

Robots

2026



PRODUCTS CATALOGUE

***RANGE
ONE 6CONTROL***

Solution
Partner

Automation
Drives

SIEMENS

AGV-mecatronique.fr

CONTENTS

ONE 6CONTROL Range.....	1
NJ60-2.2.....	2
NJ110-3.0.....	4
NJ130-2.0.....	6
NJ130-2.6.....	8
N170-3.0.....	10
N220-2.7.....	12
NJ290-3.0.....	14
NJ370-2.7.....	16
NJ500-2.7.....	18
NJ650-2.7.....	20
Comparison table.....	22
ONE 6CONTROL Range - Dual encoder.....	23
NJ120-2.05.....	24

One ecosystem, one area of expertise

Integrating an industrial robot into a CNC-controlled production line often involves juggling multiple programming languages, multiple suppliers, and multiple maintenance interfaces.

With the COMAU solution powered by SIEMENS SINUMERIK ONE, this complexity disappears. The robot becomes a machine or an extension of a machine: same programming environment, same diagnostic tools, same operator interface.

- **COMAU** — Range of 19 robots, payload from 7 kg to 650 kg
- **SIEMENS SINUMERIK ONE** — Your robot is controlled like a CNC machine
- Robot « **Plug and Play** », with or without an application

A unified robot and CNC solution



- ♦ A range of 19 robots
- ♦ A payload of 7 kg to 650 kg

SIEMENS
SINUMERIK ONE

Your robot is controlled either
as a Cartesian CNC machine or
as a robot



Solution
Partner

Automation
Drives

SIEMENS



Features

- ❑ CNC articulated robot
- ❑ 6 kinematic axes
- ❑ Siemens One CNC (controller)
- ❑ Floor-mounted, ceiling-mountable

Tasks and materials

- Arc welding processes and high-precision laser welding.
- Laser cutting of complex shapes in sheet metal and plastics.
- Controlled dosing, fluid dispensing and adhesive application.
- High-speed handling, packaging and wrapping at the end of the production line.
- Automated assembly of mechanical or electronic components..

Introduction

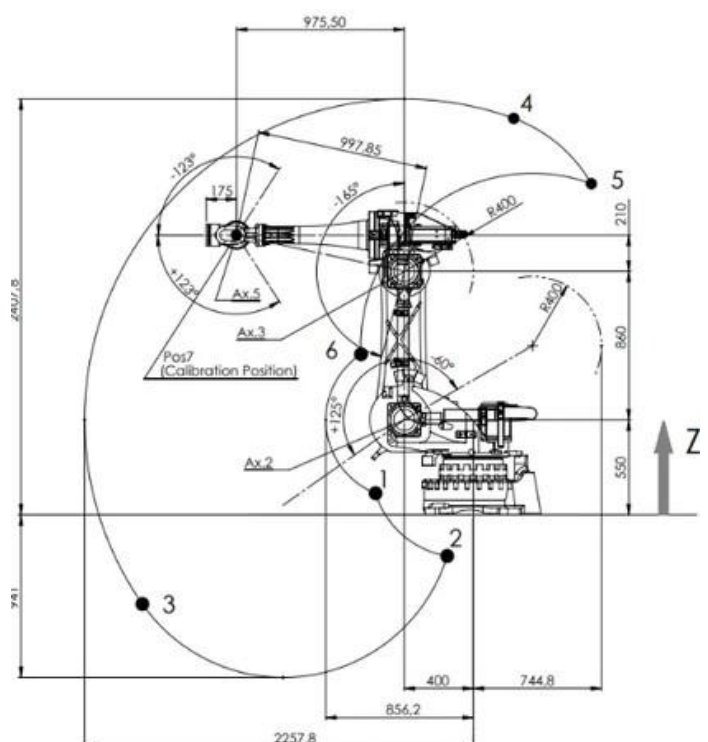
The **ONE 6CONTROL NJ60_2_2** has been developed to precisely meet the speed and fluidity requirements of your automated production lines. Thanks to its lightweight design and remarkable trajectory control, this compact articulated arm optimises the flow of your parts by drastically minimising downtime and transition phases.

Positioning and concept

Designed for the high-speed segment, this 6-axis robot prioritises dynamism to boost productivity in your workshops. The strategic reduction in its dead weight enables it to achieve lightning-fast accelerations whilst maintaining surgical-grade trajectory precision, making it ideal for continuous industrial processes.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **Ultra-fast motion:** Angular speeds of up to 340°/s on the end axes to ensure optimum cycle efficiency.
- **High protection rating (IP65 / IP67):** Allows this model to be integrated into confined cells or those exposed to welding spatter and fumes.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	60 kg <i>(Additional load on forearm: 20 kg)</i>
Working range (Max. reach)	2,258 mm
Repeatability	0.06 mm
Structure mass (Weight)	645 kg
Tool mounting flange	ISO 9409-1-A100
Mounting configuration	Floor, ceiling, or tilted up to 45° <i>(Floor / Ceiling / Sloping)</i>
Overall protection rating	IP65 / IP67

Axis	Travel range (Stroke)	Maximum speed
Axis 1	±180°	170 °/s
Axis 2	-60° to +125°	150 °/s
Axis 3	0° to -165°	165 °/s
Axis 4	±2,700° <i>(Max. torque: 221 Nm)</i>	265 °/s
Axis 5	±123° <i>(Max. torque: 221 Nm)</i>	250 °/s
Axis 6	±2,700° <i>(Max. torque: 118 Nm)</i>	340 °/s



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Industrial assembly and precision component dosing operations.
- Packaging, packing and load-handling processes.
- High-precision laser cutting and welding applications.
- Spot welding and part finishing through deburring.

