Survey on Environmental Footprint and Sustainable Practices in Prosthetic Foot Technology

***Target Audience: Prosthetic Limb Centers***

**Instructions:**

* This survey aims to gather information on the environmental footprint and sustainable practices in the prosthetic foot industry.
* Your responses are confidential and will be used solely for academic research.
* Please answer all questions to the best of your knowledge.

Part 1: General Information

1. How many years has your prosthetic limb center been in operation?

Ans:

1. On average, how many prosthetic feet does your center supply each year?

Ans:

1. Is your prosthetic limb center Privately Owned or operated by the Government?

Ans:

Part 2 : Production and Material Usage

1. On average, how many transtibial limbs do you deliver each year? How many socket revisions do you conduct each year?

Ans:

2. Which parts of the prosthetics manufacturing are done in-house vs outsourced?

Ans:

 3. For the past year, could you provide the total quantity of each material used in the manufacturing of prosthetic feet at your center?

* Carbon fiber (in kg):
* Polyurethane (in kg):
* Silicone (in kg):
* Resins (in kg):
* Adhesives (in kg):
* Plaster of Paris (in kg):
* Metals (please specify type and quantity in kg):
* Other materials (please specify type and quantity in kg):

4. Describe the main manufacturing processes used for upper vs lower limb prosthetics(in-house), including any specific techniques or technologies (e.g., injection molding, 3D printing, handcrafting).

Ans:

5. Can you share the average monthly energy consumption (in kWh) and water consumption (in liters) specifically attributed to the manufacturing of prosthetic feet at your center?

Ans:

Part 3: Lifecycle of Prosthetic Feet

6. What is the average lifespan of Upper limb vs Lower limb prosthetics provided by your center(i.e. how long the prosthesis is expected to last total)? And how does this lifespan compare to the industry average?

Ans:

7. How long before the Upper vs Lower Limb prosthetics needs to be modified or adjusted in your center on average per year?

Ans:

8. Are there any environmental factors that significantly impact the lifespan of your prosthetic legs?

Ans:

9. What is the end of life plan for prosthetics delivered by your centre? Further, Do you have a Recycling or Reusing program for prosthetics at the end of their life cycle?

Ans:

Part 4: Environmental Impact Assessment

10. What is the estimated carbon footprint of a typical prosthetic foot produced in your center (in kg CO2)? Do you consider the carbon footprint of your supply chain?

Ans:

11. What is the percentage of total waste generated annually by your center from prosthetic feet manufacturing for each of its components?

Ans:

12. What kind of packaging do you use for shipping prosthetic feet, and is it environmentally friendly?

Ans:

Part 5: Alternative Materials and Sustainable Methods

13. Do you have any certifications related to environmental management or sustainable practices?

*[ ] ISO 14001*

*[ ] B Corp Certification*

*[ ] Other (please specify): \_\_\_\_\_\_\_\_\_\_\_*

14. On a scale of 1 to 5, how important is sustainability in the manufacturing and use of prosthetic feet to you?

1 - Not important at all

2 - Slightly important

3 - Moderately important

4 - Very important

5 - Extremely important

Ans:

15. Has your center implemented any innovative sustainable manufacturing methods for prosthetic feet? If so, please describe them. What challenges has your center faced in adopting sustainable practices for prosthetic feet?

Ans:

16. How do you ensure that your suppliers and partners also adhere to sustainable practices?

Ans:

17. Lastly, What specific sustainability goals has your center set for the next 5 years? Additionally, what suggestions do you have for reducing the environmental impact of prosthetic feet?

Ans:

18. Are there any areas within prosthetic foot technology that you believe require further research for improving sustainability? If so, please specify.

Ans:

*Thank you for participating!*