



Industrial  
robot mechanics  
for every controller



For more information see [www.autonox.com](http://www.autonox.com)



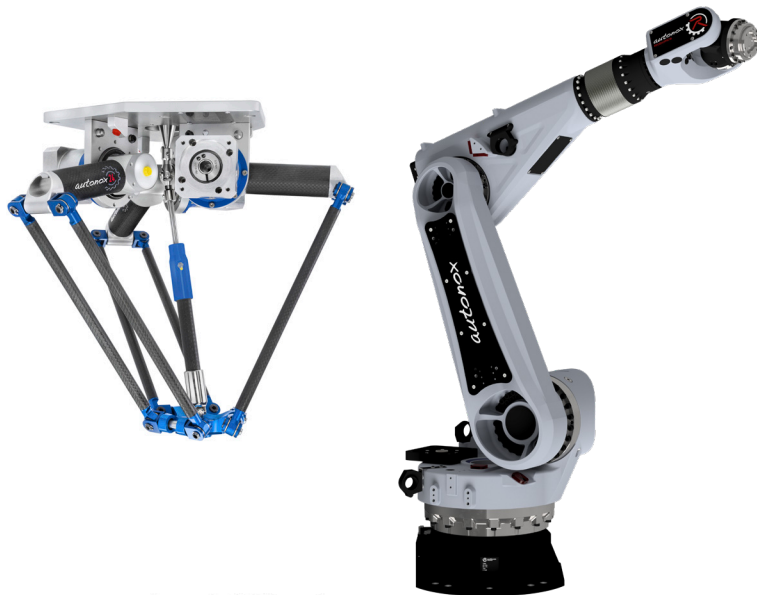
## autonox Robotics:

**autonox** mechanics don't depend on a specific controller. This means you can operate them with any suitable controller. The robots are delivered with the matching gearbox adapters for the desired servo drives.

You can choose between Hygienic Design or Standard robots.

We offer you a maximum choice of mechanical structures, degrees of freedom, payloads, working areas and options.

Development, engineering and assembly are conducted completely in our company. This guarantees our demand on highest product quality "made in Germany".



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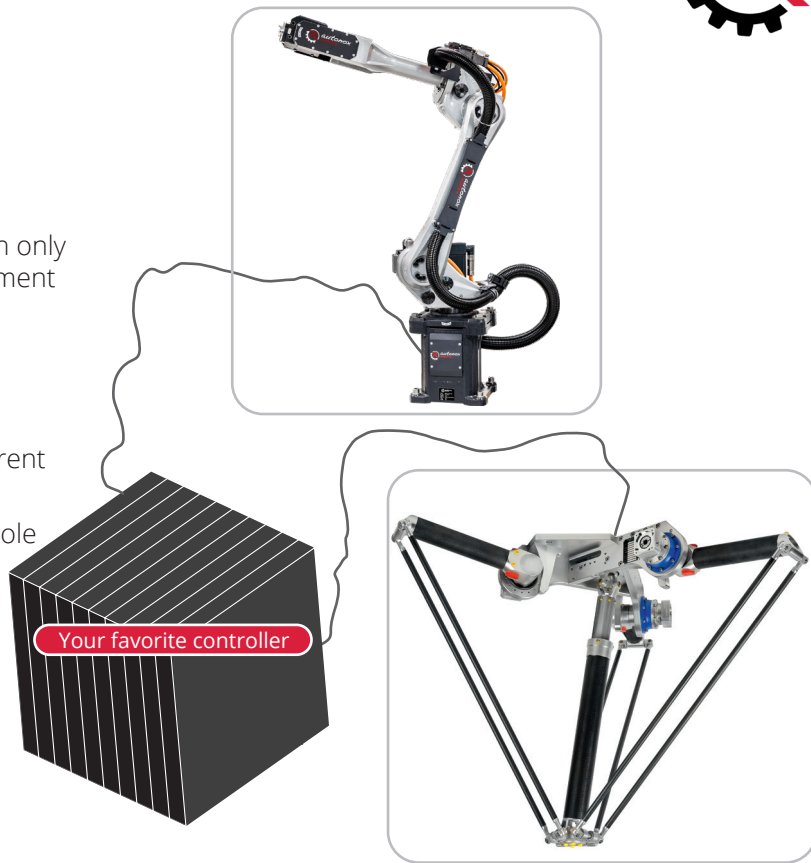
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## Controller independence

