

ISO 17874-4:2006-01 (E)

Remote handling devices for radioactive materials - Part 4: Power manipulators

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Applications of power manipulators	3
5 General features	4
6 Requirements	4
6.1 General aspects	4
6.2 Materials	6
6.3 Surface treatment	6
6.4 Design features	7
6.5 Electrical equipment	13
6.6 Dimensions of tongs with parallel jaws (standard tongs)	13
6.7 Dimensions of grip hooks	16
6.8 Dimensions of shoulder hooks	17
7 Operating devices and control systems	18
7.1 General	18
7.2 Push-buttons	18
7.3 Operating elements for one motion	19
7.4 Joysticks	19
7.5 Six-motion operating devices	19
7.6 Computer controlled systems	19
8 Manipulator vehicles	20
9 Special tongs and tools	20
10 Testing	22
10.1 General	22
10.2 Acceptance testing	22
10.3 Inspections and tests at regular intervals	22
11 Non-radioactive trial cells	23
11.1 General	23
11.2 Operator training	23
11.3 Manipulator system capability	23
11.4 Error minimization and failure recovery	23
11.5 Reliability assessments and maintenance planning	24
Annex A (normative) Electrical equipment for power manipulators	25
Bibliography	26