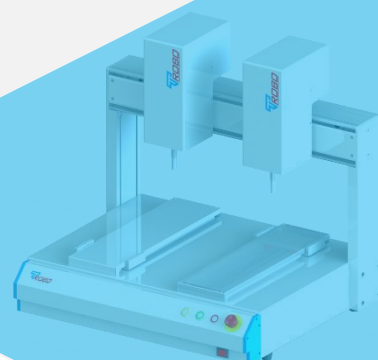
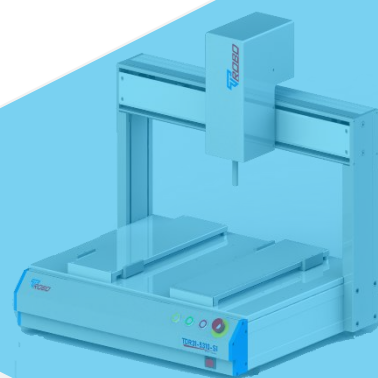




Desktop Robot Catalog

VERSION: 2022.2.16



TRI CUONG INDUSTRIAL CO., LTD

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DESKTOP ROBOT SERIES

PRODUCT SELECTION



TDR3

3 axis
Max payload 5/5kg
Max speed 500/250mm/s



TDR3S

3 axis
Max payload 5/3kg
Max speed 500/250mm/s



TDR4

4 axis
Max payload 5/3kg
Max speed 500/250mm/s



TDR31

3+1 axis
Max payload 5/5kg
Max speed 500/250mm/s



TDR41

4+1 axis
Max payload 5/3kg
Max speed 500/250mm/s



TDR6

6 axis
Max payload 5/5kg
Max speed 500/250mm/s



TDR8

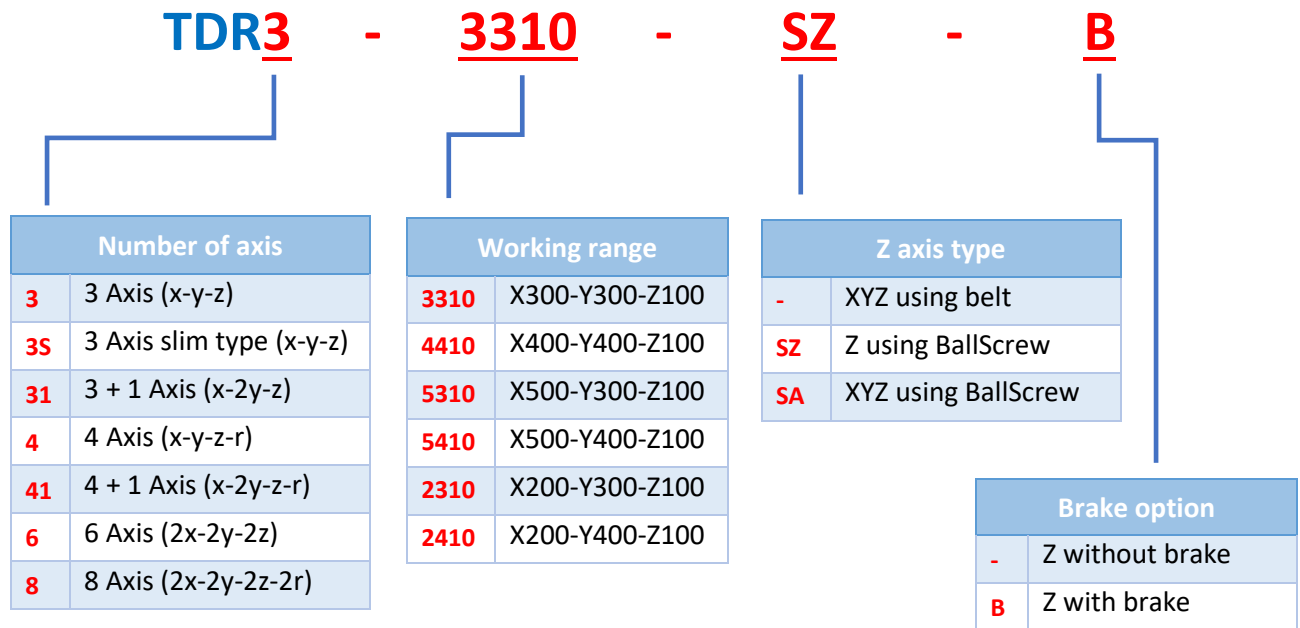
8 axis
Max payload 5/3kg
Max speed 500/250mm/s

ORDER INFORMATION

Model	Number Axis	Working range	Z Axis type	Brake (Option)
(1)	(2)	(3)	(4)	(5)
TDR	3	3310	SZ	B

(1) Series	TDR	T-Robo Desktop robot
(2) Number of axis	3	3 axis (x-y-z)
	3S	3 axis slim type (x-y-z)
	31	3 + 1 axis (x-2y-z)
	4	4 axis (x-y-z-r)
	41	4 + 1 axis (x-2y-z-r)
	6	6 axis (2x-2y-2z)
	8	8 axis (2x-2y-2z-2r)
(3) Working range (mm)	3310	X300-Y300-Z100 (TDR3, TDR3S, TDR4)
	4410	X400-Y400-Z100 (TDR3, TDR4)
	5310	X500-Y300-Z100 (TDR31, TDR41)
	5410	X500-Y400-Z100 (TDR31, TDR41)
	2310	X200-Y300-Z100 (TDR6, TDR8)
	2410	X200-Y400-Z100 (TDR6, TDR8)
(4) Z axis type	-	XYZ using belt
	SZ	Z using BallScrew
	SA	XYZ using BallScrew
(5) Brakes	-	Z axis without brake
	B	Z axis with brake

• Ordering Method



Example

Order code	TDR3 - 3310 – SZ
Description	Desktop robot 3 Axis – Stroke X300mm/Y300mm/Z100mm – Z axis uses ball screw

APPLICATIONS EXAMPLES

Dispensing



Screwing



PCB Soldering



PCB Cutting



DESKTOP ROBOT 3 AXIS

TDR3 robot series are 3-axis robots. They are designed to ensure high accuracy and stability, specialized for many different applications: screwing, dispensing, PCB cutting, soldering ...



Features:

1. Suitable for large-size products.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, arbitrary non-planar 3D paths can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.
6. Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR3-3310	TDR3-4410	TDR3-3310-SZ	TDR3-4410-SZ
Working Range <i>X/Y/Z (mm)</i>	300/300/100	400/400/100	300/300/100	400/400/100
Maximum Load <i>Workpiece/Tool (kg)</i>	5/3		5/5	
Maximum Speed <i>XY/Z (mm/s)*1</i>	500/250		500/250	
Repeatability *2	± 0.02mm		± 0.02mm	
Controller	T-ROBO Motion Controller			
Program environment	T-Flow Software			
Program/Database Capacity	999 Programs – 4,000 points/program			
Control Method	PTP & CP			
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)			
I/O Signal	12 inputs / 12 outputs			
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Mobbus TCP			
Power Source	AC200-240 – 350 W		AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm) *3</i>	500 x 550 x 582	600 x 650 x 582	500 x 550 x 650	600 x 650 x 650
Working environment	Temp 10-40°C, Humidity 20-90%			
Robot weight (<i>kg</i>)	33	42	35	45