- The complete automation can be done with only one controller platform: the same development environment for robots and the machine's other automation components.
- No specialized robot programmers are required.
- No problems with interfaces between different controllers.
- The same hardware components in the whole machine (drives, frequency converter, ...).
- Reduced storage costs
- Simplified service





## Control manufacturers / partners





## Nominal payloads

kg	DuoPod	DELTA	articc / sCara
0,5		X	
1		X	
3	X	X	X
6	X	X	X
8			X
12	X	X	
15	X		X
16			X
20		X	X
30			X
40	X		
45			X
50		X	
60			X
80	X		
150	X		

sCara



↓ 6 kg ↓



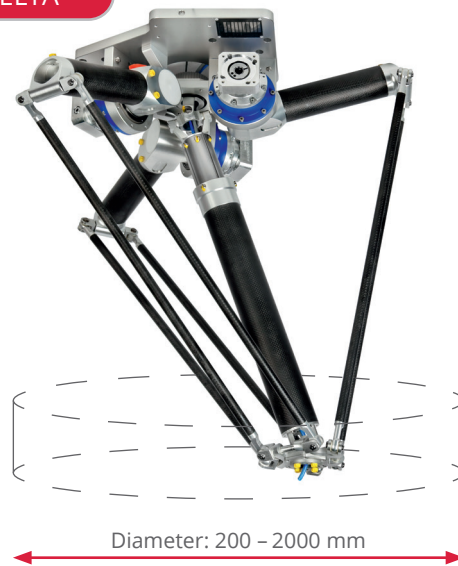


## Working area

DuoPod

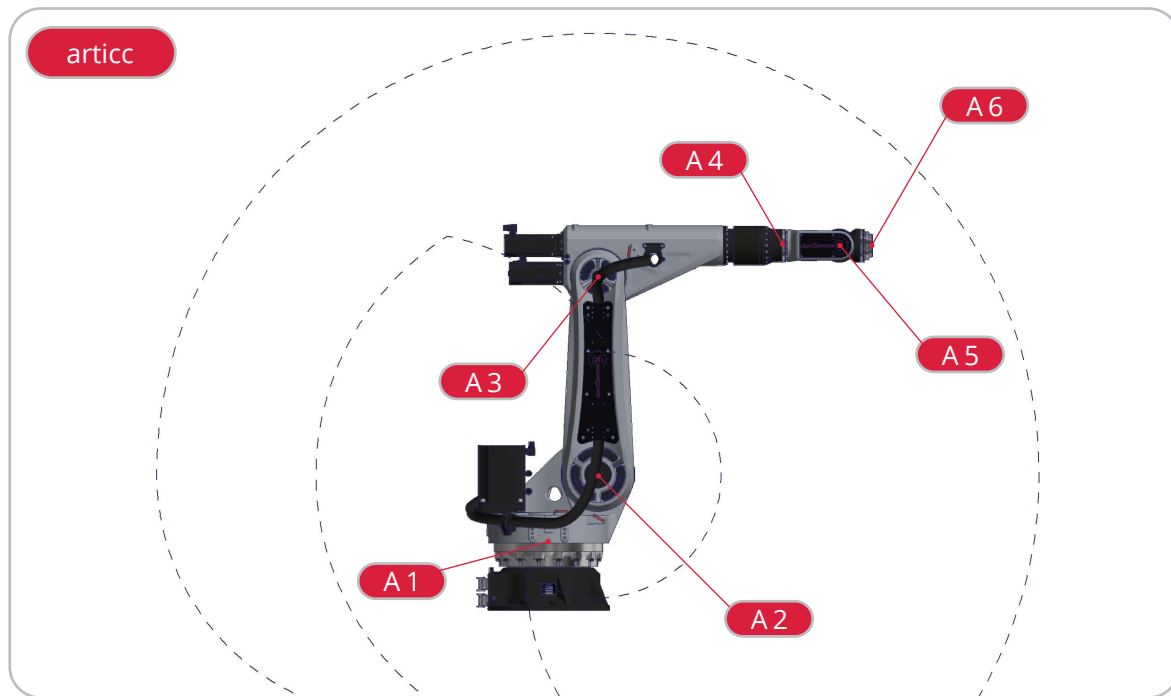


DELTA





ARTICULATED Robot mechanics (**articc / sCara**) are characterized by their wide working area, their degrees of freedom and flexibility.

