

Annexure A: Turnout Points Machine Specification

All turnouts are to be supplied with their own points machine. Therefore, this procurement also requires the supply of points machines to go with the supply of turnouts. Points Machines have to be supplied in accordance with the following specification:

Specification

- The new machine must be the non-hydraulic type and point's layout be changed to the new layout on concrete sleepers
- It is further required that the tenderer shall acquaint him/herself with the exact type of perway layout, in accordance to the turnout diagram.
- The type of points machine is the 380Vac B1-switchmatic (or style 63) with the latest modifications to suit the relevant interlocking.
- It is envisaged that the blades may require drilling to accommodate the point's layout, and this must also be confirmed with turnout layout.
- The successful Contactor shall install on turnouts points layout, rodding, cranks and new points machine.
- The points machine must be equipped with the approved vandal proofed inner or outer detector box as per conformance to the local area. The detector box is to be of the cast iron type. This must come with specialised mounting/extension plates and securing bolts
- Isolating vandal proofed junction box to also be installed
- All Crank handle and isolating circuitry/mechanism is to conform to the existing area.
- Any other necessary items as determined is to be provided by the contractor and this may include fastening bolts, washers, locknuts etc.
- The contractor must provide a set of spares (cranks and rods) for items that are unique to the layout. The contractor to ensure that the CORRECT concrete sleepers and straps required for the project are available well before occupation and they are correctly predrilled. All items must be provided and quoted for by the contractor
- The cradle to secure the points machine is part of the perway component, however the contractor to ensure that the correct type of cradle is available prior to installation, else it should be provided.
- All rodding to be of the approved make/type, however the rodding must not be galvanised. Rodding should be treated against corrosion with red oxide and the thread must be well greased with appropriate grease.
- All necessary approved rollers and fittings to be provided as part of this contract. The preferred type of roller is Plate Integrated Roller System.
- All necessary signal bonding to be renewed by the contractor and checked by Metrorail technical officer in charge.
- Contractor is to perform a compulsory site visit to ascertain the nature of the requirements of the installation and if further visits are necessary prior to tender this will be arranged.

Vandal Proofing.

- The successful Contactor shall install all vandal proofed points lids, vandal proof detector box lids and isolating box lids as per the latest Metrorail standard to be pointed out during site inspection especially related to the locking mechanism. This will necessitate that the technicians do not need to carry extra keys.
- The vandal proof points lids, vandal proof detector box lids and isolating box lids are to match the existing vandal proofing equipment, including the locking mechanism.