Experiment to test strength of gripper finger

!!Placeholder images of an older design!!

Et billede, der indeholder rød, indendørs, kunst

Automatisk genereret beskrivelse

To assess the strength of the gripper's fingers, we'll secure the bottom/gear in a fixture and apply force to the fingertip, determining the point where torque on the finger is maximized.



Et billede, der indeholder værktøj, rød, indendørs, plastik/plast

Automatisk genereret beskrivelse

**4**

**Green**: Force applied & measured with dynamic force cell

**Black:** Reference line.

We will conduct four tests from different angles to evaluate various collision scenarios with the finger:

(1) Standard collision from closing on the external diameter of a checkers piece.

(2) Collision when opening, i.e., gripping the internal diameter of a part.

(3) Collision when closing, i.e., gripping an external diameter larger than a checkers piece.

(4) Collision when moving down to collect a piece.

Additionally, there is an argument to be made regarding collisions with a part in the gripper. However, these are more complex and considered beyond the scope of this analysis.

**3**

**2**

**1**