

# **Assembly instructions: continuum structure and the platforms**

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# Components

## Assembled parts

- Continuum structure with
- 8x Pulley
- $2 \cdot n_t$  pulley swings

( $n_t$  = number of tendons)

## Manufacturing parts

- 2x DV\_NECK\_DFG\_BASE\_PLATE (Upper/lower platform)
- $n_t$  x DV\_NECK\_ADAPT\_UML (Distance spacer to adjust height of pulley swing)

## Off-the-shelf parts:

- Distance spacer (of length  $l$ )
- 6x Screws (fixing continuum and platform)



DV\_NECK\_DFG\_BASE\_PLATE



DV\_NECK\_ADAPT\_UML

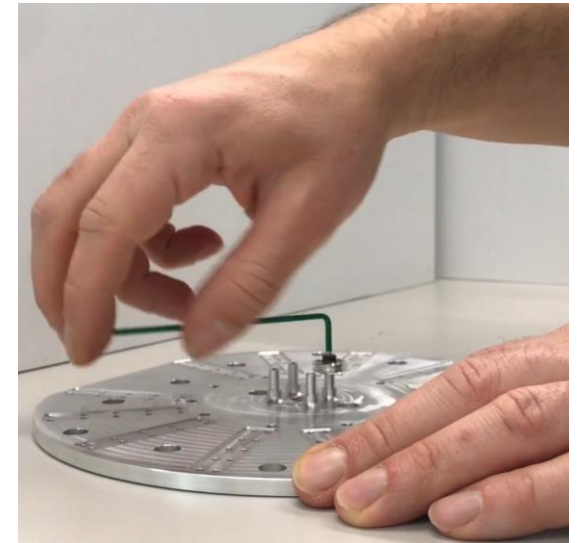
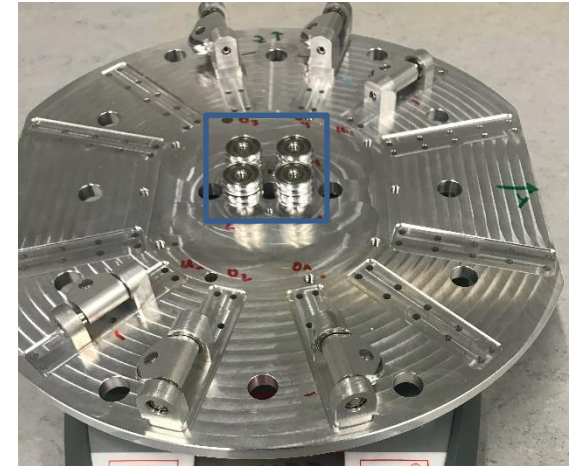
# Assembly instructions: lower platform with central pulleys

## Tools:

- Allenkey
- Different washers or other spacers

## Instructions:

- 8x pulleys are to be assembled to the center of the lower platform at four mounting spots (2 pulley on top of each other respectively)
- The inner diameter of the pulley bearing and the respective mounting at the lower platform represent a fitting, therefore need to be assembled with special care
- Use a screw (spec?) + additional spacers/washers to slowly push the bearing on the inner diameter on the mounting spot
- Repeat the procedure 7x



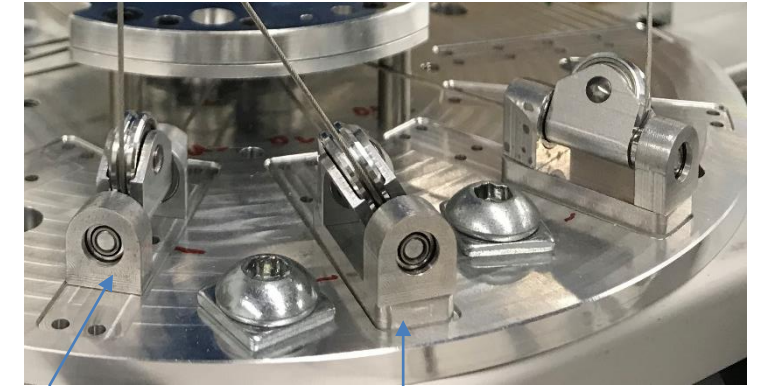
# Assembly instructions: lower/upper platform with pulley swings

## Tools:

- Allenkey

## Instructions:

- Decide on the number of tendons
- Decide, which tendon is routed on the lower or upper central pulley
- Dependent on which central pulley is used for the routing, distance spacer (DV\_NECK\_ADAPT\_UML) need be put below the pulley swing
- Assemble pulley swing (+ additional spacer) with 4 Zylinderkopfschrauben (spec? (spec for with spacer))



no spacer

spacer used

# Assembly instructions: lower/upper platforms and continuum structure

## Tools

- Allenkey

## Instructions:

- Decide on the used distance spacer and select the three screws for the lower platform (and the three screws for the upper platform respectively)
- Place the distance spacer in between the continuum structure and the platform.
- Use one screw (spec?) after the other to fix the continuum structure through the spacer on the platform using the allenkey

