

Method for obtaining hydroxyapatite scaffolds with predetermined physico-chemical characteristics for major bone reconstruction (Patent RO 131943)

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INTRODUCTION

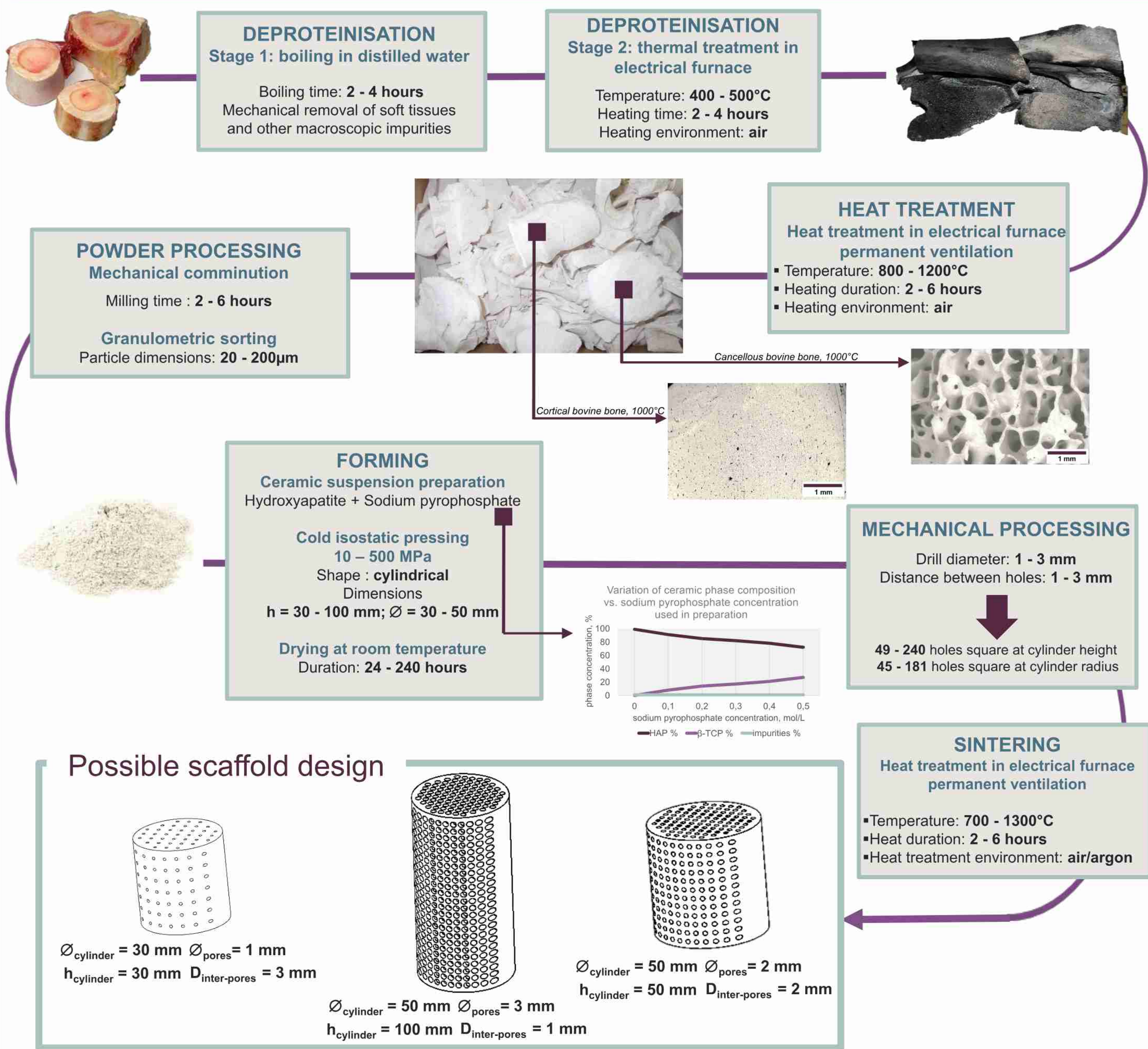
The proposed method consists in fabrication of scaffold structures for major bone defects repair, based on monophasic (hydroxyapatite – HAP) or biphasic (hydroxyapatite + tricalcium phosphate - α -TCP or β -TCP) ceramics which fulfill the product requirements related to mechanical strength and biocompatibility.

