

## 5. The Development of the OKUMURA System which Continuously Dewateres the Slurry

**-The Method for Continuously Dewatering after Dredging the Sediment in the Storage Reservoir-**

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Since the dysfunction of the dam by the increase of the sand deposit occurs, in the storage reservoirs all over the country, it is hurried up that the sand deposit of the storage reservoirs is gotten rid of. The large ground is required in the method for drying dredged gravel in sun conventionally. And it is a problem in the filter press that the continuous running is not possible and that the disposal cost increases. Then, the new technology development is expected.

In such background, we developed the OKUMURA system which continuously dewateres the slurry. The advantage of this system is shown in the following.

- i ). Because by the adoption of vertical screw press, the occupied space becomes 1/10 further than the solar drying and 1/2 further than the filter press, it becomes also applicable the tight space.
- ii ). It brings the cost reduction, because the continuous running is more possible than mechanical dewatering method using filter press, and because labor saving can be attempted.
- iii ). With applying in a variety of soil, the reuse of dealt with gravel becomes possible.
- iv ). The strength of the disposed soil can be adjusted by the detection of the opening quantity of the exhaust slot of dewatered sludge and by controlling the rotational frequency of the screw automatically.

**Key words :** sediment in the storage reservoir, screw press, continuous dewatering, automatic control