

LSI LASTEM GIDAS TEA (Thermal Environment Application) is a state-of-the-art software suite designed for the most comprehensive thermal analysis available on the market. With the three specific modules of TEA (Moderate/Hot/Cold environment) it is possible to easily carry out ISO index calculations, generate thermal-comfort projects and reports, perform simulations and organize records and results in the database.

BSZ313: Thermal comfort indexes.

Determination and interpretation of thermal comfort using calculations and local thermal comfort criteria for optimal comfort conditions according to the following ISO indexes:

- PMV Predicted mean vote (ISO7730)
- DR Predicted % of dissatisfied by draught (ISO7730)
- PPD Predicted % of dissatisfied (ISO7730)
- TO Operative temperature (ISO7730)

BSZ315: Cold environments

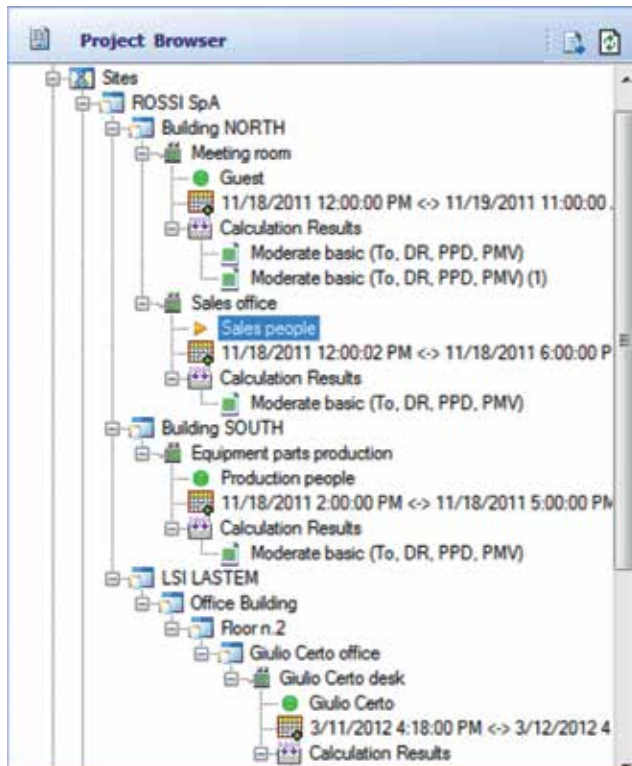
Determination and interpretation of cold stress when using required clothing insulation and local cooling effects to limit the possible decrease of body temperature according to physical thermoregulation activity.

- ITR required thermal insulation (ISO 11079)

BSZ317: Heat stress

Analytical determination and interpretation of heat stress using calculation of the predicted heat strain to avoid dangerous conditions for the health of hot environment workers.

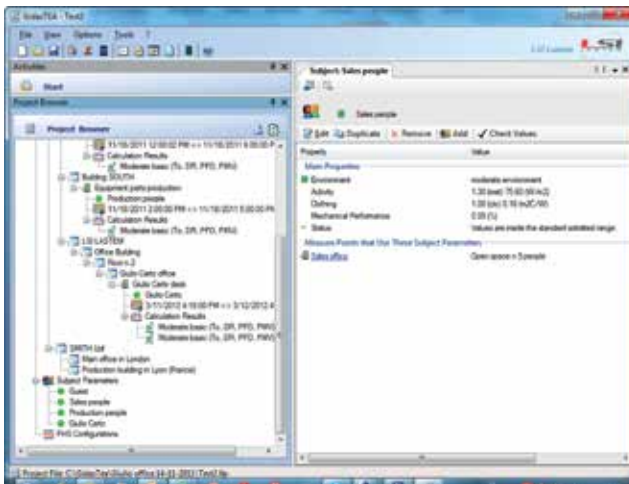
- WBGT Wet bulb globe temperature. Inside/outside (ISO 7243)
- PHS Predicted heat strain (ISO7933:2004)



Environment setup

- Organize each measurement location with record information. (Name, place, description, etc.). One or more subjects can be assigned to every measurement location;
- Index calculation for every measurement location and every subject.

🕒 interface - project browser



Main

- Data download;
- Measurement site setup;
- Subject parameters (clothing; work efficiency and activity) setup;
- Measurement reports, tables, charts and reports;
- Index calculation and in-depth analysis using different subject parameters (sensing analysis);
- Quick index calculator.

🔍 interface - Gidas TEA

Subject setup

Values setup using tables and pictures from ISO standards, including:

- Subject activity (MET)
- Clothing (Clo)
- Work efficiency (ETA)

🔍 interface - select subject clothing



Calculator feature

- Manual entering of Subject parameters (Clo, MET, ETA) and environmental quantities (temperature, RH%, air speed, etc.);
- Sensing analysis of thermal indexes when editing the entered quantities;
- Reports in DocX, Open Office xml (ECMA-376) formats.

Thermal environment measurement report

Software: GdasTEA (ver. 1.3.1.0)
Date: N/A

Parameter	Value
Activity	1.20 (met) 75.80 (W/m ²)
Clothing insulation	1.00 (clo) 0.16 (m ² C/W)
Mechanical efficiency	0.00 (%)

Environmental Parameters
This section contains general statistical elaborations of the environmental parameters.

Parameter	Minimum value	Average value	Maximum value
Air temperature (T _{air}) °C	19.28	20.75	24.47
Wall bulb temperature forced ventilation (T _{wb}) °C	24.14	25.34	27.60
Globe temperature (T _g) °C	19.28	20.38	22.92
Air velocity (V _a) m/s	0.01	0.21	4.30
Relative humidity (RH) %	43.75	54.92	60.51

Thermal environment indexes
This section contains general statistical elaborations of the thermal environment indexes.

Parameter	Minimum value	Average value	Maximum value
Predicted mean vote (PMV)	-0.79	-0.12	0.48

Final report

- Tables and charts of measurements and thermal environment indexes;
- Final report, with complete information (measurements positions, subjects, environmental quantities and thermal environment indexes, in charts and summarized tables, with editable records);
- DocX, open office, xml (ECMA-376) document format.

④ interface - measurement report



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.