



SCIENTIFIC WRITING

Improvement of sport by dint of biomimicry

LEFAY Paul - CESBRON Theo - HERVE Alexis - GELINEAU Emmanuel - GUYON Soren





SUMMARY:

- 1. Introduction
- 2. METHODS
- 3. RESULTS
- 4. DISCUSSION
- 5. CONCLUSION



1. Introduction



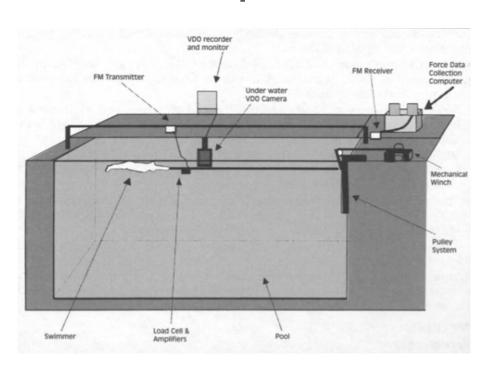
Wildlife inspire innovations

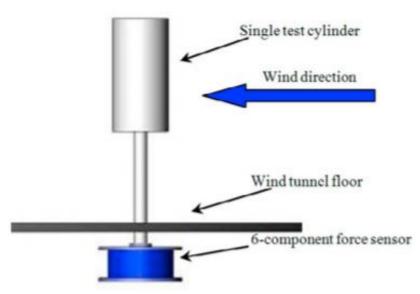




2. Method

Swimsuit experience







2. Method

Knee protector experience

- Impact protection
- Mobility
- Comfort
- Air flow
- Fitting Price

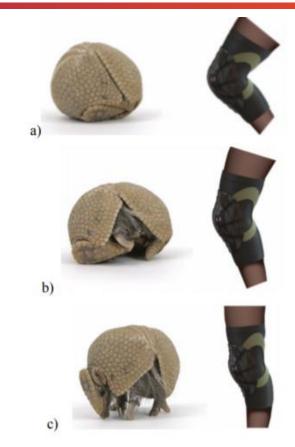


Figure: Different protection positions



3. Results

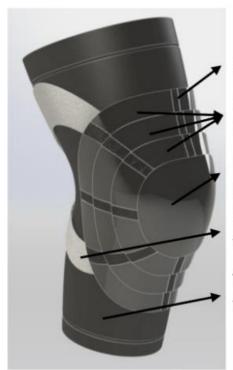
Swimsuits comparison

| Towing Condition | Normal (N) | Fastskin TM (N) | Difference (N) | Difference (%) |
|-------------------|---------------|-------------------------------|-------------------|-------------------|
| Surface (gliding) | 347.9 | 328.6 | 19.3 | 5.5 |
| Surface(kicking) | 306.4 | 290.2 | 16.2 | 5.3 |
| Depth (gliding) | 296.9 | 266.7 | 30.2 | 10.2 |
| Depth (kicking) | 282.1 | 268.6 | 13.5 | 4.8 |
| Overall | 1233.3 | 1154.1 | 79.2 | 6.4 |

Figure: Drag forces summed over the three towing velocities



3. Results



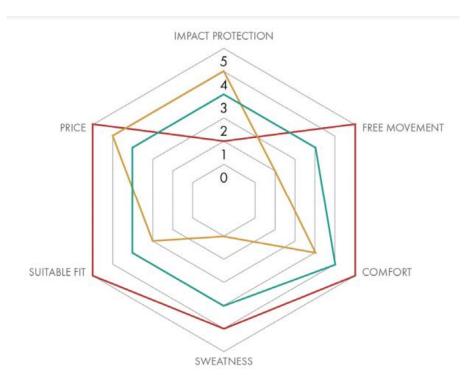
Elastic connector

Secondary protection rings

Central protection plate

Elastic band belt for fastening

Trouser legs (dri-fit technology)

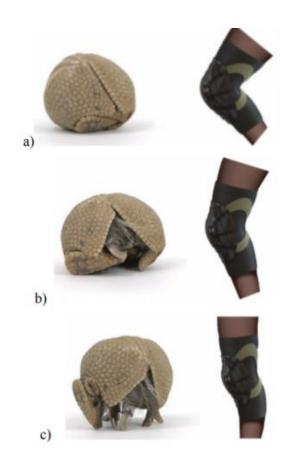




4. Discussion

- The fastskin
- The armadillo protectors
- Improvements







5. Conclusion







THANK YOU FOR YOUR ATTENTION!