

ISO 15242-3:2017-08 (E)

Rolling bearings - Measuring methods for vibration - Part 3: Radial spherical and tapered roller bearings with cylindrical bore and outside surface

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Measurement process	1
4.1	Rotational frequency	1
4.2	Bearing axial load	2
5	Measurement and evaluation methods	2
5.1	Physical quantity measured	2
5.2	Frequency domain	2
5.3	Measurement of pulses and spikes	3
5.4	Measurement	3
6	Conditions for measurement	3
6.1	Bearing conditions for measurement	3
6.1.1	Prelubricated bearings	3
6.1.2	Non-prelubricated bearings	3
6.2	Conditions of the measurement environment	4
6.3	Conditions for the measuring device	4
6.3.1	Stiffness of the spindle/mandrel arrangement	4
6.3.2	Loading mechanism	4
6.3.3	Magnitude and alignment of the external load applied to the bearing	4
6.3.4	Axial location of the transducer and direction of measurement	5
6.3.5	Mandrel	6
Annex A (normative)	Measurement of external axial loading alignment	7