

# DIN ISO 10816-3:2018-01 (E)

**Mechanical vibration - Evaluation of machine vibration by measurements on non-rotating parts - Part 3: Industrial machines with nominal power above 15 kW and nominal speeds between 120 r/min and 15000 r/min when measured in situ (ISO 10816-3:2009 + Amd .1:2017)**

---

Contents	Page
National foreword .....	3
National Annex NA (informative) Bibliography .....	4
Foreword .....	6
Introduction .....	7
1 Scope .....	8
2 Normative references .....	9
3 Measurement procedures and operational conditions .....	9
3.1 General .....	9
3.2 Measurement equipment .....	9
3.3 Measurement locations .....	9
3.4 Continuous and non-continuous monitoring .....	10
3.5 Operational conditions .....	10
4 Machine classification .....	12
4.1 General .....	12
4.2 Classification according to machine type, rated power or shaft height .....	12
4.3 Classification according to support flexibility .....	13
5 Evaluation .....	13
5.1 General .....	13
5.2 Criterion I: Vibration magnitude .....	13
5.2.1 General .....	13
5.2.2 Evaluation zones .....	13
5.2.3 Evaluation zone limits .....	14
5.2.4 Axial vibration .....	14
5.3 Criterion II: Change in vibration magnitude .....	14
5.4 Operational limits .....	15
5.4.1 Setting of ALARMS .....	15
5.4.2 Setting of TRIPS .....	15
5.5 Supplementary procedures/criteria .....	15
5.6 Evaluation based on vibration vector information .....	16
Annex A (normative) Evaluation zone boundaries .....	17
Bibliography .....	19