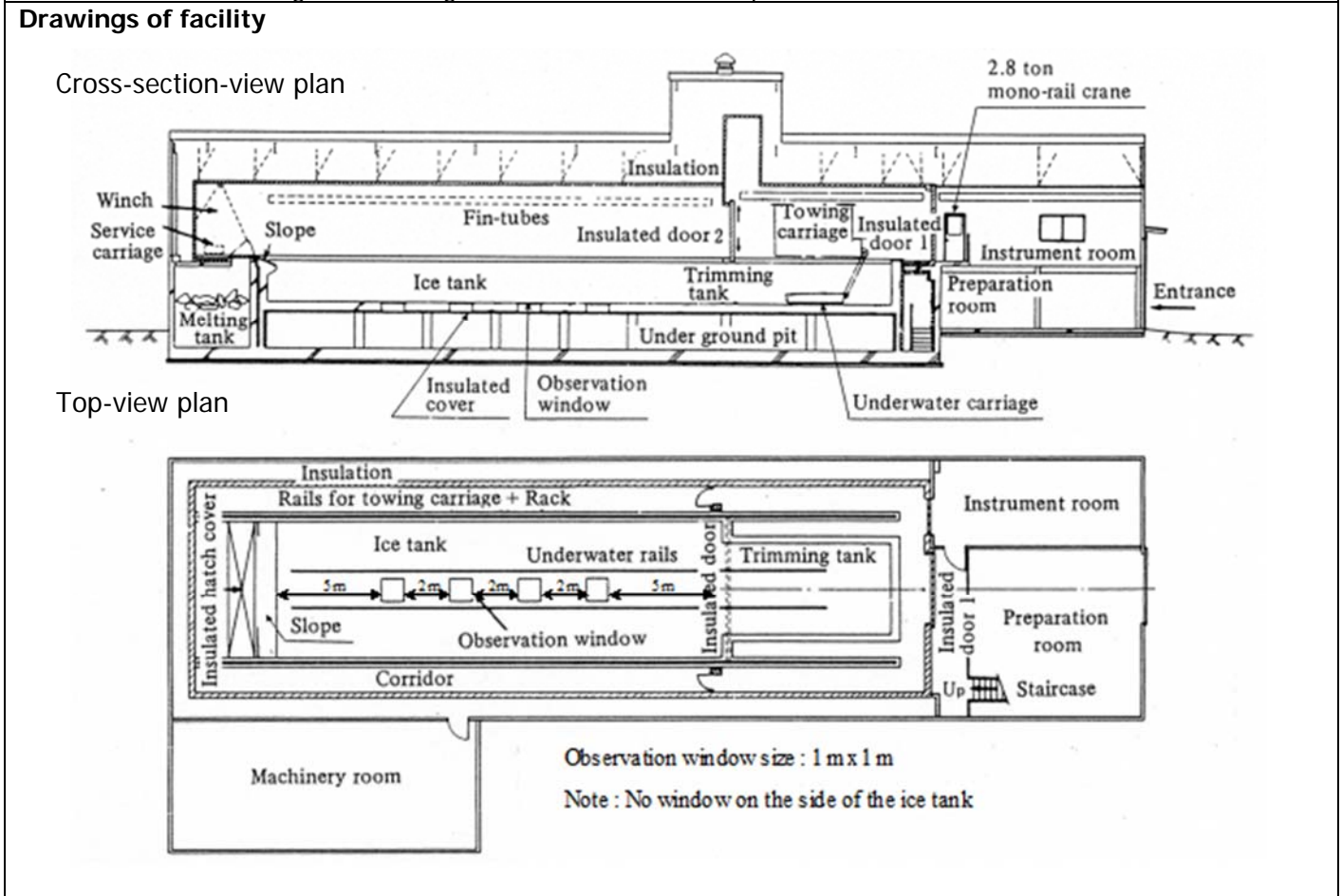


<b>Name of organization</b> Technical Research Center, Japan Marine United Corporation	<b>Year of information updating</b> 2016
<b>Year established</b> 2013	<b>Year of joining the ITTC</b> 2013
<b>Address</b> 1-3, Kumozukokan-cho, Tsu-city, Mie-pref. 514-0398 Japan	<b>Status in the ITTC</b> AC member
<b>Contact details</b> (phone, fax, e-mail) phone +81-59-238-6400 (administration group) fax +81-59-238-6442	<b>Website</b> <a href="http://www.jmuc.co.jp/">http://www.jmuc.co.jp/</a>

<b>Type of facility</b> Ice tank	<b>Year constructed/upgraded</b> 1982
-------------------------------------	------------------------------------------

<b>Name of facility</b> JMU Ice Model Basin	<b>Location</b> (if different from the above address)
------------------------------------------------	-------------------------------------------------------

**Main characteristics** (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)  
 Tank dimensions: Main tank ; Length 20.0m, Width 6.0m, Depth 1.8m (test section)  
 Trimming tank; Length 7.0m, Width 4.0m, Depth 1.8m  
 Melting tank ; Length 2.8m, Width 5.6m, Depth 2.5m



**Detailed characteristics** (carriages, wave/current/wind generators, instrumentations, etc.)  
 Cooling system : Capacity; Main tank room 99,000kcal/hour, Trimming tank room 20,000kcal/hour  
 Temperature range; Main tank room +2~ -25°C, Trimming tank room +5~0°C  
 Ice making : Type of model ice; Urea-doped granular ice  
 Ice growth rate; abt. 7mm/hour  
 Towing facilities : Towing carriage; Velocity 0~1.5m/sec  
 Underwater carriage; driven by towing carriage through a connect unit  
 Model size : Ship model maximum length 6m, Offshore structure model maximum width 3m  
 Instrumentations: Data measurement system; PC controls maximum 40 CH A-D converter and data processing

**Applications** (Tests performed)

Resistance and self-propulsion tests in level ice, pack ice, rubble ice

Ramming tests in level ice, hummock

Initial turning tests in level ice

Resistance and self-propulsion tests in brash ice channel in conformity with the guideline of Finish-Swedish ice class rules

Force measurement on offshore structure in ice

**Published description** (Publications on this facility)

POAC 1983 Helsinki, IAHR Ice Symposium 1988 Sapporo