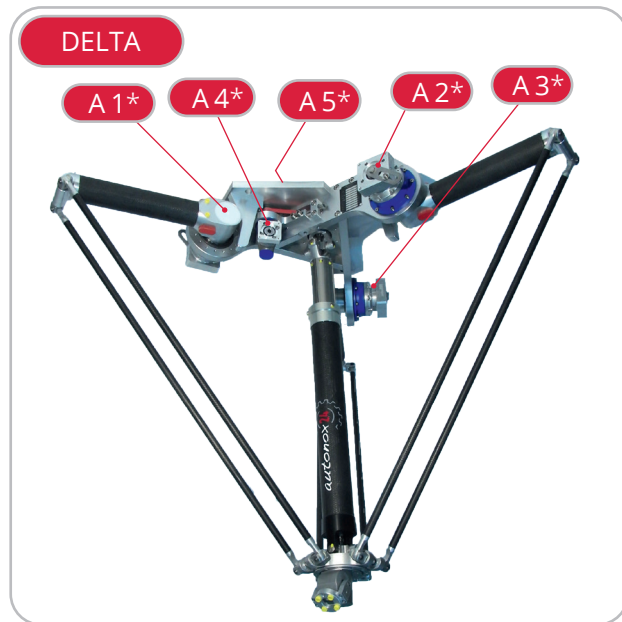




## Axes / degrees of freedom

Axes	Robot type	Term	Degrees of freedom translational	Degrees of freedom rotatory
2	DuoPod	RV2 / RVE2 / RVS2 / RVSD2	2	0
3	DuoPod	RVS3 / RVS3X / RVS3Y	2	1
3	DELTA / articc	RL3 / RLE3 / RLZ3 / articc3	3	0
4	DuoPod	RVS4	2	2
4	DELTA / sCara	RL4 / RL4X / RL4Y / RLE4 / RLT4 / RLZ4 / sCara4	3	1
5	DELTA	RL5 / RLT5	3	2
6	articc	articc6	3	3

DELTA and DuoPod Robot mechanics (parallel kinematics) are characterized by low, moving deadweights and stationary\* drives (motors and gears). The motor cables don't move.





## Tool flange 'T' / Tool shaft 'TS'

For gripper manipulation (e.g. opening, closing, spreading) many **autonox** robot mechanics are available with additional tool flange(s) 'T' or an additional tool shaft(s) 'TS'.



E.g.: RVE2 - T3 - ...



E.g.: RL4 - TS1 - ...





