**Wielding procedure:**

1. It should be complied all detailed wielding procedure specification (WPS) attached here and its supporting wielding procedure qualification test records (PQR) during execution of works.
2. All pressure retaining wields and attachment to the pressure retaining parts shall be made by shield metal arc wielding (SMAW) using low hydrogen electrode AWS E7016.
3. End preparation and root gap shall be in accordance with KAFCO SPEC. Specification prefabrication and installation and ANSI/ASME B31.3
4. Wielder performance test will be accordance with piping procedure.
5. Any imping mentation of rain, high winds on the area except proper protection of shield no welding will be approved.
6. Layer multi-layer wielding will be must.
7. Backing ring and consumable inserts shall be performed.

Butt Welds:

1. Pipe, fitting valve etc. the components shall be placed on a revolving stand aligned accurately within the tolerances specified in Piping Prefabrication and Installation procedure this specification by the use of the tack welds pieces, line up clamps etc.
2. Similar welding rods have to be used. Tack welds, root joint have to be made by qualified wielder.
3. Steel rods or welding rods need to use for setting root gap shall be removed immediately after tack.
4. Tack welds need to be grinded properly.

Flanges attachments joints:

1. Flanges bolts holes shall be straddle the establish centerline.
2. Flange joints care shall be taken to handle the flanges carefully so that the gasket contact face will not be damaged either it should not contacted with ground.
3. Front welds should be performed on all the size of slip- on flanges joints. Care shall be taken so that the weld reinforcement does not protrude onto the gasket.