The technical problem solved by this invention is the need for adequate adaptation of phase order and phase parameters, and for developing a specific procedure for producing a scaffold structure for major bone repair with predictable porosity and mechanical strength

The described method solves the technical problem by obtaining a predetermined ratio of HAP/TCP, after a preliminary stage of hydroxyapatite production by deproteinisation using thermal routes.



METHOD DESCRIPTION



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SELECTIVE REFERENCES:

[1] Miculescu F, Maidaniuc A, Stan GE, Miculescu M, Voicu SI, Cioan LT. Thermal degradation and morphological characteristics of bone products. In: Tiwari A, Raj B, editors. Reactions and Mechanisms in Thermal Analysis of Advanced Materials. Wiley - Scrivener Publishing LLC; 2015. [2] Miculescu F, Maidaniuc A, Stan GE, Miculescu M, Voicu SI, Cimpean A, et al. Tuning Hydroxyapatite Particles' Characteristics for Solid Freeform Fabrication of Bone Scaffolds. Advanced Composite Materials 2016:321. [3] RU2359708/2009; [4] RU2546539/2015; [6] US 8071007/ 2011 [7] US 6993406/2006

MECHANO-ELECTRIC LAUNDRY DRYER

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International classification:D06F58/00; F26B11/14

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A. PREZENTARE

Invenția se referă la un uscător de rufe, care poate fi utilizat în locuințe sau hoteluri, pentru rufe sau prosoape mari sau mici, colorate sau albe. Uscătorul, conform invenției cuprinde o masă mobilă de translație de forma unei cutii paralelipipedice (1), realizată din mase plastice ignifugate, goala pe interior, prevăzută cu o deschizătură dreptunghiulară, pe marginea căreia se montează niște glisiere metalice(2), pe care se sprijină cutia de protecție (3), în interiorul căreia se află fixat un moto-reductor cu turație variabilă (4), legat la un transformator (5), la ieșirea motorului (4), se află montată o folie (6), ce se continuă cu o articulație mobilă (7), pe care se fixează biela (8) ce se continuă cu o articulație mobilă (9) prinsă de un guseu de rigidizare orizontal (10), sudat de un guseu de rigidizare verticale (11), fixate pe ghidajele (12) și placa de ghidare (13), de masa mobilă (1), pe care se află suportul de rufe (14). Acționarea prin intermediul motorului (4), se face comandat prin intermediul unui modul de comandă (15). Prin mișcările de translație în plan orizontal, perpendicular pe planul de poziționare a rufelor, care prin deplasarea în lateral, creează curenți de aer care usucă rufele prinse pe orice tip de stativ (suport) de rufe.

B. PRESENTATION

The invention relates to a dryer for laundry, towels and bed linen, which can be used in households, hotels or other public lodging establishments. According to the invention, the dryer comprises a translation table (1) in the shape of a hollow parallelepipedal box made up of fireproof plastics, perforated on its whole surface for ensuring ventilation and avoiding overheating, provided with a rectangular opening, on whose edges there are some metal slides (2) placed longitudinally, by means of which it rests on a protective box (3) inside which the drive mechanism is located, the drive mechanism consisting of a variable speed gearmotor (4) connected to a transformer (6), at the output of the gearmotor (4) there being a gin (5) continued with a mobile joint (7) on which a connecting rod (8) is fixed with a mobile joint (9), attached to a horizontal reinforcing gusset (11), welded to the vertical reinforcing gussets (10) fixed to the guides (12) and the guiding plate (13), which, in their turn, are fixed to the mobile table (1) on which the laundry support (14) is located, the motor (4) being driven by means of a control module (15).

