

CONTEC

Comissão de Normalização
Técnica

SC-11

Machines

Tank Mixer - Data Sheet

Revalidation

Revalidated in 03/2020.

Tank Mixer - Data Sheet

Standardization

This Standard replaces and cancels its previous revision.

The CONTEC - Authoring Subcommittee provides guidance on the interpretation of this Standard when questions arise regarding its contents. The Department of PETROBRAS that uses this Standard is responsible for adopting and applying the sections, subsections and enumerates thereof.

Technical Requirement: A provision established as the most adequate and which shall be used strictly in accordance with this Standard. If a decision is taken not to follow the requirement ("non-conformity" to this Standard) it shall be based on well-founded economic and management reasons, and be approved and registered by the Department of PETROBRAS that uses this Standard. It is characterized by imperative nature.

Recommended Practice: A provision that may be adopted under the conditions of this Standard, but which admits (and draws attention to) the possibility of there being a more adequate alternative (not written in this Standard) to the particular application. The alternative adopted shall be approved and registered by the Department of PETROBRAS that uses this Standard. It is characterized by verbs of a nonmandatory nature. It is indicated by the expression: **[Recommended Practice]**.

Copies of the registered "non-conformities" to this Standard that may contribute to the improvement thereof shall be submitted to the CONTEC - Authoring Subcommittee.

Proposed revisions to this Standard shall be submitted to the CONTEC - Authoring Subcommittee, indicating the alphanumeric identification and revision of the Standard, the section, subsection and enumerate to be revised, the proposed text, and technical/economic justification for revision. The proposals are evaluated during the work for alteration of this Standard.

"This Standard is exclusive property of Petróleo Brasileiro S. A. - PETROBRAS, internal application and PETROBRAS Subsidiaries and shall be used by its suppliers of goods and services under contracts or similar under the conditions established in Bidding, Contract, Agreement or similar.

The use of this Standard by other companies / organizations / government agencies and individuals is the sole responsibility of the users.."

CONTEC

Comissão de Normalização
Técnica

SC - 11

Machines

Introduction

PETROBRAS Technical Standards are prepared by Working Groups - WG (consisting specialized of Technical Collaborators from Company and its Subsidiaries), are commented by Company Units and its Subsidiaries, are approved by the Authoring Subcommittees - SCs (consisting of technicians from the same specialty, representing the various Company Units and its Subsidiaries), and ratified by the Executive Nucleus (consisting of representatives of the Company Units and its Subsidiaries). A PETROBRAS Technical Standard is subject to revision at any time by its Authoring Subcommittee and shall be reviewed every 5 years to be revalidated, revised or cancelled. PETROBRAS Technical Standards are prepared in accordance with PETROBRAS Technical Standard [N-1](#). For complete information about PETROBRAS Technical Standards see PETROBRAS Technical Standards Catalog.

Foreword

This Standard is the English version (issued in 12/2014) of PETROBRAS N-1501 REV. C 12/2014. In case of doubt, the Portuguese version, which is the valid document for all intents and purposes, shall be used.

1 Scope

1.1 This Standard provides the Data Sheet for tank mixers used in projects for PETROBRAS.

1.2 This Data sheet is applicable to side inlet mixers of oil storage tanks and vertical mixers for solution preparation tanks.

1.3 This Standard is applicable to standardizations started as of the date it was published.

1.4 This Standard only contains Technical Requirements.


2 General Conditions


2.1 This Data Sheet shall be copied for its routine utilization.

2.2 In order to purchase tank mixers this Data Sheet, after being completed, shall be attached to an RM (Material Requisition), in order to constitute a purchase document.

2.3 This Data Sheet, after being completed by the designer and supplemented by manufacturer, if such is the case, shall constitute an equipment document.

