

AMENDMENT No. I

2nd March 2023

Tender Enquiry No. HSCC/PUR/Medical Equipment/SIC/2023 Dated 27.02.2023

Subject: Amendment to the tender Enquiry Document.

FOR:

I. INTENSIVE CARE UNIT

S. No.	NAME OF EQUIPMENT	Qty.	Estimated Price (₹)	EMD (INR)
1.	Vaccusport For Lower Limb	1	40,00,000	80,000

READ AS :

S. No.	NAME OF EQUIPMENT	Qty.	Estimated Price (₹)	EMD (INR)
1.	Vaccusport For Upper Limb	1	40,00,000	80,000

The Technical Specifications are attached.

All other terms and conditions of the bid document shall remain unchanged.

**GM (P)
HSCC (India) Ltd**

VACCUSPORT FOR UPPER LIMB

DPR Item No.: 60

Cost per equipment: Rs 40,00,000/-

No. Of units: 1

Total cost: Rs 40,00,000/- (As in DPR)

It is an effective way to decongest post-traumatic or post-operative swelling, therefore accelerating regeneration and rehabilitation in patients and athletes.

TECHNICAL SPECIFICATION

1. Negative pressure adjustable from 20->100 mbar(-) or -20 to> -100 mbar.
2. Intervals of negative pressure and atmospheric pressure should be adjustable from 1-20 sec each.
3. The height and angle of negative pressure tube should be individually adjustable for optimal ergonomics and patient comfort.
4. Dimensions – 105 x 78 x 103-128 cm (W x D x H) and approx weight of 80kg.
5. Nine fully automatic indication-specific treatment programmes should be available.
6. The duration of a treatment should be between 25-40 mins, depending on the indication.
7. Input voltage: 220-240V AC/800W (Comply with Indian electricity safety certification)
8. Should have CE/ US FDA/ Appropriate Indian Medical Safety & Quality Standard certification.

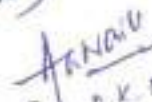

26/11/2021


(B. K. NAYAK)


(DR. SINHA)


(DR. ANSHU)


(DR. ANKIT)

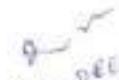

(DR. A.K. NAIR)

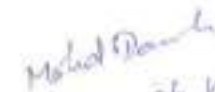

D. D. D. D.


(DR. SINGH)


DR. KULKARNI


DR. KULKARNI


(DR. DEENAN JOSHI)


(Mrs. Damish Mohd)


(Dr. Bhat)


DR. R. GARG

1. GENERAL SPECIFICATIONS (terms and conditions) FOR physiotherapy and sports medicine, C-ARM, BATTERY DRILL, ARTHROSCOPES, MEDICAL EQUIPMENTS AND AUTOCLAVES (as per minutes 01/10/2019, 15/10/2019, 22/10/2019, 31/10/2019 & 07/11/2019, 04/08/2020 over and above general specification by tendering authority)-TO BE FOLLOWED IN ALL MEDICAL EQUIPMENT ITEMS ON SIC EXPANSION.

- 1) System should be ECE / US FDA/BIS approved.
- 2) Inadvertent use of only US FDA in all specifications drafted by medical equipment committee to be omitted or not taken and should be read as and /or others as above in point 1.
- 3) Medical Grade Stainless steel / titanium or other certified material (satisfying above certification) must be used for all instruments and machinery in mandate of medical equipment committee for SIC expansion.
- 4) AERB approved.(For C-Arm)
- 5) 5 year comprehensive onsite warranty of entire system (Spare and labour) including X-ray tube (For C-Arm) and all accessories and civil, electrical and air conditioning works followed by 5 year CMC.
- 6) Company should confirm the availability of spare parts for 10 years from the date of supply of the equipment.
- 7) Company should have 24 x 7 call support facility.
- 8) List of spare parts with cost must be provided.
- 9) Should conform to latest IEC standard for requirement of safety for electromagnetic compatibility.
- 10) Physical Demonstration is essential.
- 11) Warranty 2 years in Arthroscopes subject to physical damage and wear & tear, and 1 year for Hand held Instruments of arthroscopy subject to physical damage and wear & tear ;
- 12) Warranty 5 years + CMC 5 years in all other items of this committee.
- 13) L1 will include CMC cost also;
- 14) Preventive maintenance every 3 months with log book entry;
- 15) The quality of supplied of instrument / equipment should be strictly same as given for physical demonstration / inspection, failing that the company / dealer will be black listed for 5 years for participating in tender process of hospital.
- 16) Turnkey/installation wherever required to be done by company and included in cost.
- 17) Freeze rate of consumables for 10 years
- 18) Technical specifications to be kept on site for 21 days public domain for comments of stakeholders.
- 19) Prebid meeting to be held of all stakeholders and modifications if needed may be considered.
- 20) On site training for equipment usage to be done wherever needed.
- 21) Patient and user Safety and compensatory clause for all medical machinery of this committee. This should be besides the safety checks and mechanism already essential in every medical machinery.
- 22) Service centre authorized by manufacturer should be located in Delhi NCR and should provide service and repair as soon as possible within 24hrs to ensure patient safety.

(Dr. Pooja) [Signature]
[Signature] (Dr. Simha)
[Signature] (Dr. D. Joshi)
[Signature] (Dr. Ankit)
[Signature] (Dr. Simha)
[Signature] (Dr. Ankit)
[Signature] (Dr. Simha)
[Signature] (Dr. Ankit)
[Signature] (Dr. Simha)

- 23) All electrical equipment should conform to latest electromagnetic safety standards for medical equipment.
- 24) The equipment with all its components will have warranty for period of 5 years from the date of handling over the fully functional unit and all the accessories supplied to the institution. Every thing irrespective of nature that is supplied by the vendor will be under warranty. The equipment which has multiple components should be quoted as a whole and by a single vendor.
- 25) During warranty period the desired uptime of 95% of 365 days (24hrs basis) will have to be ensured with maximum of 5 working days of downtime at a stretch. In case the downtime exceeds the 5% limit in a year or more than 5 days at a stretch (whichever is applicable) extension of warranty period by double the excess down time period will be carried out.
- 26) CMC (Comprehensive Maintenance Contract) The post warranty (after 5 years) CMC should be comprehensive for all its components (everything irrespective of nature which is supplied by the vendor under guarantee) inclusive of X-Ray Tubes. (For C-Arm) with 95% uptime and extension of CMC period by double the downtime in excess of 5%.
- 27) Participating bidders should submit a good performance certificate from institutions and a certificate that it is submitting the medical item to the user at the lowest cost with a supply order to that effect preferably of a government institution.
- 28) All procedures laid down by CVC to be followed in all items which were proprietary in nature.

[Signature]
29/11/21
Member Secretary

[Signature]
DR. Parvinder

Chairman

[Signature]
DR. Sahai

[Signature]
DR. Venay

[Signature]
AK. Nair

[Signature]
M. S. (Dr. S. Srinivas)

[Signature]
(Dr. Anand)

[Signature]
(Dr. Borah)

[Signature]
Mohd. Danish
(Mr. Danish Mohd)

Deepening Trochleoplasty Instrument Set

DPR Item No. 25
Estimated Cost per Equipment: Rs. 6,00,000 (as in DPR)
No of Sets: 1

This instrumentation should allow the cartilage layer to be released using a marking hook and burr, at which point the trochlea is deepened to a more natural groove.
The set should contains:

TECHNICAL SPECIFICATION	Quantity	SOURCE OF INFORMATION
a) Marking Hook for Trochleoplasty, 3 mm Offset /Compatible with the set	2	Brochure of company of repute attached
b) Marking Hook for Trochleoplasty, 5 mm Offset /Compatible with the set	2	
c) Retro Construction Drill Guide	2	
d) Trochleoplasty kit- with 2.9mm burr and sleeve, sterile	15	

All instruments to be compatible with each other.


