

## METALASTIK

## Cushyfoot Mountings: Series "S"

The Cushyfoot 'S' mounting has been designed for the lightweight, four-cycle, highspeed, multi-cylinder diesel engine now coming into general use on higher capacity stationary diesel generating sets (250 KVA & above), trailermounted generating sets, marine applications, vibrating equipment, etc.

No more than 107.95 mm in height when under load, the Cushyfoot 'S' is a compact unit taking up little room in relation to its capacity. The maximum vertical deflection of 10.3 mm under the load of 1600 kgs provides sufficient flexibility to isolate vibration from the various types of engines for which the mounting has been designed. Shunting shock loads upto 5 g can be accommodated.

An adjustable buffer which keeps engine movement in all

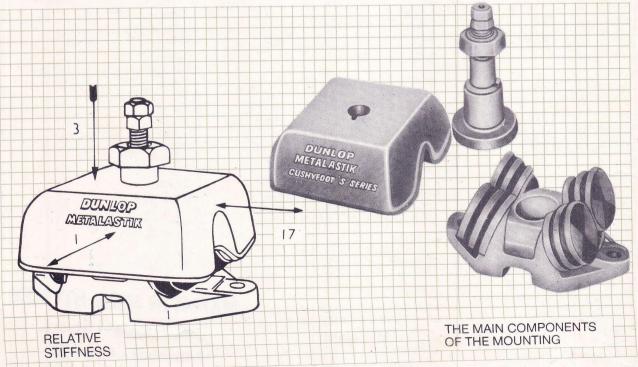
directions within desirable limits is incorporated.

Cushyfoot 'S' is particularly suitable for diesel-electric and diesel-hydraulic locomotives. For the former, a 6-point mounting system is sometimes needed because of the additional weight of the generator, but for the diesel-hydraulic, a four-point mounting arrangement is employed.

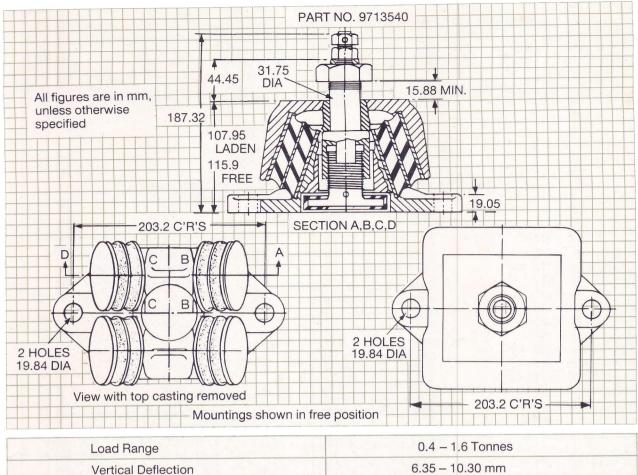
On diesel-hydraulic locomotives torque-reaction forces have to be considered in designing engine mountings. The vertical stiffness of the Cushyfoot 'S' is such that the buffer does not come into operation under these forces.

The Cushyfoot 'S' gives different deflections in transverse and fore-and-aft directions. The reason for this is clear from the illustration below showing the main components of the mounting. Under transverse loads the circular, rubber-bonded-to- metal springs are in shear while in a longitudinal direction they are in compression. In a vertical direction they are in shear and compression, giving both highload capacity and large deflections.

The ratios of transverse, vertical and longitudinal stiffnesses are in the order of 1:3:17 and have been carefully selected to give the best results. The mounting is fitted so that it is stiffest in a direction parallel with the crankshaft centre-line and the maximum flexibility is available transversely to cope with engine vibration occuring in this direction. The central column also provides height adjustment facility, if required.







It is advisable to obtain a detailed drawing before ordering. Fitment instructions will be provided after placement of order. Complete technical information can be furnished on request.



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