DIN ISO 17359:2011-09 (E)

Condition monitoring and diagnostics of machines - General guidelines (ISO 17359:2011)

Contents

Page

National foreword 3

National Annex NA (informative) Bibliography 4

Introduction 6

1 Scope 7

2 Normative references 7

3 Terms and definitions 7

4 Overview of condition monitoring procedure 7

5 Cost benefit analysis 9

6 Equipment audit 9
6.1 Identification of equipment 9
6.2 Identification of equipment function 10

7 Reliability and criticality audit 10
7.1 Reliability block diagram 10
7.2 Equipment criticality 10
7.3 Failure modes, effects and criticality analysis 10
7.4 Alternative maintenance tasks 11

8 Monitoring method 11
8.1 Measurement technique 11
8.2 Accuracy of monitored parameters 11
8.3 Feasibility of monitoring 11
8.4 Operating conditions during monitoring 12
8.5 Monitoring interval 12
8.6 Data acquisition rate 12
8.7 Record of monitored parameters 12
8.8 Measurement locations 12
8.9 Initial alert/alarm criteria 13
8.10 Baseline data 13

9 Data acquisition and analysis 14
9.1 Measurement and trending 14
9.2 Quality of measurements 14
9.3 Measurement comparison to alert/alarm criteria 14
9.4 Diagnosis and prognosis 14
9.5 Improving diagnosis and/or prognosis confidence 15

10 Determine maintenance action 15

11 Review 16

12 Training 16

Annex A (informative) Examples of condition monitoring parameters 17

Annex B (informative) Matching fault(s) to measured parameter(s) or technique(s) 18

Annex C (informative) Typical information to be recorded when monitoring machine types shown in Annex A 25

Annex D (informative) Overview of condition monitoring standards 28

Bibliography 30