- Demonstration of the equipment to be provided.
- It should be USFDA approved.


(Dr. Arora)


DR Jaisankar


DR HEMA


25/11/2021
DR N. Lal


DR Ankita Goyal


(Dr. R. Singh)


(Dr. Davinder)


DR AKMAL


DR D. Joshi


(B K NAYAK)


Mrs. Damini Mehra

HI-SPEED FUNCTIONAL ASSESSEMENT AND TRAINING DEVICE FOR LOWER EXTREMITIES

DPR Item No.: 42

Cost per Equipment: ₹ 150,00,000/-

No. of Units: 1

Total cost: ₹ 150,00,000/- (As in DPR)

This unit consists of:

- A. Ankle Machine (1 no.)
- B. Runner's Training Machine – Glutes and Hamstring (1 no.)
- C. Hip Machine (1 no.)
- D. Knee Machine (1 no.)
- E. Squat Machine (1 no.)

A- Hi speed Functional assessment and training device - Ankle Machine

ANKLE MACHINE

1. System should have facilities for testing /evaluation of muscle groups of Ankle and can be programmed as per training requirements of the user's/ athlete's Muscle groups in the Ankle (customized). Provision should be there so that real time performance of the muscle groups of Ankle joint can be seen on the digital display showing Peak Torque, ROM (range of motion) and Max Speed and Torque.
2. System should have multiple exercise mode options to accommodate different needs and requirements of different level of athletes /individuals.
3. System should also have provision for Variable Speed Mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for Dorsi flexion and Plantar flexion, Eversion and Inversion. It should have provision to work speed control or independent.
5. System should be supplied with following features: Rotary motion hydraulic resistance system, variable resistance valve technology, computer managed rehabilitation system (CMRS).
6. Should have Touch screen based PC Advanced Hi Speed Ankle Isokinetic unit with performance Bio Feedback system. Variable Speed Control Variable resistance control.
7. System should be capable of generating following reports i.e. Strength Report, Torque

(Handwritten signatures and names at the bottom of the page)

DR. ANKIT (DR. ANKIT)
DR. ANAND (DR. ANAND)
DR. RAJAN (DR. RAJAN)
DR. SAHA (DR. SAHA)
DR. B K HAYAK (B K HAYAK)
DR. SINHA (DR. SINHA)
DR. ANAND (DR. ANAND)
DR. DAVINDER (DR. DAVINDER)
DR. DAMISH (DR. DAMISH)
DR. ANAND (DR. ANAND)
DR. ANAND (DR. ANAND)

Report, Endurance Report Power Report, Range of Motion Report and Comparison Report.

B- Hi speed Functional assessment and training devise Glutes/ Hamstring Runner's Training Machine

RUNNER'S TRAINING MACHINE (GLUTES & HAMSTRING)

1. System should have provision for testing/evaluation of various muscle group testing and capable of being programmed as per training requirements of the muscle groups (customized). Real time performance of the muscle should on the digital display, showing peak torque, ROM and max speed and torque.
2. System should have versatile exercise mode to accommodate different need and requirement of different individuals.
3. System should have Multiple Exercise Modes, Variable speed mode, Variable Load Mode and Personalized Training Mode.
4. System should have facilities to program variable resistance for flexion and extension with respect to Running, Hiking & Strides.
5. Should also have provision to for variable work speed control or independent of it.
6. System should have features like Two (2) x Rotary motion hydraulic resistance system for training of Glutes either independent of each other or simultaneously, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Rotary Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame and Handle bar
4. Adjustable support pads
5. Height adjustable motor
6. Unilateral and Bilateral Exercise system
7. Variable Speed Control in a range from 5 degrees/sec to 800 degrees/sec
8. Should have Touch screen based PC Advanced Hi Speed Isokinetic glutes and hamstring unit with performance Bio Feedback system. Variable Speed Control Variable resistance control.
9. System should be capable of generating following reports: Strength Report, Torque Report,

(Dr. Barah)

(Dr. D. P. Singh)

(Dr. N. K. Singh)

(Dr. N. K. Singh)

(B K HAYAK)

(Dr. S. Singh)

(Dr. S. Singh)

(Dr. S. Singh)

(Dr. R. Singh)

Endurance Report Power Report ,Range of Motion Report , Comparison Report.

C- Hi speed Functional assessment and training device For Hip

HIP MACHINE

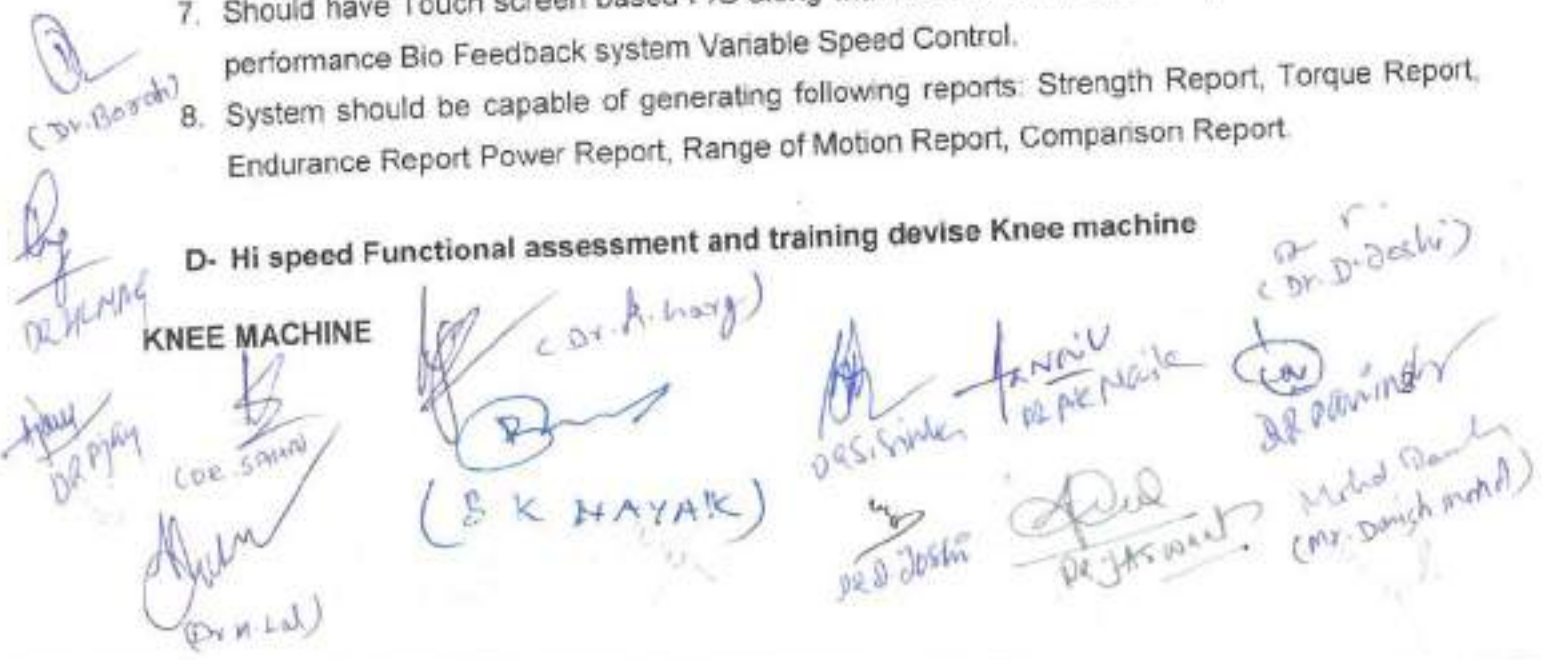
1. System should have provision for testing / evaluation of various muscle groups of Hip and can be programmed as per training requirements of the muscle groups(customized) of various athletes. Real time performance of the muscle should be seen on the digital display showing peak torque , ROM and max speed and torque.
2. System should have versatile exercise modes to accommodate different need and requirement of different individual athletes.
3. System should have provision for multiple exercise modes, Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for Hip flexion and extension, Hip abduction /abduction, Hip Internal & external rotation and should also have provision for work speed control or independent.
5. System should be supplied with following features Rotary motion hydraulic resistance system ,Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Rotary Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame and Handle bar
4. Height adjustable motor
5. Adjustable thigh rollers
6. Variable Speed Control (10deg/sec – 800 deg/sec)
7. Should have Touch screen based P/C along with Advanced Hi Speed Hip Isokinetic unit with performance Bio Feedback system Variable Speed Control.
8. System should be capable of generating following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report

