

# Xcel Limbs

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Globally, numerous individuals lose their limbs each year due to various reasons. This unfortunate event has profound psychological impacts, manifesting as mild depression, lack of confidence, and emotional fragility. Helping them rebuild confidence, facilitating better integration into society, and enabling them to lead normal lives and work become crucial. 3D simulated limbs may be one of the most direct solutions to assist them in smoother societal integration.



Image 1. Anthropometry and Smart Model Algorithm: Before designing Xcel Limbs, the designer utilised a 3D body scanner technique and smart model algorithms to evaluate optimal prosthetic data, offering direct support for 3D modelling. This advanced technique ensures highly personalised and precise prosthetic designs for each user, laying a solid foundation for them to regain confidence and trust in usage.



Image 2. Health-Oriented Design: Xcel Limbs prioritizes the overall health of users, going beyond appearance. By offering comprehensive health support and adaptive solutions, the design aims to help users lead healthier and more active lives.



Image 3. Environmentally Friendly Material Selection: Xcel Limbs utilizes high-strength resins and other eco-friendly materials in its construction. This ensures that the prosthetic not only meets the highest standards of performance but also aligns with principles of environmental sustainability. The choice of materials reflects a commitment to creating a product that is both technologically advanced and environmentally responsible.

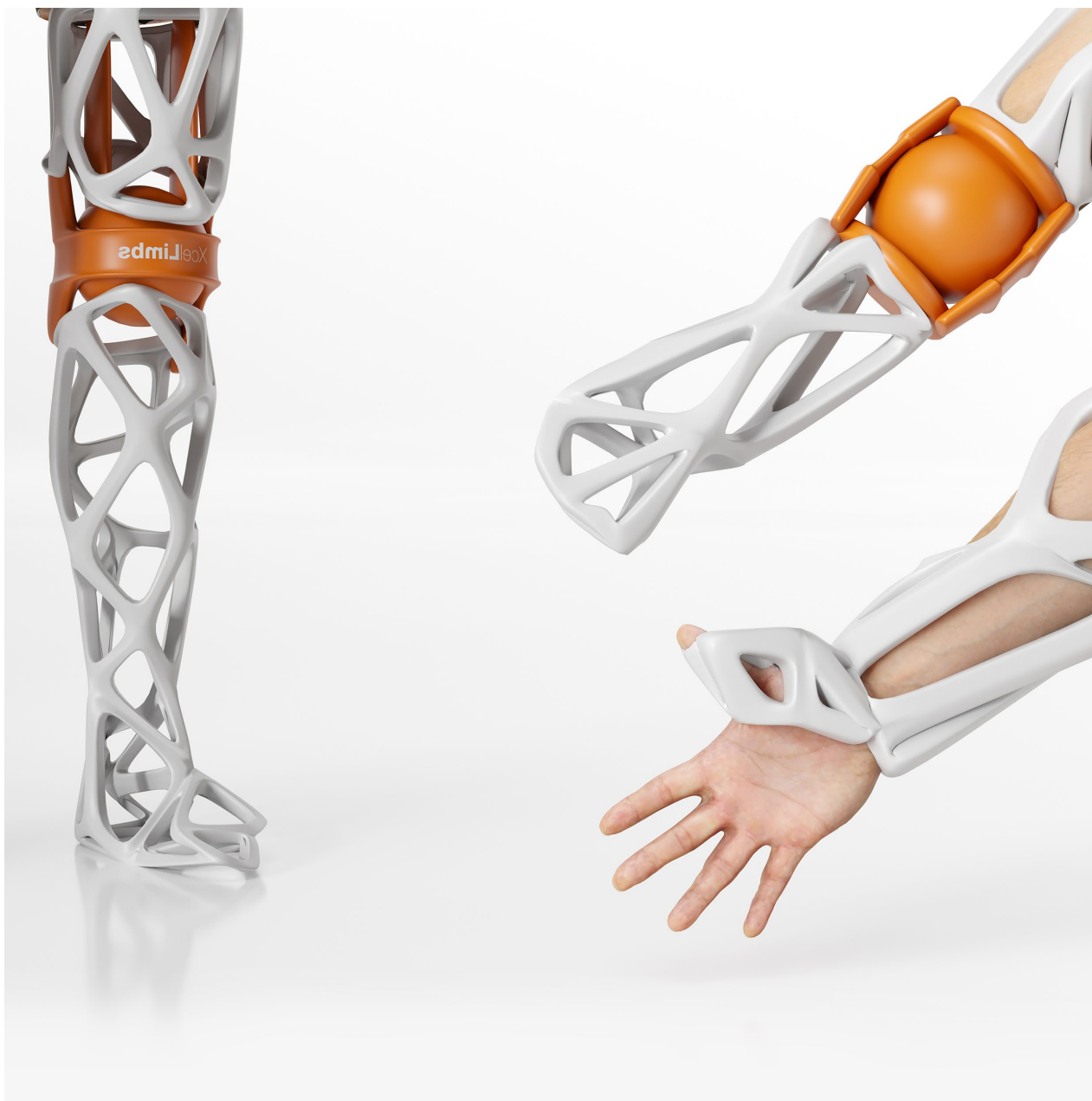


Image 4. Intelligently Integrated Wearable Device: Xcel Limbs is not just a prosthetic but also an intelligent wearable device equipped with sensors. It collects real-time user activity data through a mobile application, seamlessly integrating with their lifestyle. This technological innovation aims to enhance the user experience, providing a more natural and comfortable feel during usage.





Image 5. Emotional Support and Social Integration: Xcel Limbs' design intends to provide emotional support, assisting users in building confidence and fostering social integration. This dimension of care aims to make users feel a deeper understanding and support.