AKtion Knee

The AKtion Knee is a new design in BioDapt's product lineup that is smaller, lighter, less costly, with a more simplified design compared to its flagship product, the Moto Knee2. The prosthetic's multiple calibration options help fine tune its alignment, flexure resistance, and range of motion depending on the wearer and the activity it's being used for—from mountain biking, to snowboarding, to running, and more.





Protolabs machined seven different components included in the AKtion Knee

The parts need to withstand any environment, remain highly durable, and resistant to corrosion. Materials include:

Aluminum 7075 (anodized)

- Corrosion resistant
- Tough
- Durable

Stainless Steel 316

- Corrosion resistant
- Machinable
- Cost effective while maintaining quality

The upper crossbar included an off-angle feature that required 5-axis machining, allowing the tool to move in five different directions, compared to only three directions with 3-axis machining.



Frames

CNC Milling
Aluminum 7075
Threaded Features: 1



Bottom mount

CNC Milling Aluminum 7075 Threaded Features: 8



Upper shock shaft

CNC Turning Aluminum 7075 Threaded Features: 2



Threaded insert

CNC Milling Stainless Steel 316/316L Threaded Features: 1



Socket mount

CNC Milling
Aluminum 7075
Threaded Features: 8



Upper crossbar

CNC Milling Aluminum 7075 Threaded Features: 2