

# Hydroforming

## Fields of application and potentials



STYLING | PACKAGE | SAFETY | ENVIRONMENTAL PROTECTION | LIFETIME | STRESS RESISTANCE | FLEXIBILITY | SERVICE

### INCREASED MATERIAL USAGE AND REDUCTION OF CO<sub>2</sub> EMISSIONS

It may be a long way to go from an idea via a development to a final series-production part. With the right support, you can find the optimized solution for challenging jobs – hydroforming offers interesting alternatives to conventional half-shell technology or classic materials. Schuler supports you in all phases of your project.

### Every engineer is aware of the following requirements

- Development of attractive designs
- Limited space due to additional functions
- High engineered stiffness and high-strength materials for optimum safety
- Minimizing weight and optimizing the material usage grade with the aim of reducing CO<sub>2</sub> emissions
- Elimination of weak points due to single piece design (as opposed to half shell)
- No additional weld seams

### SCHULER SMG GMBH & CO. KG

Louis-Schuler-Str. 1  
68753 Waghäusel | Germany  
Phone +49 7254 988-220  
Fax +49 7254 988-339  
info@schulergroup.com  
www.schulergroup.com

# Fields of application and potentials

## EXAMPLES OF EXECUTED PARTS



A pillar.



Exhaust parts.



Door Handle.

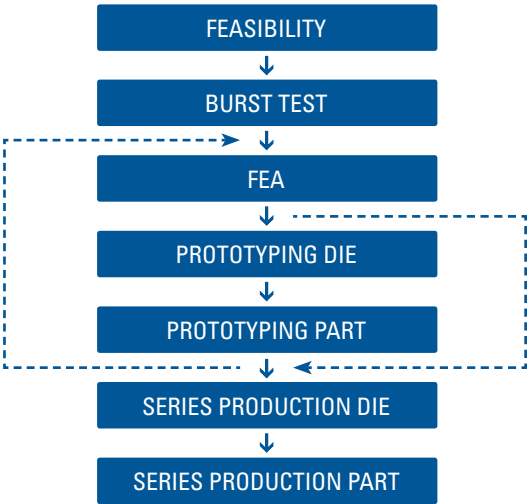
### Design freedom

The possibilities of hydroforming are extensive. It can be used to find the optimum solution for specific challenges related to the composition and design of parts. Our highly qualified process engineers and designers are at your disposal from the first idea onwards. Together, we can turn your ideas into reality. Right up to series production. Even after commissioning, our global service team is completely at your disposal – anytime.

Schuler is with you all the way in executing cost-effective and technically feasible solutions.

## BENEFITS OF THE PROCESS

- Exceptional design freedom for styling and packaging requirements
- Extremely stiff parts due to complex geometry
- High stiffness due to strain hardening during the forming process or usage of high strength steels
- Lower weight due to optimized design without doubling material
- High material usage due to
  - Minimized stamping and trimming waste
  - Feeding to final material geometry
- Long lifetime due to optimization of shape and prevention of weld seams



Schuler is your strong partner on the way to an environmentally friendly and successful product.