<Note>

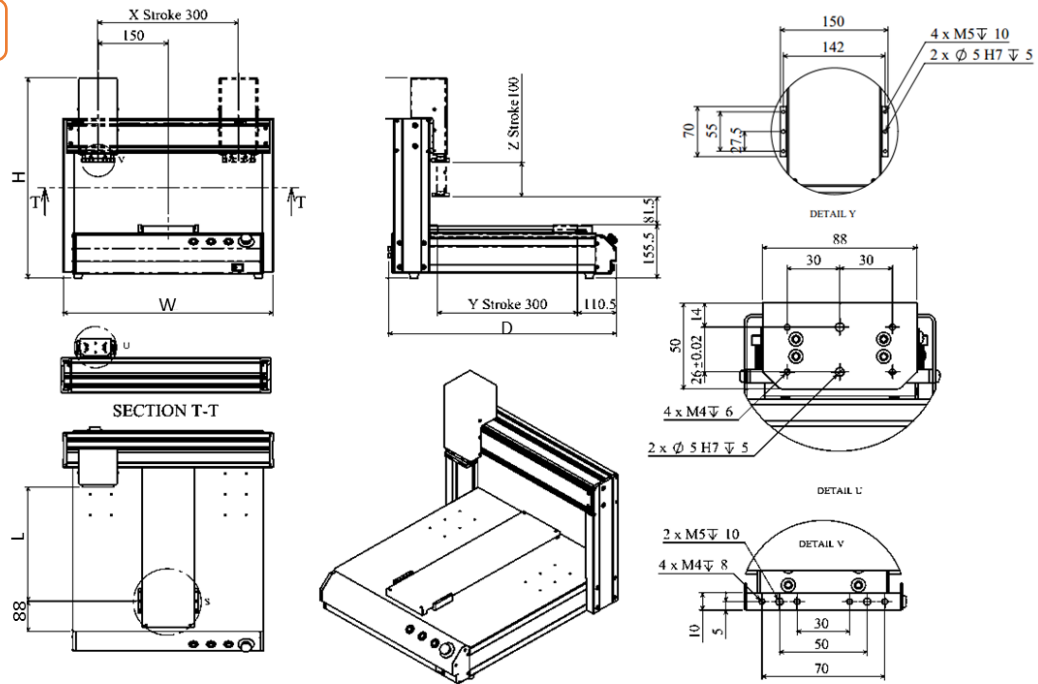
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

*3: Specification subject to change without notices.

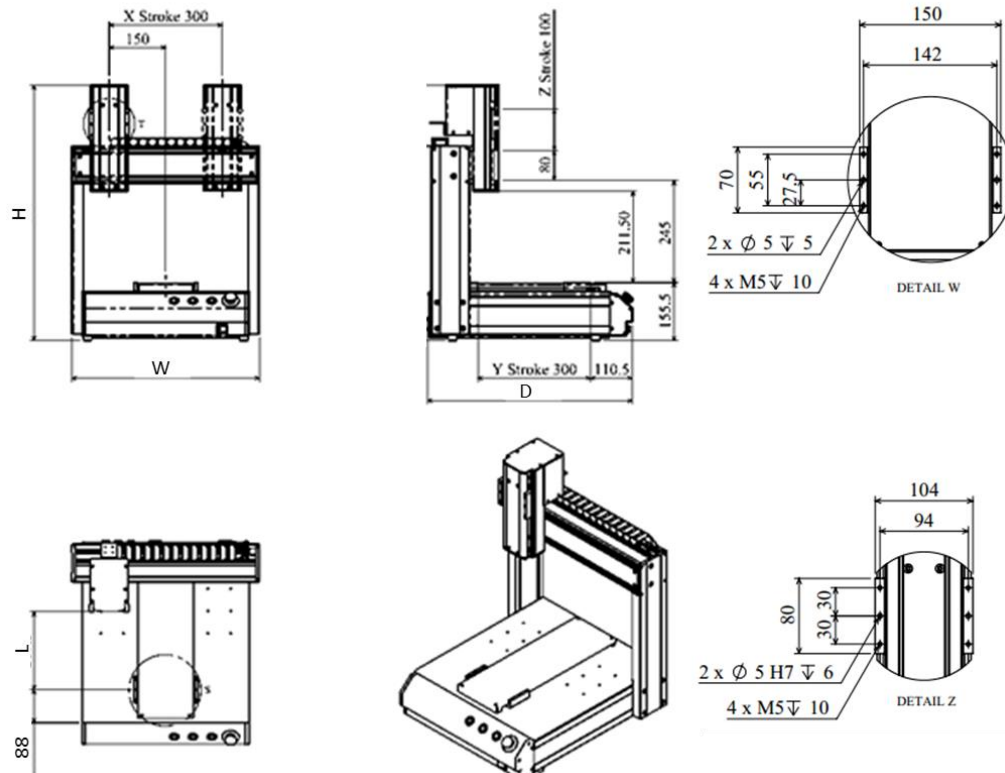
- External Dimension

TDR3



<i>Model</i>	W	D	H	L
<i>TDR31-5310</i>	498	550	590	230
<i>TDR31-5410</i>	598	650	590	330

TDR3-SZ



<i>Model</i>	W	D	H	L
<i>TDR3-3310-SZ</i>	498	550	650	208
<i>TDR3-4410-SZ</i>	598	650	650	308

DESKTOP ROBOT 3 AXIS SLIM TYPE

TDR3S robot series are 3-axis tiny robots type. They are minimalist designs but still ensure high accuracy and stability, specialized for many different applications: screwing, dispensing, PCB cutting, soldering...



Features:

1. Suitable for large-size products.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, the arbitrary non-planar 3D path can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.
6. Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR3S-3310	TDR3S-3310-SZ
Working Range X/Y/Z (mm)	300/300/100	300/300/100
Maximum Load Workpiece/Tool (kg)	5/3	
Maximum Speed XY/Z (mm/s)*1	500/250	
Repeatability *2	± 0.02mm	
Controller	T-ROBO Motion Controller	
Program environment	T-Flow Software	
Program/Database Capacity	999 Programs – 4,000 points / program	
Control Method	PTP & CP	
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)	
I/O Signal	12 inputs / 12 outputs	
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Modbus TCP	
Power Source	AC200-240 – 350 W	
External Dimensions WxDxH (mm) *3	444 x 520 x 585	444 x 520 x 595
Working environment	Temp 10 - 40°C, Humidity 20 - 90%	
Robot weight (kg)	30	35

<Note>

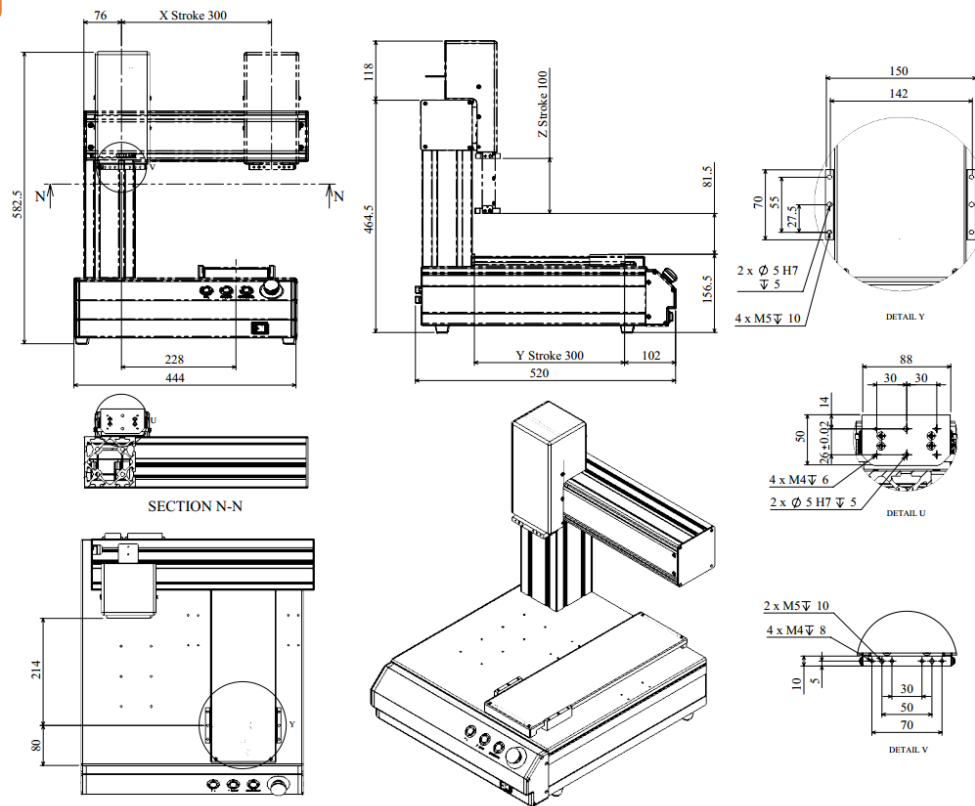
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