D- Hi speed Functional assessment and training devise Knee machine

KNEE MACHINE



 (Dr. B. B. B.)
 (Dr. A. A.)
 (S. K. HAYAK)
 (Dr. D. D.)
 (Mr. D. D.)
 (Dr. H. H.)
 (Dr. J. J.)
 (Mr. D. D.)

1. System should have facilities for evaluation / testing of various muscle groups of knee and capable of being programmed as per training requirements of the muscle groups (Customized) Real Performance of the muscle group should be seen on the digital display, showing peak torque, ROM and max speed and torque.
2. System should have multiple exercise modes to accommodate different need and requirement of different population/Athletes.
3. System should have provision for Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, Also should have provision for work speed control or independent.
5. System should be supplied with following feature rotary motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Rotary Motion Hydraulic Resistance System
2. Computer Managed Training System (CMTS)
3. Adjustable seating position
4. Adjustable support pads
5. Heavy Duty Frame
6. Heavy Duty Handle bar
7. Stabilizing Strap
8. Unilateral and bilateral Exercise System
9. Variable Speed Control (10 Degrees /sec – 800 Degrees/sec)
10. Dual motored.
11. Unilateral and bilateral Exercise system.
12. Touch screen P/C Advanced Hi Speed Isokinetic unit with performance Bio Feedback system. Variable Speed Control.
13. Adjustable seating position. Stabilizing strap. Heavy duty frame and handle bar.
14. System should be capable of generating following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison R

E- Hi speed Functional assessment and training device - Squat machine

SQUAT MACHINE

1. System should have provision for testing / evaluation of various muscle groups during Squat Activities and can be programmed as per training requirements of the muscle groups. Real time performance of the muscle groups should be seen on the digital display, showing peak torque, ROM and max speed and torque
2. System should have multiple exercise modes to accommodate different need and

(DR. SHARMA)

(B K NAYAK)

RS. JAIN

DR. PR. NEKH

DR. JAIN

DR. JAIN

DR. JAIN

- requirement of different level of athletes.
3. System should be provision for, Variable speed mode, Variable Load Mode and personalized training mode.
 4. System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.
 5. System should be capable of measuring single as well as both limbs and also perform Standing press and low row flexion and extension exercises.
 6. System should be supplied with following feature Linear motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Linear Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame
4. Counter Balance level arm
5. Counter thrust platform Variable Speed Control (Ranging from 10 deg/sec to 600 deg/sec)
6. Should have Touch screen based P/C along with Advanced Hi Speed Isokinetic Knee unit with performance Bio Feed back system, Variable Speed Control Variable resistance control.
7. System should be capable of generating following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report.
 - a. Safety Specification: Should have CE and or USFDA certification.
 - b. Training by OEM: 01 weeks / year for 3 years in SIC
 - c. Maintenance clause: as per general specifications
 - d. Safety clause: As per existing guideline.


 (Dr. H. Lal)


 (Dr. Ashish)


 (Dr. Sahas)


 (B K NAYAK)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)


 (Dr. Ankit)

1. GENERAL SPECIFICATIONS (terms and conditions) FOR physiotherapy and sports medicine, C-ARM, BATTERY DRILL, ARTHROSCOPES, MEDICAL EQUIPMENTS AND AUTOCLAVES (as per minutes 01/10/2019, 15/10/2019, 22/10/2019, 31/10/2019 & 07/11/2019, 04/08/2020 over and above general specification by tendering authority)-TO BE FOLLOWED IN ALL MEDICAL EQUIPMENT ITEMS ON SIC EXPANSION.

- 1) System should be ECE / US FDA/BIS approved.
- 2) Inadvertent use of only US FDA in all specifications drafted by medical equipment committee to be omitted or not taken and should be read as and /or others as above in point 1.
- 3) Medical Grade Stainless steel / titanium or other certified material (satisfying above certification) must be used for all instruments and machinery in mandate of medical equipment committee for SIC expansion.
- 4) AERB approved. (For C-Arm)
- 5) 5 year comprehensive onsite warranty of entire system (Spare and labour) including X-ray tube (For C-Arm) and all accessories and civil, electrical and air conditioning works followed by 5 year CMC.
- 6) Company should confirm the availability of spare parts for 10 years from the date of supply of the equipment.
- 7) Company should have 24 x 7 call support facility.
- 8) List of spare parts with cost must be provided.
- 9) Should conform to latest IEC standard for requirement of safety for electromagnetic compatibility.
- 10) Physical Demonstration is essential.
- 11) Warranty 2 years in Arthroscopes subject to physical damage and wear & tear, and 1 year for Hand held Instruments of arthroscopy subject to physical damage and wear & tear ;
- 12) Warranty 5 years + CMC 5 years in all other items of this committee.
- 13) L1 will include CMC cost also;
- 14) Preventive maintenance every 3 months with log book entry;
- 15) The quality of supplied of instrument / equipment should be strictly same as given for physical demonstration / inspection, failing that the company / dealer will be black listed for 5 years for participating in tender process of hospital.
- 16) Turnkey/installation wherever required to be done by company and included in cost.
- 17) Freeze rate of consumables for 10 years
- 18) Technical specifications to be kept on site for 21 days public domain for comments of stakeholders.
- 19) Prebid meeting to be held of all stakeholders and modifications if needed may be considered.
- 20) On site training for equipment usage to be done wherever needed.
- 21) Patient and user Safety and compensatory clause for all medical machinery of this committee. This should be besides the safety checks and mechanism already essential in every medical machinery.
- 22) Service centre authorized by manufacturer should be located in Delhi NCR and should provide service and repair as soon as possible within 24hrs to ensure patient safety.


(Dr. K. K. Singh)

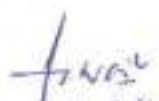

(Dr. P. Singh)


(Dr. P. Singh)


(Dr. Singh)

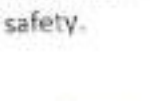

(B. K. NAYAK)



(DR. SINHA)



(DR. A. K. NAIR)


(DR. ANKIT)


(DR. ANANT)


(Dr. Davinder)


(Mr. Danish Mohd)


(Dr. R. Garg)

- 23) All electrical equipment should conform to latest electromagnetic safety standards for medical equipment.
- 24) The equipment with all its components will have warranty for period of 5 years from the date of handling over the fully functional unit and all the accessories supplied to the institution. Every thing irrespective of nature that is supplied by the vendor will be under warranty. The equipment which has multiple components should be quoted as a whole and by a single vendor.
- 25) During warranty period the desired uptime of 95% of 365 days (24hrs basis) will have to be ensured with maximum of 5 working days of downtime at a stretch. In case the downtime exceeds the 5% limit in a year or more than 5 days at a stretch (whichever is applicable) extension of warranty period by double the excess down time period will be carried out.
- 26) CMC (Comprehensive Maintenance Contract) The post warranty (after 5 years) CMC should be comprehensive for all its components (everything irrespective of nature which is supplied by the vendor under guarantee) inclusive of X-Ray Tubes. (For C-Arm) with 95% uptime and extension of CMC period by double the downtime in excess of 5%.
- 27) Participating bidders should submit a good performance certificate from institutions and a certificate that it is submitting the medical item to the user at the lowest cost with a supply order to that effect preferably of a government institution.
- 28) All procedures laid down by CVC to be followed in all items which were proprietary in nature.


