs)

Square pegs are easier for the patient to handle but are slightly more difficult to place in holes. The laminated board having 25 holes of 30 mm square size and twenty, 150mm high square pegs to fit in. Wooden pegs are painted in four different colours.

B. Round peg board: It consists of and 10 X 12 in (25 cm X 20cm) board with round slots for peg insertion. The pages are 1: (2.5cm) diameter and sre 4: (10cm) long. They are painted in 5 different colors. This peg hole can be used easily even by a severely handicapped child.

The Multispeed peg board with five each of round, square and triangular pegs in different sizes and diameters. Pegs are finished in different colors.

- C. Graded Square peg board (25 pegs): For stimulating size and depth perception on advanced level. The 18X12" laminated board having 25 square pegs of 1 size. Five each graded in 5 heights. Five rows of each size. Each size painted in a different colour.
- D. Cylindrical peg board: Confines the manipulative experience of a peg board with practice in color matching. 24 pegs and 24 cylinders are painted in multiples of four so that each color can be matched several times. Board is 9 X 15" (23 x 38 cm) ½ in (1cm) pegs fit inside 1¼ in (3cm) cylinders.
- E. Peg Checkers: Study 17 in X 17 in (43cm X 43cm) wood checkers board users large pegs instead of standard checkers. Mitthe Phl

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- **F. Pegs & Shapes:** Manipulative for eye hand co-ordination and basic sorting skill. Laminated board of 35cm X 15cm size is fitted with 4 posts on which to fit 4 sets of laminated and smoothly painted geometrical shapes of 20 mm thickness. Comes with 4 each of circle, square, rectangular and triangle shapes.
- G. Ten Pegs Board (100 Pegs): Measures an individual basic level of function in the area of colour identification, movement of fingers hand and arm. The laminated board of 45cm square size have `100 holes, 10 in a line, to hold smoothly finished one hundred solid plastic pegs in 5 different bright colour.
- **H. Depth perception peg board set:** Stimulates depth perception and eye-hand coordination on two levels. Board of 30 cm. square and have 25 holes of 12 mm. dia. The board having 20 chromplated solid iron rod pegs to place in.

Pegs and shapes (4 pegs and 4 shapes)

Manipulative for eye hand coordination and basis sorting skill. Laminated board of 30 cm square size is fitted with 4 S.S. rod pegs on which to fit 4 sets of laminated and smoothly painted geometric wall shapes of 25 mm thickness. With 4 each of circle, Square Rectangular and Triangle shapes

- I. Five Pegs Board (25 pegs): Laminated board 25cm square size having 25 holes, 5 in a line to hold 25 sold plastic pegs in five different colours.
- **J. Multi-Shape Peg Board (Wall mounting):** Combines the manipulative experiences of a peg board with practice in hand eye coordination, improves shoulder ROM and assists the development of grasp strength and tolerance. The mathematical puzzle creates interest and provide learning opportunity creates interest and provide learning opportunity. 50mm thick and 150mm long, 10 Round and 10 square pegs are easy to hold and place

K. Pyramid Round

- By stacking different sizes of ten laminated round blocks of 25 mm thickness on 30 cm high strong metallic central peg a pyramid to be for formed. It developing size constancy, concept and sequential placement of decreasing size. Also to help in elbow and shoulder exercises
- Pyramid Square: 254mm (10") high wooden painted
- Pyramid Triangular: 254,, (10") high wooden, painted
- Pyramid Hexagonal: By stacking different size of ten laminated Hexagonal blocks of 20mm thickness on 30cm high strong metallic peg, a pyramid is formed, for developing size constancy, concept and sequential placement of decreasing size. Also helps in Elbow and shoulder exert.
- 254mm (10") high wooden, painted
- Magnetic Peg board

A laminated board, fitted with 25 magnets of different resistance. 25 metal pegs are provided with different grip and finger holds

Specification

- 1. Single colour, inflatable ,moulded, heavy duty vinyl ball can support upto 150 kg.
- 2. Available in dia 65cm, 75cm, 85cm.

15.CP chair adjustable

Specifications:

- 1.Adjustable CP Chair with tubular metal frame powder coated construction. Foam padded back surface and seat with adjusting belts to secure the child in place.
- 2. The arm supports are also adjustable in height. The foot rest is also adjustable in height. An adjustable, removable activity tray is provided

FEATURES:

- Adjustable arm supports
- Adjustable foot rest
- · Adjustable and removable activity tray
- Adjustable neck support
- Mounted on heavy duty castors with brakes to provide mobility as well as position the chair in one position.
- The chair can be converted into a standing frame by removing the seat and the foot rest.