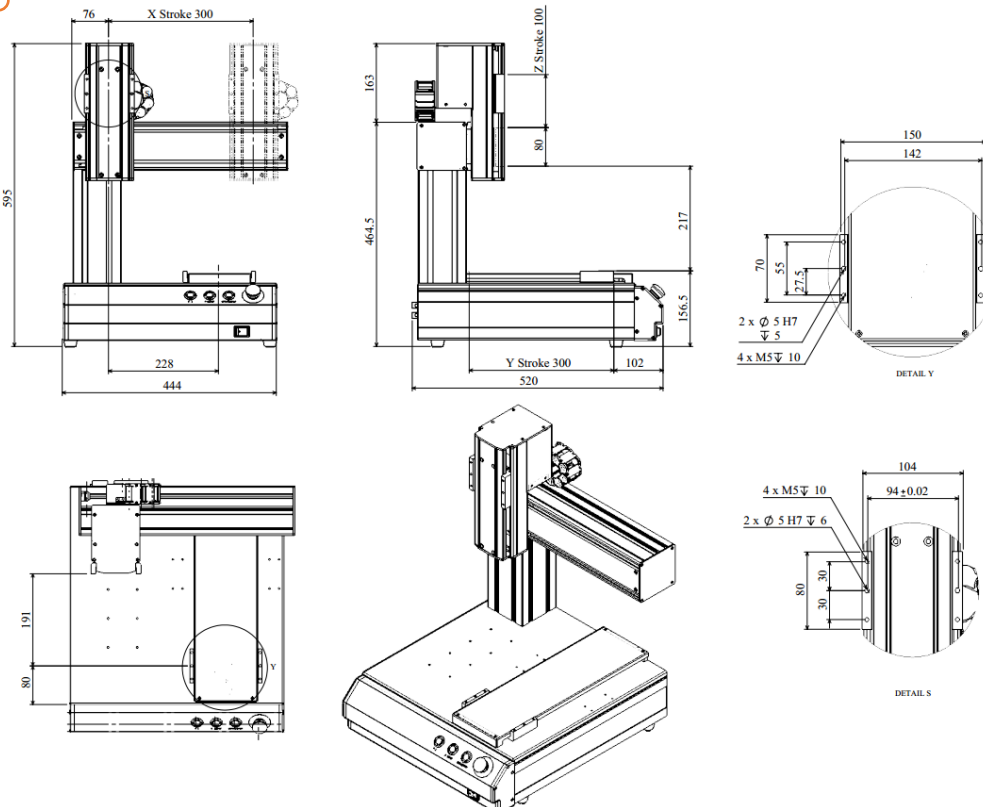
*3: Specification subject to change without notices. *3: Specification subject to change without notices.

• External Dimension

TDR3S



TDR3S-SZ



DESKTOP ROBOT 4 AXIS

TDR4 robot series are 4-axis robots. They are designed to ensure high accuracy and stability, specialized for many different applications: screwing, dispensing, PCB cutting, soldering ...



Features:

1. The additional 4th rotational (R) axis allows for dispensing or soldering at a user-specified, fixed angle around the 360° rotational plane, allowing it to access hard-to-reach areas and vertical surfaces.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, the arbitrary non-planar 3D path can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.

Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR4-3310	TDR4-4410
Working Range <i>X/Y/Z (mm)</i>	300 / 300 / 100 / 360°	400 / 400 / 100 / 360°
Maximum Load <i>Workpiece/Tool (kg)</i>	5 / 3	5 / 3
Maximum Speed <i>XY/Z (mm/s)*1</i>	500 / 250 / 600°	
Repeatability *2	± 0.02mm / ±0.1°	
Controller	T-ROBO Motion Controller	
Program environment	T-Flow Software	
Program/Database Capacity	999 Programs – 4,000 points / program	
Control Method	PTP & CP	
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)	
I/O Signal	12 inputs / 12 outputs	
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Modbus TCP	
Power Source	AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm) *3</i>	500 x 550 x 728	600 x 650 x 728
Working environment	Temp 10-40°C, Humidity 20-90%	
Robot weight (kg)	42	52

<Note>

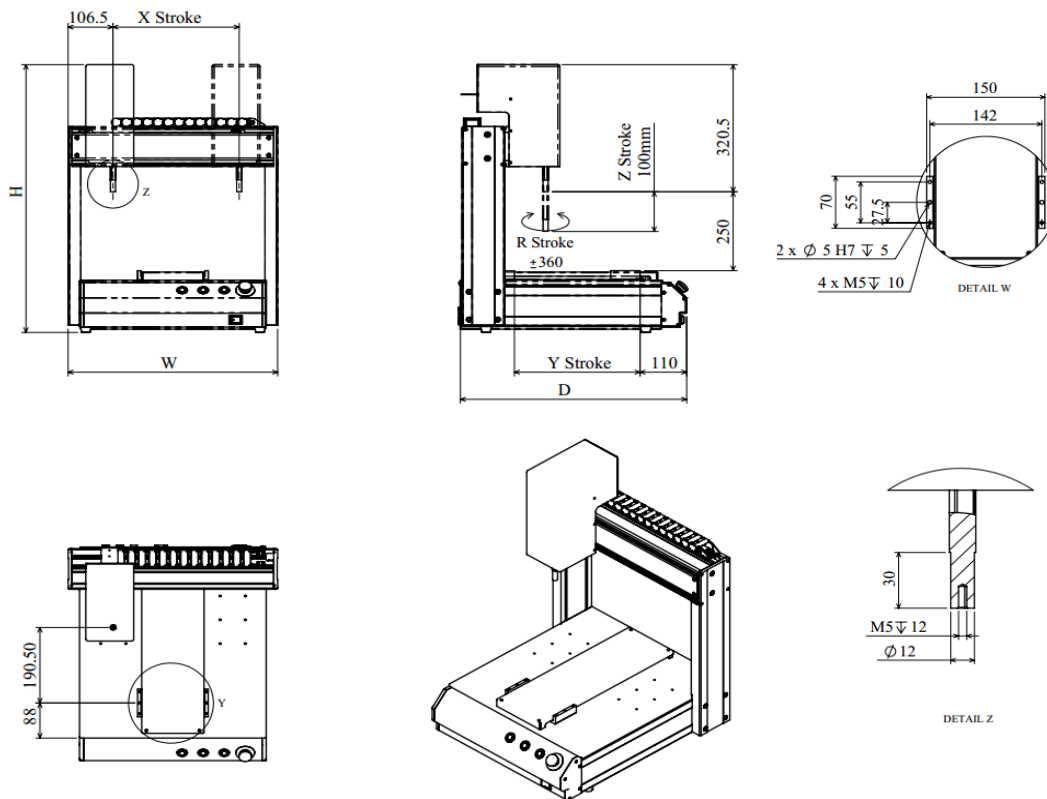
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

*3: Specification subject to change without notices.

• External Dimension

TDR4



Model	W	D	H
TDR31-5310	498	550	728
TDR31-5410	598	650	728

DESKTOP ROBOT 3, 4 AXIS PLUS

TDR31 and TDR41 robot series are 3-axis and 4-axis robots plus. They are designed with a double workpiece and ensure high accuracy and stability to improve productivity and reduce operation waiting time. Specialized for many different applications: screwing, dispensing, PCB cutting, soldering ...



