

JAIPUR VIDYUT VITRAN NIGAM LIMITED

SECTION-IIITECHNICAL SPECIFICATION FOR SUPPLY AND COMMISSIONING OF CABLE/ CONDUCTOR REWINDING MACHINE AGAINST TN-04

1.0 OBJECTIVE

Jaipur Vidyut Vitran Nigam Limited (JVNL) is engaged in Distribution and Transmission of electricity and purchase of various material For such purpose from outside sources. JVNL is having in-house testing laboratory to carry out sample testing of such purchased material. To further augment the testing facilities, rewinding of cable/ conductor is to be included.

2.0 SCOPE OF WORK:-

The scope of work mainly comprises of:-

- i) Design, supply and commissioning of cable/ conductor rewinding machine along with all accessories required for the purpose. The machine must have the valid calibration certificate from NABL accredited test house (02 Nos. Machines)
- ii) Installation and commissioning of above equipment at Central Testing Laboratory (CTL), JVNL, shall include all civil works (except the building work) viz. foundation etc. and other work with supply of all petty items required for such installation and testing.
- iii) Any other activity which are not specifically mentioned but essentially required to achieve the work objective.
- iv) To provide operation and maintenance manual including drawings – three Nos.
- v) List of spare parts and consumable items.
- vi) Guarantee for two years for instrument/ equipment including whole systems.
- vii) Bidder is required to intimate covered space required to house the equipment/ instrument. The details of power load required for the complete set up. The power load and space building shall be provided by the JVNL.

3.0 TECHNICAL SPECIFICATION:-

- i) Rewinding machine having main body of MS plate and MS Channel with suitable clutch for layering and tension control for rewinding of ACSR/ AAAC conductor of all sizes and 33 KV cable upto size 3Cx400 Sq.mm.
- ii) Drum weight capacity upto 5.0 tons.

A) Maximum drum size :

Flange Dia	:	2600 mm
Barrel Dia	:	1650 mm
Bore	:	130mm
Overall Width	:	1800mm

B) Type :

- i) Pillar type take up unit with clutch device and power pack unit.
- ii) Pillar type pay – Off stand unit with tensioning device suitable to accommodate the cable/ conductor drum.

C) Lifting lowering of drum:

Motorized with siding pintle/ collar for adjustment of drum width. Raising, lowering and reel holding sensed by proximity/ limit switches.

D) Traversing unit:

Automatic traversing unit with variable traverse of drum.

E) Measuring Unit:

Very accurate measuring unit with a counter having two vertical and horizontal guide rollers at entrance and exit of measuring unit.

F) Liner Speed :

Maximum Speed – 60mt./ minute.

Minimum Speed - 10mt./minute.

With speed selection switch for speed 10 mt./ minute, 20 mt./minutes, 30 mt./ minutes, 40 mt./minute, 50 mt. / minute and 60 mt./minute.

4.0 STANDARDS :

The machine shall conform to the provision of latest issues of standards to be read with upto date and latest amendments/ revisions thereof. Equipments conforming to any other international standard(s) which ensure(s) equal or better quality will also be acceptable and in such case(s) bidder shall clearly indicate the salient points of difference between the standards adopted and as specified ones.

5.0 INSTALLATION & COMMISSIONING:

The rewinding machine shall be suitably installed at Central Testing Laboratory (CTL) JVVNL,Jaipur. The installation and commissioning involves all required earthing, foundation as per the prevailing standards. All control/ power cable incoming control panel consists of input & output voltage, input and output current etc. for equipment shall be supplied by the bidder for functional operation of the system.

The bidder shall furnish a scheme diagram showing the layout, foundation, earthing of each equipment, rating, make and specification along with technical offer.

PAY OFF COLUMN SHIFTING TYPE : 2600 MM

Reel size	1000-2600 mm
Barrel Size	800 mm (min.)
Width	1000-1800 mm
Traverse	900-1500 mm.
Capacity	15000 Kg.
Bore	80 mm, 100 mm & 125 mm
Column Movement	Motorized.
Sensing	Raising, lowering & Reel Holding, Sensed By proximity/ limit switches.
Reel Holding	On Pintles
Up down Motor	5 H.P. – 2 Pcs (As H.T. cable drums are heavy)
Reverse Forward Motor	2 HP. 2 Pcs. (Need to change by 5.0 HP)

TAKE-UP STAND COLUMN SHIFTING TYPE : 2600 MM

Reel size	1000-2600 mm
Barrel Size	800 mm (min.)
Width	1000-1800 mm
Traverse	900-1500 mm.
Capacity	15000 Kg.
Bore	80 mm, 100 mm & 125 mm
Traverse Pitch	4 TPI
Sensing	Raising, lowering & Reel Holding, Sensed By proximity/ limit switches.
Column Movement	Motorized.
Sensing	Raising, lowering & Reel Holding, Sensed By proximity/ limit switches.
Reel Drive	15 HP AC Motor with reduction Gear Box 8" 1/40 ratio.
Reel RPM	20 RPM
Column Movement	Motorized
Reel Holding	On Pintles
Up down Motor	3 H.P. – 2 Pcs Gear Motor 30 RPM
Reverse Forward Motor	2 HP. – 2 Pcs Gear Motor 30 RPM
Traverse Motor	1.5 HP Gear Motor 50 RPM
Counter Meter	Provided.