16. Activity of Daily living Training Board

Activity of Daily living Training Unit

A. Door latch frame set

The frame set to provide learning opportunity and progressive development of dexterity. Having six laminated doors, opening in different direction. Each door to open into a shelf where a reward or toy can be kept. Common hardware of different designs, used to familiarize patient. Size of laminated unit 26"x18"x5" deep.

B. Electro equipment frame set

There different types of switches – Toggle, Piano and turn button to be wired to three colored pilot bulbs and a push button switch wired to a call bell. All the switches operate on 220 V.A.C. The unit is finished in a laminated box of size 15"x10"x5 approx.

17. Bicycle fret saw machine (Manual)

- 1. In two parts fitted with cycle chain and sprocket arrangement.
- 2. Two nos. Cast iron heavy fly wheels.
- 3. Seat (side & back supported) height should be adjustable.
- 4. Adjustable seat distance from pedals.
- 5. Digital counter for pedal strokes.

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18. Medicine Ball

Ball Medicine, made out of fine leather, securely stitched with strong leather cord. In different weights i.e. 1 Kg., 2 Kg, 3 Kg, 4 Kg, & 5 kg.

19. Ladder Wall Mounted:

- Ideal for progressive range of shoulder motion.
- Made of polished teak wood having 30 numbered steps.
- Complete with wall fixing hardware.
- **20. A.** Wrist Circumductor: Cast iron wheel of 12" diameter. Mounted on a Laminated wooden base 24" X 9", having a small adjustable handle fitted to the wheel. A knob provided at the back of the wheel to control resistance from zero to maximum. Hollowed foam padded platform size 9" X 5" X 6" high fitted with two straps to hold arm, and fitted over the base in front of the wheel for wrist circumduction. Metal parts oven baked finish.
- 20. B. Rotary wrist machine (Wall mounting): Single grip unit with calibrated sensitive resistance control mechanism, fitted on a chrome plated height adjustable bar to suit different patients. Resistance can be increased or decreased for supination and pronation exercises. Range of motion can also be measured and recorded.
- 21. Pronator & Supinator Exerciser: Bright laminated Six wooden discs & Six metal ring slide smoothly along colored wire maze, mounted on a laminated base. Convenient way to build range of motion, arm, wrist, hand and finger proficiency.

22. Exercise Band

- 1. Supports broader range of exercises extension and eccentric.
- 2. Patented formula supports hot/cold therapy, ease of use and built-in recovery for optimal form
- 3. Economical and intuitive; ideal for home exercise
- 4. Progressive for clear measure of progress
- 5.Clean and professional

23. Computerized Interferential Therapy

Features: Both medium and low frequency currents 35 Pre-programmes condition wise with protocols, Cable and Electrode checking mode, User settable memory Light weight and compact design Easy to operate, Future upgrade without change in hardware DSP based circuitry, outputs are I 100% accuracy Large graphic LCD display, International Standard and specifications, Advanced patient safety system.

Specifications: Medium Frequency Alternating Current:

- Carrier Frequency: 2000 Hz/ 4000 Hz
- Bae FSFSFSFSFS: 0-150 Hz (1Hz step)
- Sweep Modulation Programs: 1/1S, 1/5/1/5S,,6/6S
- Pole Vector 45, Two pole pre-modulated
- Output current: 0-100mA

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24. T.E.N.S. (Four Channels)

Used to treat following pain

- Shoulder Pain
- > Low back Pain
- Knee Joints Pain
- > Swelling
- > Odema
- > Sports Injuries
- > Phantom Limb Syndrome
- > Post-operative Pain
- > Diabetic neuropathy
- > Dental Procedure
- > Adhesive Capsulitis
- > Hemiplegia
- > Para Plegia
- > Non-united fracture healing procedure

Specifications

> Pulse frequency range:

Variable 5 HZ to 120 HZ

> Pulse width duration range:

Variable 50 µsec to 800 µsec

> Output mode:

Continuous and Pulsed

> Timer:

0-15 minutes pre settable with inner time adjustable up to 99

minutes and auto cut off with beep sound.

Dimension:

L 29 cm X B 21 cm X H 9.5 cm

Weight:

2.5 Kg

25. Traction Weight Set (Manual):

A set of replaceable slotted weights with carrier

- (a) Cervical Traction 9 Kg set
- (b) Pelvic/Lumber Traction 20kg set

26. Dumbal: Solid steel dumbbells with chrome plated finish. A set having of 2 dumbbells of each weight i.e. 0.5Kg, 1 kg, 1.5 kg, 2 kg, 2.5 kg, 3 kg, 3.5 kg, 4 kg, 4.5 kg & 5 kg. the total weight of this set is 54 kg. having moves on two racks and hooks for organized storage of dumbbells

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