Member Secretary
(Dr. H. Lal)

Chairman

(Dr. R. Singh)


(B K NAYAK)


(Dr. S. Sharma)


(Dr. D. D. Dindor)


(Dr. P. K. Singh)


(Dr. D. Singh)


(Dr. S. Singh)


(Dr. B. Singh)


(Dr. B. Singh)


(Dr. J. Singh)


(Dr. H. Singh)


(Dr. B. Singh)

SIC EXPANSION PROJECT

Name of The Equipment:	HI-SPEED FUNCTIONAL ASSESSMENT AND TRAINING DEVICE FOR LOWER EXTREMITIES.
Quantity Required:	01 (ONE)
Approximate Cost Per Equipment:	150 (ONE HUNDRED FIFTY) LACS (as in DPR)
Approximate Total Cost:	150 (ONE HUNDRED FIFTY) LACS
CERTIFIED THAT GENERAL SPECIFICATIONS ARE ENCLOSED	

AR SAHA

AR NARAH

AR HL NARAH

AR

(Dr. Ajay)

(Dr. Ankit)

(Dr. D. Anshu)

(Dr. Borah)



TECHNICAL SPECIFICATION FOR HI SPEED FUNCTIONAL ASSESSMENT & TRAINING SYSTEM

Hi Speed Functional Assessments for lower extremities (PAC)

A- Hi speed Functional assessment and training device Ankle Machine

ANKLE MACHINE

1. System should have facilities for testing /evaluation of muscle groups of Ankle and be programmed as per training requirements of the user's/ athlete's Muscle groups in Ankle (customized). Provision should be there to show real time performance of the muscle groups of Ankle joint can be seen on the digital display showing Peak Torque, ROM and Max Speed Torque
- System should have multiple exercise mode options to accommodate different needs and requirements of different level of athletes / individuals.
- System should also have provision for Variable Speed Mode, Variable Load Mode and personalized training mode.
- System should have facilities to program variable resistance for Dorsiflexion and Plantar flexion, Eversion and Inversion. It should have provision to work speed control or independent.
- System should be supplied with following features: Rotary motion hydraulic resistance system, variable resistance valve technology, computer managed rehabilitation system (CMRS),

[Signature]
DR. H. L. NAG

[Signature]
DR. A. V. NARAYAN

[Signature]
(DR. NAYAK)

[Signature]
(DR. ANKIT)

[Signature]
ANURADHA SOLANKI

[Signature]
(DR. BHAGNIA NCP-10)

[Signature]

[Signature]
DR. DEEPAK (DR. H.)
MOHD. DANISH

[Signature]
DR. JASWANTI

[Signature]
DR. SINITA

[Signature]
DR. RITESH

[Signature]
DR. ASH

- Should have Touch screen based P/C Advanced Hi Speed Ankle Isokinetic unit with performance Bio Feed back system. Variable Speed Control Variable resistance control.
- System should be capable of generating following reports i.e **Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report and Comparison Report.**

B- Hi speed Functional assessment and training devise Glutes/ Hamstring Runner's Training Machine

RUNNER'S TRAINING MACHINE (GLUTES & HAMSTRING)

1. System should have provision for testing/evaluation of various muscle group testing and capable of being programmed as per training requirements of the muscle groups (customized). Real time performance of the muscle should on the digital display, showing peak torque, ROM and max speed and torque
2. System should have versatile exercise mode to accommodate different need and requirement of different individuals.
3. System should have Multiple Exercise Modes , Variable speed mode, Variable Load Mode and Personalized Training Mode.
4. System should have facilities to program variable resistance for flexion and extension

[Signature]
DR. MEENAKSHI

[Signature]
DR. AN. NISHA

[Signature]
DR. NEHA

[Signature]
(DR. NAYAK)

[Signature]
(DR. ANKIT)

[Signature]
(DR. DISHA SORIN)

[Signature]
(DR. DEEPA JOSHI)
Mehal Ranjan
(MOHD DANESH)

[Signature]
(DR. SINHA)

[Signature]
(DR. JASWANTH)

[Signature]
(DR. DAVINDER)

[Signature]
DR. HITESH LAL AS

[Signature]

wrt Running , Hiking & Strides.

5. Should also have provision to for variable work speed control or independent of it.
6. System should have features like Two (2) x Rotary motion hydraulic resistance system for training of Glutes either independent of each other or simultaneously, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

- Dual Rotary Motion Hydraulic Resistance System
- Computer Managed Training System
- Heavy duty Frame and Handle bar
- Adjustable support pads
- Height adjustable motor
- Unilateral and Bilateral Exercise system
- Variable Speed Control in a range from 5 degrees/sec to 800 degrees/sec

Should have Touch screen based P/C along with Advanced Hi Speed Isokinetic Gluts & Hamstring unit with performance bio Feed back system. Variable Speed Control & Variable resistance control..

6- System should be capable of generating following reports

**Strength Report , Torque Report , Endurance Report
Power Report , Range of Motion Report , Comparison Report**

C- Hi speed Functional assessment and training device For Hip

HIP MACHINE

2. System should have provision for testing /

Handwritten notes:
Tangvi
AR AR NATH
DR AR NATH
DR ANKIT

Handwritten notes:
DR DEEPA
DR ANITA
DR SIKHP

Handwritten notes:
DR DEEPA
Med. Dr. Danish
DR DANISH

Handwritten notes:
DR JASWANT

Handwritten notes:
DR JASWANT

evaluation of various muscle groups of Hip and can be programmed as per training requirements of the muscle groups (customized) of various athletes. Real time performance of the muscle should be seen on the digital display showing peak torque , ROM and max speed and torque

- 3 System should have versatile exercise modes to accommodate different need and requirement of different individuals athletes.
- 4 System should have provision for multiple exercise modes , Variable speed mode, Variable Load Mode and personalized training mode.
- 4 System should have facilities to program variable resistance for Hip flexion and extension ,Hip abduction /abduction, Hip internal & external rotation and should also have provision for work speed control or independent.
- 5 System should be supplied with following features Rotary motion hydraulic resistance system ,Servo valve technology, computer managed rehabilitation system (CMRS),

Technical Specification

- Rotary Motion Hydraulic Resistance System
- Computer Managed Training System
- Heavy duty Frame and Handle bar
- Height adjustable motor
- Adjustable thigh rollers
- Variable Speed Control (10deg/sec – 800

Handwritten signatures and names at the bottom of the page:

- DR. NARAYAN (DR. NARAYAN)
- DR. ANKUSH (DR. ANKUSH)
- DR. SINGHA (DR. SINGHA)
- DR. DEEPAK JOSHI (DR. DEEPAK JOSHI)
- MOHD. DANISH (MOHD. DANISH)
- DR. JASWANT (DR. JASWANT)
- DR. DAVIN PATEL (DR. DAVIN PATEL)
- DR. NAG (DR. NAG)
- AC (ANURADHA)

deg/sec)

- Should have Touch screen based P/C along with Advanced HI Speed Hip Isokinetic unit with performance Bio Feed back system & Variable Speed Control.