REFERENCES

[1] PATENT RO 12311981
[2] PATENT DE 10318486.

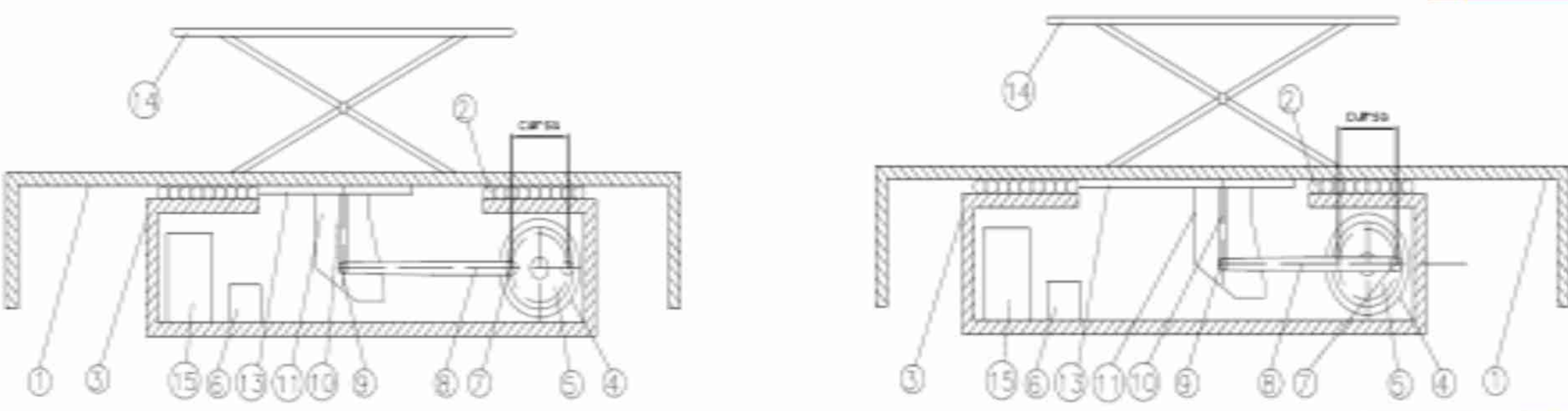


Fig. 1. MECHANO-ELECTRIC LAUNDRY DRYER (left extreme position and right extreme position).

