

SOUTHERN RAILWAY

DESCRIPTION OF VARIOUS WORKS TO BE DONE FOR THE WELDING OF JOINTS

The work of welding of joints should be done strictly in conformity with procedure given in Manual for Fusion welding of Rails by Alumino Thermit Process September 1998.

i) Removal/Loosening of fish plates and bolts, steel keys, pulling the rails to the required extent to provide adequate gaps of 20 to 25mm for welding,refixing the removed/loosened keys,fish plates and bolts under protection of track.(Line block).

ii) Respacing the required number of sleepers on either side of the joint to be welded and lifting the rail ends to the extent prescribed and as directed by the Engineer in charge to correct alignment and level and providing wooden blocks/packings underneath the rail where necessary.

iii) Scraping and cleaning the rail ends to remove dust and rust with approved wire brushes with all contractors cleaning materials and tools.

iv) Making welding moulds, with Railways mould box for the specified rail section, moulding sand, patterns and other accessories supplied by Railway to the satisfaction of the site in charge official.

v) Conveying the moulds as made above, from the place of moulding to the place of welding fixing the moulds in the rail joints and luting all round the mould with wet luting sand leaving no gaps or holes taking care that the luting remains intact till the welding is completed.

vi) Pre-heating the rail ends with contractors petrol and using pressure tanks vapouriser etc., supplied by Railways to the extent and temperature specified by the site in charge duly inflating the tank to maintain the required pressure and shifting the tanks vapouriser and other accessories from joint to joint as the work progresses. Only pressure tank, vapourisers and other non consummables will be supplied by Railways. Petrol will be supplied by contractor at his cost.

vii) Fixing Railways special crucibles and stand near the joint to be welded charging the crucibles with Railways portion and igniting the charge and tapping into the mould as per the direction of site in charge with all contractors labour and leading the same from joint to joint as the work advances.

viii) Removing the crucible after tapping the portion removing the mould after allowing the moulten steel to become sufficiently hard and chipping off in the time prescribed the excess materials and filling the top tables as directed with all

contractors labour as per direction of the site in charge duly ensuring safe and timely passage of trains after the execution of work.

ix) Respacing the sleepers after completing the welding work and rectifying any minor alignment or surface defects thereof. All permanent way tools will be supplied by the Railway free of charge.

x) Stenciling the month and year, firms insignia serial number of joints etc and where necessary as directed by the Site in charge as given in Para 5.6 of Manual for fusion welding of rails by Alumino Thermit Process September 1998.

xi) Filing the welded joints to the required tolerance is to be done as prescribed by the SE/PW in charge with contractors hand files and labour.

xii) Keeping custody of the various equipments and tools supplied by the Railway by deputing necessary watchmen at site of work.

xiii) Maintaining approved first aid equipment at site of work to be provided by the contractor.

xiv) Painting the newly welded weld collar with 2 coats of bituminous paint conforming to IS:158, inclusive of scrapping of area to be painted, with contractors supply of paint, tools & plants, consumables etc complete.

Signature of Tenderer/Contractor