[illegible]

DATA SHEET		No.	REV.
		SHEET of	
TITLE: MIXER			
1	APPLICABLE TO: <input type="checkbox"/> PROPOSAL <input type="checkbox"/> PURCHASE <input type="checkbox"/> AS BUILT		
2	FOR: _____	UNIT: _____	
3	SITE: _____	SERVICE: _____	
4	Nº REQ'D: _____	MANUFACTURER: _____	
5	MODEL: _____	VENDOR: _____	
6	SIZE / TYPE: _____	DRIVER: _____	
7	SERIAL Nº: _____	MANUFACTURER Nº: _____	
8 OPERATING CONDITIONS			
9	PRODUCT: _____	ANGLE ADJUST: <input type="checkbox"/> YES <input type="checkbox"/> NO	
10	MIXTURE TEMPERATURE: _____ °C	MIXTURE FINALITY: _____	
11	DENSITY AT OPERATING/MAX TEMP.: _____ kg/m³	MIXTURE TIME: _____ min	
12	VISCOSITY AT OPERATING/MAX TEMP.: _____ cP	TOTAL FLOW: _____ m³/h	
13	PRESSURE: _____ kgf/cm²a	REPLACING Nº / h: _____	
14	SERVICE: <input type="checkbox"/> CONTINUOUS <input type="checkbox"/> INTERMITTENT	SOLIDS TYPE/MAX DIA: _____ µm	
15	OPERATION DURING FILLING: <input type="checkbox"/> YES <input type="checkbox"/> NO	DECANTING VELOCITY: _____ m/s	
16	OPERATION DURING DISCHARGE: <input type="checkbox"/> YES <input type="checkbox"/> NO	CONTAMINANTS: _____	
17			
18			
19			
20 MIXTURE DATA			
21		CASE 1	
22	COMPONENTS	CASE 2	
23	TEMPERATURE, °C		
24	DENSITY kg/m³		
25	VISCOSITY, cP		
26	% (WEIGHT)		
27			
28 TANK DATA			
29	ITEM Nº: _____	NOZZLE DIMENSIONS: _____ mm	
30	DIAMETER: _____ mm	MOUNTING FLANGE DIMENSIONS: _____ mm	
31	HEIGHT, m: _____	MOUNTING LOCAL: <input type="checkbox"/> SHELL <input type="checkbox"/> ROOF <input type="checkbox"/> BOTTOM	
32	CAPACITY: _____ m³	NOZZLE CENTER LINE HEIGHT: _____ m	
33	DRAWING Nº: _____	BOTTOM: <input type="checkbox"/> FLAT <input type="checkbox"/> CONICAL	
34	ROOF TYPE: _____		
35			
36 CONSTRUCTION		36 MATERIAL	
37	ASSEMBLY POSITION: <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> LATERAL <input type="checkbox"/> TOP	CASING: _____	
38	<input type="checkbox"/> VERTICAL <input type="checkbox"/> BOTTOM	IMPELLER: _____	
39	IMPELLER TYPE: <input type="checkbox"/> RADIAL <input type="checkbox"/> AXIAL <input type="checkbox"/> CIRCULAR	STUFFING BOX: _____	
40	NUMBER OF IMPELLERS: _____	SHAFT: _____	
41	NUMBER IMPELLER BLADES: _____	GASKETS: _____	
42	BLADE TYPE: <input type="checkbox"/> VERTICAL PLAIN <input type="checkbox"/> VERTICAL CURVED	SEAL: _____	
43	<input type="checkbox"/> RUSHTON <input type="checkbox"/> SMITH	ANGLE ADJUST DISPOITIVE: _____	
44	<input type="checkbox"/> NAVAL HELIX <input type="checkbox"/> PBT	BELLOWS: _____	
45	<input type="checkbox"/> HYDROFOIL <input type="checkbox"/> HE <input type="checkbox"/> LS <input type="checkbox"/> HS	SPHERICAL SLEEVE: _____	
46	IMPELLER DIAMETER, mm: _____ PITCH: _____	GEARBOX: PINION _____	
47	rpm: _____ SHAFT POWER: _____ kW	GEAR _____	
48	SHAFT DIAMETER: _____ mm LENGTH: _____ m		
49	SEAL MANUFACTURER: _____ TYPE: _____	GEAR	
50	BEARINGS: RADIAL: _____ THRUST: _____	GEAR	
51	LUBRICATION: <input type="checkbox"/> OIL <input type="checkbox"/> FORCED <input type="checkbox"/> GREASE	GEAR	
52	TRANSMISSION: <input type="checkbox"/> DIRECT <input type="checkbox"/> GEAR	GEAR	
53		GEAR	
54		GEAR	
55 DRIVE SHAFT COUPLING		55 MOTOR SHAFT COUPLING	
56	MANUFACT.: _____ MODEL: _____	MANUFACT.: _____ MODEL: _____	
57	TYPE: _____ SIZE: _____	TYPE: _____ SIZE: _____	
58	<input type="checkbox"/> NON-SPARK COUPLING GUARD MATERIAL _____	<input type="checkbox"/> NON-SPARK COUPLING GUARD MATERIAL _____	
59			
60			
THIS DOCUMENT IS PROPERTY OF PETROBRAS, BEING PROHIBITED OUTSIDE OF THEIR PURPOSE.			
FORM OWNED TO PETROBRAS N-1501 REV. C ANNEX A - SHEET 02/03.			

