

# ISO 22804:2023-08 (E)

## Marine technology - General technical requirement of marine conductivity-temperature-depth (CTD) measuring instrument

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>Technical specifications .....</b>	<b>3</b>
4.1	General .....	3
4.2	Instrument appearance .....	3
4.2.1	Cosmetic requirements .....	3
4.2.2	Product identification .....	3
4.2.3	Instrument fastener .....	3
4.3	Measuring performance of instrument and product .....	3
4.4	Instrument and product environmental adaptability .....	4
4.5	Instrument and product interface and data format .....	4
<b>5</b>	<b>Test methods .....</b>	<b>4</b>
5.1	Test instrument and equipment .....	4
5.2	Appearance inspection .....	5
5.3	Instrument and product interface and data format checking .....	5
5.4	Measurement performance test .....	5
5.4.1	Test requirements .....	5
5.4.2	Selected test points .....	5
5.4.3	Test preparation .....	6
5.4.4	Accuracy measurement of temperature and conductivity .....	6
5.4.5	Temperature and conductivity accuracy test .....	6
5.4.6	Pressure accuracy test .....	7
5.4.7	Resolution test .....	8
5.4.8	Stability test .....	8
5.5	Environmental adaptability test .....	8
<b>6</b>	<b>Test requirements .....</b>	<b>9</b>
6.1	Number of instruments to be tested .....	9
6.2	Test process .....	9
6.3	Qualification requirements .....	9
6.4	Delivery requirements .....	9
6.5	Supporting documents .....	9
<b>7</b>	<b>Marking, packaging, transportation, storage .....</b>	<b>10</b>
7.1	Marking .....	10
7.1.1	Nameplate mark .....	10
7.1.2	Packing mark .....	10
7.2	Packaging .....	10
7.2.1	Packaging requirements .....	10
7.2.2	Supporting items .....	10
7.3	Transportation .....	10
7.3.1	Means of transport .....	10

7.3.2	Transport requirement .....	11
7.4	Storage .....	11
7.4.1	Storage environment .....	11
7.4.2	Storage requirements .....	11
8	User software .....	11
8.1	General .....	11
8.2	Measurement management .....	11
8.3	Parameter calculation .....	11
8.4	Data processing .....	12
Annex A (informative) Examples of record tables for CTD measuring instrument accuracy test data .....		13
Annex B (informative) Calculation of practical salinity .....		16
Annex C (informative) Pressure to depth conversion .....		19
Bibliography .....		20