Features:

1. Dual worktable design, two workbenches alternating operation, significantly improving the production effect.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, the arbitrary non-planar 3D path can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.
6. Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR31-5310	TDR31-5410	TDR31-5310(SZ)	TDR31-5410(SZ)	TDR41-5310	TDR41-5410
Working Range <i>X/Y/Z (mm)</i>	300/300/ 100	400/400/ 100	300/300/ 100	400/400/ 100	300/300/ 100/360°	400/400/ 100/360°
Maximum Load <i>Workpiece/Tool (kg)</i>	5 / 3		5 / 5		5 / 3	5 / 3
Maximum Speed <i>XY/Z (mm/s)*1</i>	500 / 250		500 / 250		500 / 250 / 360°	
Repeatability *2	± 0.02mm		± 0.02mm		± 0.02mm / ±0.1°	
Controller	T-ROBO Motion Controller					
Program environment	T-Flow Software					
Program/Database Capacity	999 Programs – 4,000 points / program					
Control Method	PTP & CP					
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)					
I/O Signal	12 inputs / 12 outputs					
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Mobbus TCP					
Power Source	AC200-240 – 350 W		AC200-240 – 500 W		AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm) *3</i>	698 x 550 x 590	698 x 650 x 590	698 x 550 x 635	698 x 650 x 635	698 x 550 x 730	698 x 650 x 730
Working environment	Temp 10-40°C, Humidity 20-90%					
Robot weight (kg)	42	48	45	50	48	52

<Note>

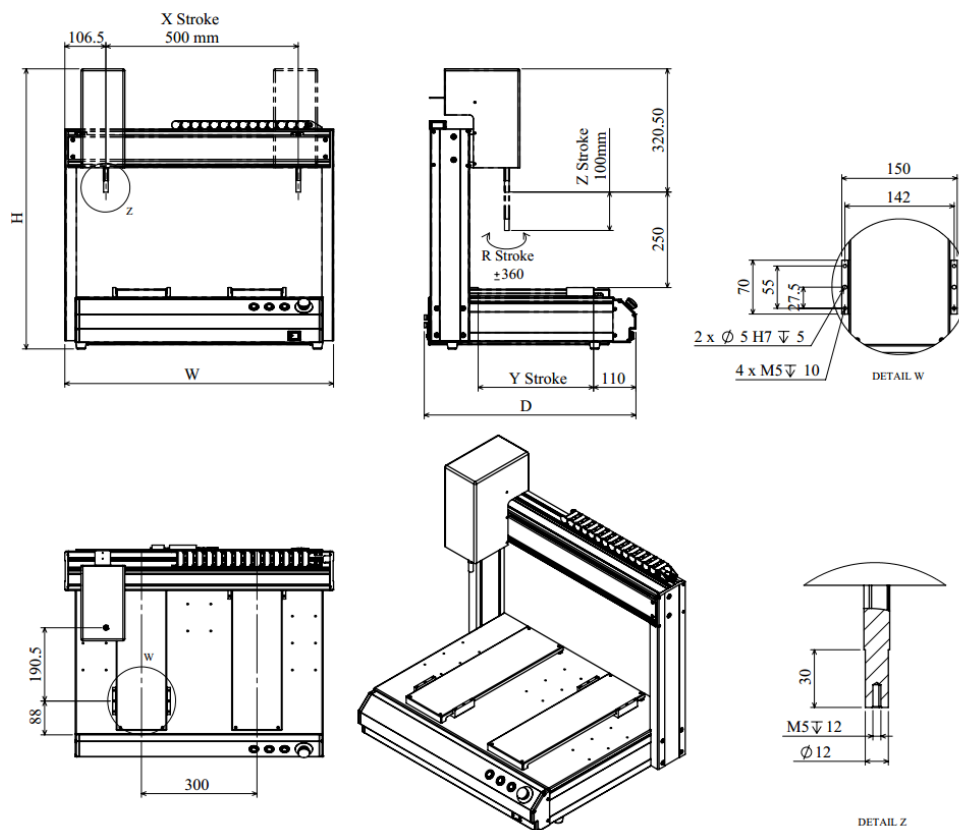
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

*3: Specification subject to change without notices.

• External Dimension

TDR41



Model	W	D	H
TDR31-5310	698	550	728
TDR31-5410	698	650	728

DESKTOP ROBOT 6 AXIS

TDR6 robot series are 6-axis robots. They are designed with a double workpiece and ensure high accuracy and stability to improve productivity. Specialized for many different applications: screwing, dispensing, PCB cutting, soldering ...



Features:

1. Dual worktable independent design, two workbenches independent operation, double of significantly improving the production effect.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, the arbitrary non-planar 3D path can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.
6. Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR6-2310	TDR6-2410	TDR6-2310-SZ	TDR6-2410-SZ
Working Range <i>X/Y/Z (mm)</i>	200/300/100	200/400/100	200/300/100	200/400/100
Maximum Load <i>Workpiece/Tool (kg)</i>	5/3		5/5	
Maximum Speed <i>XY/Z (mm/s)*1</i>	500/250		500/250	
Repeatability *2	± 0.02mm		± 0.02mm	
Controller	T-ROBO Motion Controller			
Program environment	T-Flow Software			
Program/Database Capacity	999 Programs – 4,000 points / program			
Control Method	PTP & CP			
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)			
I/O Signal	12 inputs / 12 outputs			
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Mobbis TCP			
Power Source	AC200-240 – 350 W		AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm) *3</i>	698x550x590	698 x 650 x 590	698 x 550 x 650	698 x 650 x 650
Working environment	Temp 10-40°C, Humidity 20-90%			
Robot weight (kg)	55	58	58	62

<Note>

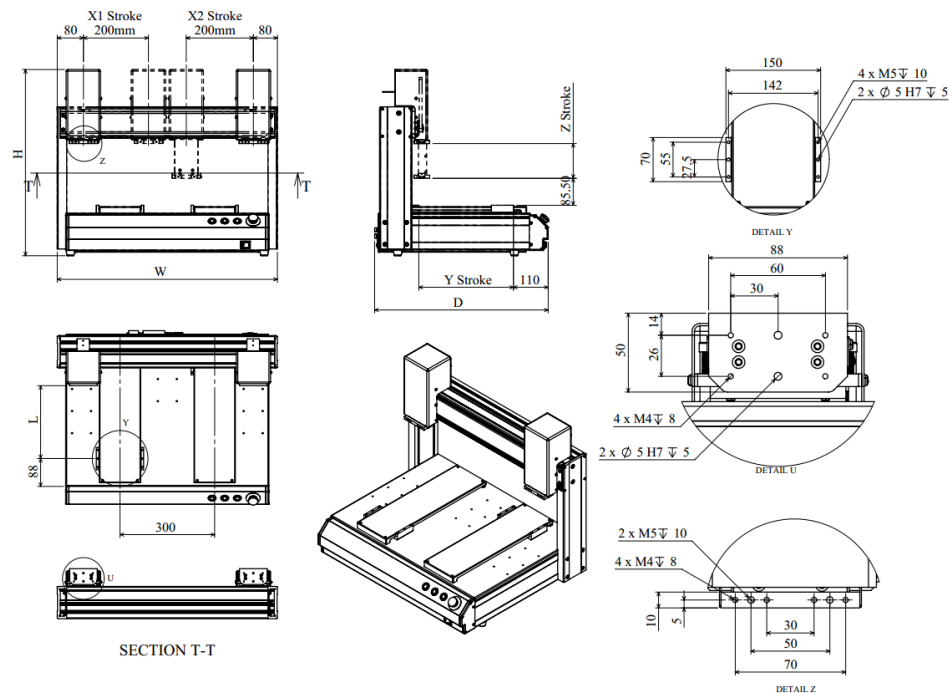
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

*3: Specification subject to change without notices.