DATA SHEET		No.	REV.
 PETROBRAS		SHEET _____ of _____	
TITLE MIXER			
1	INDUCTION MOTOR		
2	<input type="checkbox"/> MANUFACTURER: _____		
3	<input type="checkbox"/> DATA SHEET: _____		
4	<input type="checkbox"/> FURNISHED BY: _____		
5	<input type="checkbox"/> TYPE: _____		
6	<input type="checkbox"/> MOUNTED BY: _____		
7	<input type="checkbox"/> POWER: _____ kW <input type="checkbox"/> SPEED: _____ rpm		
8	<input type="checkbox"/> FRAME: _____ <input type="checkbox"/> ENCLOSURE: _____		
9	<input type="checkbox"/> HORIZ. <input type="checkbox"/> VERT. <input type="checkbox"/> SERVICE FACTOR: _____		
10	<input type="checkbox"/> VOLTS/PHASE/HERTZ: _____		
11	SYSTEM VOLTAGE: DIP <input type="checkbox"/> 80% <input type="checkbox"/> OTHER: _____		
12	<input type="checkbox"/> MINIMUM STARTING VOLTAGE: _____ V		
13	<input type="checkbox"/> INSULATION: _____ <input type="checkbox"/> TEMP. RISE: _____ °C		
14	<input type="checkbox"/> FULL LOAD AMPS: _____ A		
15	<input type="checkbox"/> LOCKED ROTOR AMPS: _____ A		
16	<input type="checkbox"/> STARTING METHOD: _____		
17	<input type="checkbox"/> LUBE: _____		
18	BEARINGS (TYPE / NUMBER): _____		
19	<input type="checkbox"/> RADIAL: _____ / _____		
20	<input type="checkbox"/> THRUST: _____ / _____		
21	<input type="checkbox"/> VERTICAL THRUST CAPACITY		
22	UP _____ kgf DOWN _____ kgf		
23			
24	QA INSPECTION AND TESTING		
25	<input type="checkbox"/> SHOP INSPECTION		
26	<input type="checkbox"/> MATERIAL CERTIFICATION REQUIRED		
27	<input type="checkbox"/> IMPELLER <input type="checkbox"/> SHAFT <input type="checkbox"/> SHAFT SLEEVE		
28	<input type="checkbox"/> OTHER: _____		
29	TESTS: _____ N-WIT WIT OBS.		
30	<input type="checkbox"/> MECHANICAL RUNNING <input type="checkbox"/> <input type="checkbox"/>		
31	<input type="checkbox"/> IMPELLER DYNAMIC BALANCING <input type="checkbox"/> <input type="checkbox"/>		
32	<input type="checkbox"/> VENDOR SHALL SUBMIT TEST PROCEDURES FOR PETROBRAS		
33	APPROVAL		
34	<input type="checkbox"/> VENDOR SHALL SUBMIT INSPECTION AND TEST PLAN FOR		
35	PETROBRAS APPROVAL		
36	OTHER TEST: _____		
37			
38	REMARKS:		
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
THIS DOCUMENT IS PROPERTY OF PETROBRAS, BEING PROHIBITED OUTSIDE OF THEIR PURPOSE.			
FORM OWNED TO PETROBRAS N-1501 REV. C ANNEX A - SHEET 03/03.			

REV. A

There is no index of revisions.

REV. B

Affected Parts	Description of Alteration
All.	Revalidation.

REV. C

[illegible]