
Process Quality Controller

2017

IQCS

First written test

Field	Quality area	Qualification	Process Quality Controller	Valid date	2017. 6. 1
Exam type	Multiple choice	No. of Ques.	50	Exam hour	90 minutes
Title	Sub title	Detail		No. of Ques.	Distribution.
Summary of process quality control	1. Concept of quality and process	<ul style="list-style-type: none"> • Change of quality concept • Definition of quality • KANO model • Customer focused quality control • Quality characteristics • Classification of quality 		5	10%
	2. Concept of process	<ul style="list-style-type: none"> • Concept of quality • Understand of process • Characteristics of good quality • Process management 		3	6%
	3. Customer satisfaction	<ul style="list-style-type: none"> • Concept of customer satisfaction • Concept development of customer satisfaction • Importance of customer satisfaction 		1	2%
	4. Quality cost	<ul style="list-style-type: none"> • Concept of quality cost • Objective of measuring quality cost • COQ and COPQ • Quality cost and configuration • Quality cost and quality • Hidden quality cost • Analysis of quality cost 		3	6%
Statistic process control	1. Concept of statistic process control	<ul style="list-style-type: none"> • Definition of statistic process control • Objective of statistic process control • SQC and SPC • Understand of quality fluctuation • Process improvement activity • CTQ and CTP 		10	20%
	2. Understand of basic statistics	<ul style="list-style-type: none"> • Statistic analysis • Classification of data • Arrangement of data 			

		<ul style="list-style-type: none"> • Index that show center and spread distribution • Distribution of data 		
	3. TOOL Basic analysis tool	<ul style="list-style-type: none"> • Improvement on process quality problem • 7 method of quality control • Neo 7 mehtod of quality control 	4	8%
	4. Utilize of control chart	<ul style="list-style-type: none"> • Distribution of process • Safety of process • Understand of control chart • control chart for variables • control chart for attributes • Interpretation of control chart • Interpretation of process • Classification of group • Quality control by control chart 	5	10%
	5. Process capability index	<ul style="list-style-type: none"> • Cause of Quality fluctuation • Concept of process capability • Determination criteria for process capability • Calculation of process capability index 	3	6%
	6. Measurement system analysis	<ul style="list-style-type: none"> • Importance of measurement system evaluation • Type of measurement system evaluation • Measurement system analysis 	3	6%
	7. Specification and tolerance	<ul style="list-style-type: none"> • Concept of specification • Tolerance and permissible tolerance • Relation between process and specification • Additively of tolerance 		
Process quality improvement methodology	1. Improvement of productivity	<ul style="list-style-type: none"> • Scientific management theory • Concept of productivity • Object of productivity control • Concept of waste • 7 wastes at production site • ECRS principles • 3jung activities • 5S activities • Step by step method • Management by eye 	5	10%
	2. Process analysis	<ul style="list-style-type: none"> • Definition and object of process analysis • Basic analysis of process • Priority analysis • Process improvement • QC process chart 	2	4%

	3. Reorganization of process	<ul style="list-style-type: none"> • Concept of line efficiency • Calculation of line efficiency • Line activity 	4	10%
	4. Improvement of process quality	<ul style="list-style-type: none"> • Spread of quality function • FEMA • 5 why analysis • Internal standardization • Small group improvement activity 		

2nd practical test

Field	Quality area	Qualification	Process Quality Controller	Valid date	2017. 6. 1
Exam type	Short answer	No. of Ques.	10-20	Exam hour	120 minutes
Title	Sub title	Detail		No. of Ques.	Distribution
Summary of process quality control	1. Concept of process quality control	<ul style="list-style-type: none"> • Able to explain concept of quality, process, process quality. • Able to explain KANO quality model • Able to explain quality characteristics and process variables. • Able to explain about good process • Able to explain objective of process quality management 		Depends on percentage	100%
	2. Quality cost	<ul style="list-style-type: none"> • Able to explain concept and objective of quality cost • Able to explain relation between quality and quality cost. • Able to explain about potential process. 			
Statistic process control	1. Concept of SPC	<ul style="list-style-type: none"> • Able to explain about statistic process control activity objectives. • Able to explain cause of process fluctuation • Able to explain about CTQ, CTP • Able to explain process improvement activities. 			
	2. Understand of basic statistic	<ul style="list-style-type: none"> • Able to explain/understand about statistic analysis process • Able to classify data and organize them by their characters. • Able to explain about condition of data • Understand/calculate average and distribution 			

		<ul style="list-style-type: none"> • Able to explain/understand about distribution of data 		
	3. Basic analysis tool	<ul style="list-style-type: none"> • Able to utilize 7 methods of quality control • Able to utilize 7 New methods of quality control 		
	4. Utilize of control chart	<ul style="list-style-type: none"> • Able to explain/understand about distribution of process and their stability. • Able to draw coefficient/variable control chart • Able to interpret prepared control chart 		
	5. process capability index	<ul style="list-style-type: none"> • Able to calculate process capability index • Able to evaluate process capability index 		
	6. Measurement system analysis	<ul style="list-style-type: none"> • Able to implement measurement system analysis • Able to interpret analysis result. 		
	7. Specification and tolerance	<ul style="list-style-type: none"> • Able to explain/understand concept of specification and tolerance • Able to interpret additivity of tolerance and set up tolerance 		
Improve method of process quality	1. Improvement of productivity	<ul style="list-style-type: none"> • Able to explain/understand concept of productivity • Able to explain 7 losses • Able to explain ECRS principles • Able to explain 3Jung 5S activities 		
	2. Analysis of process	<ul style="list-style-type: none"> • Able to calculate line organization efficiency • Able to perform reorganization of process through process division 		
	3. Improvement of process quality	<ul style="list-style-type: none"> • Able to explain and understand spread of quality function • Able to explain and understand FEMA • Able to explain and understand 5 WHYS • Able to explain and understand about objective, necessity of standardization • Able to explain about independent improvement activities 		

		<ul style="list-style-type: none">• Able to explain and understand QC story.		
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