

DIN EN ISO 18640-2:2018-08 (E)

Protective clothing for firefighters - Physiological impact - Part 2: Determination of physiological heat load caused by protective clothing worn by firefighters (ISO 18640-2:2018)

Contents	Page
European foreword	3
Foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Symbols and abbreviations	8
5 Evaluation method	8
5.1 General	8
5.2 Firefighting scenarios	8
5.2.1 Standard scenario for THS measurements	8
5.3 THS measurement	9
5.3.1 General	9
5.3.2 Apparatus and software	9
5.3.3 Heat flux	9
5.3.4 Wicking layer correction	10
5.3.5 Skin diffusion (E_{sk})	10
5.3.6 Data exchange with physiological model	10
5.3.7 Measurement control	10
6 Measurement	12
6.1 General	12
6.2 THS measurement	12
6.2.1 Test preparation	12
6.2.2 Software settings	12
6.2.3 Sampling and test specimen	12
6.2.4 Measurement procedure	12
6.2.5 Data evaluation	13
7 Test report	13
7.1 General	13
7.1.1 Specimen identification	13
7.1.2 Measurement conditions	13
7.1.3 Results of THS measurement	13
7.2 Predicted physiological parameters	14
7.3 Contents of test report	14
Annex A (normative) Single-sector Thermo-physiological Human Simulator (THS)	15
Annex B (informative) Example measurement protocol according to ISO 18640-2	19
Annex C (informative) Scenarios for testing and limitation of system	20
Bibliography	22