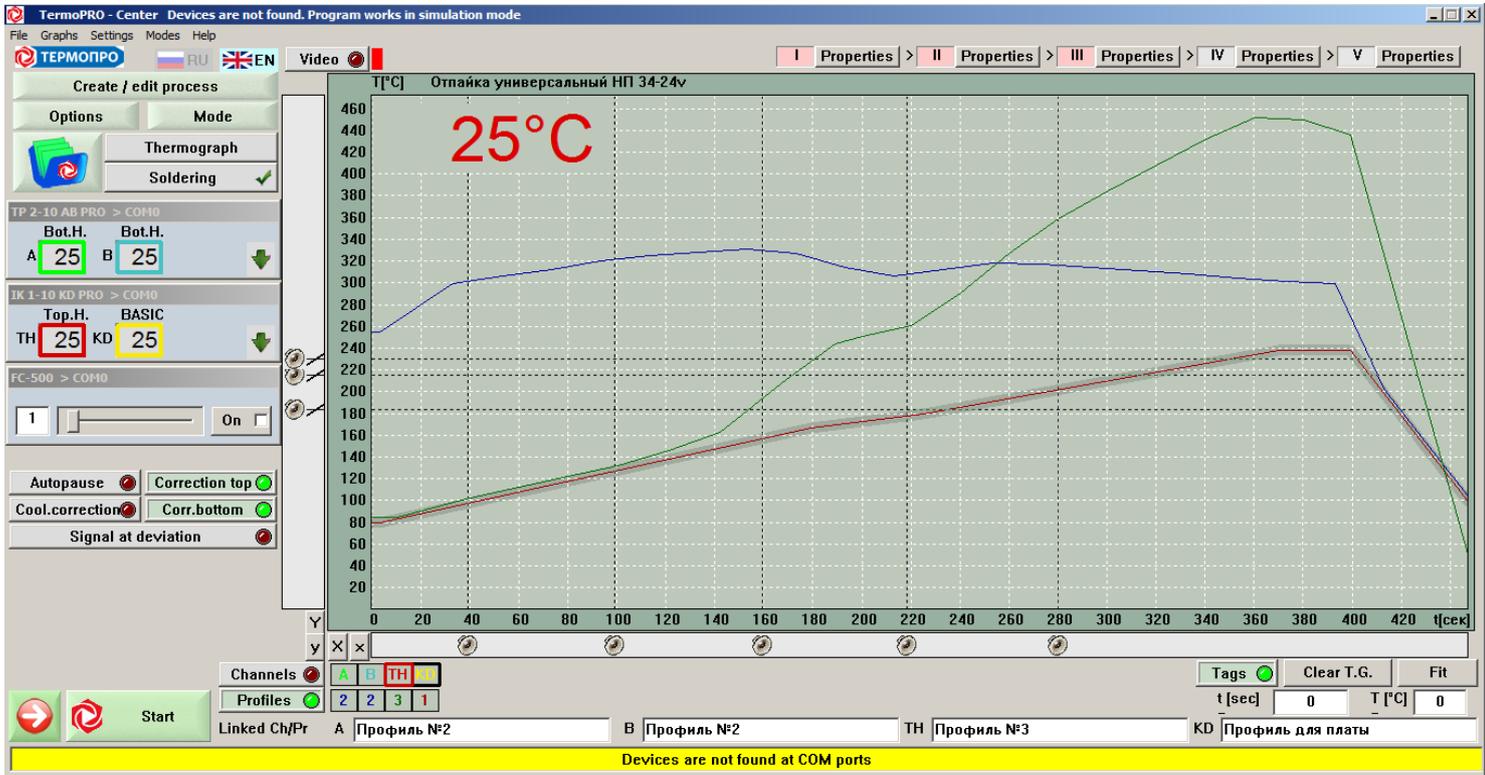
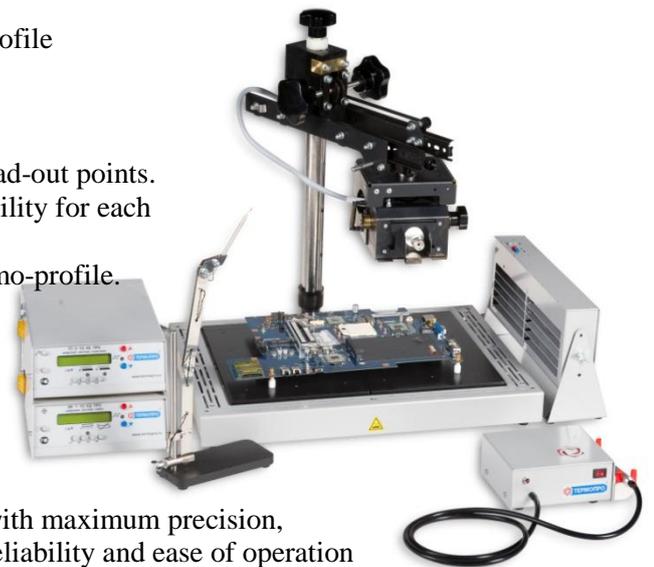


