

# Modular Lightweight Gripper System

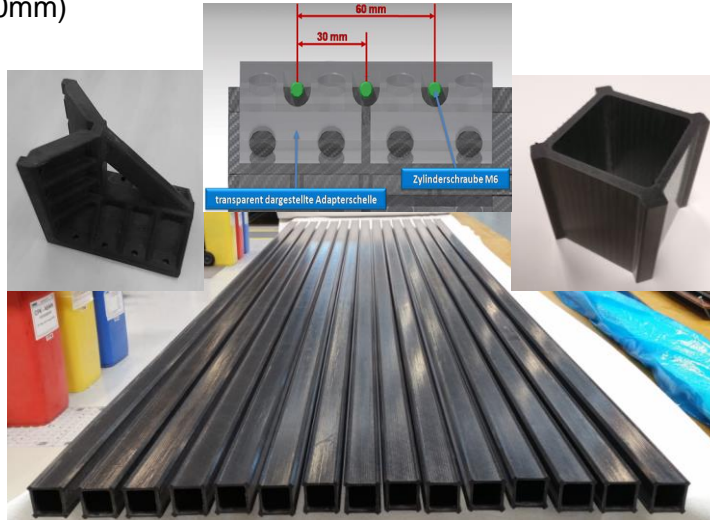
## Level 1: Weight reduction: 15-25 % depending on gripper system

consists of the conventional three EGT-profiles made of aluminum in combination with CF-SMC elements including various connectors and two robot flange plates

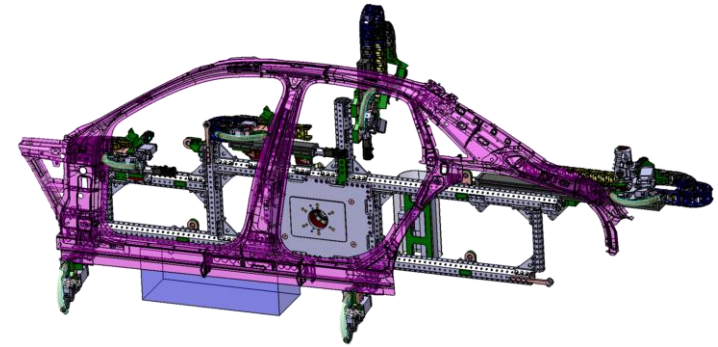


## Level 2: Weight reduction: 40-60 % depending on gripper system

System kit consisting of complex pultruded CFRP profile (the "X-Profile") with multi-directional layer structure, various connecting elements made of CF-SMC and just one CFRP round tube (d=40mm)

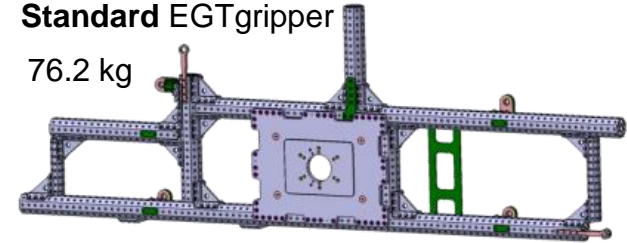


## Example: Robot gripper of Audi for car sidewall



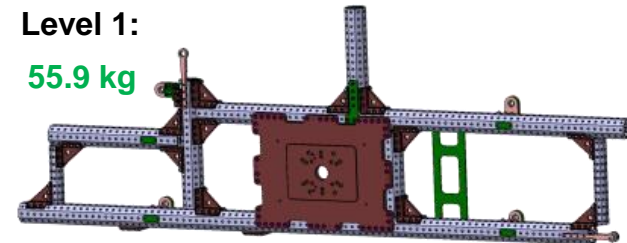
### ▶ Standard EGTgripper

76.2 kg



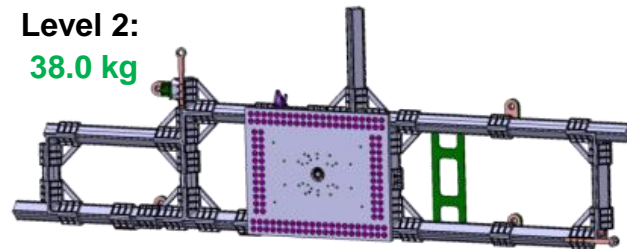
### ▶ Level 1:

