

## Facilitate™ – efficient, accurate and predictable

Astra Tech Facilitate™ Computer Guided Implant Treatment is based on SimPlant™ software from Materialise™ and was launched in October 2006. Facilitate Software is an efficient, high-precision, three-dimensional, computer-based diagnostic tool for the accurate planning and performance of precise, predictive and safe implant placement<sup>1-9</sup>. Facilitate is specially developed for the Astra Tech implant system, however, also including an internal “library” of virtual implants for all major implant manufacturers. Facilitate Surgical Guide is fabricated at the supportive level of choice (i.e. bone, mucosa or tooth) for directed drilling and precise implant installation in 3 dimensions<sup>6,10-12</sup>.

There is a growing amount of clinical documentation on the use of 3D visualizations and surgical guides involved in dental implant planning and treatment<sup>5,13-19</sup>. Benefits of computer guided implant treatment documented in the scientific literature include the possibility to make bone volume calculations<sup>3, 20</sup>, measure bone densities<sup>3, 21-24</sup>, identify vital structures<sup>3, 25</sup>, predict initial implant stability<sup>26</sup> and predictably perform flapless implant surgery<sup>18, 27</sup>, although minor deviations from planned implant position in coronal and apical portions and implant angulation have been reported<sup>9, 17, 19, 28</sup>, further underlining the importance of keeping the recommended safety distance. Further documented advantages are the enhanced interactive communication with the prosthodontist<sup>10, 29</sup>, enabling optimized biomechanical design of the superstructure. Moreover, widened treatment options by means of ability to treat patients that previously could not be restored with implants due to the inability to accurately find and utilize the limited bone available have been reported<sup>29, 30</sup>. Facilitate is also an efficient tool for patient communication and treatment plan presentation. Costs may be lowered when chair time is shortened, in particular when immediate loading is applied<sup>31, 32</sup>. Patient safety can be increased since highly precise and predictable outcomes are achieved when using high accuracy stereolithographic surgical guides<sup>6, 7, 11, 33-35</sup> compared with implant placement using traditional guides<sup>12</sup>.

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