Introduction

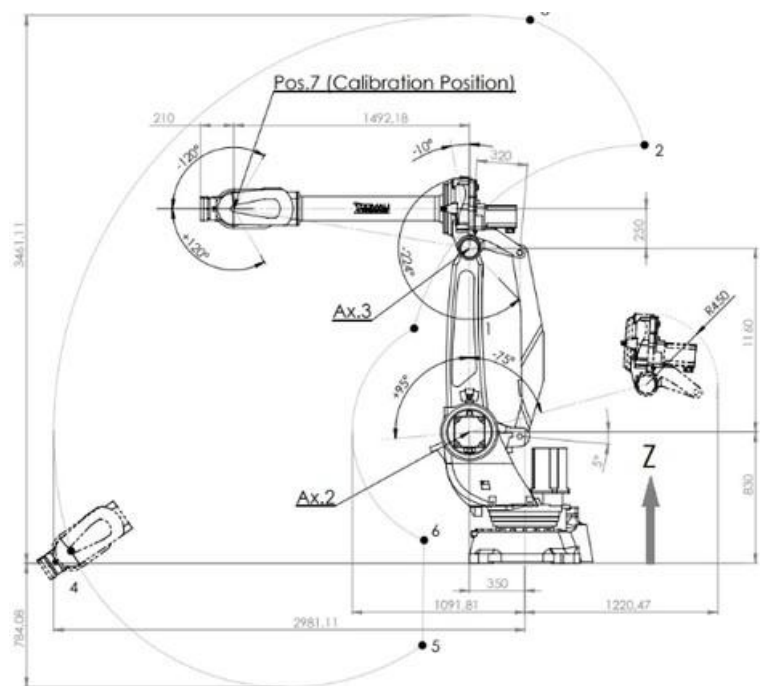
The **ONE 6CONTROL NJ110_3_0** is an industrial articulated arm designed to provide the power and robustness essential to your automation solutions. Engineered for demanding applications, it ensures smooth, high-intensity operations whilst optimising the overall efficiency of your production lines.

Positioning and concept

Designed with high performance in mind, this 6-axis robot combines exceptional reach with first-class energy efficiency. Its optimised architecture enables it to deliver superior productivity, a direct reduction in operating costs and excellent long-term reliability.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **Robust wrist with high torque capacity:** Integration onto end-effectors for smooth handling of complex tools.
- **Sealed and reinforced structure:** Dual certification to stringent protection standards, ideally suited to harsh industrial environments.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	60 kg (Additional load on forearm: 20 kg)
Working range (Max. reach)	2,258 mm
Repeatability	0.06 mm
Structure mass (Weight)	645 kg
Tool mounting flange	ISO 9409-1-A100
Mounting configuration	Floor, ceiling, or tilted up to 45° (Floor / Ceiling / Sloping)
Overall protection rating	IP65 / IP67

Axis	Travel range (Stroke)	Maximum speed
Axis 1	±180°	170 °/s
Axis 2	-60° to +125°	150 °/s
Axis 3	0° to -165°	165 °/s
Axis 4	±2,700° (Max. torque: 221 Nm)	265 °/s
Axis 5	±123° (Max. torque: 221 Nm)	250 °/s
Axis 6	±2,700° (Max. torque: 118 Nm)	340 °/s



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Precision machining (milling, drilling, tapping) of aluminium and composite parts.
- High-precision assembly and joining operations.
- 3D printing and additive manufacturing for metals and composites.
- Flexible use in multi-task cells: machining, additive manufacturing, inspection, assembly.

Introduction

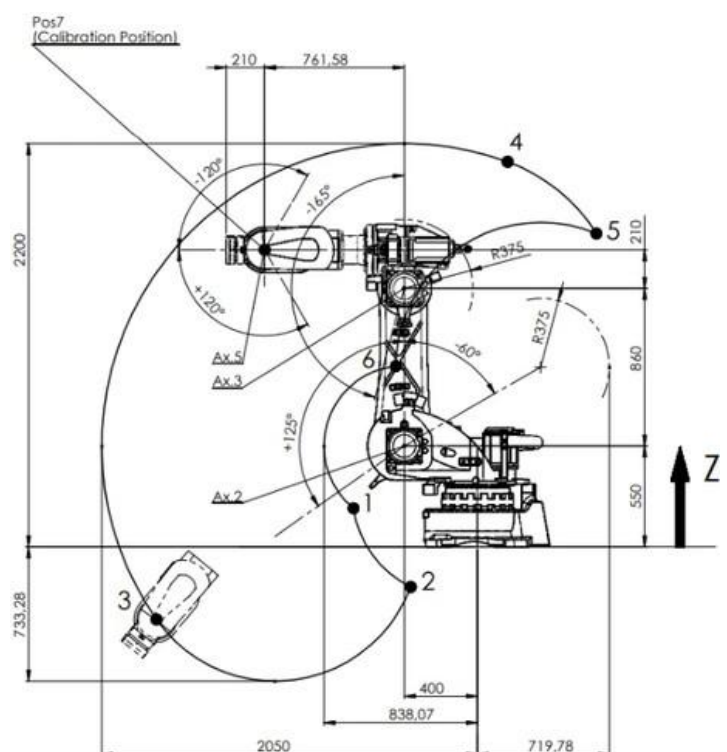
The **ONE 6CONTROL NJ130-2.0** is a CNC industrial robot designed for machining, assembly and additive manufacturing. It offers machine-tool-grade rigidity and path control, with zero mechanical play throughout its service life and secondary encoders on all axes.

Positioning and concept

By applying machine-tool design principles to a 6-axis robotic kinematic system, the **ONE 6CONTROL NJ130-2.0** ensures repeatable positioning and trajectory accuracy suited to demanding manufacturing processes. The platform supports full trajectory control and integration with industrial controllers.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- Ultra-high-resolution secondary encoders (on the output side) on all six axes for improved path accuracy.