6- System should be capable of generating following reports

**Strength Report, Torque Report , Endurance Report
Power Report ,Range of Motion Report , Comparison Report**

**D- Hi speed Functional assessment and training devise
Knee machine**

KNEE MACHINE

1. System should have facilities for evaluation / testing of various muscle groups of knee and capable of being programmed as per training requirements of the muscle groups (Cutomised). Real Performance of the muscle group should be seen on the digital display, showing peak torque , ROM and max speed and torque
2. System should have Multiple exercise modes to accommodate different need and requirement of different population/Athletes.
3. System should have provision for Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, Also should have provision for work speed control or independent.
5. System should be supplied with following feature rotary motion hydraulic resistance system, Servo valve technology, computer

DR. ALI NAZKI

DR. ANSHU NAZKI

DR. ANKIT

(DR. NAYAN)

(DR. ANKIT)

(DR. NEERAJ BOLA)

(DR. SIMHA)

DR. DEVIKANT JAIN
M.D. - Sports
(M.D. DANCING)

(DR. JESWANT)

DR. HIMESH LAL

managed rehabilitation system (CMRS).

Technical Specification

- Dual Rotary Motion Hydraulic Resistance System
- Computer Managed Training System (CMTS)
- Adjustable seating position
- Adjustable support pads
- Heavy Duty Frame
- Heavy Duty Handle bar
- Stabilising Strap
- Unilateral and bilateral
- Exercise System
- Variable Speed Control
- {10 Degrees /sec – 800 Degrees/sec}
- Dual motored.
- Unilateral and bilateral Exercise system.
- Touch screen P/C Advanced Hi Speed Isokinetic unit with performance Bio Feed back system. Variable Speed Control.
- Adjustable seating position. Stabilising strap.
Heavy duty frame and handle bar.

6- System should be capable of generating following reports

**Strength Report , Torque Report , Endurance Report
Power Report , Range of Motion Report , Comparison Report**

E- Hi speed Functional assessment and training devise Squat machine

SQUAT MACHINE

1. System should have provision for testing / evaluation of various muscle groups during Squat Activities and can be programmed as per training requirements of the muscle groups. Real time performance of the muscle groups should be seen on the digital display, showing peak torque , ROM and max speed and torque

DR. NAYAK

DR. NAYAK

(DR. NAYAK)

AS

(DR. DILIPATI SORAN)

(DR. JASWANT)

(DR. SINHA)

(DR. JASWANT)

DR. ATRECH LAL

(DR. ANKIT)

2. System should have multiple exercise modes to accommodate different need and requirement of different level of athletes.
3. System should be provision for, Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.
5. System should be capable of measuring single as well as both limbs and also perform Standing press and low row flexion and extension exercises
6. System should be supplied with following feature Linear motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS),

Technical Specification

- Linear Motion Hydraulic Resistance System
 - Computer Managed Training System
 - Heavy duty Frame
 - Counter Balance level arm
 - Counter thrust platform Variable Speed Control (Ranging from 10 deg/sec to 600 deg/sec)
 - Should have Touch screen based P/C along with Advanced HI Speed Isokinetic Knee unit with performance Bio Feed back system. Variable Speed Control Variable resistance control..
- 6- System should be capable of generating following reports

DR. HELIX

DR. ANIL KUMAR
DR. ANIL KUMAR
DR. ANIL KUMAR

(DR. NAYAK)

(DR. MUKIT)

DR. DIGANTA BORAH

(DR. SINHA)

DR. DEEPAK JOSHI
DR. DEEPAK JOSHI
(DR. DEEPAK JOSHI)

(DR. JASWANT)

DR. ANITA KAL

	Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report
--	---

<p>Hi Speed functional assessment and training devise for Upper extremities (PAC)</p>	<p>F- Hi speed Functional assessment and training devise single station multi-function rotary shoulder machine <u>MULTI-FUNCTION ROTARY SHOULDER MACHINE</u></p> <ol style="list-style-type: none">System should have provision for testing/evaluation of various muscle groups of shoulder and can be programmed as per training requirements of the muscle groups (cutomised). Provision should be there so that real time performance of the muscle groups can be seen on the display, showing Peak Torque , ROM and Max Speed and TorqueSystem should have multiple exercise mode to accommodate different need and requirement of different levels of athletes.System should be supplied with Variable Speed Mode, Variable Load Mode and Personalized Training Mode.System should have facilities to program variable resistance for flexion and extension for both sides of the body independently and should have also provision for work speed control or independent,System should be supplied with following mandatory features: Rotary motion hydraulic resistance system, Servo valve technology system , computer managed rehabilitation system (CMRS), <p>Technical Specification</p> <ul style="list-style-type: none">Rotary Motion Hydraulic Resistance SystemComputer Managed Training System
--	--

Handwritten signatures and initials:

- (DR. NAYAK)
- (DR. DEVI ANAND KURUM)
- (DR. ANKIT)
- (DR. SINHA)
- (DR. JASWANT)
- (DR. MANGAL JOSHI)
- (DR. PANKAJ)
- (DR. RAJ)

	<ul style="list-style-type: none"> • Heavy duty Frame for elite training facility • Counter Balance Level arm • Counter Thrust Platform • Optional Adjustable Angle (-30 deg/sec -180 deg/sec) • Optional Footrest and Chest strap • Variable Speed Control (10 deg/sec – 600 deg/sec • Should have touch screen based P/C along with Advanced HI Speed Shoulder Isokinetic unit with performance Bio Feed back system . Variable Speed Control Variable resistance control., <p>6 System should be capable of providing following reports</p> <p>Strength Report, Torque Report, Endurance Report</p> <p>Power Report, Range of Motion Report, Comparison Report</p>
	<p>G-Hi speed Functional assessment and training devise Torso machine</p> <p>TORSO MACHINE</p> <ul style="list-style-type: none"> • System should have facilities for evaluation of various muscle testing and can be programmed as per requirements of the muscle group. Real time performance of the muscle can be seen on the display, showing peak torque , ROM and max speed and torque • System should have multiple exercise modes to accommodate different need and requirement of different population & athletes. • System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode. • System should have facilities to program variable resistance for flexion and extension, should also

Handwritten notes:
 Torso
 you
 needed

Signature:
 (DR. WAHAB)

Signature:
 (DR. DILIPKANTH BOPPA)

Signature:
 (DR. DEEPAK JOSHI)

Signature:
 (MR. DANESH)

Signature:
 (DR. ANKIT)

Signature:
 (DR. SINHA)

Signature:
 (DR. JEEVAN)

Signature:
 (DR. JEEVAN)

AS

have provision for work speed control or independent.

- System should have the following feature Rotary motion hydraulic resistance system ,Servo valve technology, computer managed rehabilitation system (CMRS),

Technical Specification

- Rotary Motion Hydraulic Resistance System
- Computer Managed Training System
- Heavy duty Frame
- Counter Balance level arm
- Counter thrust platform Variable Speed Control (10 deg/sec – 600 deg/sec)
- Should have Touch screen based P/C along with Advanced Hi Speed torso Isokinetic unit with performance Bio Feed back system , Variable Speed Control Variable resistance control..

