Summarizing:

- INBODY presents an accuracy comparable with laser systems;
- the instant acquisition of INBODY allows the generation of clean meshes, while meshes reconstructed with some laser scanner may present overlapping problems if the patient moves during the acquisition;
- manual laser scanners require expert operators in their use, and often more passages to obtain a closed surface. In these tests, the acquisition phase of the manual laser lasted 10 minutes, and some part of the model still present holes;
- as every photogrammetric system, INBODY can reconstruct not only the geometry, but also the texture;

4. Conclusions

In this paper we presented INBODY, an instant photogrammetric 3D body scanner for orthopedics. We explained its hardware and software setup, as well as the developed prototype. We validated it as a possible and cost effective solution for the 3D digitization of human body models.
Several aspects need to be improved, as for example the use of workstations with more than one GPU for exploiting parallel computing. Moreover, the authors will provide INBODY of an ad-hoc software for photogrammetric processing.
The applications fields in which INBODY may be used are multiple: orthopedics, sport, medicine, fashion and beauty, cosmetic and dermatology. In the future we also expect that scanning systems may partially be used for monitoring a certain class of diseases, as scoliosis, whose diagnostics and monitoring now require invasive technologies.

Acknowledgment

The authors would like to acknowledge the people of the Ortopedia Ruggiero, in particular Francesco Bruno, for their support in testing and validating INBODY. Moreover, many thanks go to Anna Grazioso, for her graphics support.

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