

**“Blade Gripper“
The Slim-line Gripper System**

- The construction of the gripper starts after the assigned devices have already partly been constructed.
- Limited accessibility for the gripper arm/ clamping point design.
- As the gripper generally carries various devices, only small areas remain as "free space" for the gripper arms to get access into the device.
- Result: Only limited space is available for projecting gripper extensions /arms

→ Gripper arm design must be extremely narrow!

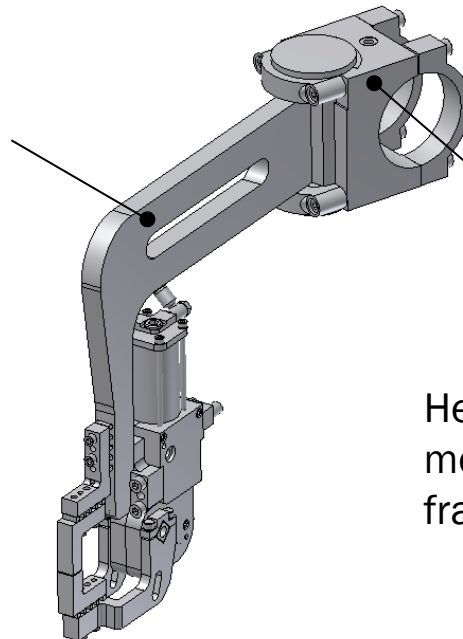
Approach:

Replacement of conventional gripper arms by narrow blades.

Idea of the Blade Gripper:

- Profiles and overhanging tubes of conventional gripper arms are replaced by **blades**.
- The flame-cut flat steel constructions of the clamp brackets in the devices serve as patterns for the **blade grippers**.

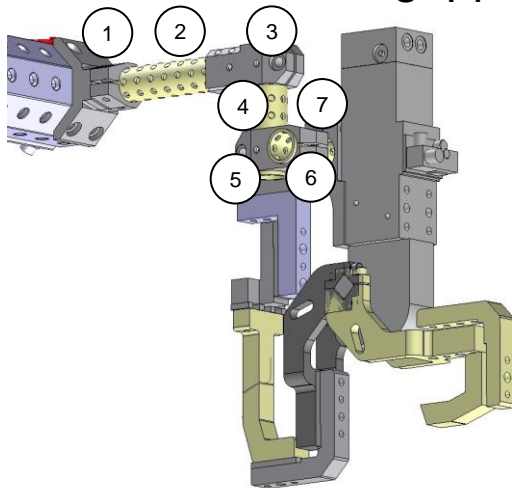
Gripper arm = **blade**, highly rigid aluminium, thickness: 20mm/ 25mm



Here: swivel adapter for mounting the **blade** to the base frame

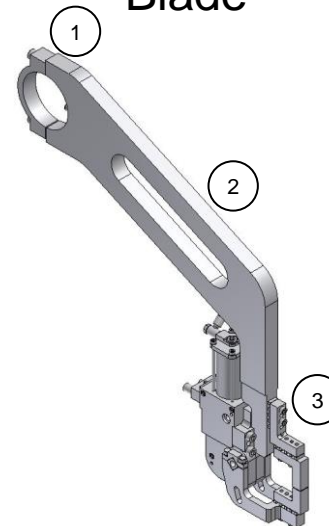
- Mounted on the base frame, one element – the blade – replaces the complex extension arm assembly with up to 6-8 component parts
- The “blade“ is a flat smooth component.
- It is slim and only as wide as required -> 20–25 mm
 - > Optimized accessibility
- Simple construction
 - > Clamping point is achieved along the shortest path