7 System should be capable of generating following reports

**Strength Report, Torque Report , Endurance Report
Power Report, Range of Motion Report , Comparison
Report**

H-Hi speed Functional assessment and training devise Bench Press/Pull machine

BENCH PRESS/PULL MACHINE

1. System should have facilities for testing / evaluation of various groups of muscle testing and can be programmed as per requirements of the muscle groups. Real time performance of the muscle should be seen on the display , showing peak torque, ROM and max speed and

to note
Mare

(DR NAYAK)

(DR STANHA)
DR ANKIT

(DR STANHA)

(DR DEEPA)
DR DEEPA
MOHD DANISH

(DR JASWANT)
AS

Chiranjiv
Shy

torque

2. System should have versatile exercise mode to accommodate different need and requirement of different levels of athletes.
3. System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, Also should have provision to work speed control or independent.
5. System should be supplied with following feature Linear motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS),

Technical Specification

- Linear Motion Hydraulic Resistance System
- Computer Managed Training System
- Heavy duty Frame
- Counter Balance level arm
- Counter thrust platform Variable Speed Control in a range of 10 degrees/sec – 600 degrees/sec
- Should be supplied with Touch screen based P/C along with Advanced Hi Speed Bench Press/Pull Machine Isokinetic unit with performance Bio Feed back system . Variable Speed Control Variable resistance control..
- 6- System should be capable of generating following reports

Strength Report , Torque Report , Endurance Report
Power Report , Range of Motion Report , Comparison

for next

Handwritten signature

(DR. RAJESH)
(DR. ANKIT)
(DR. SHARMA)
(DR. DIGANTA)
(DR. JOSH)
(MOHD DANISH)
(DR. JAGWANI)
As

Report

I- Hi speed Functional assessment and training
devise Dead Lift Machine

DEAD LIFT MACHINE

1. System should have facilities for testing / evaluation of various muscle group testing during dead lift and can be programmed as per requirements of the muscle groups (customized) and real time performance of the muscle should be seen on the digital display, showing peak torque, ROM and max speed and torque
2. System should have multiple exercise modes to accommodate different need and requirement of different level of athletes.
3. System should be able to perform the following exercises. Dead Lift, Upright row, Triceps extension, Shoulder shrug, Power take off, Jump thrust, all movements in both flexion / extension.
4. System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
5. System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.
6. System should be supplied with following features i.e. Linear motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

- Linear Motion Hydraulic Resistance System

Handwritten signature

Handwritten signature

(DR. NAYAK)

(DR. BHUPATI BOPRA)

(DR. KEERAVI JOSHI)

(DR. DANISH)

(DR. ANKIT)

(DR. SINGH)

(DR. JASWANT)

Handwritten signature

- Computer Managed Training System
 - Heavy duty Frame and Handle bar
 - Reversible handles
 - Power take off blocks
 - Variable Speed Control (5 deg/sec – 800 deg/sec)
 - Should have Touch screen based P/C along with Advanced Hi Speed Dead Lift machine Isokinetic unit with performance Bio Feed back system, Variable Speed Control Variable resistance control..
- 7- System should be capable of generating following reports

**Strength Report, Torque Report, Endurance Report
Power Report, Range of Motion Report, Comparison Report**

J- Hi speed Functional assessment and training devise Trunk

TRUNK

1. System should have facilities for testing /evaluation of various muscle groups of trunk and capable of being programmed as per requirements of the muscle groups (customized) and real performance of the muscle should be seen on the digital display, showing peak torque, ROM and max speed and torque
2. System should have multiple exercise modes along with provision for work speed control or independent mode to accommodate different need / requirement of different level of athletes .
3. System should be supplied with Variable speed mode, Variable Load Mode and personalized

ANAL

(DR ASHAY)

(DR ANKIT)

(DR. NAYAK)

(DR. VIKANTA BORAH)

(DR. SINITA)

(DR. DEEPAK JOSHI)
M.D. (MORPHOLOGY)

(DR. JAGWANT)

(DR. DAVIN DEVI)

(ANURADHA)

	<p>training mode.</p> <p>4. System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.</p> <p>5. System should be supplied with following features i.e. Rotary motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).</p> <p>Technical Specification</p> <ul style="list-style-type: none"> • Rotary Motion Hydraulic Resistance System • Computer Managed Training System • Heavy duty Frame • Adjustable Height Chest roller • Adjustable support pads • Variable Speed Control (10 deg/sec – 400 deg/sec • Should have Touch screen based P/C along with Advanced Hi Speed Trunk Isokinetic unit with performance Bio Feed back system, variable Speed Control & variable resistance control.. <p>6- System should be capable of generating following reports</p> <p>Strength Report, Torque Report , Endurance Report Power Report ,Range of Motion Report, Comparison Report</p>
--	---

Safety Specification: Should have CE/USFDA/Appropriate Indian Medical Safety and Quality Standard Certification.
 Training by OEM 01 weeks / year for 3 years in SIC
 Maintenance clause: For 5 years after warranty period of 2 years
 Safety clause: As per existing guideline

Handwritten notes:
 Dr. Anuradha Solanki

Signature:
 (B K HAYAK)

Signature:
 (DR BORAH)

Signature:
 AS (ANURADHA SOLANKI)

Signature:
 (DR DAVINDER)
 (MOHA. BANSH)

Signature:
 (DR ANKIT)

Signature:

Signature:
 Dr. S. Singh

Signature:
 Dr. S. Singh

HI-SPEED FUNCTIONAL ASSESSEMENT AND TRAINING DEVICE FOR UPPER EXTREMITIES

DPR Item No.: 43

Cost per Equipment: ₹ 150, 00,000/-

No. of Units: 1

Total cost: ₹ 150, 00,000/- (As in DPR)

This unit consists of:

- A. Multi-Function Rotary Shoulder Machine (1 no.)
- B. Torso Machine (1 no.)
- C. Bench Press/Pull Machine (1 no.)
- D. Dead Lift Machine (1 no.)
- E. Truck Machine (1 no.)

A - Hi speed Functional assessment and training devise single station multi-function rotary shoulder machine

MULTI-FUNCTION ROTARY SHOULDER MACHINE

1. System should have provision for testing/ evaluation of various muscle groups of shoulder and can be programmed as per training requirements of the muscle groups (customized). Provision should be there so that real time performance of the muscle groups can be seen on the display, showing Peak Torque, Range Of Motion (ROM) and Max Speed and Torque.
2. System should have multiple exercise modes to accommodate different need and requirement of different levels of athletes.
3. System should be supplied with Variable Speed Mode, Variable Load Mode and Personalized Training Mode.
4. System should have facilities to program variable resistance for flexion and extension for both sides of the body independently and should have also provision for work speed control or independent.
5. System should be supplied with following mandatory features: Rotary motion hydraulic resistance system, Servo valve technology system, computer managed rehabilitation system (CMRS).

Technical Specification

1. Linear Motion Hydraulic Resistance System

(Dr. R. Singh)
(COE Army)
(Dr. S. Sinha)
(COE SANA)
(COE HITESH LAL)
(DR. ANKIT)
(COE DEEPAK SINGH)
(DR. ANAND)
(COE P. N. NAW)
(DR. DANISH)
(DR. DANISH)
(DR. AK. NAYAK)
(DR. BOONH)

2. Computer Managed Training System
3. Heavy duty Frame for elite training facility
4. Counter Balance Level arm
5. Counter Thrust Platform
6. Optional Adjustable Angle (-30 deg/sec -90 deg/sec)
7. Optional Footrest and Chest strap
8. Variable Speed Control (10 deg/sec – 600 deg/sec
9. Should have touch screen based P/C along with Advanced Hi Speed Shoulder Isokinetic unit with performance Bio Feedback system. Variable Speed Control Variable resistance control.
10. System should be capable of providing following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report.

