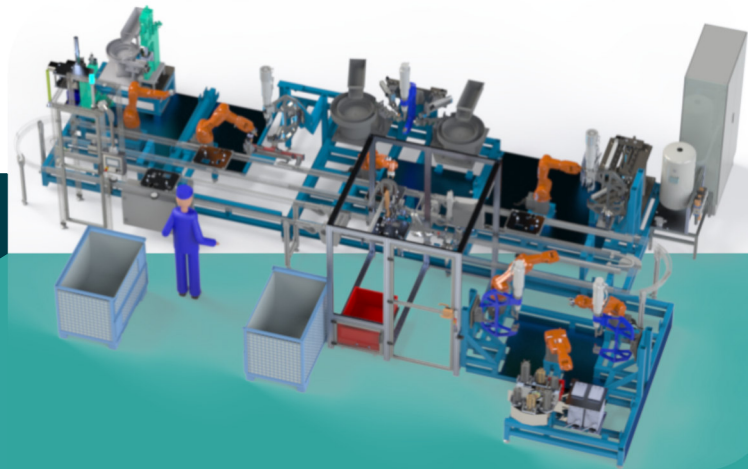
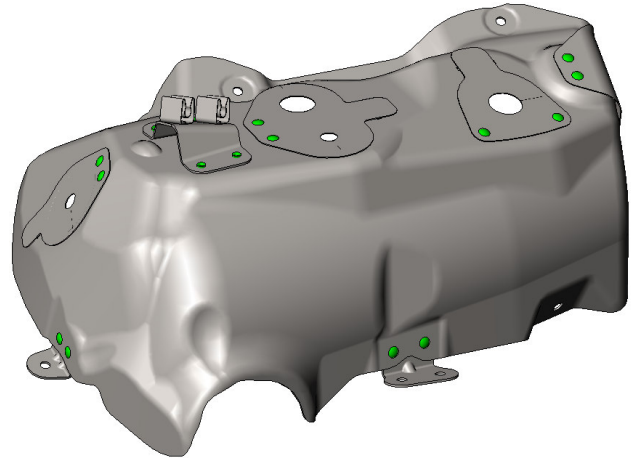


Assembly station punch rivets



- Universal, fully automatic punch riveting system for joining sheet metal assemblies, adaptable to an extremely varied range of parts.
- Setup:
 - Several stations can be coupled for different joining processes
 - Robot-guided workpiece adapters
 - Parts transport via transfer belt
 - Parts supply via conveyors with hopper
 - Stationary punch riveting system for different rivet types
 - Automatic separation of OK and NOK parts
 - Manual equipment of the blank and removal of the finished part
- Highlights:
 - Variety of different workpiece types, materials, material thicknesses
 - Minimum set-up time
 - Short cycle times due to robotic handling, even for extremely varying rivet positions
 - High riveting process reliability due to force displacement measuring system



Technical Data

Workpiece	multi-part free-form sheet metal parts (car engine heat shields)	
Workpiece dimensions		
Sheet thickness	approx. 2–4 mm	
Outer dimension	approx. 500 mm	
Number of individual components	3-10 or more	
Materials	Sandwich material, cold-formed steel, textile mats	
Assembly operation	Punch rivets	
Tools		
Punch rivet system	with rivet supply unit	
Industrial robot	KUKA®	
Part supply	Geho®, rotary conveyor, longitudinal conveyor, parts hopper	
Rivet	loose hollow punch rivets	
Number per workpiece	8-20	
Cycle time	1–2 sec moving from rivet to rivet 2 sec riveting process	
Machine control	SIMATIC S7 PLC	
Visualisation	Mobile touch panel	
Electrical characteristic data	IEC	UL / CSA
Supply	400 V / 50 Hz / 63 A	480Y/277 VAC / 60 Hz / 63 A
Control voltage	24 V DC	24 V DC
Connected load	12 kVA	12 kVA
Compressed air connection	6 bar	
Airborne noise emission		
Max. sound pressure level	<83 dB(A)	
Eq. permanent noise level	<75 dB(A)	