

Industrial robot mechanics for every controller





#### 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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Our website.





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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

		55.54	
kg	DuoPod	DELTA	articc
0,5	X	Χ	
1		Χ	
3	X	Χ	X
6	X	Х	
8			Χ
12	X	Χ	
15	X		
16			Χ
20		Χ	Χ
30			Χ
40	X		
45			Χ
50		Χ	
60			Χ
80	Х		
150	X		
350	X		



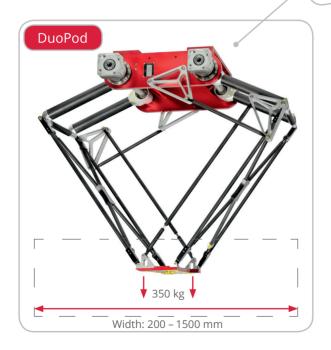


# Working area

Series 'RV' with high stiffness cross to the main axes.

(Two upper arms per drive)

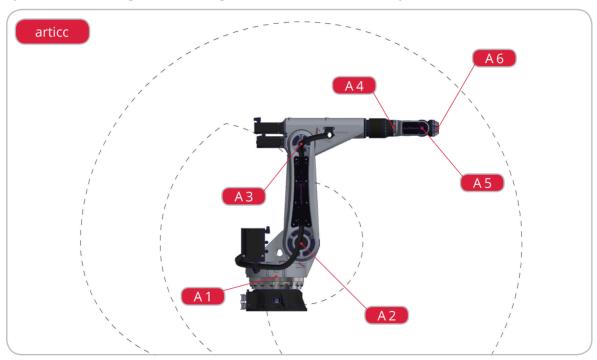
autonox Robotics







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





# Axes / degrees of freedom

Number of axes	Robot type	Term	Degrees of free- dom translational	Degrees of free- dom rotatory
2	DuoPod	RV2 / RVS2 / RVSD2	2	0
3	DuoPod	RV3 / RVS3 / RVSD3	2	1
3	DELTA	RL3	3	0
4	DuoPod	RV4 / RVS4	2	2
4	DELTA	RL4 / RLE4	3	1
5	DELTA	RL5	3	2
6	ARTICULATED	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'.

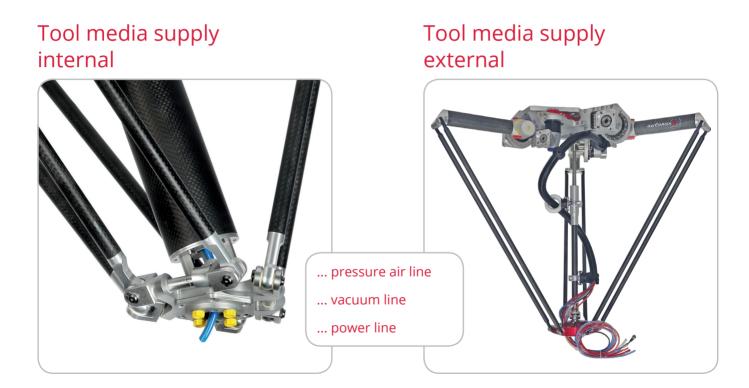


E.g.: RV2 - T3 - ...



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







# 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)
- Tool-side change-adapter, prepared for mechanical finishing (\*)



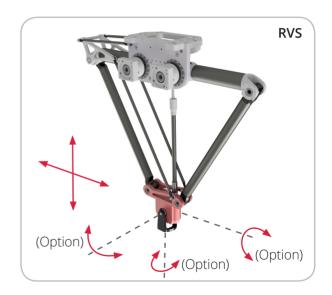




#### DuoPod Robot mechanics 'RVS' and 'RVSD'

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





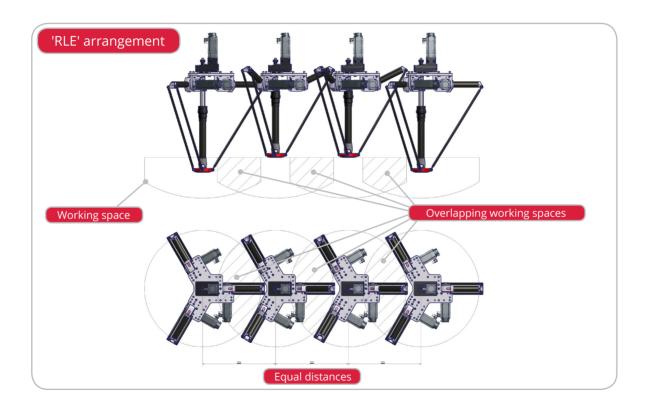


### DELTA Robot mechanics 'RLE' (for close robot arrangement)

- Close arrangement possible due to asymmetrical postioning of the drives and special gearboxes.
- High ridgity 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







### Standard DELTA Robot mechanics



#### **DELTA Robot mechanics 'RLZ'**





#### ARTICULATED Robot mechanics 'articc'

- Available with 3 to 6 axes
- Payloads from 3 kg to 150 kg
- 15 variants are currently planned
- Various working ranges and options
- Articulated robot mechanics for every controller

# **BECKHOFF**



















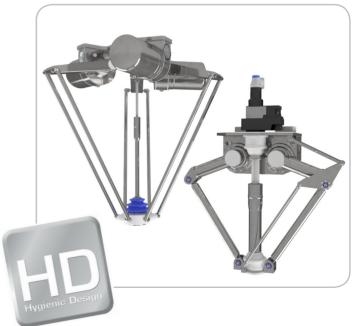


# Hygienic Design

#### 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 catalog for robot mechanics

autonox Robotics offers you a large range of robot mechanics for every controller.





# 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



### **Customized Design**

- 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
- Customized Design:
   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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