

**Printed Boards and Water Jet Cutting for
Manufacturing Magnets,**

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J. MISCOPEIN, SIGMAPHI PIBS, Rue Louis de Broglie, F-56038 Vannes - For many years, different types of electromagnets have used printed boards and many attempted in order to get high quality magnetic induction. The French AEC has developed a geometry that allows to construct multipole magnets having a constant field integral inside the entire gap. Sigmaphi has purchased the patent, and now designs and manufactures multipole magnets according to this method. Moreover, by means of water jet cutting, Sigmaphi has recently manufactured pole face windings for correcting a spectrometer at OAK RIDGE NATIONAL LABORATORY. This paper details the means (CAD) used for the design, the manufacture and the measurements of these two types of electromagnets.