

SYNOPOSES

TRANSFORMATION OF THE WORKING CONDITIONS OF LARGE HYDRAULIC STRUCTURES

BY LEOPOLD ESCANDE (Page 4)

The present paper describes the gist of the lecture delivered by Professor Leopold Escande, who is a member of Academy of Science of Paris and director of l' E.N.S.E.E.H.T., on the occasion of his visit to Japan in an official capacity as the French Cultural Mission, at the meeting held on 13th September, 1962 under the joint sponsorship of the J.S.C.E. and Japan-France Society of Industrial Engineering.

ZONING PLAN AND ROLE TO BE PLAYED BY CONSTRUCTION DEPARTMENT AND PROBLEMATICAL POINTS

BY I. UCHIDA, C.E. MEMBER (Page 18)

The present paper describes the zoning plan which lately an important problem and discusses its problematical points, and also discusses where the role to be played by the construction department lies, in connection with the transportation, water supply and ground, assuming that the industrial problem makes the center of the plan.

ON THE FLOOR OF LOCK AT THE ESTUARY OF THE NIKKO RIVER

BY Y. KANDA AND M. MURAKAMI, C.E. MEMBER (Page 23)

The floor of lock at the mouth of the Nikko-river is discussed being classified into the causes of temperature variation, dry and shrinkage etc. on the basis of the observation results by means of thermometer, joint meter and reinforcement meter imbedded in the gate floor and the authors opinion regarding the points in design (structural as well as material) and execution to which attention is to be paid is clearly stated.

STRAIN MEASUREMENTS OF PRESTRESSED CONCRETE TANK WALL

BY K. OKADA, S. NISHIBAYASHI, C.E. MEMBER (Page 31)

This paper presents the results of strain measurement on prestressed cylindrical concrete tank walls at the time of transferring of prestress. Freyssinet's method as well as Preload's method is employed to transmit prestress to the P C tank walls. By means of Carlson strainmeters embeded in concrete, the strains due to prestressing and the bending moments caused by prestressing in the longitudinal direction are measured and compared with theoretical values for each of both method described above. The results obtained show that the prestresses applied fulfill the design conditions and the measured strains satisfactorily coincide with the theoretical values in the angular (tangential) direction. It is expected that comparatively large strains in the longitudinal direction occur due to the circumferential prestressing, while the measured strains are approximately one half the theoretical values.

FLOOD OF THE RIVER ISHIKARI ON AUGUST, 1962

BY Y. MORITA, C.E. MEMBER (Page 38)

The present paper describes the flood of the Ishikari river occurred in August, 1962 together with the history of its improvement work in the past, the scale of the flood this time, the rate of flood flow, the actual condition of damage and how to carry out the improvement work.

PLAN OF WATER WORK ON WIDE AREA

BY K. SAWATAKE, C.E. MEMBER (Page 44)

The present paper describes the outline of the work, water supply business, operation of bussines and duty of the water works on wide area, taking the Osaka Municipal water works as an actual example.

EXPERIMENTAL RESEARCH CONCERNING CONSTRUCTION OF PANEL POINT OF ARCH BRIDGE FOR WHICH PIPE SECTION IN USED

BY I. KONISHI, T. OKUMURA, T. UEHARA, T. SHIGETO, C.E. MEMBER (Page 51)

The present paper discusses the local stress of panel point, when pipe section is used, on the basis of experiment.