Technical specifications

Robot type	Articulated
Maximum payload	130 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2050 mm
Repeatability	0.07 mm
Structure mass (Weight)	740 kg
Measurement system	Secondary encoders (output side) ultra-resolution on all 6 axes <i>(Option: 2nd direct encoder per axis)</i>
Tool mounting flange	ISO 9409 - 1 - A 125
Numerical control (CN)	SIEMENS ONE
Cabinet dimensions	1400 x 1088 x 500 mm
Protection rating	IP67 / IP65 / IP54
Mounting configuration	Floor, ceiling or sloping

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	155°/s	—
Axis 2	-60° to +125°	105°/s	—
Axis 3	0° to -165°	150°/s	—
Axis 4	± 200°	200°/s	638 Nm
Axis 5	± 120°	190°/s	638 Nm
Axis 6	± 2700°	230°/s	314 Nm



A SIEMENS SOLUTION PARTNER

Features

- ☐ CNC articulated robot
- ☐ 6 kinematic axes
- ☐ Siemens One CNC (controller)
- ☐ Floor-mounted, ceiling-mountable

Tasks and materials

- Sub-assembly operations and precision fluid metering.
- End-of-line processes: robotic packaging and batch packaging.
- High-performance spot welding for the sheet metal industry.
- Advanced thermal processes: laser cutting and high-definition plasma cutting.
- Mechanical finishing and deburring operations.

Introduction

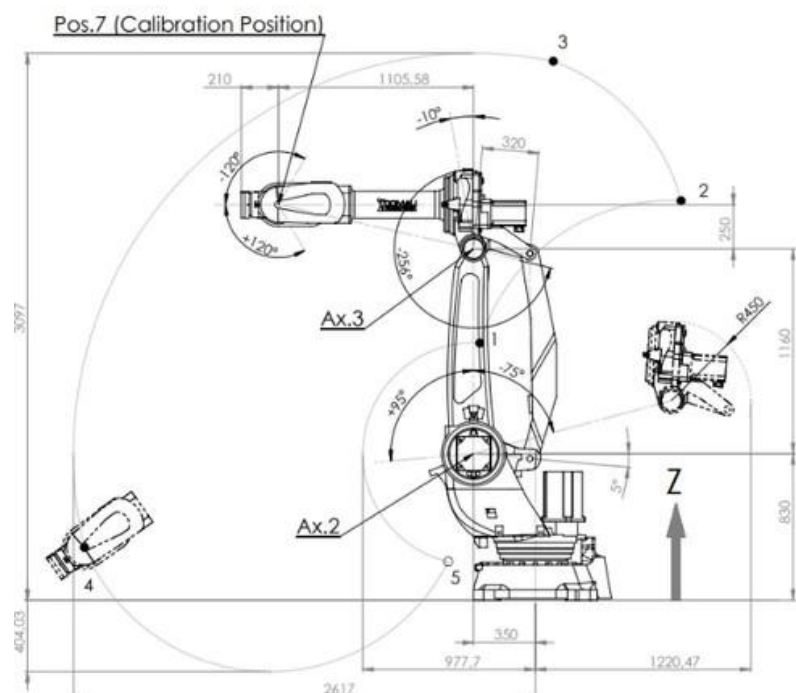
The **ONE 6CONTROL NJ130_2_6** has established itself as a benchmark industrial robotic arm, designed to bring high levels of power and robustness to the heart of your automated systems. Ideal for sustaining high production rates, it continuously optimises the operational profitability of your manufacturing processes.

Positioning and concept

Designed with uncompromising industrial productivity in mind, this 6-axis robot combines an optimised working envelope with excellent energy efficiency. Its meticulously engineered mechanical design ensures low long-term running costs whilst maintaining consistent precision.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **High-torque wrist unit:** Provides maximum clamping force on the end axes.
- **High-protection, waterproof design:** Combined IP65/IP67 ratings, designed for extended service life in harsh industrial environments.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	130 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2616 mm
Repeatability	0.07 mm
Structure mass (Weight)	1050 kg
Tool mounting flange	ISO 9409 - 1 - A 125
Mounting configuration	Floor or ceiling (Floor / Ceiling)
Overall protection rating	IP65 / IP67

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	110°/s	—
Axis 2	-75° to +95°	110°/s	
Axis 3	-10° to -256°	110°/s	
Axis 4	± 280°	190°/s	638 Nm
Axis 5	± 125°	190°/s	638 Nm
Axis 6	± 2700°	230°/s	314 Nm



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Handling and packaging: parts transfer and compact palletising solutions.
- Spot welding: ideal for assembling structures with integrated beams.
- 3D printing and additive manufacturing: high-precision continuous processes on large workpieces.
- Automated assembly and bonding: adhesive bead application and component handling.
- Machining and finishing: drilling, deburring and polishing of parts.

Introduction

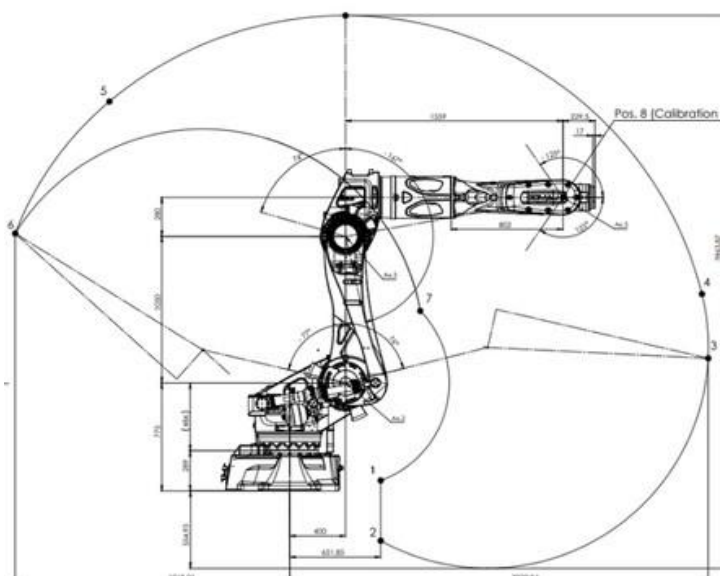
The **N170-3.0** is positioned as an agile and innovative model in the range, designed specifically to handle demanding automation applications in the industrial sector. Capable of moving a record payload of 170 kg, this compact articulated arm delivers the power, agility and precision essential to your production lines, whilst optimising overall efficiency and operating costs.

