

DIN EN ISO 18640-2:2020-06 (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 + Amd 1:2019)

Contents	Page
European foreword	3
A₁ European foreword to Amendment A₁	4
Foreword	5
A₁ Foreword to Amendment A₁	6
Introduction	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	8
4 Symbols and abbreviations	10
5 Evaluation method	10
5.1 General	10
5.2 Firefighting scenarios	10
5.2.1 Standard scenario for THS measurements	10
5.3 THS measurement	11
5.3.1 General	11
5.3.2 Apparatus and software	11
5.3.3 Heat flux	11
5.3.4 Wicking layer correction	12
5.3.5 Skin diffusion (E_{sk})	13
5.3.6 Data exchange with physiological model	13
5.3.7 Measurement control	13
6 Measurement	14
6.1 General	14
6.2 THS measurement	14
6.2.1 Test preparation	14
6.2.2 Software settings	14
6.2.3 Sampling and test specimen	14
6.2.4 Measurement procedure	14
6.2.5 Data evaluation	15
7 Test report	15
7.1 General	15
7.1.1 Specimen identification	15
7.1.2 Measurement conditions	15
7.1.3 Results of THS measurement	15
7.2 Predicted physiological parameters	16
7.3 Contents of test report	16
Annex A (normative) Single-sector Thermo-physiological Human Simulator (THS)	17
Annex B (informative) Example measurement protocol according to ISO 18640-2	21
Annex C (informative) Scenarios for testing and limitation of system	22
Bibliography	24