Conventional module gripper



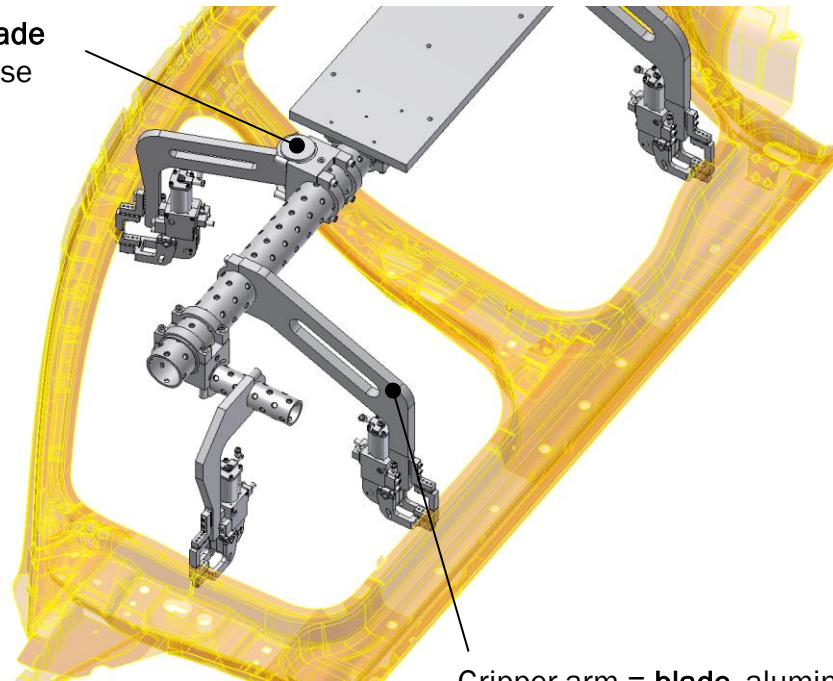
(here Euro gripper)

Blade



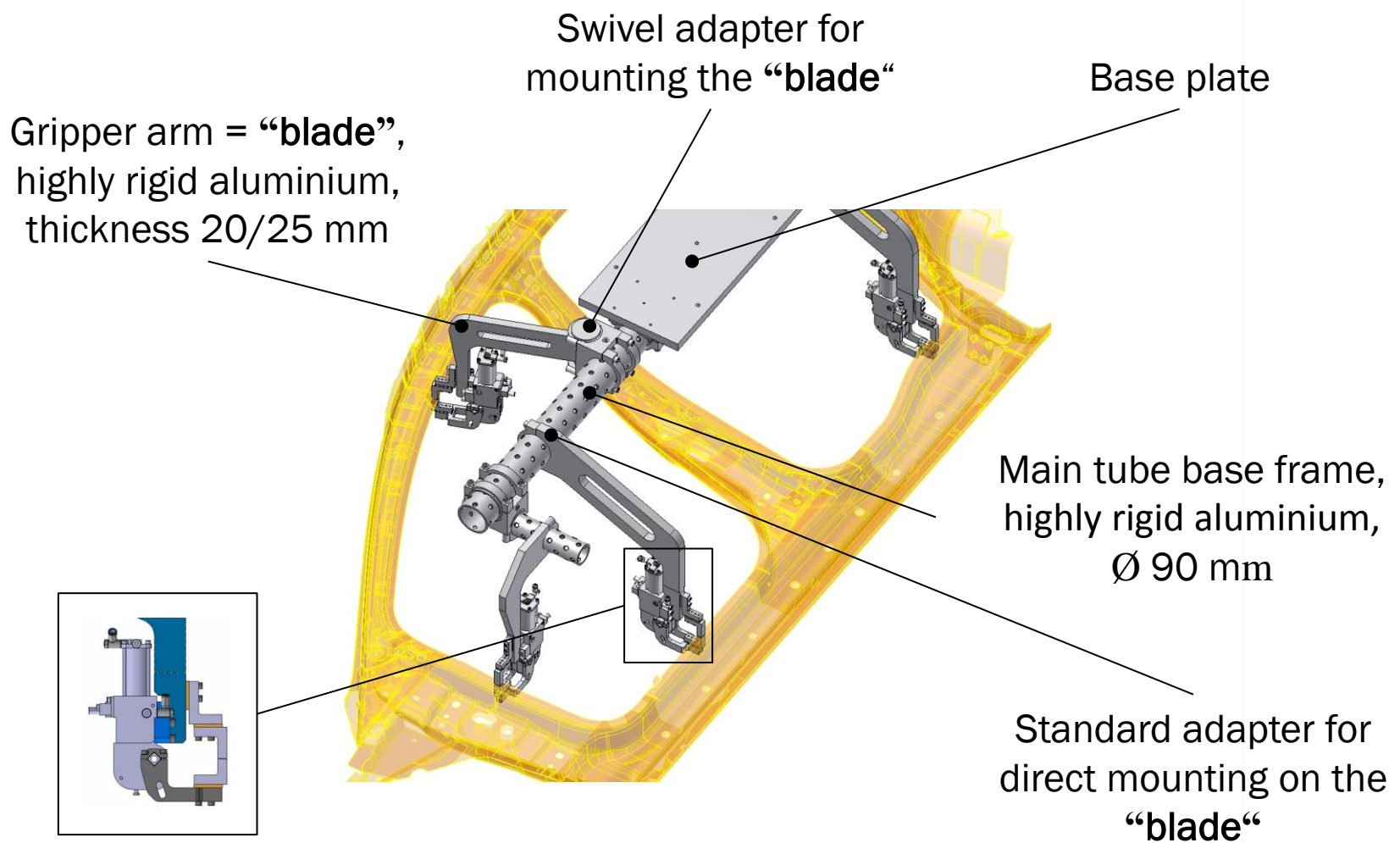
Base frame can be built as circular tube system, circular frame tube system or hybrid system.