Positioning and concept

Designed for intensive industrial operations, this 6-axis robot combines high lifting capacity with precise path control thanks to the e-Motion 3.0 motion algorithm. Its modern kinematics, featuring a nitrogen-balancing system on axis 2, provide a wide rear working range, ensuring optimum flexibility and rock-solid industrial reliability.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **Enhanced performance and dynamics (e-Motion 3.0):** State-of-the-art software control that optimises trajectories in real time, reducing cycle times by 20% whilst ensuring surgical repeatability of 0.05 mm.
- **Compact hollow-wrist kinematics:** An inverted-geometry structure combined with a nitrogen-balancing system and integrated cable routing, maximising the working space whilst eliminating the risk of collisions and fibre wear.

Technical specifications

Robot type	Articulated CNC
Number of axes	6 axes
Maximum payload	170 kg <i>(Supports additional tooling load on the arm)</i>
Reach (Max. range)	3000 mm
Repeatability	0.05 mm
Structure mass (Weight)	1277 kg
Tool mounting flange	ISO 9409 - 1 - A 125
Mounting configuration	Floor or ceiling
Protection rating	IP65 (Wrist IP67)

Axis	Range of motion	Max. speed
Axis 1 (A1)	$\pm 180^\circ$	110 °/s
Axis 2 (A2)	$- 77^\circ / + 65^\circ$	100 °/s
Axis 3 (A3)	$- 200^\circ / + 70^\circ$	140 °/s
Axis 4 (A4)	$\pm 125^\circ$	140 °/s
Axis 5 (A5)	$\pm 125^\circ$	140 °/s
Axis 6 (A6)	$\pm 200^\circ$	210 °/s



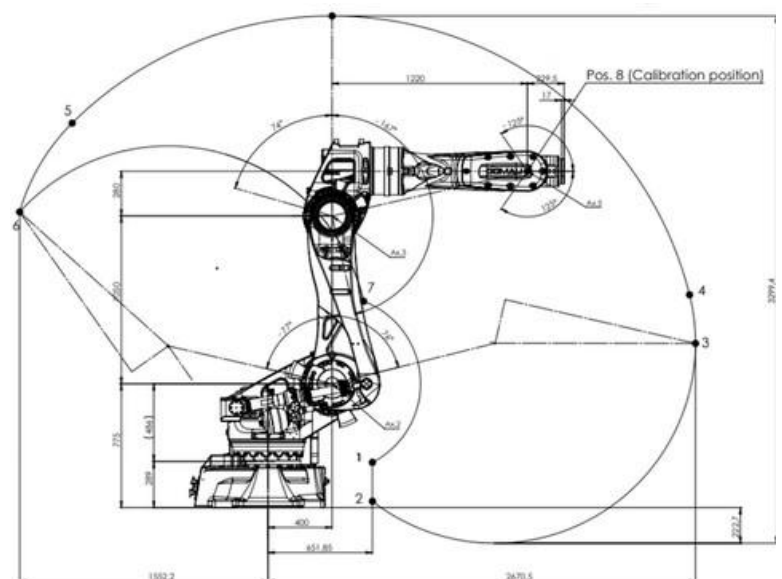
- ☐ CNC articulated robot
- ☐ 6 kinematic axes
- ☐ Siemens One CNC (controller)
- ☐ Floor-mounted, ceiling-mountable

- High-intensity spot welding and assembly operations.
- Heavy-load handling, palletising and unloading of machinery.
- Advanced continuous processes: large-format 3D printing, adhesive and sealant application.
- Part finishing: deburring, polishing and foundry applications.

The **ONE 6CONTROL N220_2_7** is a high-payload industrial robot, designed to meet the flexibility and cost-effectiveness requirements of modern production lines. Thanks to its innovative modular architecture and the integration of the latest generation of compact motors, it guarantees low operating costs and excellent reliability throughout its entire life cycle.

By combining a lightweight mechanical structure with the power of advanced motion algorithms, the ONE 6CONTROL N220_2_7 offers optimum dynamics and path repeatability. Its nitrogen-balanced system on axis 2 gives it a particularly wide rearward working envelope, maximising its agility in confined spaces.

- 1400 x 1088 x 500



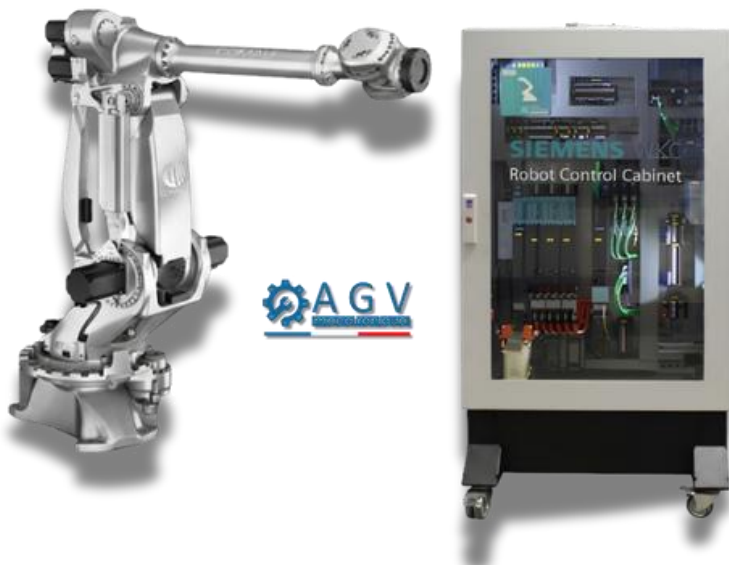
Key technologies and components

- **Patented nitrogen-based balancing system on axis 2:** For enhanced rear-end agility.
- **Integrated cabling and cable management options:** (Safe Motion) for tool protection.

