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(2) manufacturing the abrasion erosion resistance and the resistance decreases when D_{max} is equal to or smaller than 5 mm. A coarse aggregate containing calcite can be used to control the effect on the concrete abrasion erosion appeared insignificant in comparison with the low strength concrete design.

5. Conclusion

problems associated with hydraulic structures and with viable engineering solutions for these problems. Our findings are summarized as follows:

(3) Test data—the data obtained indicated that the splitting tensile strength is a more effective predictive factor than compressive and flexural strength in determining concrete abrasion erosion resistance to water-borne sand.

from 140 to 180 kg/m³.

(5) Coarse aggregate—for low strength concrete made with a w/c ratio of 0.50 and coarse aggregate, with a maximum size up to 19 mm, improved the concrete abrasion erosion resistance. For high strength concrete, the coarse aggregate

(11) S.-J. Fazel, B.N. Abdolrazzi, Designing solutions to prevent concrete damage, *Concrete International* (May 1991), 38–44.

(12) Henry Kinsler, J. Francis Young, *Acoustic Fundamentals*, Second Edition, 2002.

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