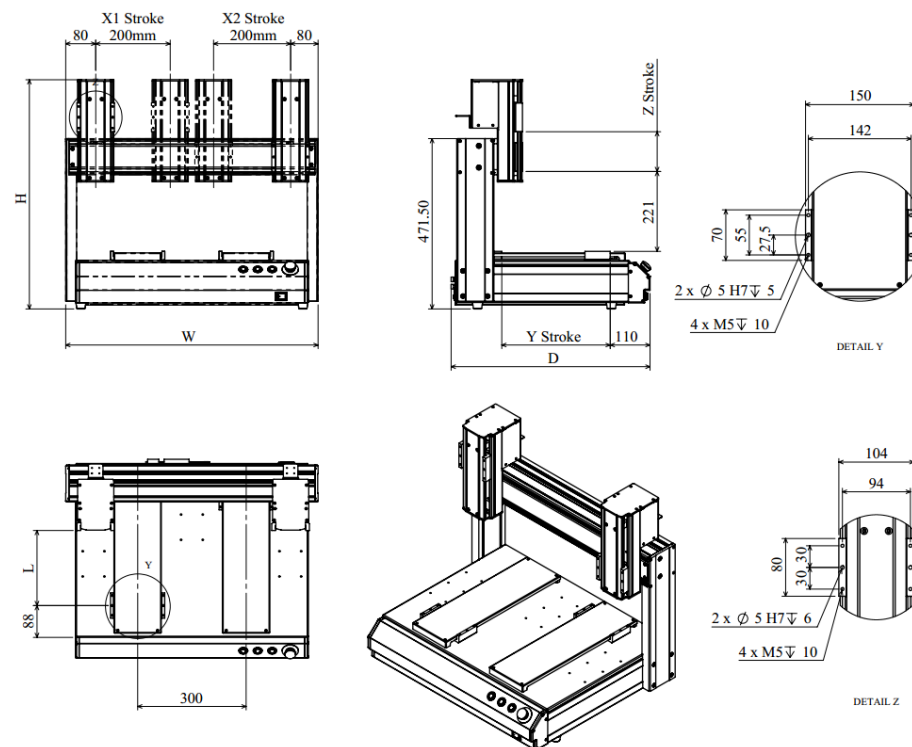
External Dimension

TDR6



Model	W	D	H	L
TDR6-2310	698	550	590	230
TDR6-2410	698	650	590	330

TDR6-SZ



Model	W	D	H	L
TDR6-2310-SZ	698	550	650	208
TDR6-2410-SZ	698	650	650	308

DESKTOP ROBOT 8 AXIS

TDR8 robot series are 8-axis robots. They are designed with a double workpiece and ensure high accuracy and stability to improve productivity. specialized for many different applications: screwing, dispensing, PCB cutting, soldering ...



TDR8



Teach pendant

Features:

1. Dual worktable independent design, two workbenches independent operation, double of significantly improving the production effect.
2. Simple and convenient operation, high speed, and accuracy.
3. Using trapezoidal acceleration and deceleration, speed foresight, and micro-line interpolation technology, an arbitrary non-planar 3D path can be realized.
4. Comprehensive dispensing process solutions, including early closing, lagging opening, inclined upward-lifting, variable speed in motion, closed graphics circle settings, and other functions.
5. Modular connectivity design for the simple installation of productivity enhancement tools. Increased productivity due to faster cycle times and fewer rejects.
6. Proprietary, user-friendly software allows programs to be easily and quickly set up using the teach pendant.

• Specification

MODEL	TDR8-2310	TDR8-2410
Working Range X/Y/Z (mm)	200/300/100/360°	200/400/100/360°
Maximum Load Workpiece/Tool (kg)	5/3	5/3
Maximum Speed XY/Z (mm/s)*1	500/250/600°	
Repeatability *2	± 0.02mm / ± 0.1°	
Controller	T-ROBO Motion Controller	
Program environment	T-Flow Software	
Program/Database Capacity	999 Programs – 4,000 points / program	
Control Method	PTP & CP	
Teaching Method	Remote Teaching (JOG), Manual Data Input (MDI)	
I/O Signal	12 inputs / 12 outputs	
External Interface	RS232, RS485/RS422, Ethernet Protocol: No Protocol, TCP/IP, Modbus RTU, Modbus TCP	
Power Source	AC200-240 – 500 W	
External Dimensions WxDxH (mm) *3	698 x 550 x 728	698 x 650 x 728
Working environment	Temp 10-40°C, Humidity 20-90%	
Robot weight (kg)	62	65

<Note>

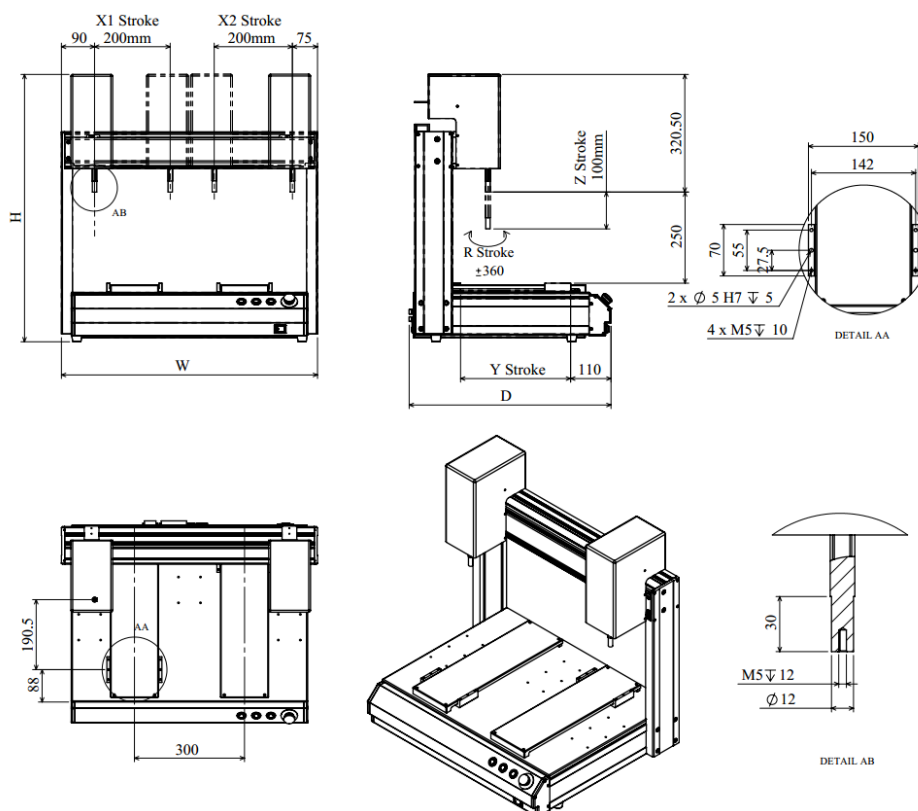
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the full portable load.

*2: Repeatability was measured at a constant temperature and did not represent a guarantee of absolute precision.

*3: Specification subject to change without notices.

• External Dimension

TDR8



Model	W	D	H
TDR8-2310	698	550	728
TDR8-2410	698	650	728

DESKTOP SCREWING MACHINE SERIES PRODUCT SELECTION



TDS3

3 axis X-Y-Z
Max payload 5/5kg
Max speed 500/250mm/s



TDS31

3+1 Axis X-2Y-Z
Max payload 5/5kg
Max speed 500/250mm/s



TDS6

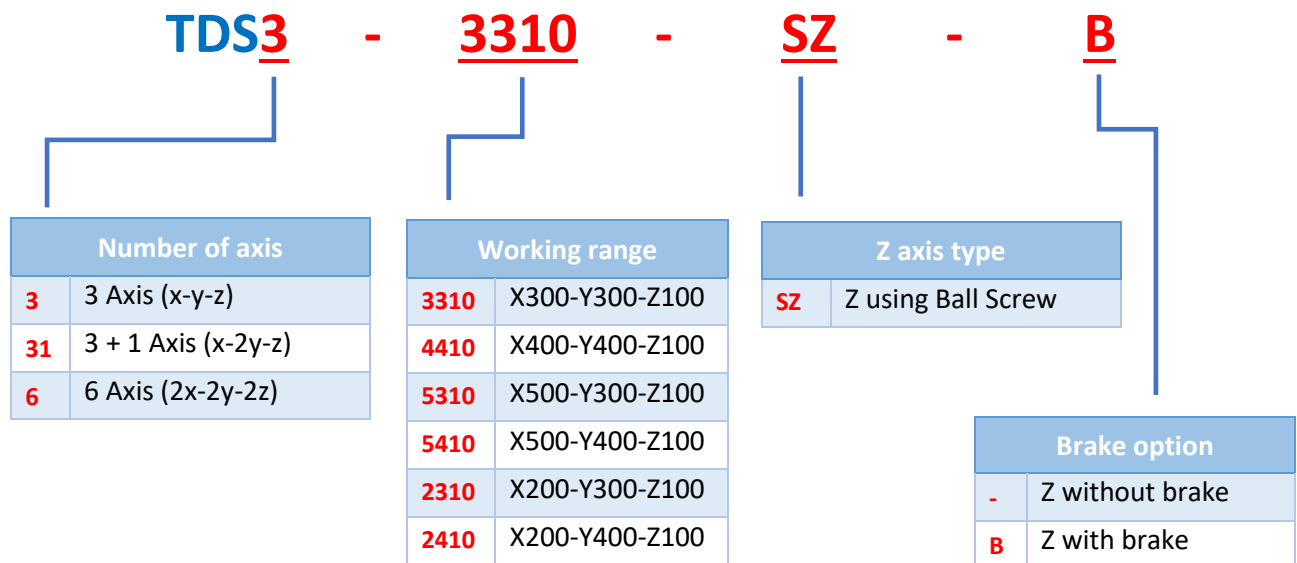
6 Axis 2X-2Y-2Z
Max payload 5/5kg
Max speed 500/250mm/s