Spécifications technologiques

Key indicator	Performance
Lifting capacity (Wrist)	220 kg
Additional payload (Arm)	50 kg
Horizontal reach	2670.5 mm
Repeatability	± 0.05 mm
Total structure mass	1193 kg
Protection rating	IP65

Axis	Working range	Max. speed
Axis 1 (Base rotation)	± 180°	120°/s
Axis 2 (Lower arm)	-77° to +76°	100°/s
Axis 3 (Upper arm)	-167° to +74°	110°/s
Axis 4 (Wrist - Rotation)	± 200°	140°/s
Axis 5 (Wrist - Bend)	± 125°	140°/s
Axis 6 (Wrist - Twist)	± 2700°	210°/s



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Heavy-duty machining operations on composite materials, alloys and metals.
- High-intensity spot welding and assembly of large-scale structures.
- Heavy-load handling, packaging and high-capacity palletising at the end of the production line.
- Automated thermal and cutting processes: laser cutting, plasma cutting and precision dosing.
- Industrial finishing of castings by deburring.

Introduction

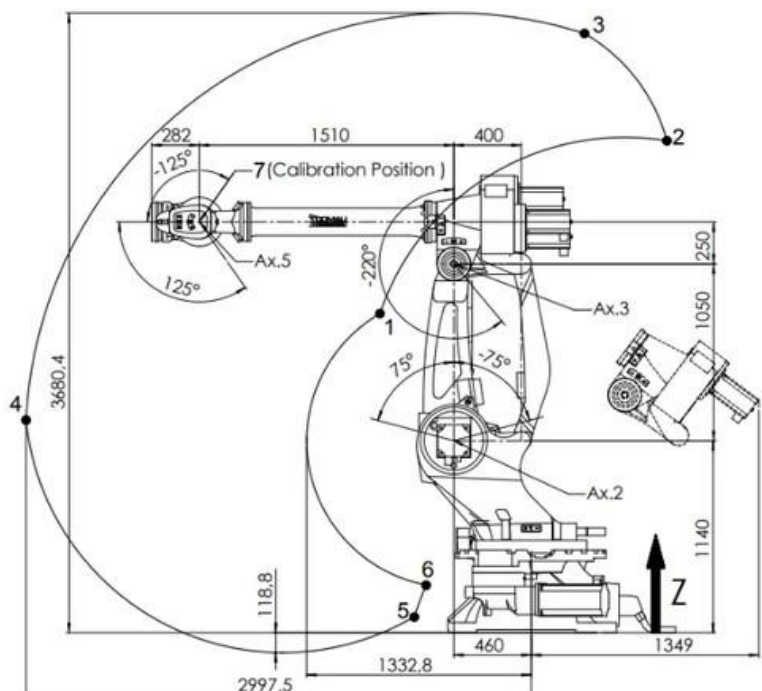
The **ONE 6CONTROL NJ290_3_0** represents the pinnacle of power and robustness for your heavy-duty industrial applications. Specially designed to handle massive loads, this high-capacity articulated arm ensures the safety of your automation processes whilst maximising the throughput and efficiency of your facilities.

Positioning and concept

Designed to meet the most extreme industrial challenges, this 6-axis robot combines immense lifting power with a reach of nearly 3 metres. Its state-of-the-art kinematics ensure excellent energy management, a significant reduction in operating costs and exceptional mechanical durability under severe conditions.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- An ultra-robust mechanical structure weighing over 2 tonnes, ensuring optimum stability and vibration damping during machining operations.
- A high-load-capacity wrist unit with maximum water resistance (IP65/IP67) for continuous operation in harsh and damp environments.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	290 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2997 mm
Repeatability	0.15 mm
Structure mass (Weight)	2150 kg
Tool mounting flange	ISO 9409 - 1 - A 125
Mounting configuration	Floor
Overall protection rating	IP65 / IP67

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	110°/s	—
Axis 2	+95° to -75°	110°/s	—
Axis 3	-10° to -256°	110°/s	—
Axis 4	± 280°	190°/s	638 Nm
Axis 5	± 120°	190°/s	638 Nm
Axis 6	± 2700°	230°/s	314 Nm



A SIEMENS SOLUTION PARTNER

Features

- ❑ CNC articulated robot
- ❑ 6 kinematic axes
- ❑ Siemens One CNC (controller)
- ❑ Floor-mounted, ceiling-mountable

Tasks and materials

- High-precision heavy-duty machining and trimming of large metal or composite workpieces.
- Intensive spot welding and handling of bulky welding clamps.
- End-of-line operations: packaging, heavy palletising and handling of massive blocks.
- Cutting-edge thermal and industrial processes: laser cutting, plasma cutting and controlled dosing.
- Demanding applications in foundry work and the finishing of parts through deburring.

