

PINCH ROLLER ASSEMBLY AS PER BHEL DRG 1M02F2700804

DESIGN AND SUPPLY OF 2 ROLLER TYPE PINCH ROLLER ASSEMBLY AS PER THE FOLLOWING DATA

Eng no : 2661900264

Pinch Roll Assembly with Gear Motor Drive as per the Drg No.
1-M-02F-27 0804-Z

SUB ASSEMBLY DRGS. AS FOLLOWS:

(01) 2M 02F 14 02494 (02) 3M 02F 14 4839 (03) 4M 02F 14
12815
(04) 4M 02F 14 12816 (05) 4M 02F 14 12817 (06) 3M 02F 14
3868
(07) 3M 02F 14 03869 (08) 4M 02F 14 09872 (09) 4M 02F 27
16929 (10) 4M 02F 14 12819 (11) 4M 02F 14 9876 (12) 4M
02F 14 17665-01 (13) 3M 02F 14 10498 (14) 4M 02F 14 09880
(15) 4M 02F 14 9881
(16) 4M 02F 14 9882 (17) 4M 02F 14 9883 (18) 4M 02F 14
12820
(19) 4M 02F 14 12821 (20) 3M 02F 27 6504 (21) 4M 02F 27
16836 (22) 4M 02F 27 16837 (23) 4M 02F 27 16838 (24) 4M
02F 27 16839
(25) 4M 02F 27 16925

SPECIFICATION:

(1) The pinch rollers are to transport tubes of 24 mm dia. to 88.1 of 2.4 to 12 mm thickness of length 12 meters to transfer the tube load to the next pinch roller.

(2) The pinch rollers are to be driven by geared motor with logical operations as follows:-

Open position to accommodate maximum diameter.

Close position to grip the tubes.

Ensure rotation by geared motor such that the tube will draw the drive force and move forward.

Reverse rotation of the pinch roller to ensure the tube travel in the reverse linear direction (to and fro).

The pinch roller open and close for clamping and de-clamping the tube can be through pneumatic cylinder.

(3) The pinch rollers are driven by one geared motor and controlled by DC Solenoid valves and limit switch.

(4) The pinch rollers assembly are two roller type as per the part drawing 4-M-02F-27 17665-01 and the critical dimensions, speed, power rating, etc., are specified in the drawing of geared motor. Minor variations are acceptable.

(5) The pinch roller drawing enclosed is for reference and guidance. The existing pinch roller in the machine should be studied by the vendor

(6) The general arrangement can be followed as per the drawing for easy operational feature and maintenance.

(7) The pinch rollers and the materials are to be followed as per machine tool manufacturing norms and the standard norms.

(8) The two rotating pinch rollers are to be moulded with proper non-metallic material such as metalon or heavy duty compounds to take care the shock, impact, abrasive loads during tube bending.

(9) The clamping and un-clamping, sliding, dimensions, diameters, thickness of the rollers connecting components are nearly as per drawing.

(10) All the pneumatic cylinders and valves are to be SMC/ Festo make only.

(11) Gearedmotor: PBL / BHARAT BIJLI / HINDUSTAN / BONFIGLIOLI / BAUER / ROTOMOTIVE / ROTO FLEX / NEW ALLENBERRY / SEW / HABASIT ROSSI.

(12) Sensors to be provided for terminating the tube travel and stopping the pinch roller during appropriate operational requirement as per site condition.

(13) After placement of order the final drawing are to be submitted for BHELs approvals before manufacturing the pinch roll assembly.

(14) Pinch roller assembly will be inspected for its function and reliability at vendor's site before dispatch (Pre-dispatch inspection)

Note:

(a) All items as per sl. no 1 (sub assemblies as per part drawings mentioned in BHEL Drawing No. 1-M-02F-27 0804-Z) are to be manufactured as per the drawing details

(b) Fabrication has to be done at supplier's works.

(c) All the raw materials are to be as per BHEL drawing specification.

(d) All raw materials, welding consumables paints etc are under the scope of the vendor.

(e) Welding electrode E7018 only has to be used for fabrication.

(f) Wherever machining, welding and fitting are required due consideration shall be maintained for fit and tolerance.

(g) All materials has to be transported and delivered to BHEL / Trichy by the supplier.

(h) One coat of red oxide paint as per the industrial practice has to be applied by the supplier.

(i) The supplier may visit BHEL for familiarisation and for any clarification required on the above system.

(j) The offerer shall submit the offer in two part bid.

VENDOR QUALIFYING CRITERIA:

ONLY THOSE VENDORS WHO SATISFY THE FOLLOWING CONDITIONS WILL GET QUALIFIED TO PARTICIPATE IN THE TENDER:

(1) VENDOR SHOULD HAVE MINIMUM 3 YEAR EXPERIENCE IN THIS FIELD.

(2) PREVIOUS PO DETAILS FOR SUPPLYING SIMILAR KIND OF ITEMS SHOULD BE SUBMITTED ALONG WITH OFFER. OTHERWISE OFFER WILL BE REJECTED.

(3) COMPANY PROFILE DETAILS HAS TO BE PROVIDED ALONG WITH OFFER.

(4) BHEL RESERVES THE RIGHT TO VISIT THE VENDOR'S WORKS FOR VERIFYING THE MANUFACTURING FACILITIES AND ANY OTHER CREDENTIAL FURNISHED BY THE VENDOR IN CASE THE INFORMATION FURNISHED WITH THE OFFERS FOUND TO BE FALSE /INCORRECT, THE OFFER SHALL BE REJECTED.