

CLAIMS

1. Tray return module (19) for an inspection facility extending between a public area (P) for deposit (1) of travelers' belongings and a secure area (S) for recovery (5) of these belongings, this module (19) comprising an opening (21) for receiving said trays (2),
5 means (23) for returning said trays (2) towards said deposit zone (1), and means for transferring said (2) trays from said opening (21) to said return means (23), wherein said transfer means comprise a plurality of transfer rollers (27a, 27b, 27c, 27d) with helical thread (39) capable of engaging with the edges (17) of said trays (2) and arranged between said receiving opening (21) and said return means (23).
- 10 2. Return module (19) according to claim 1, in which said return means (23) are provided under said opening (21) and four transfer rollers (27a, 27b, 27c, 27d) with helical thread and with substantially vertical axis are arranged at the periphery of said opening (21).
3. Return module (19) according to claim 2, in which said transfer rollers (27a, 27b, 27c, 27d) extend to said return means, and have a thread (39) having a pitch gradually
15 increasing from said opening (21) to said return means (23).
4. Return module (19) according to one of claims 2 or 3, in which the pitch of said thread (39) is adapted to ensure the transfer of said trays (2) from said opening (21) to said return means (23) with a rotation of said transfer rollers (27a, 27b, 27c, 27d) of at most 2.5 turns.
- 20 5. Return module (19) according to any of the preceding claims, comprising at least one (29a, 29b) motor for driving at least one of said transfer rollers (27a, 27d or 27a, 27c), and transmission means (35) of this rotational movement to the other transfer rollers.
6. Return module (19) according to any of the preceding claims, comprising means (31a, 31b) for detecting presence of said trays (2).
- 25 7. Return module (19) according to any of the preceding claims, in which said return means comprise a plurality of return rollers (23) with substantially horizontal axes.

8. Inspection facility arranged between a public area (P) for depositing (1) personal belongings of travelers in trays, and a secure area (S) for recovering these belongings (5), comprising at least one tray return module (19) according to any one of the preceding claims.