

Assembly instructions: pulley swing

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Overview testbed

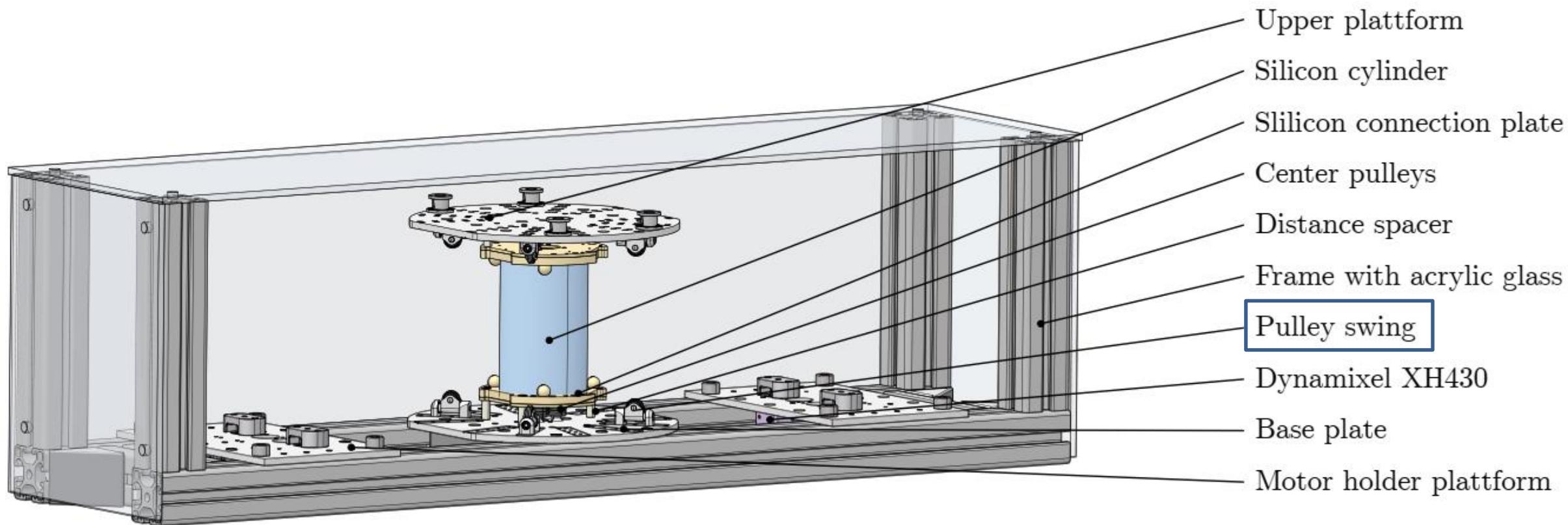


Fig. 2: Overview of the proposed open source tendon-driven continuum mechanism with all involved components.

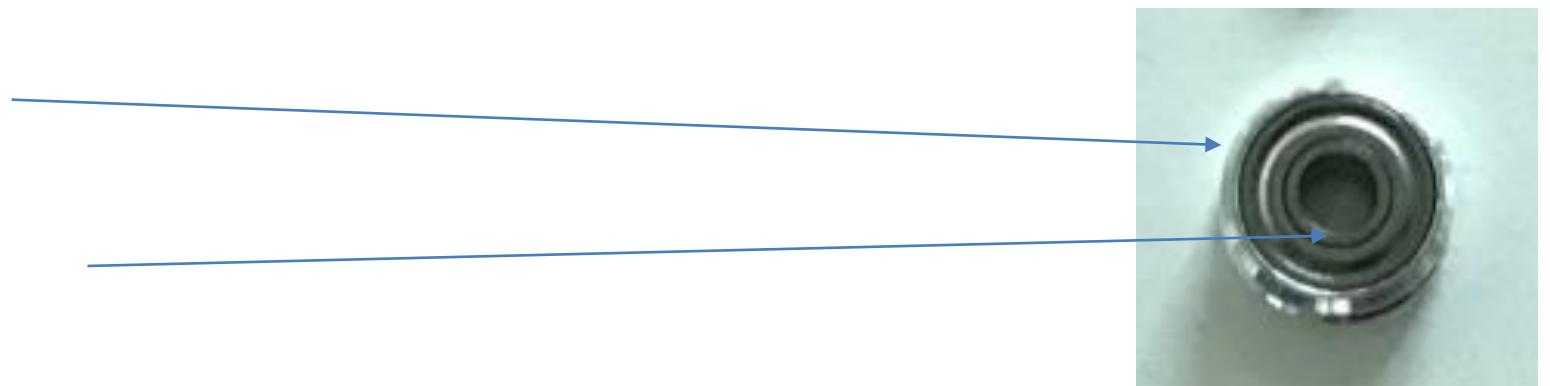
Pulley components

Manufacturing parts:

- Pulley guide (ANYMAL_NECK_PULLEY)

Off-the-shelf parts:

- Axial bearing (Bearing 694
- 04X11X04-2Z)