55.9 kg



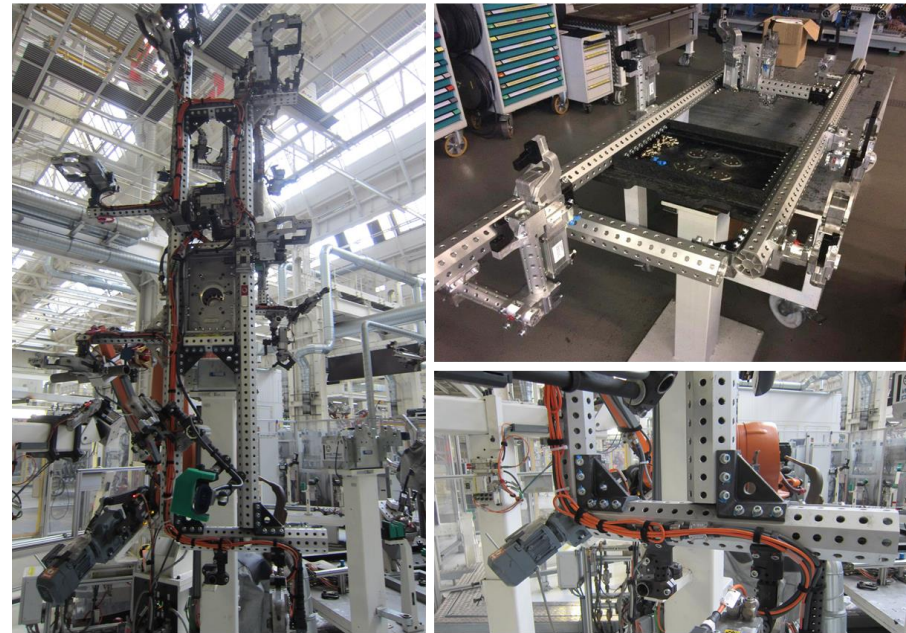
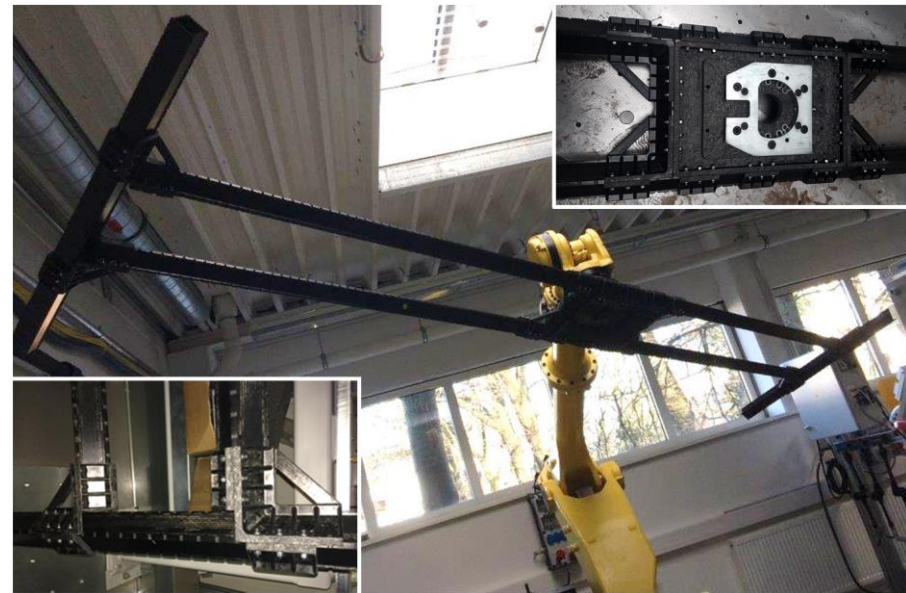
### ▶ Level 2:

38.0 kg



## Our Project Team

- ▶ Marc Fette, CTC Stade & LaFT HSU (PM)
- ▶ Reinhard Dorner, Audi AG (Ingolstadt)
- ▶ Frank Stief, PSW / Audi AG (Ingolstadt)
- ▶ Roland Winkler, PSW / Audi AG (Ingolstadt)
- ▶ Thomas Rieker, Audi AG (Neckarsulm)
- ▶ Martin Spohn, Audi AG (Neckarsulm)
- ▶ Thomas Rommel, Volkswagen AG (Wolfsburg)
- ▶ Andreas Schell, Volkswagen AG (Wolfsburg)
- ▶ Manila Brandt, Airbus Operations GmbH
- ▶ Frank Neuhaus, Airbus Operations GmbH
- ▶ Marco Lahn, LaFT HSU / UniBw Hamburg
- ▶ Remo Hinz, CTC Stade



## Our Supporters