B- Hi speed Functional assessment and training devise Torso machine

TORSO MACHINE

1. System should have facilities for evaluation of various muscle testing and can be programmed as per requirements of the muscle group. Real time performance of the muscle can be seen on the display, showing peak torque , ROM and max speed and torque
2. System should have multiple exercise modes to accommodate different need and requirement of different population & athletes.
3. System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.
5. System should have the following feature Rotary motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Linear Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame
4. Counter Balance level arm

DR. R. G. Singh
DR. H. Singh
DR. B. Singh

CDR A. Lal

(DR. S. Singh)

(Dr. S. Singh)

DR. B. Singh

DR. Ashwani

DR. P. Singh

(Dr. Ashwani)
DR. Ashwani

DR. Ashwani
2 (Dr. Ashwani)

Mohd Danish
(Mr. Danish Mohd)

5. Counter thrust platform Variable Speed Control (10 deg/sec – 600 deg/sec)
6. Should have Touch screen based P/C along with Advanced Hi Speed torso Isokinetic unit with performance Bio Feedback system. Variable Speed Control Variable resistance control.
7. System should be capable of generating following reports: Strength Report, Torque Report , Endurance Report Power Report, Range of Motion Report, Comparison Report.

C-Hi speed Functional assessment and training devise Bench Press/Pull machine

BENCH PRESS/PULL MACHINE

1. System should have facilities for testing / evaluation of various groups of muscle testing and can be programmed as per requirements of the muscle groups. Real time performance of the muscle should be seen on the display, showing peak torque, ROM and max speed and torque
2. System should have versatile exercise mode to accommodate different need and requirement of different levels of athletes.
3. System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension, Also should have provision to work speed control or independent.
5. System should be supplied with following feature Rotary motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Linear Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame
4. Counter Balance level arm
5. Counter thrust platform Variable Speed Control in a range of 10 degrees/sec – 600 degrees/sec

CDR R. Singh
DR. K. G. Bhatnagar
DR. K. G.

(Dr. B. Singh)
(Dr. S. Singh)

DR. SK. Nayak
(Dr. S. Singh)

DR. Deepak Jais

DR. Divinder
3

DR. Anand

Mohamud
(Mr. Danish Malik)

(Dr. Ankit)

- Should be supplied with Touch screen based P/C along with Advanced Hi Speed Bench Press/Pull Machine Isokinetic unit with performance Bio Feedback system . Variable Speed Control Variable resistance control..
- System should be capable of generating following reports: Strength Report , Torque Report , Endurance Report Power Report, Range of Motion Report , Comparison Report.

D-Hi speed Functional assessment and training devise Dead Lift Machine

DEAD LIFT MACHINE

- System should have facilities for testing / evaluation of various muscle group testing during dead lift and can be programmed as per requirements of the muscle groups (customized)and real time performance of the muscle should seen on the digital display, showing peak torque , ROM and max speed and torque
- System should have multiple exercise modes to accommodate different need and requirement of different level of athletes.
- System should be able to perform the following exercises. Dead Lift, Upright row, Triceps extension, Shoulder shrug , Power take off , Jump thrust, all movements in both flexion / extension.
- System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
- System should have facilities to program variable resistance for flexion and extension, should also have provision for work speed control or independent.
- System should be supplied with following features i.e. linear motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

- Linear Motion Hydraulic Resistance System
- Computer Managed Training System
- Heavy duty Frame and Handle bar
- Reversible handles

Handwritten signatures and notes in blue ink are scattered across the bottom of the page:

- Top left: *(Dr. R. Singh)*, *(Dr. R. Singh)*, *(Dr. R. Singh)*, *(Dr. R. Singh)*
- Bottom left: *(Dr. Borah)*, *(Dr. S. Sankha)*, *(Dr. Saha)*, *(Dr. BK Nayak)*, *(Dr. D. Joshi)*
- Bottom center: *(Dr. J. S. Nayak)*
- Bottom right: *(Dr. Davinder)*, *(Dr. Anil)*, *(Dr. Ankit)*

5. Power take off blocks
6. Variable Speed Control (5 deg/sec – 800 deg/sec)
7. Should have Touch screen based P/C along with Advanced Hi Speed Dead Lift machine Isokinetic unit with performance Bio Feed back system, Variable Speed Control Variable resistance control.
8. System should be capable of generating following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report.

E-Hi speed Functional assessment and training devise Trunk

TRUNK

1. System should have facilities for testing /evaluation of various muscle groups of trunk and capable of being programmed as per requirements of the muscle groups (customized) and real performance of the muscle should be seen on the digital display, showing peak torque, ROM and max speed and torque
2. System should have multiple exercise modes along with provision for work speed control or independent mode to accommodate different need / requirement of different level of athletes.
3. System should be supplied with Variable speed mode, Variable Load Mode and personalized training mode.
4. System should have facilities to program variable resistance for flexion and extension. Should also have provision for work speed control or independent.
5. System should be supplied with following features i.e. Rotary motion hydraulic resistance system, Servo valve technology, computer managed rehabilitation system (CMRS).

Technical Specification

1. Rotary Motion Hydraulic Resistance System
2. Computer Managed Training System
3. Heavy duty Frame
4. Adjustable Height Chest roller
5. Adjustable support pads

Dr. R. Hary

Dr. K. N. Singh

Dr. H. N. Singh

Dr. A. Singh

Dr. S. Singh

Dr. K. Singh

Dr. S. Singh

Dr. B. K. N. Singh

Dr. J. Singh

Dr. D. Singh

Dr. D. Singh

Dr. Singh

Dr. H. Singh

Dr. Singh

- 6. Variable Speed Control (10 deg/sec – 400 deg/sec)
 - 7. Should have Touch screen based PC along with Advanced HI Speed Trunk Isokinetic unit with performance Bio Feedback system, variable Speed Control & variable resistance control.
 - 8. System should be capable of generating following reports: Strength Report, Torque Report, Endurance Report Power Report, Range of Motion Report, Comparison Report.
- a) Safety Specification: Should have CE and or USFDA certification.
 - b) Training by OEM: 01 weeks / year for 3 years in SIC.
 - c) Maintenance clause: as in general specifications
 - d) Safety clause: As per existing guideline.

 (Dr. A. Ghosh)
 Dr. K. Nag
 Dr. D. Jais
 (Dr. Saha)
 (Dr. Borah)
 Dr. Jaisant
 Dr. D. Jais
 (Dr. Kal)
 (Dr. Saha)
 (Dr. Ankita)
 Dr. BK Nag
 Dr. Ak Naik
 (Dr. Danish Moid)

1. GENERAL SPECIFICATIONS (terms and conditions) FOR physiotherapy and sports medicine, C-ARM, BATTERY DRILL, ARTHROSCOPES, MEDICAL EQUIPMENTS AND AUTOCLAVES (as per minutes 01/10/2019, 15/10/2019, 22/10/2019, 31/10/2019 & 07/11/2019, 04/08/2020 over and above general specification by tendering authority)-TO BE FOLLOWED IN ALL MEDICAL EQUIPMENT ITEMS ON SIC EXPANSION.