Introduction

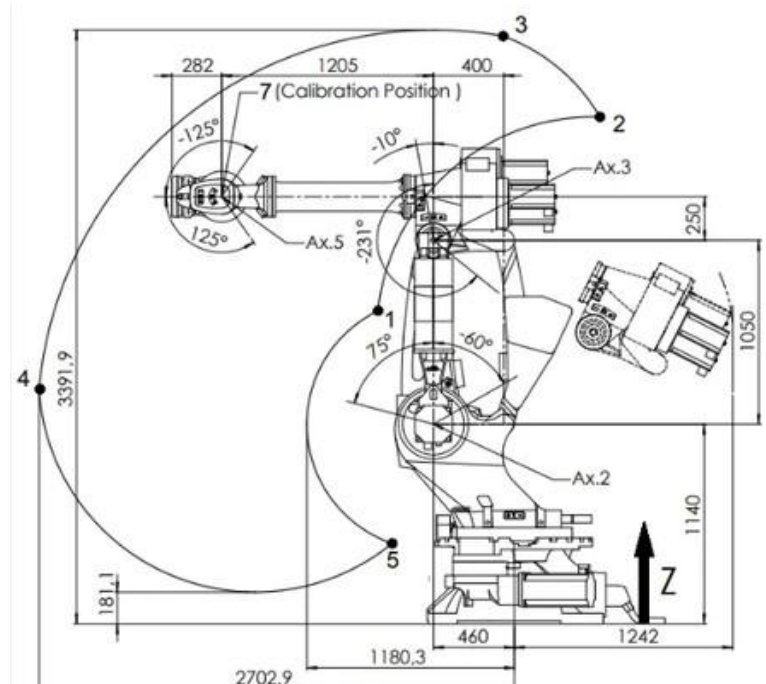
The **ONE 6CONTROL NJ370_2_7** stands out as the powerhouse of the range, designed to tackle the most extreme industrial challenges where raw power must be combined with precise path control. Capable of handling exceptional loads of up to 370 kg, this top-of-the-range articulated arm delivers maximum productivity to your automated systems.

Positioning and concept

A true benchmark in the 'Ultra Heavy-Duty' category, this 6-axis robot combines Herculean mechanical strength with remarkable energy efficiency for its class. Its reinforced architecture enables it to absorb intense dynamic stresses, ensuring controlled operating costs and unfailing durability on your production lines.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- An oversized wrist unit delivering phenomenal torque (over 2,100 Nm on axes 4 and 5) for the deflection-free handling of very heavy tools.
- An IP65/IP67-certified sealed design, providing a complete protective barrier against abrasive dust and splashes of industrial fluids.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	370 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2703 mm
Repeatability	0.15 mm
Structure mass (Weight)	2100 kg
Tool mounting flange	ISO 9409 - 1 - 200 - 6 - M12
Mounting configuration	Floor
Overall protection rating	IP65 / IP67

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	85°/s	—
Axis 2	+75° to -60°	85°/s	—
Axis 3	-10° to -231°	85°/s	—
Axis 4	± 2700°	90°/s	2109 Nm
Axis 5	± 125°	90°/s	2109 Nm
Axis 6	± 2700°	120°/s	1177 Nm



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Heavy-duty handling and transfer of large components during the manufacturing process.
- Precision machining and trimming of massive metal or composite structures.
- Intensive spot welding using large, bulky welding clamps.
- High-speed end-of-line operations: industrial packaging and heavy palletising.
- Automated technological and cutting processes (laser, plasma) and 3D measurement control.
- Finishing of heavy castings by deburring.

Introduction

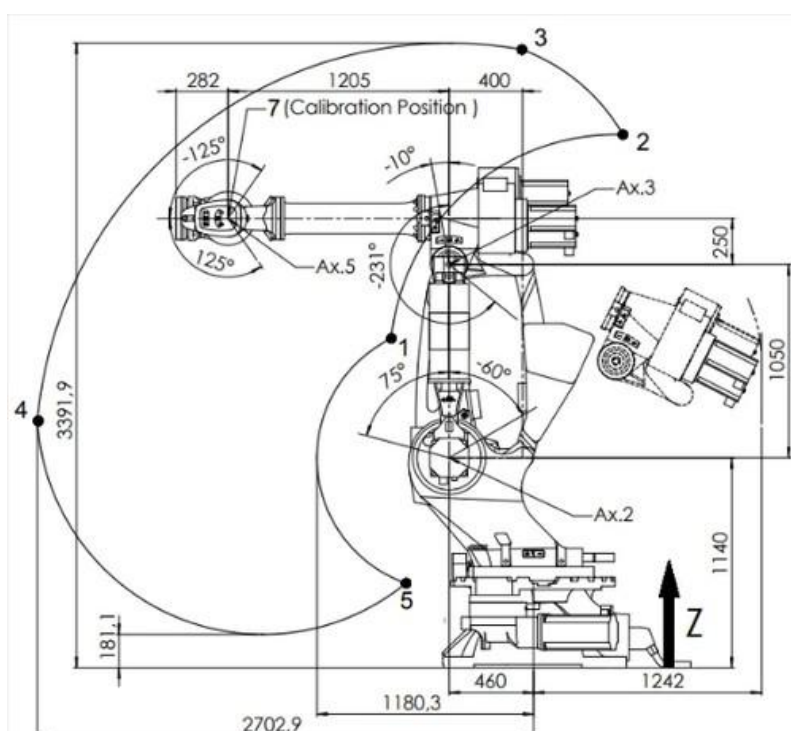
The **ONE 6CONTROL NJ500_2_7** embodies the ultimate power of the range, having been specifically developed for the most demanding automation applications where the handling of enormous loads must be combined with total versatility. Capable of lifting up to 500 kg, it provides a robust solution to the demands for superior productivity in modern factories.

Positioning and concept

Positioned in the ultra-high payload capacity robot segment, this 6-axis behemoth combines exceptional mechanical strength with rigorous control of energy consumption. Its ultra-rigid structure is designed to absorb significant dynamic loads, ensuring minimal operating costs and rock-solid reliability during heavy-duty tasks.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **Reinforced 2.4-tonne mechanical structure:** Providing perfect support and stability to counteract leverage effects and eliminate vibrations during machining or measurement.
- **Extra-powerful mechanical wrist:** Delivering an exceptional torque of 2,550 Nm on the bending axes, protected by dual IP65/IP67 waterproof certification.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	500 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2703 mm
Repeatability	0.15 mm
Structure mass (Weight)	2400 kg
Tool mounting flange	ISO 9409 - 1 - 200 - 6 - M12
Mounting configuration	Floor
Overall protection rating	IP65 / IP67

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	85°/s	
Axis 2	+75° to -60°	85°/s	—
Axis 3	-10° to -231°	85°/s	—
Axis 4	± 2700°	90°/s	2550 Nm
Axis 5	± 125°	90°/s	2550 Nm
Axis 6	± 2700°	120°/s	1569 Nm



A SIEMENS SOLUTION PARTNER

Features

- CNC articulated robot
- 6 kinematic axes
- Siemens One CNC (controller)
- Floor-mounted, ceiling-mountable

Tasks and materials

- Handling of heavy loads and transfer of bulky parts or large-scale blocks.
- Heavy-duty spot welding with control of very bulky welding clamps.
- High-precision heavy-duty machining and trimming of large metal or composite structures.
- Intensive end-of-line processes: industrial packaging and very high-capacity palletising.
- Thermal and automated cutting applications: plasma cutting and precision dosing.
- Finishing and deburring of massive castings.

