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Rapports complémentaires
Ergänzende Berichte
Complementary Report

II-2 Prof. E. FUMAGALLI

Monsieur le Président, Mesdames et Messieurs, en tenant compte que mon rapport est déjà à vos mains, pour mieux documenter l'activité de l'ISMES dans le domaine des modèles de conténiteurs nucléaires en précontraint, je me permets d'utiliser le temps à disposition pour vous proposer la projection d'un bref documentaire relatif à deux modèles récemment essayés à l'ISMES. A ce sujet je donne la parole à M. Verdelli qui a suivi personnellement l'exécution et les essais des modèles susdits.

II-2 Mr. G. VERDELLI

A short film is shown to illustrate the tests dealt with in Report II-2 more effectively; it summarizes the most interesting aspects of the construction and the tests carried out at ISMES during the last year on thin models in the scale 1 : 20. The film is divided into two parts. The first part shows the most important construction stages and the tests carried out on thin model no. 2 (see paper). The collapse of this model occurred at a pressure of 120 Kg/cm^2 with the breaking of a large number of the hoop cables of the barrel. The second part of the film has no commentary and illustrates the ultimate tests carried out in successive stages on thin model no. 3 described in detail in the report in question and only recently finished. In the initial stage of the ultimate tests the maximum pressure reached was 90 Kg/cm^2 corresponding to the first clearly visible cracks which concerned the central part of the barrel. In the two overpressure tests up to 115 Kg/cm^2 which were later carried out, although there were an increased number of cracks (limited however to the central part of the barrel) the elastic behaviour of the prestressing cables was still evident. Final collapse, at 140 Kg/cm^2 , occurred with the collapse of the central part of the upper slab. This type of unexpected collapse is caused by the yield of the wires of the slab hoop cables, the diameter - in this third model - not having been increased as were the wires in the other cable systems.

II-3 Ing. R. RICCIONI

Mr. Chairman, Ladies and Gentlemen; I trust you will allow me to apologize not only for myself but also on behalf of Prof. Fanelli and Dr. Robutti for the delay in presenting our paper. A delay hardly justified by the fact of our being in an own house here, but perhaps excusable on account of our work, based on numerical methods, is only a simple chess piece, dependent on the other pieces in the game - that is to say - the project, the available information of the physical model and the specified rheological input.