FROM THE EDITOR'S DESK

European Welding Federation's (EWF) experiences in developing and institutionalising guidelines for the "... minimum required contents of training ... for the welding coordinators ..." i.e. for the European Welding engineers, technologists and specialists cannot quite have passed into technology development history, when in most of the non-European countries, including India, vigorous assessment and evaluation works are continuing for similar achievements. Indian Institute of Welding's (IIW) persistent work to codify and help to institute guidelines for the Welding coordinators is essentially an exercise to select norms for such guidelines. Qualitative selection of such norms need to reflect global tendencies, sans origin, but taking into account national perspectives. Such orderly development has been reported by D. Bohme of German Welding Institute and D. Dehelean of ISIM, Timisara, Romania in their paper "Task, Function ..... Guidelines and Standards" presented at the IWC '96 and re-printed in this issue. The paper is dated. However, in this particular instance, a non-EU country, Romania, has shown one way as to how it is possible to adopt standards of another international institution (WEF) through actual practice – training, conviction and reorientation and eventually develope and institutionalise curricula for Romanian practice. Through complementary and intellectual interactions it became possible to arrive at a complementary and mutually acceptable situation for ISIM and WEF. Modulation criteria to meet the demand of Indian scenario cannot bypass such worthy experiences when the outcome is expected to be similar.

P. K. Ghosh and B. K. Rai, in their paper "Correlations of Pulse Parameters and Bead Characteristics in Pulsed Current Flux cored GMAW process" have highlighted effects of pulse current in GMAW process on geometry and dilution of weld bead. The authors' conclusion approaches, predictably, the minima – "is there more heat input vis-a-vis continuous current GMAW Process?" At pulse characteristics generating lower heat than continuous welding it would inevitably lower dilution and bead thickness than those observed during continuous current GMAW. It is still a matter of conjecture whether an economic standby position could be achieved by pulse parameter manipulation with electronic gadgetry whereby continuous current GMAW could become a complementary process.

On the SAW process, however manipulation of the variables, for instance, voltage or current, would instantly be reflected on bead geometry. Here predictability is quite apparent and the authors Mehta, et al in their paper "Effects of Submerged Arc Process Variables on the Bead Geometry of Horizontal Fillet Welds" have indicated that increasing voltage and/or welding current both have effects of increase in heat input and in size of the fillet weld geometry in general. Comparative studies, such as these two, underscore means of control of weld geometry i.e. rate of deposition and volume of weld metal deposition necessary for the job.

We thought it would be a novel idea to project welding of equipment for dairy, food and allied industries. Welding of stainless steel, in general, is quite an important subject as the material is extensively and widely used, from space and nuclear industries down to our kitchen equipment. It is important to remember the existence of a very large variety of stainless steels with significant difference in their respective properties due to different chemical compositions. In his paper "Process and Fabrication of Stainless steel Equipment for Dairy, Food and allied Industries", the author Sri M Ramprasad has brought out not only the stainless steel varieties used in the fabrication of equipment for the food industries in general, but also the welding technologies used in these industries; and the related charts and tables provided could be useful for all engaged in the job with S.S.

To consider maintenance welding one needs to "espouse the cause of conservation of fast dwindling scarce raw materials ...", states the author of the paper "Maintenance Welding : A Scientific Approach" by Sri R. D. Pennathur. Over the past couple of years IWJ has devoted considerable space in highlighting the technology of maintenance welding, be it for the Railways, mining or other industries. Maintenance engineering needs no promotion. It stands out in its own right, for it makes sense, it is economic and it is aesthetic. Maintenance welding repairs a wear aggravated by corrosion, erosion, temperature, impact and so on. The idiom is "do it in time" and save it. Unpredictable failure prevention is maintenance engineering. In this regard, ASTM has evolved methods based on scientific studies, as referred to by the author. It needs to be an anticipatory and technology based remedial work ... and not shoving it all under the carpet. Remember the boomerang theory!

Sd/- Dr. P. Majumdar
Editor