

SPECIFICATION RT57-09-04-02

DRAWN GRID ROLLER – 14,000kg

COMPLY / NOT COMPLY
(*Delete/Cross-Out whichever is not applicable)

Noted

(Bidder to initial each noted item)

1. **NOTE. Equipment supplied against this specification must also comply with the General Specification for earth moving equipment**

*Comply / Not Comply

2. **FUNCTION**

A drawn grid roller with square mesh, grid shaped rolling wheels, suitable for road construction, is required.

*Comply / Not Comply

3. **MASS**

The total mass of the roller must be not less than 14 000kg and not more than 16 000kg.

*Comply / Not Comply

The conical shaped wheel hubs must be filled with a suitable material of very high density to ballast the wheels and minimize the load on the bearings and frame.

*Comply / Not Comply

The unballasted mass of the roller is to be not less than 5 500kg.

*Comply / Not Comply

The complete grid roller must be so ballasted that there is approximately 50kg weight on the hitch when it is in operational condition.

*Comply / Not Comply

4. **ROLLS**

The roller must have two separate roller wheels, mounted on individual shafts. The wheels must be mounted side-by-side.

*Comply / Not Comply

Roller diameter shall be approximately 1700mm:

*Comply / Not Comply

Roller width shall be approximately 750mm:

*Comply / Not Comply

The roller wheels must be of a grid design with an opening of approximately 90mm square and manufactured of shock and abrasion resistant alloy steel of which the details must be submitted with the offer. The hardness must not be less than 350 Brinell.

*Comply / Not Comply

The outer surface (the surface that comes into contact with the road) of the roller wheels is to have a woven appearance with some sections of the mesh higher than others. This is to assist with the crushing of the gravel. The difference in height between the higher and lower surfaces of the mesh is to be approximately 30mm.

*Comply / Not Comply

The ends and inside of the roller wheels must be constructed in such a manner as to provide continuous self-cleaning.

*Comply / Not Comply

Clear illustrative drawings with fully dimensioned details of the grid pattern as well as photographs showing the grid design and height of knuckles must accompany the offer.

*Comply / Not Comply

5. BALLAST BOXES

Removable ballast boxes must be included with the roller. All the boxes must be reinforced on the inside to support the sides and bind the concrete.

*Comply / Not Comply

6. BEARINGS

The roller wheels must be fitted with anti-friction roller bearings, hermitically sealed against entry of water and dirt.

*Comply / Not Comply

7. FRAME

The roller must have a heavy duty frame to withstand the severe operating conditions and must be designed to accommodate the removable ballast boxes.

*Comply / Not Comply

8. DRAWBAR

The drawbar must be of robust construction and fitted with a universal towing hitch with a built-in shock absorbing facility. Moving parts must be well hardened or lubricated with grease to minimise wear.

*Comply / Not Comply

The drawbar, is to be not less than 1 400 mm long which will permit the towing tractor to turn approximately 90° relative to the roller, without the wheels contacting the roller frame.

*Comply / Not Comply

A hitch allowing 360 ° rotations around the longitudinal axis as well as movement about an axis parallel to the roller axle is to be fitted to the draw bar.

*Comply / Not Comply

The hitch tongue is to take a 50 mm diameter pin and is to be approximately 420 mm above ground level when being towed. The hitch tongue must be 75 mm thick and must be fitted with a replaceable hardened bush to take the pin.

*Comply / Not Comply

An adjustable and collapsible screw type jacking stand with handle is required to support the drawbar.

*Comply / Not Comply

9. FINISH AND COLOUR

The complete machine must be sand or grit blasted, primed with a heavy duty primer to withstand severely corrosive conditions and finished in golden yellow to SABS colour code B49.

*Comply / Not Comply

10. DELIVERY

The rollers must be supplied complete and ballasted in terms of this specification.

*Comply / Not Comply

11. OPTIONAL EXTRAS

11.1 WEST COAST PAINT SPECIFICATION

Painting to the “West Coast” specification as specified in the General Specifications.

*Comply / Not Comply

11.2 MANUALS

Workshop and spares manuals as specified in the General Specifications.

*Comply / Not Comply

TECHNICAL SCHEDULE

The Technical Schedule must be completed in full; failure to comply will invalidate your bid

Clearly delete/cross-out whichever is not applicable at YES/NO questions

DETAILS OF OFFER

1. MAKE AND MODEL

Make

Model

Manufacturer

Country of origin

Year of manufacture

2. OPERATING MASS

Complete unballasted machine.

_____ kg

Ballast mass in the two wheel hub cones.

_____ kg

Mass of individual ballast boxes filled with concrete.

_____ kg

Total mass of ballasted machine.

_____ kg

Has the roller been ballasted so that the correct weight is on the hitch?

YES / NO

3. ROLLS

Number of roller wheels

Wheel diameter

_____ mm

Wheel width.

_____ mm

Size of mesh grid opening

_____ mm

Type of steel used in the grid mesh.

—

Hardness

_____ Brinell

Have drawings and photographs been supplied as specified?

YES / NO

Are the grid rolls self-cleaning?

YES / NO

4. BALLAST BOXES

Number

5. REARINGS

Details of bearings

6. DRAWBAR

Details of the shock absorbing facility?

Are wearing parts hardened or lubricated?

Length of drawbar

_____mm

Does the hitch allow 360° rotation about the longitudinal axis?

YES / NO

Does the hitch allow movement about an axis parallel to the roller axle?

YES / NO

Does the hitch have a hardened bush to take a 50mm pin?

YES / NO

What is the height of the hitch above the ground when the drawbar is horizontal?

_____m
m

Is an adjustable jack stand fitted?

YES / NO

7. OPTIONAL EXTRAS

Have the optional extras been quoted for?

YES / NO

8. GENERAL

(a) Are all the required accessories fitted?

YES / NO

(b) Are all drawings, brochures and sheets submitted?

YES / NO

(c) Is the offer completely to specification?

YES / NO

(d) State all deviations from the specifications

(e) Has the General Specification been completed?

YES / NO

Please note that failure to furnish all required technical specifications, brochures and information of products offered will invalidate the Bid.