## Tool media supply external

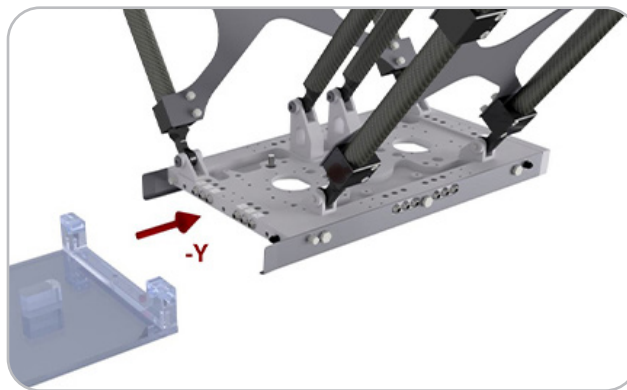


- ... pressure air line
- ... vacuum line
- ... power line



## Tool changing system 'ATS'

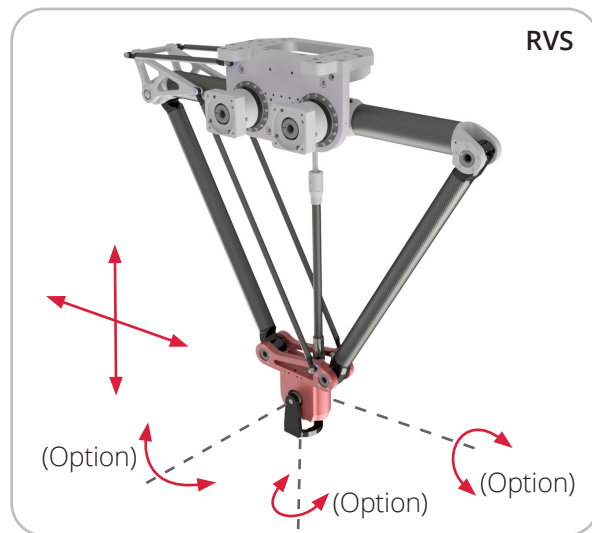
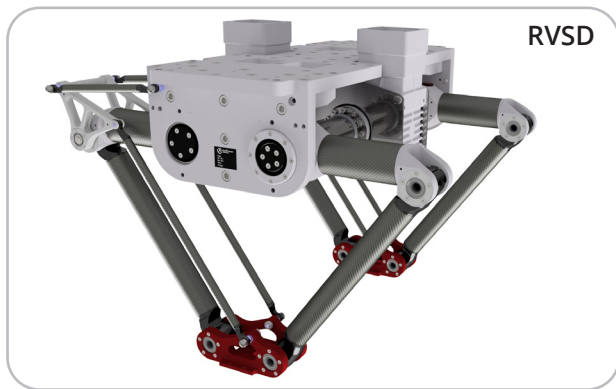
- Grippers and tools can be changed quickly and easily.
- Up to tenfold media transmission in the tool changing system (pneumatics / vacuum / electric power)
- with vertical (low tool weights) and horizontal (high tool weights) change direction.





## DuoPod Robot mechanics 'RVS' and 'RVSD'

- Narrow design (RVS)
- High performance
- Versatile application fields
- Number of axes: 2 to 4
- Many options (e.g.: T-shaft(s))



