

About 80% weight reduction compared to conventional gripper with same holding force
Example lightweight and integrated functionality



Bronchial gripper



Application

- Hole gripper for part handling
- Weight of gripper: 19g
- Max weight of part: 12kg
- Integrated pneumatic membrane leverages gripping force
- Save working pressure range 1-7 bar
- Long time test 5 Mio cycles

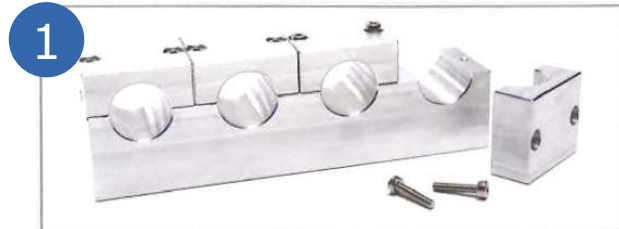
Advantages

- About 80% weight reduction compared to conventional gripper
- Fully integrated gripper, no assembly costs
- Individually scalable

More than 30% cost advantage due to additive manufacturing and optimized design

Exemplary comparison of conventional and additive manufacturing

Conventional manufacturing
(13 parts, aluminum alloy)



Additive manufacturing, conventional design
(13 parts, PA12)



Additive manufacturing, optimized design
(2 parts, PA12, colored)



Illumination for vision technology

kuhnstoff
SCHICHTBAUTECHNOLOGIE

Application

- Diode clamps for illumination purposes in machinery environment
- Stepwise transfer from conventional to additive manufacturing

Advantages

- About 80% reduction of assembly time (2 instead of 10 minutes)
- More than 30% cost advantage
- Shorter manufacturing and thus delivery time (reduction of about 75%)