Standard adapter for mounting the **blade** on the designed gripper arm to the base frame



Gripper arm = **blade**, aluminium construction, individually designed extension/arm, thickness: 20mm / 25mm

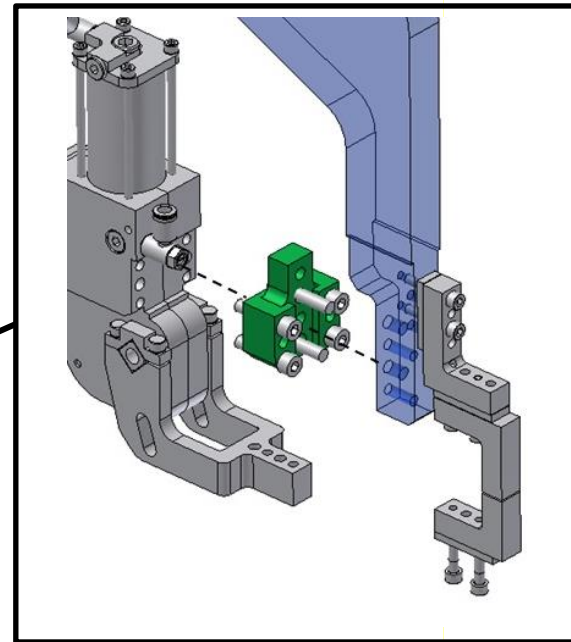
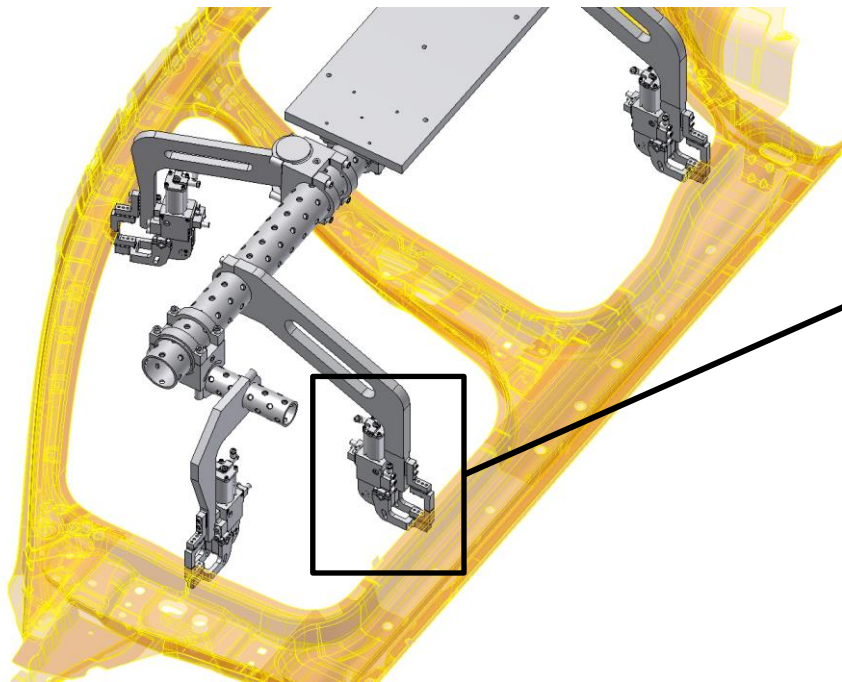
Example of Concept System