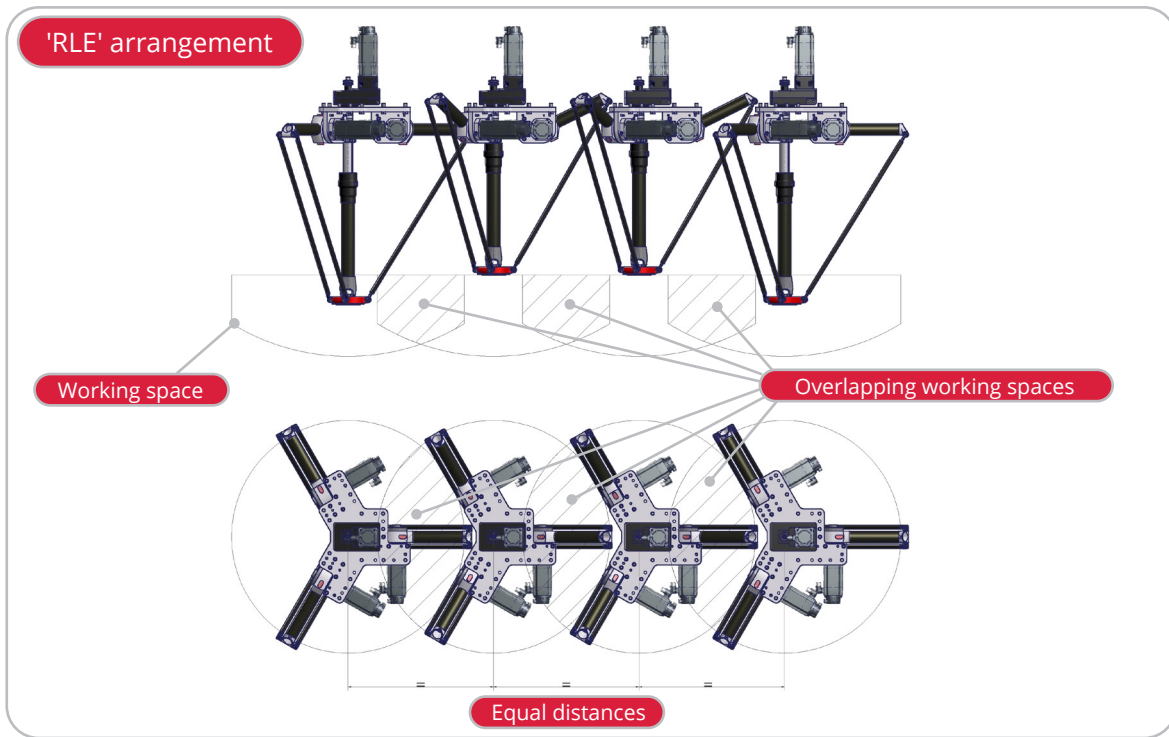


## DELTA Robot mechanics 'RLE' (for close robot arrangement)

- Close arrangement possible due to asymmetrical positioning of the drives and special gearboxes.
- High rigidity of the tool holder  
(the 120° arrangement between the upper arms remain unchanged)
- High performance
- Constant distance between the robots
- Multiple overlapping working spaces





