

ICS 07.060
CCS A 45

HY

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HY/T 0316-2021

**The specification for construction of marine station
(English Translation)**

Issued on: April 1, 2021

Implemented on: June 1, 2021

**Issued by: Ministry of Natural Resources of the People's Republic of
China**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Marine station function and classification
 - 4.1 Marine station function
 - 4.2 Classification of marine stations
- 5 Marine station infrastructure construction
 - 5.1 Manned Marine Station
 - 5.2 Unmanned Marine Station
 - 5.3 Observation points and monitoring points
 - 5.4 Elevation datum
 - 5.5 Security System
- 6 Equipment configuration and technical requirements
 - 6.1 Observation/monitoring equipment configuration
 - 6.2 Auxiliary equipment configuration
 - 6.3 Technical requirements for data collection
 - 6.4 Technical requirements for communication network
- 7 Marine station personnel requirements
- Appendix A (informative appendix) Marine station business premises setup
- Appendix B (informative appendix) Schematic diagram of tide survey well design
- Appendix C (informative appendix) Basic equipment configuration of ocean station

Foreword

This standard is compiled in accordance with the rules given in GB/T 1.1-2009.

This standard was proposed by the Ministry of Natural Resources of the People's Republic of China.

This standard is under the jurisdiction of the National Marine Standardization Technical Committee (SAC/TC283).

Drafting organizations of this standard. State Oceanic Administration Beihai Forecast Center, National Marine Environmental Monitoring Center, State Oceanic Administration

East China Sea Environmental Monitoring Center Center, Dalian Marine Environment Monitoring Center Station of State Oceanic Administration.

1 Scope

This standard specifies the construction functions and classification of marine stations, infrastructure construction requirements, equipment configuration and technical requirements, and personnel requirements.

Please wait.

This standard applies to the construction of new marine stations in my country and the upgrading of existing marine stations.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 14914.2 Ocean Observation Specification Part 2: Coastal Observation GB 17378 (all parts) Marine Monitoring Specification GB/T 32146.1 Technical requirements for the design and construction of inspection and testing laboratories Part 1: General requirements GB/T 35221 General Rules for Ground Meteorological Observation Specifications GB 50057 Code for lightning protection design of buildings GB/T 51015 Seawall Engineering Design Code HY/T 059 General technical requirements for automated observation of ocean stations QX4 Meteorological Observatory (Station) Lightning Protection Technical Specification

3 Terms and definitions

Marine station Relying on shore bases, islands (or fixed offshore platforms) to conduct marine hydrological observations, marine meteorological observations, marine ecological environment monitoring, and obtain long-term it is a place where marine environmental data can be transmitted, sorted, and quality controlled regularly and continuously.

Observationsite

Places used to carry out observations of a particular element, including tide-gauge wells, temperature-salt wells, wave rooms, meteorological observation fields, etc.

Monitoringsite

Places used to carry out monitoring of a certain element, including atmospheric deposition sampling points, carbon dioxide shore island base stations, water quality online shore base

stations, etc.

4.1.1 Hydrological observation

Observe surface sea water temperature, surface sea water salinity, sea luminescence, tide level, sea waves, sea ice, etc.