

Title (en)  
IMPROVED MANDREL HAVING AN EDDY CURRENT PROBE

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Application  
**EP 84115488 A 19841214**

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Abstract (en)  
[origin: EP0148454A2] An improved fluid mandrel having an eddy current probe generally comprises a probe body which is detachably connectable to the bottom of a fluid mandrel on one end, and a source of hydraulic fluid on the other end. The probe body includes a pair of sensing coils which are separated along the longitudinal axis of the body by a distance approximately equal to the thickness of the metallic structure desired to be detected. The invention finds application in performing expansions which eliminate the clearance, e.g., by interference fit, between heat exchange tubes extending through the baffle plates in nuclear steam generators; the sensing coils of the probe are longitudinally spaced the same distance as the thickness of the baffle plates in order to generate a sharp and unambiguous electronic signal indicative of the relative positions of the mandrel and the baffle plate. Also disclosed is a method of controlling the expansion swaging force considering the tube material properties.

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CPC (source: EP)  
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Citation (search report)  
• [A] EP 0004864 A1 19791031 - WESTINGHOUSE ELECTRIC CORP [US]  
• [A] EP 0055101 A2 19820630 - HASKEL INC [US]  
• [A] GB 2069387 A 19810826 - NORTHERN ENG IND  
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