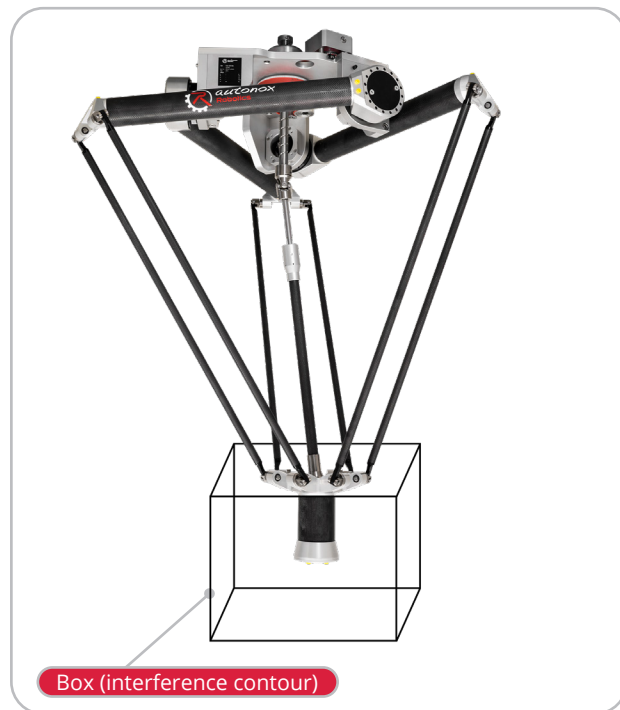




## DELTA Robot mechanics 'RLZ'

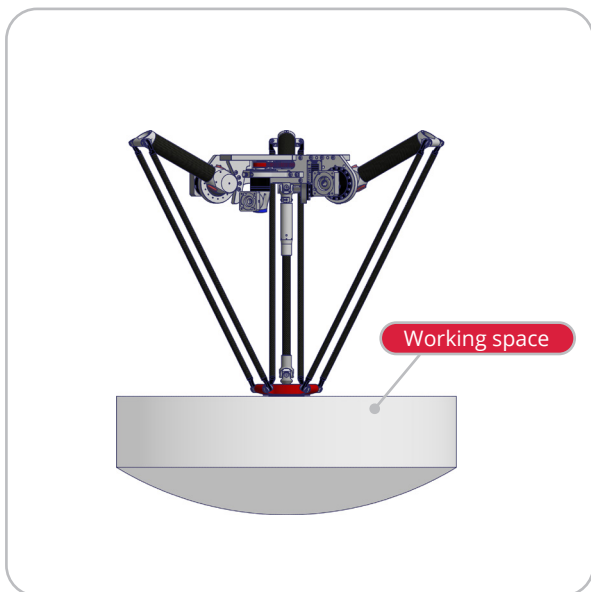
- Z-stroke almost doubled compared to standard DELTA robots of the same size
- Ideal for packaging in deep boxes
- Robust construction remains

World's first  
innovation!  
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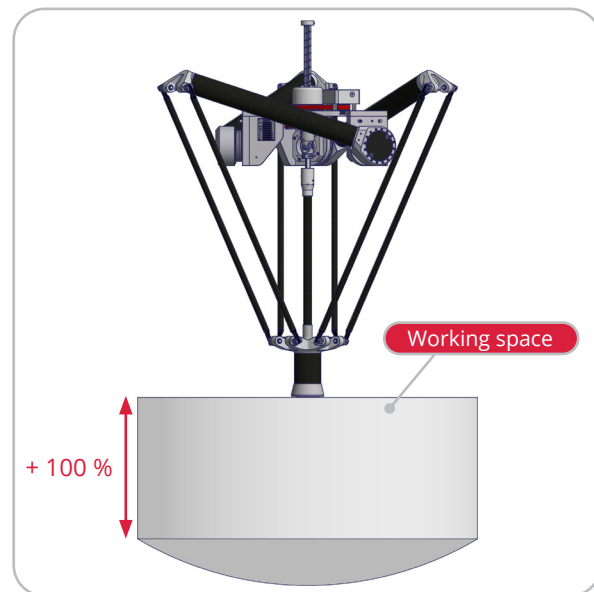




## Standard DELTA Robot mechanics



## DELTA Robot mechanics 'RLZ'





## ARTICULATED Robot mechanics 'articc' / 'sCara'

- Available with 3 to 6 axes
- Payloads from 3 kg to 700 kg
- Various working ranges and options
- Articulated robot mechanics for every controller

