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Nota di contenuto	AIChE Equipment Testing Procedure: Mixing Equipment (Impeller Type); Contents; Figures; 100.0 Purpose and scope; 101.0 Purpose; 102.0 Scope; 103.0 Liability; 200.0 Definition and Description of Terms; 201.0 Introduction; 202.0 Mixing Equipment; 202.1 Equipment Configurations; 202.2 Impellers; 202.3 Vessels; 202.4 Auxiliary Equipment; 203.0 Basic Nomenclature; 203.1 Equipment Variables; 203.2 Mixing Related Dimensionless Groups; 203.3 Process Related Dimensionless Groups; 204.0 Operating Conditions; 205.0 Types of Tests; 205.1 Operating Performance; 205.2 Mechanical Conditions 205.3 Mechanical Operation205.4 Mixer Support Structure; 205.5 Process Conditions; 206.0 Performance Criteria; 300.0 Test Planning; 301.0 Preliminary Considerations; 301.1 Safety; 301.2 Environmental; 301.3 Test Objectives; 301.4 Multiple Applications; 302.0 Plans for Operating Performance Tests; 302.1 Speed; 302.2 Power; 302.3

Torque; 303.0 Plans for Mechanical Condition Tests; 303.1 Equipment Verification; 303.2 Alignment; 303.3 Runout; 303.4 Gear Tooth Contact; 303.5 Seals; 303.6 Auxiliary Equipment; 303.7 Vibration; 303.8 Noise; 304.0 Plans for Mechanical Operation Tests
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 403.8 Temperature; 404.0 Mechanical Operation Measurements; 404.1 Natural Frequency; 404.2 Shaft strain; 404.3 Deflection; 404.4 Spectral Analysis; 405.0 Process Condition Measurements; 405.1 Density or Specific Gravity; 405.2 Viscosity; 405.3 Physical State; 405.4 Chemical Composition; 405.5 Other Physical/Chemical Properties; 406.0 System Operating Conditions; 406.1 Temperature; 406.2 Pressure; 406.3 Liquid Level, Volume, and Flow; 406.4 Phase Ratios; 406.5 Blend Time; 406.6 Sampling; 500.0 Test Procedures; 501.0 General Test Procedures; 502.0 Preliminary Operation and Safety
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 505.2 Deflections of Structure

Sommario/riassunto

The latest edition of this industry-friendly guide to evaluating the performance of mixing equipment brings this traditional process operation into the 21st century. The book starts with basic definitions and terms, and goes to detail test planning and procedures, and computation and evaluation of results. Appendices offer a troubleshooting checklists, sample log.