ORDER INFORMATION

Model	Number Axis	Working range	Z Axis type	Brakes (Option)
(1)	(2)	(3)	(4)	(5)
TDS	3	3310	SZ	B

(1) Series	TDS	T-Robo desktop screwing machine
(2) Number of axis	3	3 axis (x-y-z)
	31	3 + 1 axis (x-2y-z)
	6	6 axis (2x-2y-2z)
(3) Working range (mm)	3310	X300-Y300-Z100 (TDR3)
	4410	X400-Y400-Z100 (TDR3)
	5310	X500-Y300-Z100 (TDR31)
	5410	X500-Y400-Z100 (TDR31)
	2310	X200-Y300-Z100 (TDS6)
(4) Z axis type	SZ	Z using BallScrew
(5) Brakes	-	Z axis without brake
	B	Z axis with brake

• Ordering Method



Example	
Order code	TDS3 - 3310 – SZ
Description	Desktop robot 3 Axis – Stroke X300mm/Y300mm/Z100mm – Z use Ball screw

DESKOP SCREWING MACHINE 3 AXIS

TDS3 screwing machine series are 3-axis machines. They use a PLC controller and HMI screen to reduce the cost and ensure high accuracy and stability. They are specialized in screwing applications.



Features:

1. Suitable for large-size products.
2. Can replace artificial specific screw lock pay operations, realizing mechanization production. Reduce the labor intensity of workers. The traditional manual screw placement and alignment of the screw head takes up a lot of time and energy.
3. Do not need to match the external computers, convenient installation. Setting operation is simple. The staff quickly master the operation skill and debugging.
4. Apply to mobile phones, digital products, photoelectric, health care, small household electrical appliances.

• Specification

MODEL	TDS3-3310-SZ	TDS3-4410-SZ
Working Range <i>X/Y/Z (mm)</i>	300/300/100	400/400/100
Maximum Load <i>Workpiece/Tool (kg)</i>	5/5	
Maximum Speed <i>XY/Z (mm/s)*1</i>	500/250	
Repeatability *2	± 0.02mm	
Controller	PLC Control – PTP 2D	
Program/Database Capacity	10 -25 program, 20 – 30 points per program (able to adjust follow customer request)	
Teaching Method	Teaching on HMI screen	
I/O Signal	12 inputs / 12 outputs	
External Interface (Option)	RS232C, RS485 – Modbus ASCII\RTU	
Features	Counting product (total, OK, NG), store on workshift, check force, check screw, check high.	
Power Source	AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm)*3</i>	500x750x670	600x850x670
Working environment	Temp 10-40°C, Humidity 20-90%	
Robot weight (kg)	52	56

<Note>

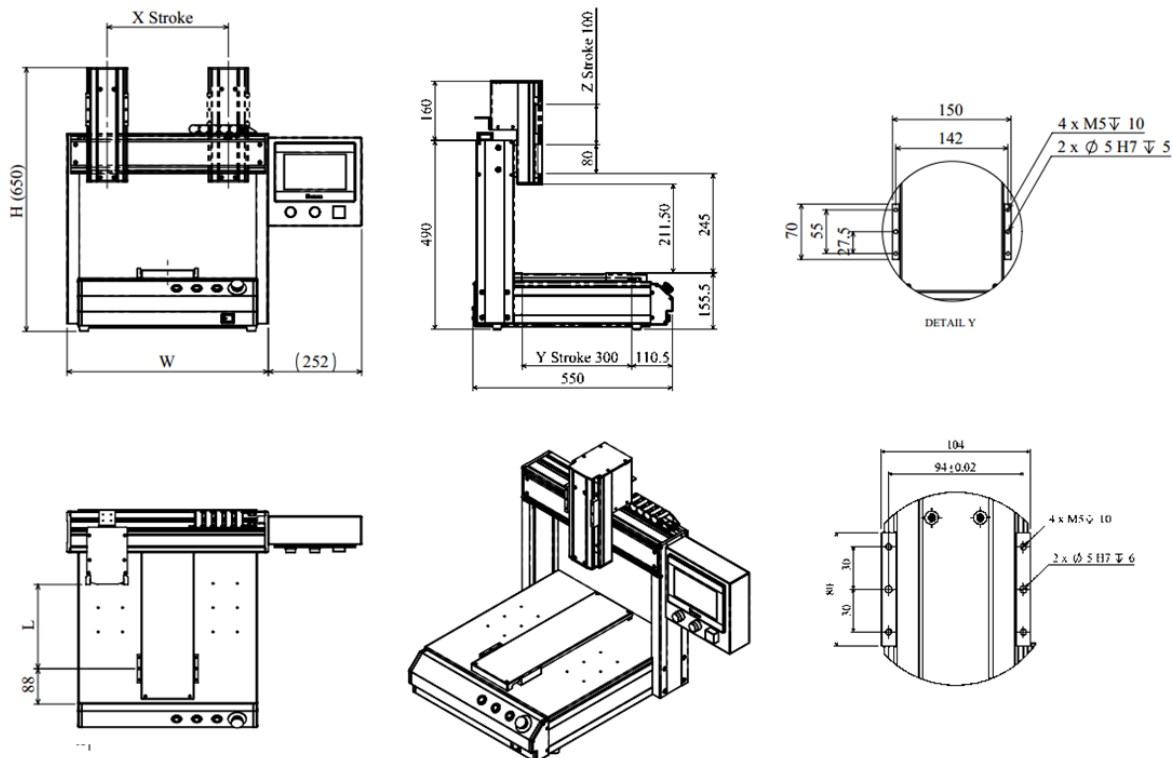
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the maximum portable load.

*2: Repeatability was measured at a constant temperature and did not guarantee absolute precision.

*3: Dimensions not included HMI, Specification subject to change without notices.

• External Dimension

TDS3-SZ



Model	W	D	H	L
TDS3-3310-SZ	498	550	650	208
TDS3-4410-SZ	598	650	650	308

DESKOP SCREWING MACHINE 3 AXIS PLUS

TDS31 screwing machine series are 4-axis machines. They use a PLC controller and HMI screen to reduce the cost and designed with the double workpiece and ensure high accuracy and stability to improve productivity reduce operation waiting time. They are specialized in screwing applications.



Features:

1. Dual worktable design, two workbenches alternating operation, significantly improving the production effect.
2. Can replace artificial specific screw lock pay operations, realizing mechanization production. Reduce the labor intensity of workers. The traditional manual screw placement and alignment of the screw head takes up a lot of time and energy.
3. Do not need to match the external computers, convenient installation. Setting operation is simple. The staff quickly master the operation skill and debugging.
4. Apply to mobile phones, digital products, photoelectric, health care, small household electrical appliances.

