
**Auxiliary tables for vibration
generators — Methods of describing
equipment characteristics**

*Tables auxiliaires pour générateurs de vibrations — Méthodes de
description des caractéristiques*

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 6070:2019

<https://standards.iteh.ai/catalog/standards/iso/56fcdada-2efd-4717-9de1-604855a8c477/iso-6070-2019>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 6070:2019

<https://standards.iteh.ai/catalog/standards/iso/56fcdada-2efd-4717-9de1-604855a8c477/iso-6070-2019>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	2
5 Vibration values	3
6 Auxiliary table configurations	3
6.1 General	3
6.2 Typical designs of the head expander	4
6.2.1 General	4
6.2.2 Expander with linear bearing guidance and air spring support	5
6.2.3 Expander with hydrostatic bearing guidance and air spring supports	5
6.2.4 Bare head expander	5
6.3 Typical designs of the slip table	5
6.3.1 General	5
6.3.2 Hydrostatic bearing table	5
6.3.3 Flat spring table	6
6.3.4 Oil or air cushion table	6
6.3.5 Mechanical slide table	6
6.3.6 Ball, roller or needle bearing table	6
6.3.7 Hydraulic slide table	6
6.3.8 Magnetic bearing table	6
6.3.9 Dry bearing table with hydrostatic compensation	6
6.4 Axis systems	7
6.4.1 Moving table reference axis system	7
6.4.2 Other moving table reference axis systems	8
7 Auxiliary table characteristics	8
7.1 General	8
7.2 Characteristics	8
7.2.1 Effective travel	8
7.2.2 Rated frequency range	8
7.2.3 Rated RMS velocity v_z	8
7.2.4 Static load (limit) F_s	8
7.2.5 Static load (limit) per unit area F_p	8
7.2.6 Limiting axial forces	8
7.2.7 Limiting pitching torque C_α	8
7.2.8 Limiting rolling torque C_β	9
7.2.9 Limiting yawing torque C_γ	9
7.2.10 Transmissibility	9
7.2.11 Total harmonic distortion of acceleration	9
7.2.12 Environmental limits	9
7.2.13 Load mounting insert pattern	9
8 Test loads	10
9 Characteristics to be supplied by the manufacturer	10
10 Measurement of common dynamic characteristics	15
10.1 Plotting of the acceleration transmissibility function	15
10.2 Measurement of transverse accelerations	15
10.2.1 No-load condition	15
10.2.2 Loaded condition	15
10.3 Measurement of test table acceleration field uniformity	16
10.4 Measurement of acceleration distortion	16

10.5	Measurement of parasitic rotations.....	16
11	Operating instructions	16
	Bibliography	18

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[ISO 6070:2019](https://standards.itih.ai/catalog/standards/iso/56fcdada-2efd-4717-9de1-604855a8c477/iso-6070-2019)

<https://standards.itih.ai/catalog/standards/iso/56fcdada-2efd-4717-9de1-604855a8c477/iso-6070-2019>