

Strength Assisting Orthotic

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Need / Solution

- Workers that do heavy lifting and are prone to back injury and other such ailments.
- Current rehabilitation orthotics are expensive and inaccessible.
- Our team (Power-Flex Industries) is designing and building a powered strength-assisting orthotic arm.



Market

- This orthotic will have applications in physical therapy, military use, commercial use, and will be marketed to these groups.
 - Adding strength to warehouse workers and other such civilian jobs
 - As a rehabilitation tool for people with loss of motion or strength
 - As a soldier enhancing wearable

Marketplace Competition

- One similar device is the TALOS Exosuit being developed by MIT, DARPA, and U.S. Army Research.
- Its features include assisting lifting with heavy loads, protecting the wearer from bullets, and making use of multiple cameras and sensors.
- The current design is bulky and limits natural movement.



Product Development

- Stage 1: Proof of concept/rough prototype
- Stage 2: Information gathering/networking/refinement
- Stage 3: Trial runs/final refinements
- Stage 4: Initial Production

Conclusion

- Our product is a powered strength-assisting orthotic arm.
- We plan to market it with applications in heavy lifting jobs, physical therapy, and military use.
- A prototype will be completed by early April.