“TermoProCenter”(TPC) UNIQUE FUNCTIONS Software for IK-650Pro - most diversified and flexible approach to BGA Soldering and thermo-profiling



- ◆ Automatic BGA soldering process with simultaneous display of all read-out information from all heating and control channels. In result, one process thermo-profile guarantees the same height Quality results for soldering of different PCB without any additional profile.
- ◆ Graphic Recorder Mode provides a long term temperature monitoring read out from control sensors.
- ◆ Built-in "BGA-video" module supports video control by anxious camera or microscope units USB-connected. Video recording may be realized automatically.
- ◆ Process pause with temperature supporting can be added into profile
- ◆ Manual temperature adjustment function at pause.
- ◆ "Hot-Start" in thermo-profile speeds up the soldering circle.
- ◆ After process cooling with controlled speed.
- ◆ Simultaneous operation with up to 4 temperature control and read-out points.
- ◆ Programmable Audio/visual notification and warnings set up ability for each Process moment by choice of operator.
- ◆ Saving in archive all soldering results and process settings thermo-profile.
- ◆ One-Button push restore of soldering results from archive.



We faced up with the task to guarantee repeatability of the process with maximum precision, with maximum technological flexibility of equipment, saving high reliability and ease of operation at the same time.

We think we replied the Challenge. ...but judge yourself!

Our technological solution based on mathematical model of the thermodynamic process underlying solder joint of electronic components formation.

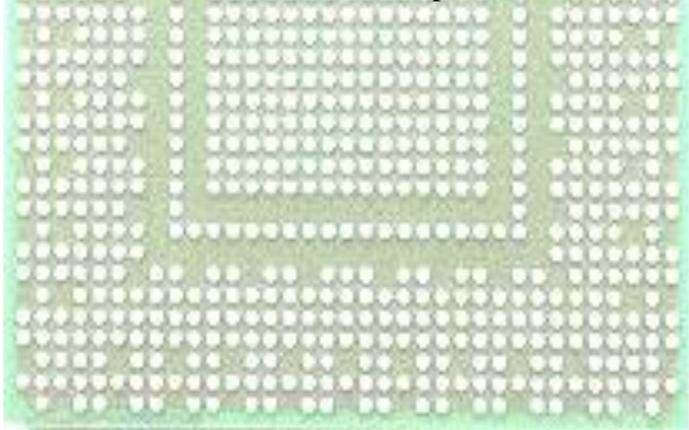
Developed mathematical model serves as a basement of computer program ‘TermoProCenter (TPC)’ what actually presents a portfolio of functions taking into calculation a big number of external and internal factors of the process for each specific case, and provides its maximum possible repeatability not depending on external/internal factors alteration.

“TermoProCenter TPC” Software portfolio contains answers almost to any technological situation, and we did our best to realize maximum possible number of functions programmed in it with help of our TermoPro instruments which we present to your judgment.

The Program armed with equipment is a powerful both production and scientific instrument without any exaggeration. Set of tools incorporated in the Program can be used both for realization thermodynamic process of soldering and for registration, analysis and adaptation the process to required conditions as well.

BGA Reworking and Soldering TermoPro Center is designed for realization of the following functions:

- Soldering SMD-components on PCB by tracing preliminary developed, tested and tuned thermo-profile;
- Thermo-profiles development and tuning. Feed-back links between multiple sensors and software afford operator to optimize a profile in a way ideally meet a PCB specific;
- Pre-heating of PCB's during soldering and de-soldering of SMD-components by different technique;
- Pre-heating of PCB's during a process of components replacement on PCB (repair operations);
- Control of Temperature parameters during pre-heating and soldering;
- Pre-heating of silicon wafers at the solar battery production process;
- Pre-heating of ceramic components before process them what reduce microcracking;
- Chems thermo-polimerization. For exsample, components fixing glue;
- BGA components re-balling by thermoprofile;
- Preliminary heating of metal parts (joints) before its soldering;
- PCB utilization by mass components de-soldering;
- Other Lab needs where the temperature control in small zone is required.



®



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