1 INTRODUCTION

In December 1995, a thermocouple well was broken and liquid sodium leaked out of the intermediate heat transport system of the prototype fast breeder reactor Monju. Figure 1 shows the schematic of the thermocouple well. The well was broken at the neck where the diameter abruptly changes from 25mm to 10mm. This study deals with the technical investigation of the failure mechanism of the well and identification of the cause.

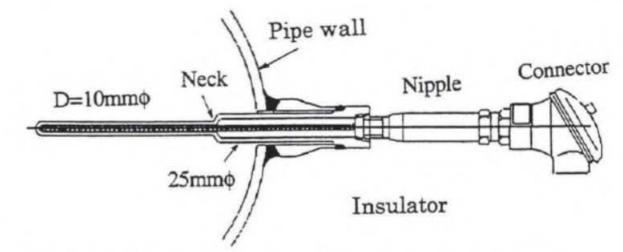


Fig.1 Schematic drawing of the thermocouple well.