

ISO/TS 16976-3:2011-08 (E)

Respiratory protective devices - Human factors - Part 3: Physiological response s and limitations of oxygen and limitations of carbon dioxide in the breathing environment

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Terms and definitions, symbols and abbreviated terms	1
2.1	Terms and definitions	1
2.2	Symbols and abbreviated terms	4
3	Oxygen and carbon dioxide in the breathing environment: physiological responses and limitations	5
3.1	General	5
3.2	Oxygen and carbon dioxide gas exchange in the human lung	5
3.3	Oxygen and carbon dioxide transport in the blood	6
3.4	Oxygen and carbon dioxide and the control of respiration	8
3.5	Hyperoxia: physiological effects	9
3.6	Hypoxia: physiological effects	10
3.7	Hypercarbia: physiological effects	13
3.8	Relevance to the use of respiratory protective devices (RPD)	16
3.9	Interpretation of results	19
3.10	Significance of results	20
	Bibliography	21