irrespective of industries. They are forced to work in cramped space assuming awkward posture that burden to cardio-respiratory system.

**Methods** This study was performed on worker (n=31) engaged in welding job in different construction industry throughout West Bengal. The task was examined in the light of the observed physiological parameters and postural load in workers during their performances. The physical strain in terms of cardio-acceleration and energy cost was examined by Heart Rate Monitor. Ergonomic assessment tool REBA (Rapid Entire Body Assessment) was used to assess the working posture and risk level of postural load. Different thermal factors like Dry bulb temperature(DB), Wet bulb temperature(WB), Globe temperature(GT), Relative humidity(RH), Air velocity (AV), Wet bulb globe temperature(WBGT) was evaluated.

**Result** Cardio-acceleration and energy cost was found to be moderately heavy. Risk level of postural load was found to be 4–9 category; DB (32.27°C-35.7°C), WB (23.92°C – 26.5°C), GT (35.75°C-40.73°C), RH (43.27%– 49.9%), AV (15.51 meter/minute-26.67 meter/minute), WBGT (27.23°C-30.2°C) was found.

**Discussion** It was observed that the workers were suffering from huge amount of postural load and also encountered with radiant heat from work environment which turns the work more strenuous for them. It is urgently necessary to consider some interventions which may limit the environmental stress and postural load to increase the productivity of welders.

This is connected with peculiarities of OD registration system and underestimation real level of OD. All this justifies the need of occupational diseases diagnosis, prevention and compensation system improving in the RF.