

ISO 15531-44:2017-07 (E)

Industrial automation systems and integration - Industrial manufacturing management data - Part 44: Information modelling for shop floor data acquisition

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions, and abbreviated terms	1
3.1	Terms and definitions	1
3.2	Abbreviated terms	4
5	Purpose, principles and structure of this document	6
5.1	Purpose of this document	6
5.2	Basic principles of this document and overview of the main entities	6
5.3	Structure of shop floor data acquisition system	8
5.4	The captured data and their organization	9
5.4.1	General characteristics	9
5.4.2	Manufacturing management data	11
5.4.3	Quality management	11
5.4.4	Productivity and maintenance	11
5.4.5	Traceability	11
5.5	The question of time: time stamping and time measure	11
5.6	Size optimization	12
6	The EXPRESS schema definition of shop floor captured data	12
6.1	Shop floor captured data schema definition	12
6.2	Shopfloor_captured_data type definitions	13
6.2.1	type_of_movement	13
6.2.2	stock_in	13
6.2.3	stock_out	13
6.2.4	stock_taking	14
6.3	Shop floor captured data entity definitions	14
6.3.1	Stock	14
6.3.2	Manufactured_product	14
6.3.3	Orders	15
6.3.4	Manufacturing_batch	16
6.3.5	Work_order	16
6.3.6	material_consumption	17
6.3.7	Productivity_and_maintenance	18
6.3.8	Quality	20
6.3.9	Resource	21
6.3.10	Time stamping and time reference	22
	Annex A (normative) Information object registration	23
	Annex B (informative) EXPRESS listing	24
	Annex C (informative) EXPRESS-G Diagram	28
	Bibliography	30