

# Drilling-fluid Processing Systems Evaluation

API RECOMMENDED PRACTICE 13C  
SIXTH EDITION, DECEMBER 2023



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# Drilling-fluid Processing Systems Evaluation

## 1 Scope

This recommended practice specifies procedures for assessing and modifying the performance of solids control equipment systems commonly used in the field in petroleum and natural gas drilling-fluids processing.

The procedures described in this standard are not intended for the comparison of similar types of individual pieces of equipment.

## 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API Recommended Practice 13B-1, *Field Testing Water-based Drilling Fluids*

API Recommended Practice 13B-2, *Field Testing Nonaqueous-based Drilling Fluids*

ASTM E11<sup>1</sup>, *Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves*

## 3 Terms, Definitions, Symbols, Acronyms, and Abbreviations

### 3.1 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1.1

##### **addition section**

Compartment(s) in the surface drilling-fluid system, between the removal section and the suction section, which provides (a) well-agitated compartment(s) for the addition of drilling-fluid additives.

#### 3.1.2

##### **agitator**

##### **mechanical stirrer**

Mechanically driven mixer that stirs the drilling fluid by turning an impeller near the bottom of a mud compartment to blend additives, suspend solids, and maintain a uniform consistency of the drilling fluid.

#### 3.1.3

##### **aperture**

##### **(screen cloth)**

Opening between the wires in a screen cloth.

#### 3.1.4

##### **aperture**

##### **(screen surface)**

Opening in a screen surface.

#### 3.1.5

##### **apex**

Opening at lower end of a hydrocyclone.

<sup>1</sup> ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, www.astm.org.