• Specification

MODEL	TDS31-3310-SZ	TDS31-4410-SZ
Working Range <i>X/Y/Z (mm)</i>	500/300/100	500/400/100
Maximum Load <i>Workpiece/Tool (kg)</i>	5/5	
Maximum Speed <i>XY/Z (mm/s)*1</i>	500/250	
Repeatability *2	± 0.02mm	
Controller	PLC Control – PTP 2D	
Program/Database Capacity	10 -25 program, 20 – 30 points per program (able to adjust follow customer request)	
Teaching Method	Teaching on HMI screen	
I/O Signal	12 inputs / 12 outputs	
External Interface (Option)	RS232C, RS485 – Modbus ASCII\RTU	
Features	Counting product (total, OK, NG), store on workshift, check force, check screw, check high.	
Power Source	AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm)*3</i>	698x550x650	698x650x650
Working environment	Temp 10-40°C, Humidity 20-90%	
Robot weight (kg)	55	60

<Note>

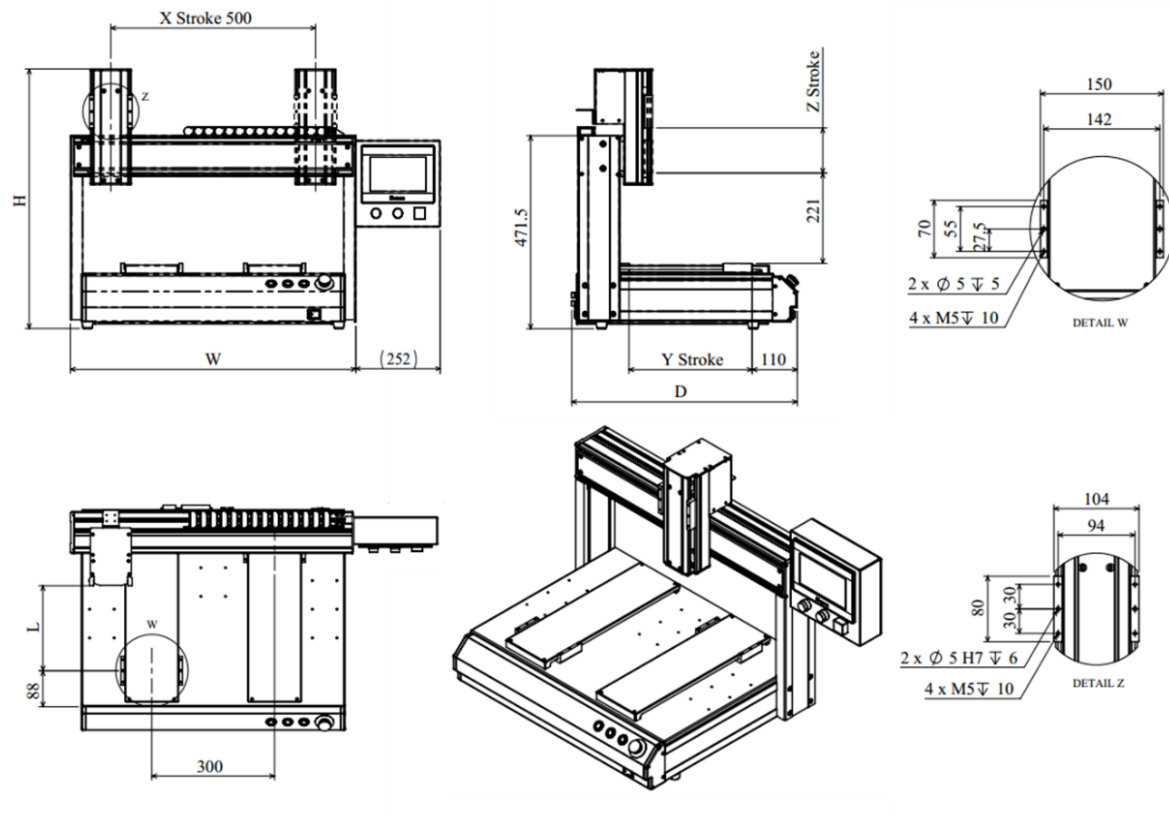
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the maximum portable load.

*2: Repeatability was measured at a constant temperature and did not guarantee absolute precision.

*3: Dimensions not included HMI, Specification subject to change without notices.

• External Dimension

TDS31-SZ



Model	W	D	H	L
TDS31-5310-SZ	698	550	670	208
TDS31-5410-SZ	698	650	670	308

DESKOP SCREWING MACHINE 6 AXIS

TDS6 screwing machine series are 6-axis machines. They use a PLC controller and HMI screen to reduce the cost and designed with the double workpiece and ensure high accuracy and stability to improve productivity reduce operation waiting time. They are specialized in screwing applications.



Features:

1. Design a dual independent working table, two workbenches independent operation, and double the production effect significantly.
2. Can replace artificial specific screw lock pay operations, realizing mechanization production. Reduce the labor intensity of workers. The traditional manual screw placement and alignment of the screw head takes up a lot of time and energy.
3. Do not need to match the external computers, convenient installation. Setting operation is simple. The staff quickly master the operation skill and debugging.
4. Apply to mobile phones, digital products, photoelectric, health care, small household electrical appliances.

• Specification

MODEL:	TDS6-2310-SZ	TDS6-2410-SZ
Working Range <i>X/Y/Z (mm)</i>	200/300/100	200/400/100
Maximum Load <i>Workpiece/Tool (kg)</i>	5/5	
Maximum Speed <i>XY/Z (mm/s)*1</i>	500 / 250	
Repeatability *2	± 0.02mm	
Controller	PLC Control – PTP 2D	
Program/Database Capacity	10 -25 program, 20 – 30 points per program (able to adjust follow customer request)	
Teaching Method	Teaching on HMI screen	
I/O Signal	12 inputs / 12 outputs	
External Interface (Option)	RS232C, RS485 – Modbus ASCII\RTU	
Features	Counting product (total, OK, NG), store on workshift, check force, check screw, check high.	
Power Source	AC200-240 – 500 W	
External Dimensions <i>WxDxH (mm)*3</i>	698x550x650	698x650x650
Working environment	Temp 10-40°C, Humidity 20-90%	
Robot weight (kg)	55	60

<Note>

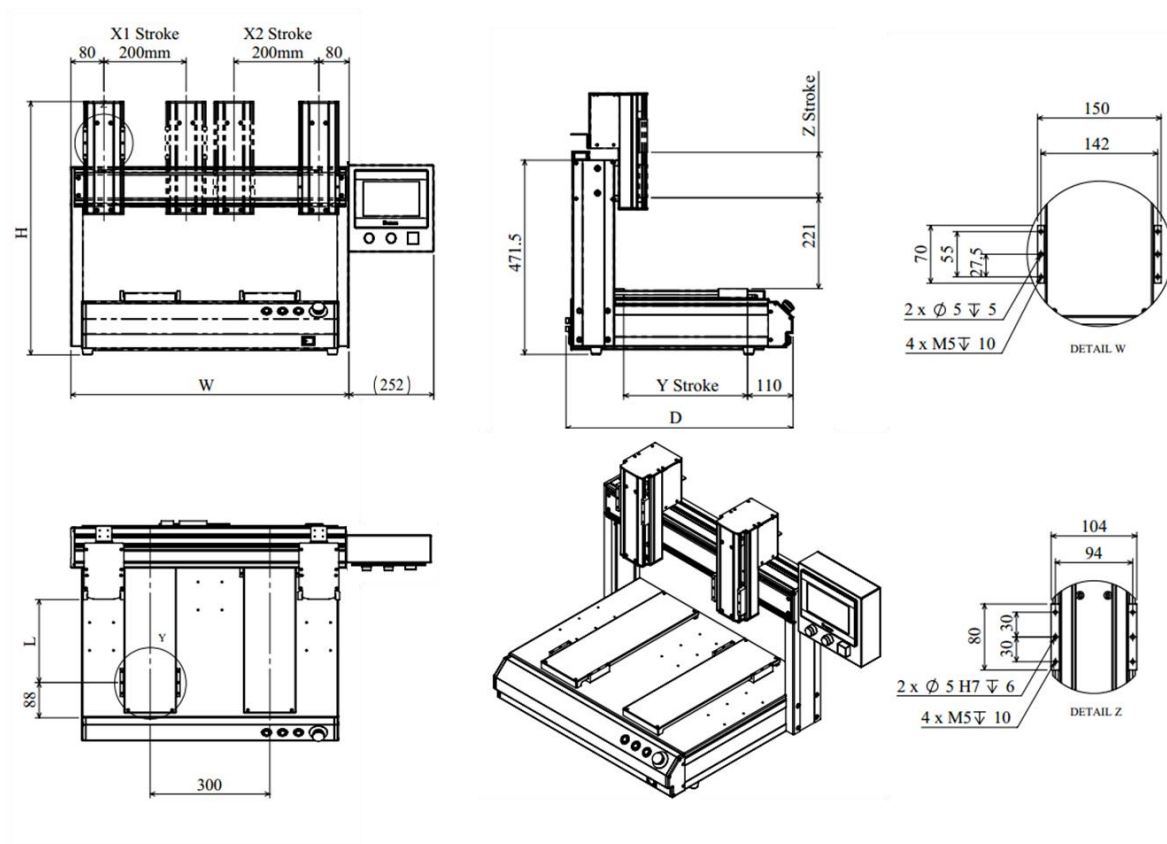
*1: Maximum speed can vary depending upon conditions. The robot cannot reach maximum speed when bearing the maximum portable load.