- 1) System should be ECE / US FDA/BIS approved.
- 2) Inadvertent use of only US FDA in all specifications drafted by medical equipment committee to be omitted or not taken and should be read as and /or others as above in point 1.
- 3) Medical Grade Stainless steel / titanium or other certified material (satisfying above certification) must be used for all instruments and machinery in mandate of medical equipment committee for SIC expansion.
- 4) AERB approved. (For C-Arm)
- 5) 5 year comprehensive onsite warranty of entire system (Spare and labour) including X-ray tube (For C-Arm) and all accessories and civil, electrical and air conditioning works followed by 5 year CMC.
- 6) Company should confirm the availability of spare parts for 10 years from the date of supply of the equipment.
- 7) Company should have 24 x 7 call support facility.
- 8) List of spare parts with cost must be provided.
- 9) Should conform to latest IEC standard for requirement of safety for electromagnetic compatibility.
- 10) Physical Demonstration is essential.
- 11) Warranty 2 years in Arthroscopes subject to physical damage and wear & tear, and 1 year for Hand held Instruments of arthroscopy subject to physical damage and wear & tear ;
- 12) Warranty 5 years + CMC 5 years in all other items of this committee.
- 13) L1 will include CMC cost also;
- 14) Preventive maintenance every 3 months with log book entry;
- 15) The quality of supplied of instrument / equipment should be strictly same as given for physical demonstration / inspection, failing that the company / dealer will be black listed for 5 years for participating in tender process of hospital.
- 16) Turnkey/installation wherever required to be done by company and included in cost.
- 17) Freeze rate of consumables for 10 years
- 18) Technical specifications to be kept on site for 21 days public domain for comments of stakeholders.
- 19) Prebid meeting to be held of all stakeholders and modifications if needed may be considered.
- 20) On site training for equipment usage to be done wherever needed
- 21) Patient and user Safety and compensatory clause for all medical machinery of this committee. This should be besides the safety checks and mechanism already essential in every medical machinery.
- 22) Service centre authorized by manufacturer should be located in Delhi NCR and should provide service and repair as soon as possible within 24hrs to ensure patient safety.

Dr. V. N. NAR
Arun

(Dr. V. N. Nar)
(Dr. S. Srinivas)
(Dr. D. Joshi)
(Dr. Ankit)
(Dr. Borah)
(Dr. Sahas)
(Dr. Danish Mehdi)

- 23) All electrical equipment should conform to latest electromagnetic safety standards for medical equipment.
- 24) The equipment with all its components will have warranty for period of 5 years from the date of handing over the fully functional unit and all the accessories supplied to the institution. Every thing irrespective of nature that is supplied by the vendor will be under warranty. The equipment which has multiple components should be quoted as a whole and by a single vendor.
- 25) During warranty period the desired uptime of 95% of 365 days (24hrs basis) will have to be ensured with maximum of 5 working days of downtime at a stretch. In case the downtime exceeds the 5% limit in a year or more than 5 days at a stretch (whichever is applicable) extension of warranty period by double the excess down time period will be carried out.
- 26) CMC (Comprehensive Maintenance Contract) The post warranty (after 5 years) CMC should be comprehensive for all its components (everything irrespective of nature which is supplied by the vendor under guarantee) inclusive of X-Ray Tubes. (For C-Arm) with 95% uptime and extension of CMC period by double the downtime in excess of 5%.
- 27) Participating bidders should submit a good performance certificate from institutions and a certificate that it is submitting the medical item to the user at the lowest cost with a supply order to that effect preferably of a government institution.
- 28) All procedures laid down by CVC to be followed in all items which were proprietary in nature.


 Member Secretary


 DR. JAWA
 DR. AK. NIKH


 DR. DANISH
 (DR. DANISH)


 (DR. DANISH)


 DR. DANISH
 (DR. DANISH)


 DR. DANISH
 (DR. DANISH)


 Chairman


 DR. DANISH


 (DR. DANISH)


 DR. DANISH

Telemetry Biofeedback and Neurofeedback System

DPR Item No. : 79

Cost per equipment: Rs 20,00,000/-

No. Of units: 1

Total cost: Rs 20,00,000/- (As in DPR)

Biofeedback & neurofeedback system helps in assessing stress levels and stress response. It also helps in teaching self regulation skills and in learning to relax.


Technical Specifications

1. Computerized Portable 10 channel biofeedback system capable of data acquisition for RMS SEMG, EKG, EEG, skin conductance, heart rate, blood volume pulse, respiration, goniometer, force, accelerometer, torsiometer and voltage input with cardio pro and reactive/physiology suite.
2. System should be battery operated, and light weight to carry on the field.
3. System sampling rate for all the channel should have 2048 sample/sec. for recording various parameter. Facilities available for multi channel acquisition for same parameter.
4. System should have facility for online recording, telemetry data recording and on flash memory.
5. Should be provided with rechargeable batteries, battery life should be at least, - 30Hrs logging in single charge, charging should be of smart technology with no chances of overcharging.
6. Analysis and operating software should have multiple screen options as per user requirements.
7. Operating system - windows XP or Vista or windows 7 or above with a compatible laptop for each system.
8. Telemetric Transmission should be minimum of 100 metres.
9. Data Acquisition system with the programs preloaded should be supplied with the system
10. There should be provision for preloaded programs like stress tests, respiration training, relaxation training, confrontation training, temperature training, threshold value training.
11. Multiple feedback options like lines, pictures, videos, audio should be present for the sports person being tested.
12. System should have lifetime licences.
13. Should comply with CE / ISO / USFDA / Appropriate Indian Safety Standard Certification.
14. System sensor should have facility for self impedance checkup and facility for automatic artefact rejection feature.


(DR. ANIL KUMAR)


(DR. NITISH LAL)

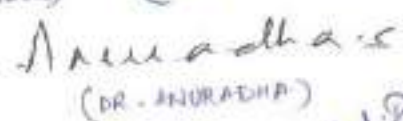

(DR. DEEPAK SINGH)

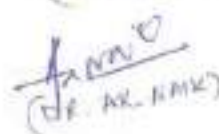

(DR. S. SINHA)


(MOHD DANISH)


(DR. DAVINDER)


(DR. ANURADHA)


(DR. ANURADHA)


(DR. AR. RAVI)


(MOHD DANISH)


(DR. ANIL KUMAR)


(DR. ANIL KUMAR)


(DR. ANIL KUMAR)


(DR. ANIL KUMAR)


(DR. ANIL KUMAR)


(DR. ANIL KUMAR)

Viana Test System

DPR Item No. : 83

Cost per equipment: Rs 40,00,000/-

No. Of units: 1

Total cost: Rs 40,00,000/- (As in DPR)

VTS sport is psychometrically valid tool for measuring sports related components like reaction time, decision making, reactive stress tolerance, coordination and peripheral perception.

Technical Specifications

The Vienna Test System (SPORT) should include following features:-

Software:- (Software should have a minimum validity 10 years.

1. Should have provision for assessment of time movement and anticipation.
2. Should have provision for assessment of stress tolerance, attention and reaction speed.
3. Should have provision for assessment of peripheral perception.
4. Should have provision for assessment of sensory motor coordination.
5. Should have provision for assessment of reaction time.
6. Should have provision for assessment of personality.
7. To measures the attention and reaction time in response to simple visual or auditory stimulus material.
8. Should have provision for assessment of attention concentration through comparison of figures with regard to their congruence.
9. Should have provision for addition of any other relevant software (at the time of up gradation of software.)
10. Should be provided with VTS administrative software.

Hardware should include the following:-

- Stereo head set.
- Universal response Panel
- Foot pedal
- Analog foot pedal
- Calibration module
- PP Hardware
- Suitcase for PP hardware
- Test System Dongle

Should be provided with laptop with latest configuration (16 GB RAM/ 1TB SSD at least i7 processor with compatible appropriate graphic card) to support software requirements of above equipment and better.

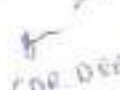
Should have CE / IEC / Appropriate Indian Electrical Safety Standard Certification.


(CDR P. J. JAIN)


(CDR H. L. NAG)


(CDR S. SHARMA)


(CDR M. SAHAI)



(CDR DEEPAK SHARMA)



(CDR D. BORDIA)


(CDR S. SENHAT)


(CDR RAJESH)


(DR ANURASHA S)


(CDR A. K. NAG)


(MAHESH)