**BECKHOFF**

**rexroth**  
A Bosch Company

**K E B A**  
Automation by innovation.

**RA** **Rockwell  
Automation**

**SERVOTRONIX**  
always in motion™

**SEW**  
**EURODRIVE**

**SIEMENS**



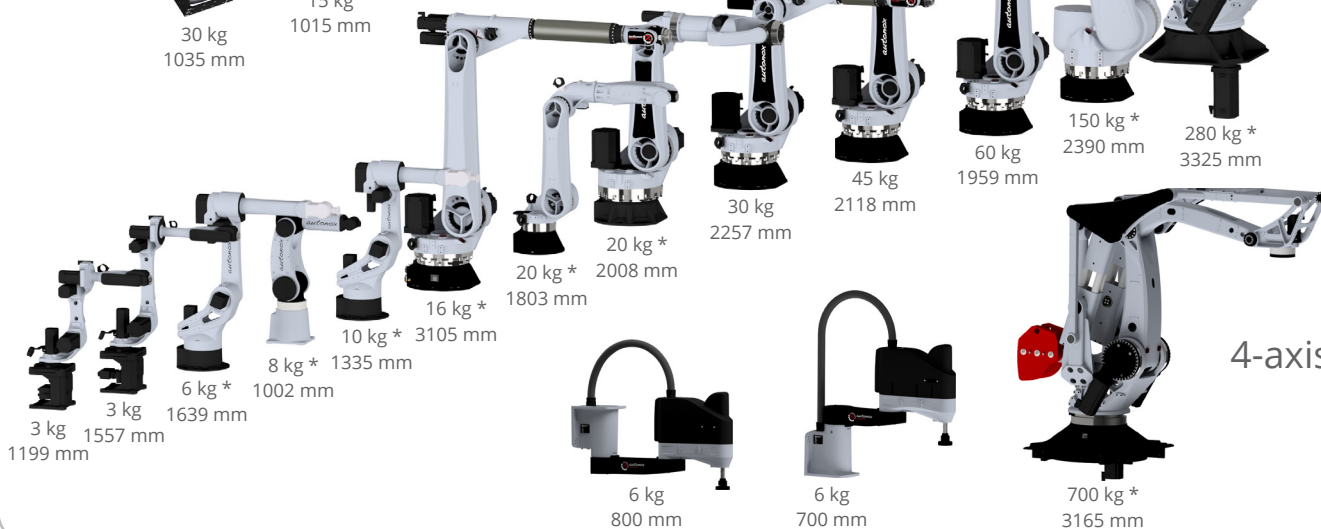


## Overview serial kinematics

3-axis



6-axis



4-axis

\* coming soon



Consequently  
Hygienic Design  
autonox Robotics

## Hygienic Design

### Consequently Hygienic Design:

- Limited surface temperature in the area of the drives
- No material coatings
- No joints, edges or gaps
- Can be cleaned using the common processes (high pressure cleaner up to 28 bar) and chemicals.
- Only approved materials
- Integrated media supply (optionally available)





Our online-Katalog of the world's largest portfolio of controller-independent robot mechanics.





## Made in Germany

- **Stability:**  
The **autonox** arm joints cannot open themselves during operation and are very stiff.
- **Highest availability:**  
Special **autonox** gears for parallel robots.
- **Maintenance:**  
The most **autonox** robot mechanics are maintenance-free.
- **Compact design**





High-end gearbox



Completed robot mechanics

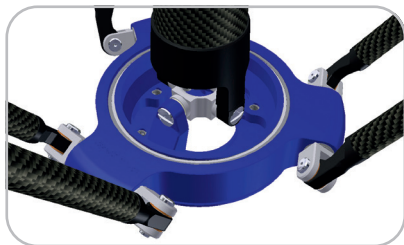


## Customization Options

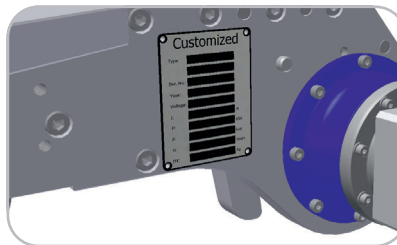
- Your company's logo or your name for the robot on the mechanics
- Your company's logo on the type plate
- Company specific colors
- Your own spare parts list



Your spare parts list



Your colors



Your identification plate



Your company's logo or  
your name for the robot



## The competitive advantages of **autonox Robotics** at a glance

- **Controller independent robot mechanics:**  
The complete automation process can be implemented on a single controller platform.
- **Patented, internal tool media supply and turning moment shaft:**  
This reduces wear and increases the performance
- **Stability:**  
The **autonox** arm joints cannot detach themselves during operation and are very stiff.
- **Highest availability...**  
...is guaranteed by our special **autonox** gears for parallel robots for instance.
- **Maintenance:**  
The most **autonox** robot mechanics are maintenance-free.
- **Compact design**
- **Simplified construction of the machine frame...** ...in most cases all motors are mounted below the head plate.
- **Consequent Hygienic design:**  
All used materials are approved
- **Customization options:**  
Company specific design customization is possible
- **Quality made in Germany:**  
The **autonox** robot mechanics are developed and manufactured 100% in our machine works.



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