

INTERNATIONAL STANDARD

ISO
8385

First edition
1990-08-01

Shipbuilding and marine structures — Dredgers — Classification

Construction navale et structures maritimes — Dragues — Classification

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8385:1990

<https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4faf-8780-d55f5c5168b2/iso-8385-1990>



Reference number
ISO 8385:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8385 was prepared by Technical Committee ISO/TC 8, *Shipbuilding and marine structures*.

Annex A of this International Standard is for information only.

[ISO 8385:1990](#)

<https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4faF-8780-d55f5c5168b2/iso-8385-1990>

© ISO 1990

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Shipbuilding and marine structures — Dredgers — Classification

1 Scope

This International Standard provides a single classification for all types of dredgers designed for changing the dimensions of waterways in the interests of navigation by extracting or shifting the soil, where a dredger is considered to be a vessel or floating structure intended for dredging.

- 1 Area of operation
- 2 Soil characteristics
- 3 Power plant
- 4 Mobility
- 5 Transportability
- 6 Crew quarters
- 7 Location of dredging gear
- 8 Operating movements
- 9 Equipment for movement and propulsion
- 10 Method of soil extraction
- 11 Disposal of dredged material

2 Classification

Dredgers are classified on the basis of the criteria

1 to 11 in table 1: <https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4fa8-8780-d55f5c5168b2/iso-8385-1990>

Table 1 — Classification on basis of criteria

1 Area of operation	1.1 Inland waterways	
	1.2 Seagoing	1.2.1 Harbours and coastal zone
		1.2.2 Offshore
		1.2.3 Ocean-going
	1.3 Special environments	1.3.1 Tropical
		1.3.2 Arctic
1.3.3 Other special environments		

2 Soil characteristics	2.1 Silts
	2.2 Peats and organic soils
	2.3 Sands
	2.4 Gravels
	2.5 Clays
	2.6 Boulders and cobbles
	2.7 Rocks
	2.8 Mixed soils
3 Power plant	3.1 Steam
	3.2 Diesel
	3.3 Diesel-electric
	3.4 Diesel-hydraulic
	3.5 Electric
	3.6 Electric-hydraulic
	3.7 Gas-turbine
	3.8 Nuclear
	3.9 Mixed
4 Mobility	4.1 Non-propelled
	4.2 Self-propelled
	4.3 With limited propulsive capabilities
5 Transportability	5.1 Non-dismountable
	5.2 Dismountable
6 Crew quarters	6.1 Without crew accommodation
	6.2 With day accommodation
	6.3 With full sleeping accommodation

ITeH STANDARD PREVIEW
(standards.iteh.ai)

ISO 8385:1990

<https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4faf-8780-d555c5168b2/iso-8385-1990>

7 Location of dredging gear	7.1 At one side	
	7.2 At both sides	
	7.3 In a well	7.3.1 Fore
		7.3.2 Aft
	7.4 On deck	7.4.1 Fore
		7.4.2 Aft
8 Operating movements	8.1 Longitudinal	8.1.1 Ahead
		8.1.2 Astern
	8.2 Traversing or lateral/arc	
	8.3 Combinations and special	
9 Equipment for movement and propulsion	9.1 Propellers or other propulsive devices	
	9.2 Anchors	
	9.3 Spuds	
	9.4 Combinations and special	
10 Method of soil extraction	10.1 Single bucket dredgers	10.1.1 Dipper dredgers
		10.1.2 Backhoe dredgers
	10.2 Grab dredgers	10.2.1 Single grab dredgers
		10.2.2 Multi-grab dredgers
	10.3 Multi-bucket dredgers	
	10.4 Rockbreakers	10.4.1 With freely falling chisel
		10.4.2 With forced movement chisel
		10.4.3 With drilling for blasting
	10.5 Scraper dredgers	
	10.6 Bed levellers	
10.7 Agitation dredgers		

10 Method of soil extraction (concluded)	10.8 Suction dredgers	10.8.1 Type of dredge pump	10.8.1.1 Centrifugal or axial flow pump
			10.8.1.2 Jet pump
			10.8.1.3 Air lift
			10.8.1.4 Combinations and special
		10.8.2 Method of loosening soil	10.8.2.1 Cutter
			10.8.2.2 Bucket wheel
			10.8.2.3 Hydraulic agitator
			10.8.2.4 Combinations and special
		10.8.3 Type of suction head	10.8.3.1 Forward suction head
			10.8.3.2 Draghead
10.8.3.3 Combinations and special			
11 Disposal of dredged material	11.1 Direct delivery		
	11.2 Hydraulic delivery	11.2.1 Cantilever pipeline	
		11.2.2 Floating pipeline	
		11.2.3 Submersible pipeline	
	11.3 Chute		
	11.4 Belt conveyor		
	11.5 Delivery by barge		
	11.6 Hopper dredgers	11.6.1 Bottom doors or valves	
11.6.2 Split hull			
11.6.3 Other means of disposal			
11.7 Combinations			

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8385:1990
<https://standards.iteh.ai/catalog/standards/sist/4124f622-6622-4680-d55f5c5168b2/iso-8385-1990>

Annex A
(informative)

Bibliography

[1] ISO 8384:—¹⁾, *Shipbuilding and marine structures — Dredgers — Vocabulary*.

[2] PIANC²⁾, *Classification of soils and rocks to be dredged*, 1984.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8385:1990

<https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4faf-8780-d55f5c5168b2/iso-8385-1990>

1) To be published.

2) Permanent International Association of Navigation Congresses.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8385:1990

<https://standards.iteh.ai/catalog/standards/sist/1c4f3d82-a022-4faf-8780-d55f5c5168b2/iso-8385-1990>

UDC 627.748.001.33

Descriptors: shipbuilding, dredgers, classifications.

Price based on 5 pages