Introduction

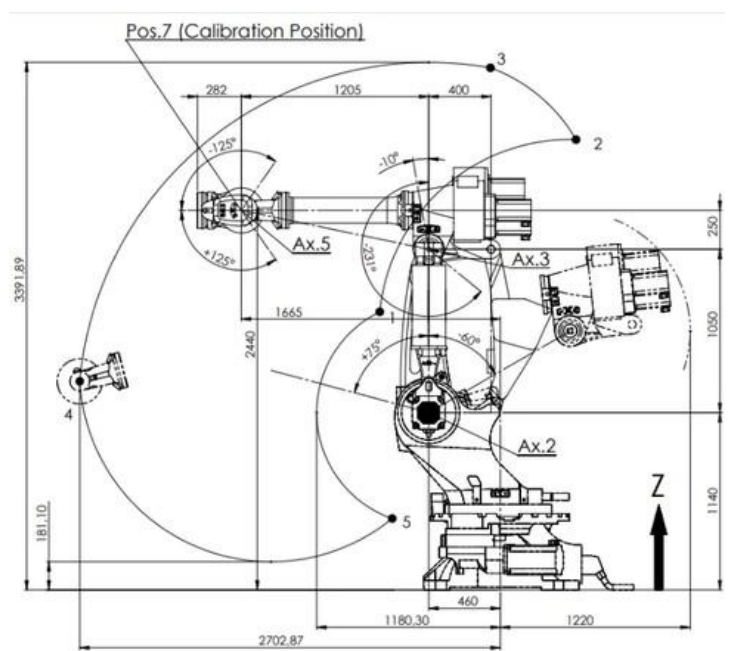
The **ONE 6CONTROL NJ650_2_7** stands out as the undisputed workhorse of the range, designed specifically to handle the heaviest and most demanding automation applications in the industrial sector. Capable of moving a record load of 650 kg, this top-of-the-range articulated arm provides the raw power your production lines need, whilst optimising overall efficiency.

Positioning and concept

Designed for 'Extreme Heavy-Duty' applications, this 6-axis robot combines exceptional lifting capacity with rigorous management of operating and energy costs. Its reinforced kinematics and chassis are engineered to absorb significant dynamic loads, ensuring perfect stability and rock-solid industrial reliability.

Cupboard dimensions

- 1400 x 1088 x 500



Key technologies and components

- **Reinforced 2.4-tonne mechanical structure:** Providing perfect support and stability to counteract leverage effects and eliminate vibrations during machining or measurement.
- **Extra-powerful mechanical wrist:** Delivering an exceptional torque of 2,550 Nm on the bending axes, protected by dual IP65/IP67 waterproof certification.

Technical specifications

Robot type	Articulated
Number of axes	6 axes
Maximum payload	650 kg <i>(Additional load on forearm: 50 kg)</i>
Reach (Max. range)	2703 mm
Repeatability	0.15 mm
Structure mass (Weight)	2450 kg
Tool mounting flange	ISO 9409 - 1 - 200 - 6 - M12
Mounting configuration	Floor
Protection rating	IP44 / IP65 at wrist

Axis	Working range (Stroke)	Max. speed	Max. torque
Axis 1	± 180°	75°/s	—
Axis 2	-60° to +75°	75°/s	—
Axis 3	-231° to -10°	75°/s	—
Axis 4	± 2700°	90°/s	3060 Nm
Axis 5	± 125°	90°/s	3060 Nm
Axis 6	± 2700°	120°/s	1766 Nm

COMPARISON TABLE

ONE 6CONTROL range - Overview of the 11 models

Model	Max. payload	Range of operation	Repeatability	Weight	Protection
NJ60-2.2	60 kg	2258 mm	0.06 mm	645 kg	IP65/IP67
NJ110-3.0	110 kg	2980 mm	0.07 mm	1070 kg	IP65/IP67
NJ130-2.0	130 kg	2050 mm	0.07 mm	740 kg	IP67/65/54
NJ130-2.6	130 kg	2616 mm	0.07 mm	1050 kg	IP65/IP67
N170-3.0	170 kg	3000 mm	0.05 mm	1277 kg	IP65 (IP67 wrist)
N220-2.7	220 kg	2670 mm	0.05 mm	1193 kg	IP65
NJ290-3.0	290 kg	2997 mm	0.15 mm	2150 kg	IP65/IP67
NJ370-2.7	370 kg	2703 mm	0.15 mm	2100 kg	IP65/IP67
NJ500-2.7	500 kg	2703 mm	0.15 mm	2400 kg	IP65/IP67
NJ600-2.7	650 kg	2703 mm	0.15 mm	2450 kg	IP44/65 (wrist)

ONE 6CONTROL RANGE WITH DOUBLE ENCODER

This solution, designed for drilling, machining, crimping, riveting, and more, provides a more rigid system: maximized rigidity and repeatability eliminate mechanical play.

In its ONE 6CONTROL range, AGV Mecatronique offers the NJ120-2.05, an industrial CNC robot specifically designed for machining, assembly, and additive manufacturing.