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*3: Dimensions not included HMI, Specification subject to change without notices.

• External Dimension

TDS6-SZ



Model	W	D	H	L
TDS6-2310-SZ	698	550	650	208
TDS6-2410-SZ	698	650	650	308

SCREWING EQUIPMENTS

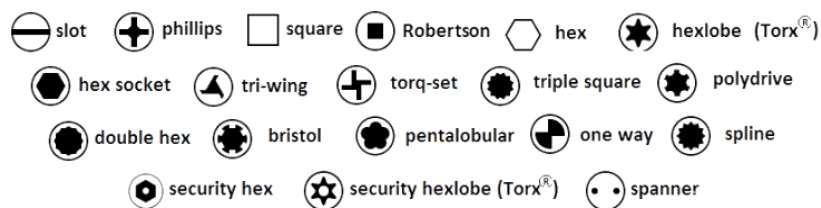
Split Pickup Feeder

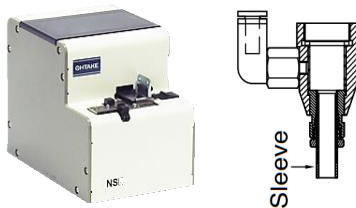
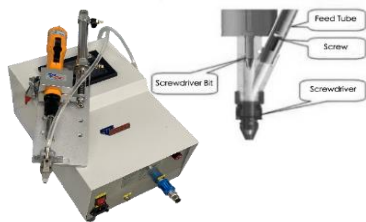
1. Feeder supply screw to split disc or fixed position.
2. Suction on ScrewDrive move and pickup screw fed adopts vacuum suction screw method.
3. Applies to most screw lengths with size M1.2-M4

Blow Direction Feeder

1. Screw is fed from Feeder to head of Screwdrive by Air blow.
2. Suitable screw specification $L \geq 1.2 D$ (D = screw head diameter, L = length of screw thread) conforms to the condition screw are available this desktop blowing type automatic locking screw machine.
3. This Automatic screw feeding machine available for similar size screw length is $+ / - 5$ mm with size M2-M5.

Applicable screws head



METHOD	PICKUP TYPE FEEDER	BLOW TYPE FEEDER
Image		
Screwdriver	HIOS / KILEWS / SUDONG / DG...	HIOS / KILEWS / SUDONG / DG...
Screw feeder	OHTAKE / FUMA / SUMAKE...	SUMAKE / T-ROBO
Screw Size	M1.2-M4	M2.6-M6
Torque	1.5-15kgf.cm	1.5-20kgf.cm
Screw feeding Method	Feeder + Pick by Vacuum suction + Tighten screwdriver + Screwdriver bits	Feeder + tighten gripper + chunk + Tighten screwdriver + screwdriver bits
Screw lock speed	1.5-2.2s/pcs (not included load & unload)	1.1-1.8s/pcs (not included load & unload)

SCREWING APPLICATIONS

Desktop Screwing machine Series, with more configurations: 3 axes, 3+1 Axis, 6 Axis. Along with a combination of any type of feeder and screwdriver and suitable for most of the available equipment of the manufacturers. This makes T-ROBO's Auto screwing machine more complete and relevant to all the needs of assembling and tightening screws in all production areas.

Adopts vacuum suction screw method or Blow screw method, high universality, overcome the blowing screw can't send the screw length diameter ratio less than 1.2mm, also overcomes the disadvantage of magnetic suction way can't suction stainless steel screw. For M1.0 - M4.0 screws, all can be applied, such as screw size changed, need to change the suction nozzle.

PICKUP TYPE	DESCRIPTION	BLOW TYPE	DESCRIPTION
	Series Model: TDR3-SZ/TDS3-SZ Product Size (mm): 320x350x90		Series Model: TDR3-SZ/TDS3-SZ Product Size (mm): 320x350x90
	Series Model: TDR31-SZ/TDS31-SZ Product Size (mm): 150x350x90		Series Model: TDR31-SZ/TDS31-SZ Product Size (mm): 240x350x90
	Series Model: TDR6-SZ/TDS6-SZ Product Size (mm): 160x350x90		Series Model: TDR6-SZ/TDS6-SZ Product Size (mm): 180x350x90

* In addition, we can configure to suit the required layout and application.

SCREWING ACCESSORIES



Feeder



Feeder Pickup



Feeder Blow



Handle Screwdriver



Screwdriver



Screwdriver unit



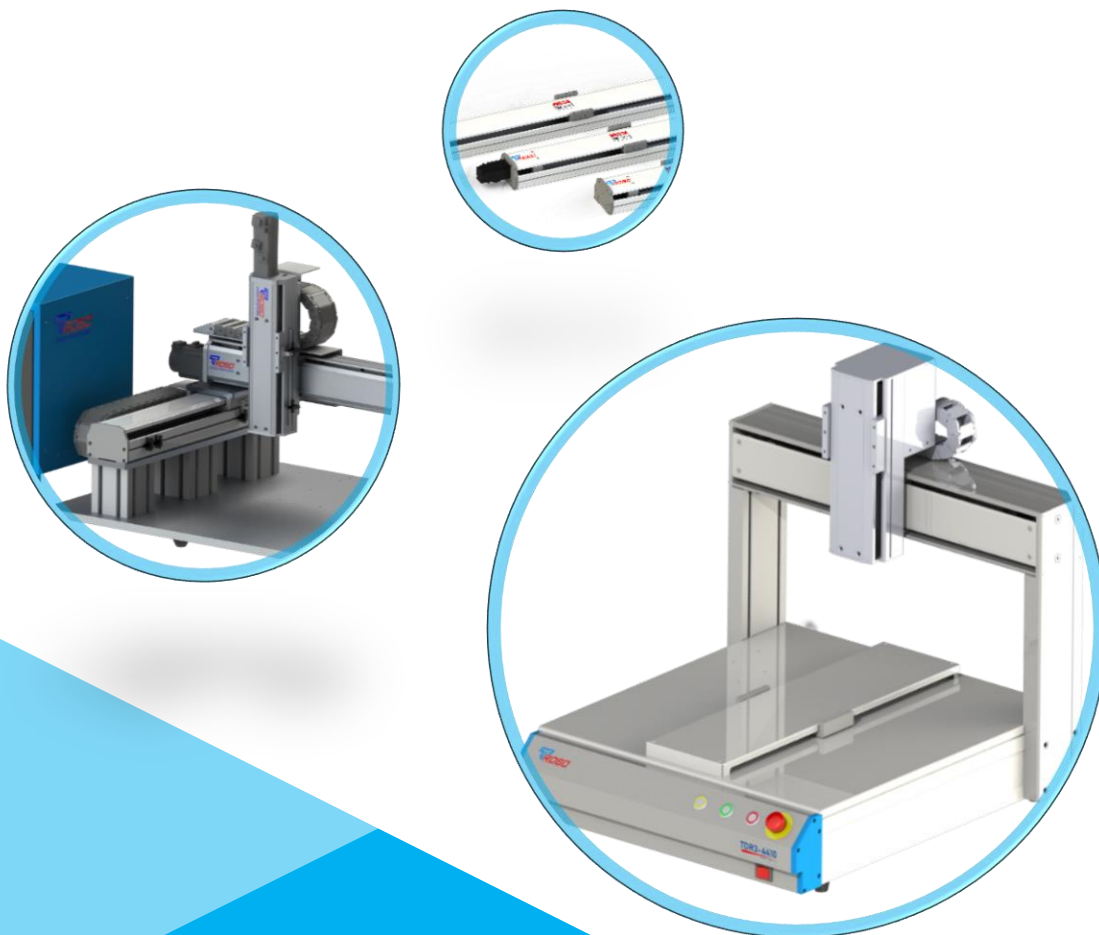
Suction head



Claw head



Screw bit



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