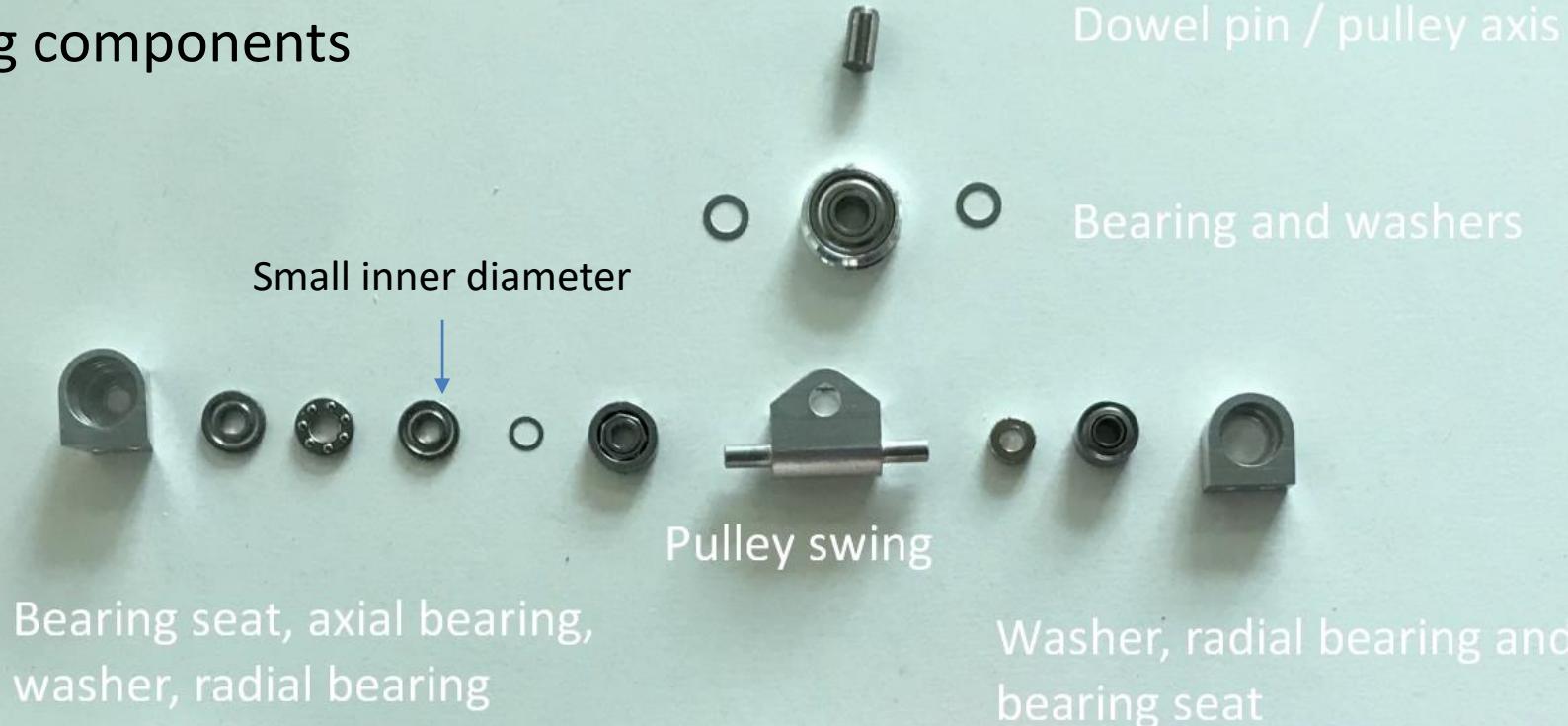
Tools:

- ISO propanol and cleaning equipment
- Loctite 648

Pulley: assembly instructions

- Clean the pulley guide and the outer circumference of the bearing using ISO-propanol
- Put slight amount of Loctite 648 on the inner circumference of the pulley guide
- Place the pulley guide on the bearing carefully and make sure no glue is entering the bearing
- Respect a curing time of 24h

Pulley-swing components



Pulley-swing components

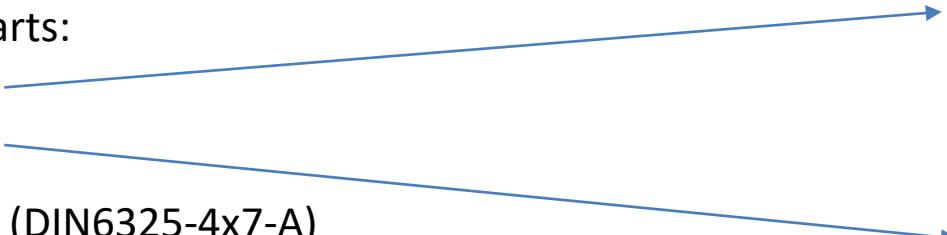
Assembled parts:

- Pulley

Manufacturing parts:

- Pulley swing (ANYMAL_NECK_UMLHEBEL)
- Swing holder with axial bearing
(DV_ANYMAL_NECK_UML_HOLD)
- Swing holder (DV_ANYMAL_NECK_UML_HOLD)

Off-the-shelf parts:

- Bearings
 - Washers
 - Dowel pin (DIN6325-4x7-A)
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- Axial bearing (F3-8M)
 - Radial bearing (MR93 03X9X2,5)
 - Radial bearing (693 03X8X03-2Z)
 - Pulley washers (AS 4,10x5,85x0,15)
 - Thin washers (AS 3,20x4,40x0,10)
 - Thick washer (SPACER 3,20x6x2)

Tools:

- Parallel pliers

Pulley swing: assembly instructions

- Assemble the pulley into the pulley swing including the two washers and the dowel pin. Therefore, place the pulley and one washer at each side into the swing and make sure every component is coaxial with the hole in the swing
- Use the parallel plier to introduce the dowel pin into the hole of the swing
- Assemble the left and the right hand side of the pulley swing as shown in the explosion-image two slides above
- For convenience, please follow the assembly instructions in the video:

