

# آنالیز ارتعاشات

## استانداردهای عمومی

**ISO 2041** Mechanical vibration, shock and condition monitoring - Vocabulary

**ISO 2954** Mechanical vibration of rotating and reciprocating machinery  
Requirements for instruments for measuring vibration severity

**ISO 5348** Mechanical vibration and shock  
Mechanical mounting of accelerometers

**ISO 10817-1** Rotating shaft vibration measuring systems – Part 1:  
Relative and absolute sensing of radial vibration

## استانداردهای ایزولاسیون ارتعاشات

**ISO 2017-1** Mechanical vibration and shock – Resilient mounting systems – Part 1  
Technical information to be exchanged for the application of isolation systems

## استانداردهای اندازه گیری ارتعاشات بدنی (شتاب سنج و سرعت سنج)

**ISO 10816-1** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 1:  
General guidelines

**ISO 10816-2** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 2:  
Land-based steam turbines and generators in excess of 50 MW with normal operating speeds of  
1500r/min, 1800r/min, 3000 r/min and 3600 r/min

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

**ISO 10816-4** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 4:  
Gas turbine sets with fluid-film bearings

**ISO 10816-5** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 5:  
Machine sets in hydraulic power generating and pumping plants

**ISO 10816-6** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 6:  
Reciprocating machines with power ratings above 100 kW

**ISO 10816-7** Mechanical vibration – Evaluation of machine vibration by measurements on non-rotating parts – Part 7:  
Rotordynamic pumps for industrial applications, including measurements on rotating shafts

## استانداردهای اندازه گیری ارتعاشات تماسی (پروب پروکسی)

**ISO 7919-1** Mechanical vibration of reciprocating machines – Measurement on rotating shafts and evaluation criteria  
– Part 1:  
General guidelines

**ISO 7919-2** Mechanical vibration – Evaluation of machine vibration by measurements on rotating shafts – Part 2:  
Land-based steam turbines and generators in excess of 50 MW with normal operating speeds of  
1500r/min, 1800r/min, 3000 r/min and 3600 r/min

<b>ISO 7919-3</b>	Mechanical vibration – Evaluation of machine vibration by measurements on rotating shafts – Part 3: Coupled industrial machines
<b>ISO 7919-4</b>	Mechanical vibration – Evaluation of machine vibration by measurements on rotating shafts – Part 4: Gas turbines with fluid-film bearings
<b>ISO 7919-5</b>	Mechanical vibration – Evaluation of machine vibration by measurements on rotating shafts – Part 5: Machine sets in hydraulic power generating and pumping plants
<b>استانداردهای پایش وضعیت و عیب یابی</b>	
<b>ISO 13372</b>	Condition monitoring and diagnostics of machines – Vocabulary
<b>ISO 17359</b>	Condition monitoring and diagnostics of machines – General guidelines
<b>ISO 13373-1</b>	Condition monitoring and diagnostics of machines – Vibration condition monitoring – Part 1: General procedures
<b>ISO 13373-2</b>	Condition monitoring and diagnostics of machines – Vibration condition monitoring – Part 2: Processing, analysis and presentation of vibration data
<b>ISO 13374-1</b>	Condition monitoring and diagnostics of machines – Data processing, communication and presentation – Part 1: General guidelines
<b>ISO 13379-1</b>	Condition monitoring and diagnostics of machines – Data interpretation and diagnostics techniques – Part 1: General guidelines
<b>ISO 13381-1</b>	Condition monitoring and diagnostics of machines – Prognostics – Part 1: General guidelines
<b>ISO 13380</b>	Condition monitoring and diagnostics of machines -- General guidelines on using performance parameters
<b>ISO 18431-1</b>	Mechanical vibration and shock – Signal processing – Part 1: General introduction
<b>ISO 18431-2</b>	Mechanical vibration and shock – Signal processing – Part 2: Time domain windows for Fourier Transform analysis
<b>استانداردهای ماشین های خاص</b>	
<b>ISO 14694</b>	Industrial Fans – Specifications for balance quality and vibration levels
<b>ISO 14695</b>	Industrial Fans – Method of measurement of fan vibration
<b>ISO 8528-9</b>	Reciprocating internal combustion engine driven alternating current generating sets – Part 9: Measurement and evaluation of mechanical vibrations
<b>استانداردهای ارتعاشات مرتبط با ساختمان ها</b>	
<b>ISO 8569</b>	Mechanical vibration and shock – Measurement and evaluation of shock and vibration effects on sensitive equipment in buildings

<b>ISO 1925</b>	Mechanical vibration – Balancing -Vocabulary
<b>ISO 1940</b>	Mechanical vibration – Balance quality requirements of rigid rotors
<b>ISO 1940-1</b>	Mechanical vibration – Balance quality requirements of rigid rotors – Part 1 Specification and verification of balance tolerances
<b>ISO 11342</b>	Mechanical vibration – Methods and criteria for the mechanical balancing of flexible rotors
<b>ISO 19499</b>	Mechanical vibration – Balancing – Guidance on the use and application of balancing standards
<b>ISO 21940-13</b>	Mechanical vibration – Rotor balancing – Part 13: Criteria and safeguards for the in-situ balancing of medium and large rotors
<b>ISO 21940-14</b>	Mechanical vibration – Rotor balancing – Part 14: Procedures for assessing balance errors
<b>ISO 20806</b>	Mechanical vibration -- Criteria and safeguards for the in-situ balancing of medium and large rotors

<b>ISO 18436-1</b>	Condition monitoring and diagnostics of machines - Requirement for qualification and assessment of personnel – Part 1: Requirements for assessment bodies and the assessment process
<b>ISO 18436-3</b>	Condition monitoring and diagnostics of machines - Requirement for qualification and assessment of personnel – Part 3: Requirements for training bodies and the training process
<b>ISO 18436-2</b>	Condition monitoring and diagnostics of machines - Requirements for training and certification of personnel - Part 2: Vibration condition monitoring and diagnostics