ISO 20140-1:2019 (E)

Automation systems and integration — Evaluating energy efficiency and other factors of manufacturing systems that influence the environment — Part 1: Overview and general principles

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Environmental performance evaluation of manufacturing systems

- 4.1 Manufacturing system life cycle phases and product life cycle phases
- 4.2 Manufacturing system life cycle steps and their environmental influence

5 Requirements for environmental performance evaluation

Annex A (informative) Use cases of ISO 20140

- A.1 General
- A.2 Scenario 1: Purpose of and situations for environmental performance evaluation
- A.2.1 Environmental performance evaluation of manufacturing system
- A.2.1.1 Evaluation of a generic manufacturing process
- A.2.1.2 Evaluation of a specific manufacturing process
- A.2.2 Environmental performance evaluation of the product manufacturing phase
- A.2.2.1 General
- A.2.2.2 Evaluation based on general environmental performance data
- A.2.2.3 Evaluation based on specific environmental performance data
- A.3 Scenario 2: Activities through the manufacturing system life cycle
- A.3.1 General
- A.3.2 Evaluation of improvement of the environmental performance of the manufacturing system
- A.3.3 Benchmarking of environmental performance
- A.3.4 Alternative studies of environmental performance
- A.3.5 Comparison of equipment supplier’s Environmental Characteristics Data (ECD)
- A.3.6 Setting the targets of environmental improvement
- A.3.7 Monitoring and improvement of the shop floor operations

Page count: 9