

ISO/TR 12845:2010-08 (E)

Selected illustrations of fractional factorial screening experiments

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	4
5	Generic description of fractional factorial designs	5
5.1	Overview of the structure of the examples in Annexes A to F	5
5.2	Overall objective(s) of the experiment (Step 1)	5
5.3	Response variable(s) (Step 2)	5
5.4	Factors affecting the response(s) (Step 3)	5
5.5	Select a fractional factorial design (Step 4)	6
5.6	Analyse the results -- Numerical summaries and graphical displays (Step 5)	7
5.7	Present the findings (Step 6)	8
5.8	Perform confirmation runs (Step 7)	8
6	Description of Annexes A to F	8
6.1	Comparing and contrasting the examples	8
6.2	Experiment summaries	8
Annex A (informative)	Direct mail marketing campaign	10
Annex B (informative)	Optimizing a polymer emulsion	20
Annex C (informative)	Insight into PVC foam formulations	34
Annex D (informative)	Process validation for an insulin product	47
Annex E (informative)	Washing machine experiment	60
Annex F (informative)	Aggregated shipworm bacterium	72
Bibliography		80