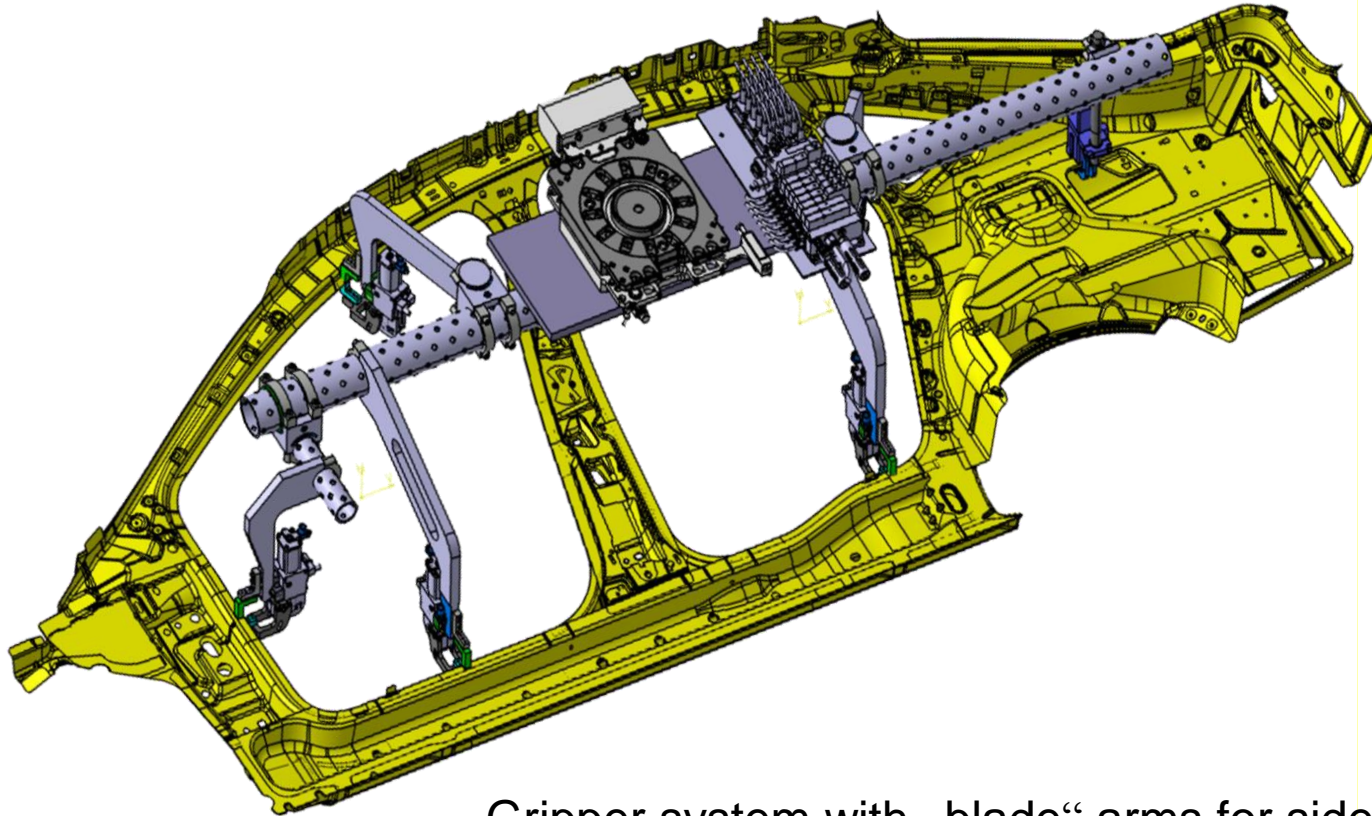


New gripper clamp with U-shaped fixture for direct mounting to the "blade"

Concept sketch

New gripper clamp with U-shaped fixture (1) for "blade"





Gripper system with „blade“ arms for side panel

Thank you for your kind attention.

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