It delivers machine-tool-level rigidity and trajectory control, with no mechanical play over its service life, and secondary encoders on all axes for improved accuracy.

Solution
Partner

Automation
Drives

SIEMENS

A unified robot and CNC solution



- ◆ A robot modified by AGV mecatronique
- ◆ With dual encoder

SIEMENS
SINUMERIK ONE

Your robot is controlled in the same way as a CNC machine



Introduction

The **ONE 6CONTROL NJ120-2.05** is a state-of-the-art CNC industrial robot designed for machining, assembly and additive manufacturing. It offers exceptional rigidity and machine-tool-grade path control, characterised by a complete absence of mechanical play throughout its service life, as well as secondary encoders on all axes.

Positioning and concept

By applying machine-tool structural principles directly to a 6-axis robotic kinematic system, the **ONE 6CONTROL NJ120-2.05** delivers repeatable positioning and trajectory accuracy that is perfectly suited to the most demanding manufacturing processes. Its software platform supports full trajectory control and native integration with industrial controllers.

Cabinet dimensions

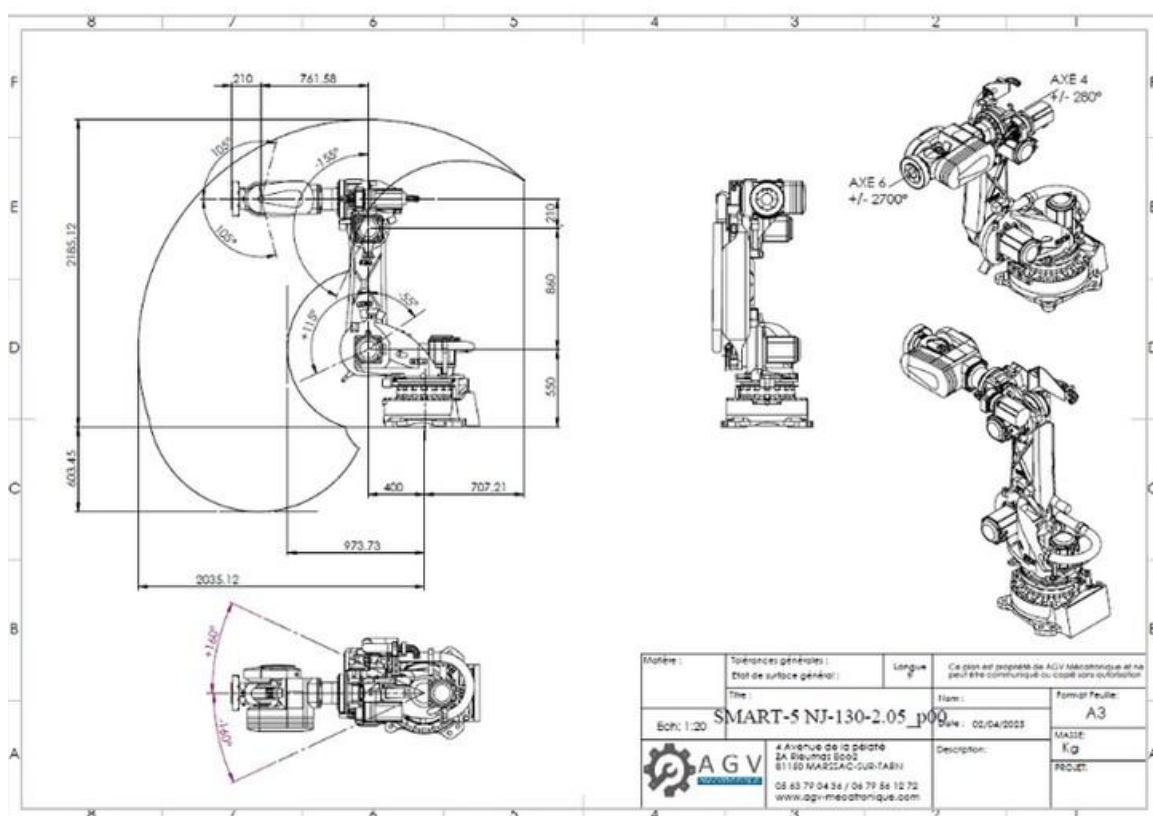
- 1400 x 1088 x 500



A SIEMENS SOLUTION PARTNER

Scope of application

- Aerospace industry (structural components, composites).
- Automotive industry (moulds, prototypes, finishing).
- General machining and precision engineering.
- Energy and wind power sector.
- Architecture and design (additive manufacturing, decorative panels).



Tasks and materials

- Precision machining (milling, drilling, tapping) of aluminium and composite parts.
- Machining of plastics and foams (shaping, trimming).
- Robotic finishing (deburring, polishing).
- Additive manufacturing (large-format 3D printing).
- Precision welding and plasma cutting.
- High-precision assembly and bonding.

Key technologies and components

- **Enhanced performance and dynamics (e-Motion 3.0):** Improves responsiveness and precision of movement.
- **Optimised machining paths:** Ensures a superior surface finish.

Technical specifications

	Axis	N760
	Load	20 kg
	Range	1100 - 500 kg
	Mass	165 kg
	Storage	25 mm
	Current weight	600 x mmm
	Current weight	1 kg
Axe	Displacement range	Max speeds
Ax1	-1000 – 16000 mm	500 mm/h
Ax2	-1000 – 25000 mm	500 mm/h
Ax5	-350 – 700 mm	400 mm/h
Axk	-230 – 250 mm	400 mm/h



Your standards, our precision.

AGV Mechatronics works with you to design the robotic solution that will take your production to the next level.

CONTACT US

**ZA Rieumas, 4 avenue de la Pelatie
81150 Marssac-sur-Tarn, France**

**Tel.: 05 63 79 04 36
contact@agv-mecatronique.fr**

AVG-mecatronique.fr

Solution Partner COMAU & SIEMENS SINUMERIK ONE