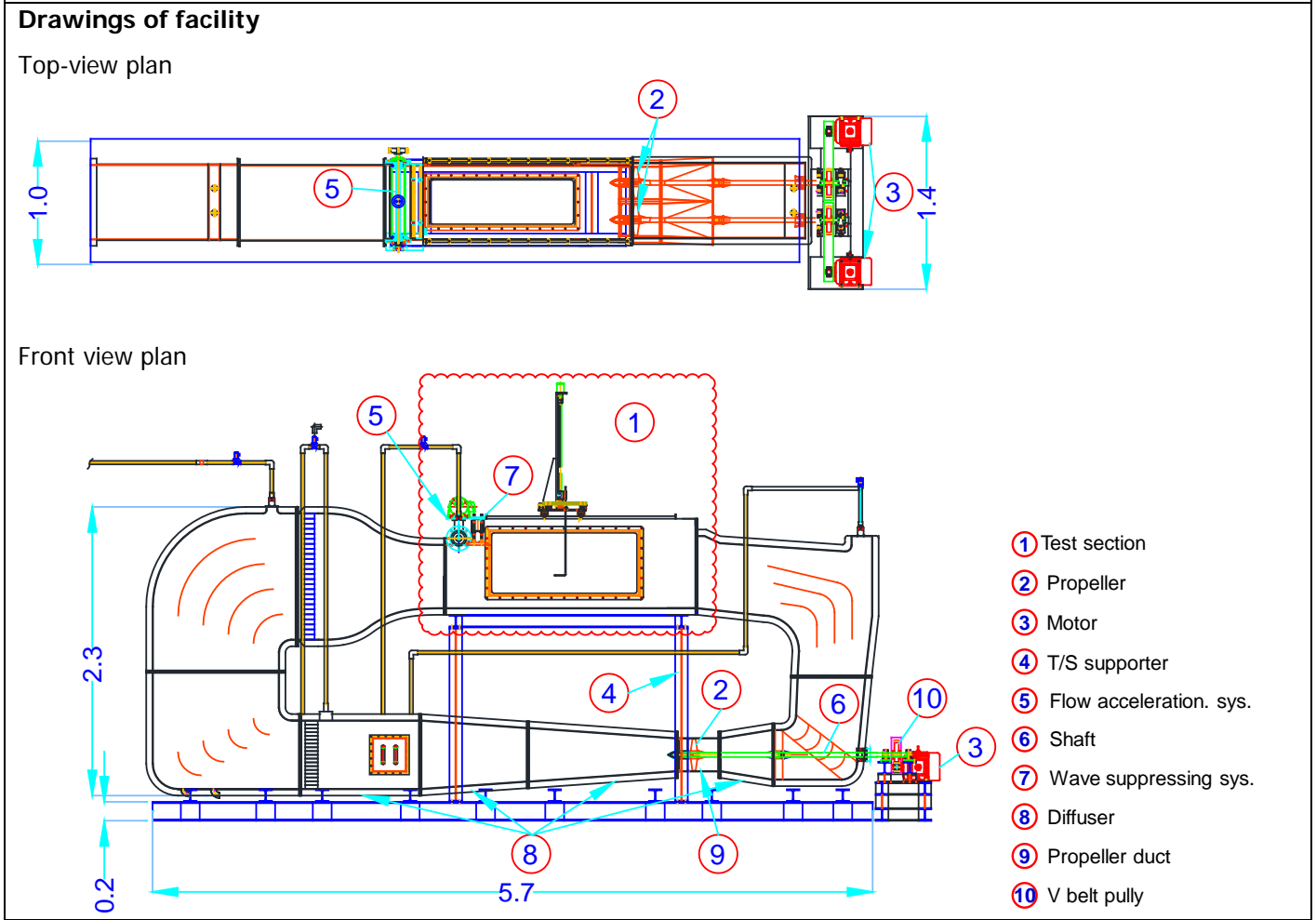


Name of organization Changwon National University	Year of information updating 2020
Year established 1969	Year of joining the ITTC -
Address 20 Changwondaehak-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea	Status in the ITTC -
Contact details (phone, fax, e-mail) Changwon National University – +82 55 213 3680, +82 55 213 3689, cinter@changwon.ac.kr Ship Dynamics and Control Laboratory – +82 55 213 3683 hkyoon@changwon.ac.kr	Website http://www.changwon.ac.kr/name/main.do

Type of facility Circulating Water Channel	Year constructed/upgraded Constructed 2009
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Name of facility Ship Dynamics and Control Laboratory	Location (if different from the above address)
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Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desktop)
Main body (L x B x H) – 5.0 x 0.6 x 2.2 m; Observation part (L x B x H) – 2.0 x 0.6 x 0.6 m



Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)

- Circulating Water Channel
 - Max. operating water: 3 tons
 - Flow velocity: 0.1~1.0 m/s
 - Main body (L x B x H) – 5.0 x 0.6 x 2.2 m
 - Observation part (L x B x H) – 2.0 x 0.6 x 0.6 m

Applications (Tests performed)

- Model tests
 - Visualization of the flow around the ship
 - Resistance test and self-propulsion test
 - Captive model test (PMM test)
- Other tests
 - Measurement of the interference effect of tugboat
 - Cross drag measurement test of two-dimensional section
 - Cavitation reduction coating performance test
 - Performance test of Capstone design prototype

Published description (Publications on this facility)

Scientific publications:

- Kim, H. and Akimoto, H. and Islam, H. (2015). Estimation of the hydrodynamic derivatives by RANS simulation of planar motion mechanism test, *Ocean Engineering*, Vol. 108, pp. 129-139.
- Yoon, H.K. and Kang, J.N (2010). Planar Motion Mechanism test for the mobile harbor running in design speed in Circular Water Channel, *Journal of Navigation and Port Research*, Vol. 34, pp. 525-532.

Scientific publications:

- Yoon, H.K., Choe, S.M., Kim, A.R. and Yeo, D.J (2010). Experimental study on the interference effects of tugboat on barge by Circular Water Channel, *Proceeding of Autumn Annual Conference*, pp. 124-126.