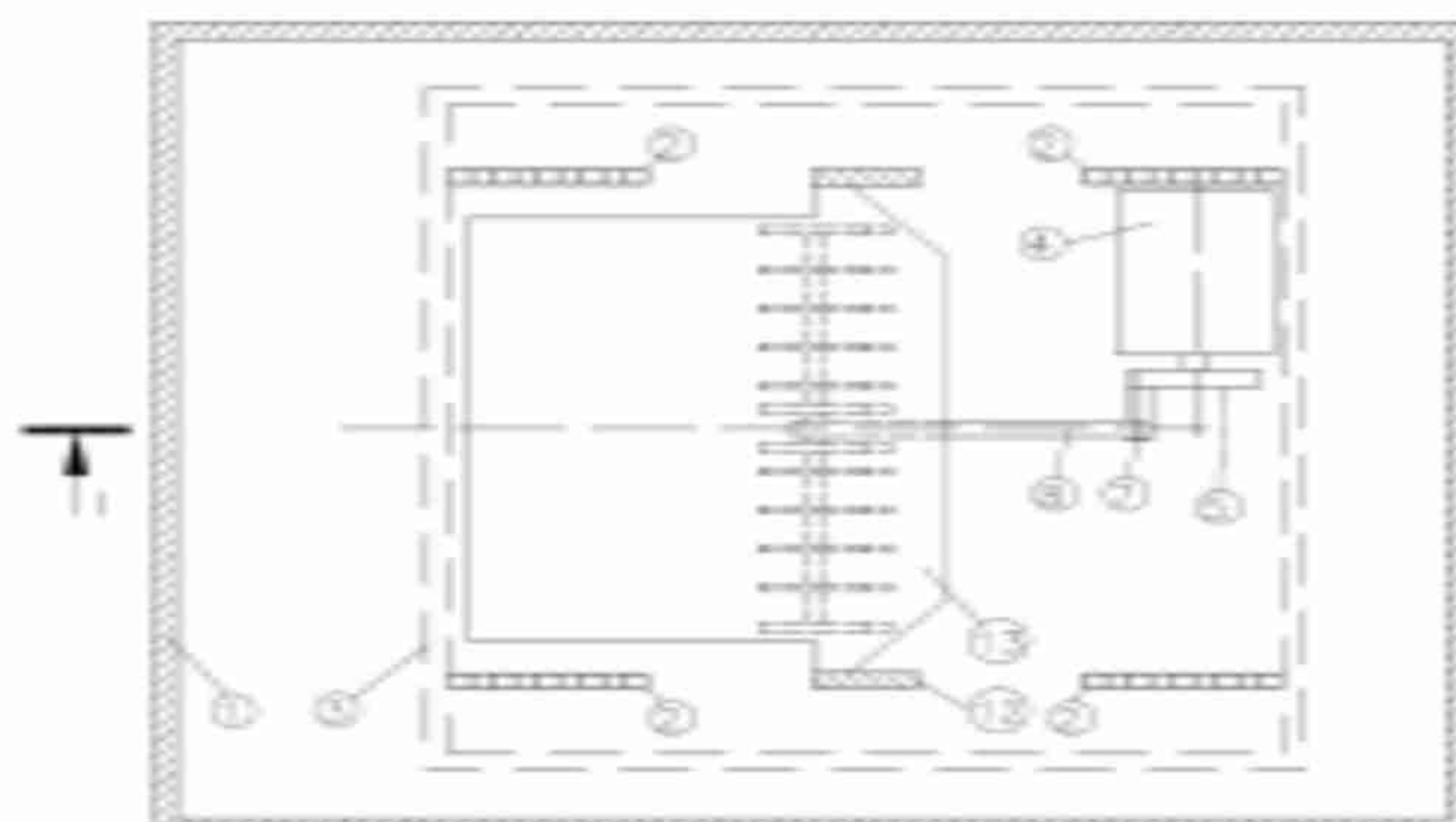
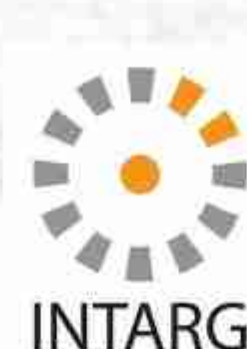


Fig. 2. Bird view of the MECHANO-ELECTRIC LAUNDRY DRYER.

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OCCUPATIONAL HEALTH AND SAFETY STUDY FOR THE WORK ENVIRONMENT OF AN EQUIPMENT DISTRIBUTION OPERATOR

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The study presents the occupational risks within SC AC BONT TOOLS SRL, a company specialized in the distribution of industrial equipment.
The main hazards associated with the activity are identified, such as handling heavy equipment, ergonomic risks, exposure to chemicals and transport safety.
Solutions are proposed for the findings, creating work safety, highlighting the importance of periodic training, equipment modernization and optimization.

ADVANTAGES OF THE PROPOSED STUDY

IDENTIFICATION AND REDUCTION OF OCCUPATIONAL RISKS

OPTIMIZATION OF WORK PROCESSES

IMPROVEMENT OF LEGAL COMPLIANCE

INCREASE IN EMPLOYEE SATISFACTION AND PRODUCTIVITY



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