

# DIN EN ISO 7243:2017-12 (E)

## Ergonomics of the thermal environment - Assessment of heat stress using the WBGT (wet bulb globe temperature) index (ISO 7243:2017)

---

<b>Contents</b>		Page
<b>European foreword</b> .....		3
<b>Foreword</b> .....		4
<b>Introduction</b> .....		5
<b>1</b>	<b>Scope</b> .....	6
<b>2</b>	<b>Normative references</b> .....	6
<b>3</b>	<b>Terms and definitions</b> .....	6
<b>4</b>	<b>Method</b> .....	7
<b>5</b>	<b>Determination of WBGT</b> .....	8
<b>6</b>	<b>Determination of metabolic rate</b> .....	8
<b>7</b>	<b>Determination of effects of clothing</b> .....	8
<b>8</b>	<b>Timing and duration of measurements</b> .....	9
	8.1 Timing of measurements .....	9
	8.2 Duration of measurements .....	9
<b>9</b>	<b>Spatial and temporal variations</b> .....	10
	9.1 Measurement specifications relating to heterogeneity of environment (spatial variations) .....	10
	9.2 Measurement specifications relating to time variations of WBGT index .....	10
	9.3 Measurement specifications relating to time variations of metabolic rate .....	10
	9.4 Measurement specifications relating to time variations of clothing .....	10
<b>10</b>	<b>Interpretation</b> .....	11
<b>Annex A (informative) Reference values of the WBGT heat stress index</b> .....		12
<b>Annex B (normative) Measurement of parameters used in the WBGT index and specification of instruments</b> .....		14
<b>Annex C (informative) Alternative globe thermometers</b> .....		16
<b>Annex D (informative) Prediction of natural wet bulb temperature</b> .....		18
<b>Annex E (informative) Estimation of metabolic rate</b> .....		20
<b>Annex F (informative) Clothing adjustment values (CAVs)</b> .....		21
<b>Bibliography</b> .....		22