

Specifications

SGP-300-HD Series pillar gantries are biggest and strongest series of TDRi pillar gantries.

Up to 3 meter X (vertical arm) and 3 meter Z strokes are possible. 300kg payload make it capable for special applications like twin wire welding, laser cutting, plazma cutting, flaming etc beside of standard welding applications.

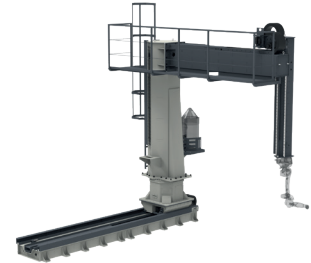
SGP-300-HD HEAVY DUTY PILLAR GANTRY

AXES CONFIGURATIONS	X, XY, XYZ, XZ, X + ROTARY, XZ + ROTARY, Z+ROTARY	S - Standard Version		L - Long Arm Version	
X AXES	Max payload	4.000	kg	6.000	kg
	Max allowable extra load (includes Y, Z and rotary axes extra loads)	600	kg	600	kg
	X module lengths	2-3-4	m	2-3-4	m
	Stroke range	1-39	m	1-39	m
	Length range (as uniting of 2m, 3m, and 4m modules)	2-40	m	2-40	m
	Max speed	1,7	m/s	1.7	m/s
	Average speed	1,4	m/s	1.4	m/s
ROTARY AXES	Max inertia	15.000	kgm ²	15.000	kgm ²
	Stroke range	±170	degree	±170	degree
	Max speed	5	rpm	5	rpm
	Average speed	4	rpm	4	rpm
Y AXES	Max payload	1.500	kg	2.000	kg
	Max allowable extra load (includes Z axes extra load)	100	kg	250	kg
	Stroke range	2 - 2.5 - 3	m	3.5, 4	m
	Max speed	1.7	m/s	1.2	m/s
	Average speed	1.4	m/s	1	m/s
Z AXES	Max payload	300	kg	300	kg
	Max allowable extra load	20	kg	20	kg
	Stroke range	1.5 - 2	m	2.5 - 3	m
	Max speed	0.7	m/s	0.4	m/s
	Average speed	0.5	m/s	0.35	m/s
FLANGE HEIGHT	End flange height from the floor	2-7	m	2-7	m
	Repeatability	0.05	mm	0.05	mm

XYZ Axes



XYZ ROTARY Axes



XY Axes



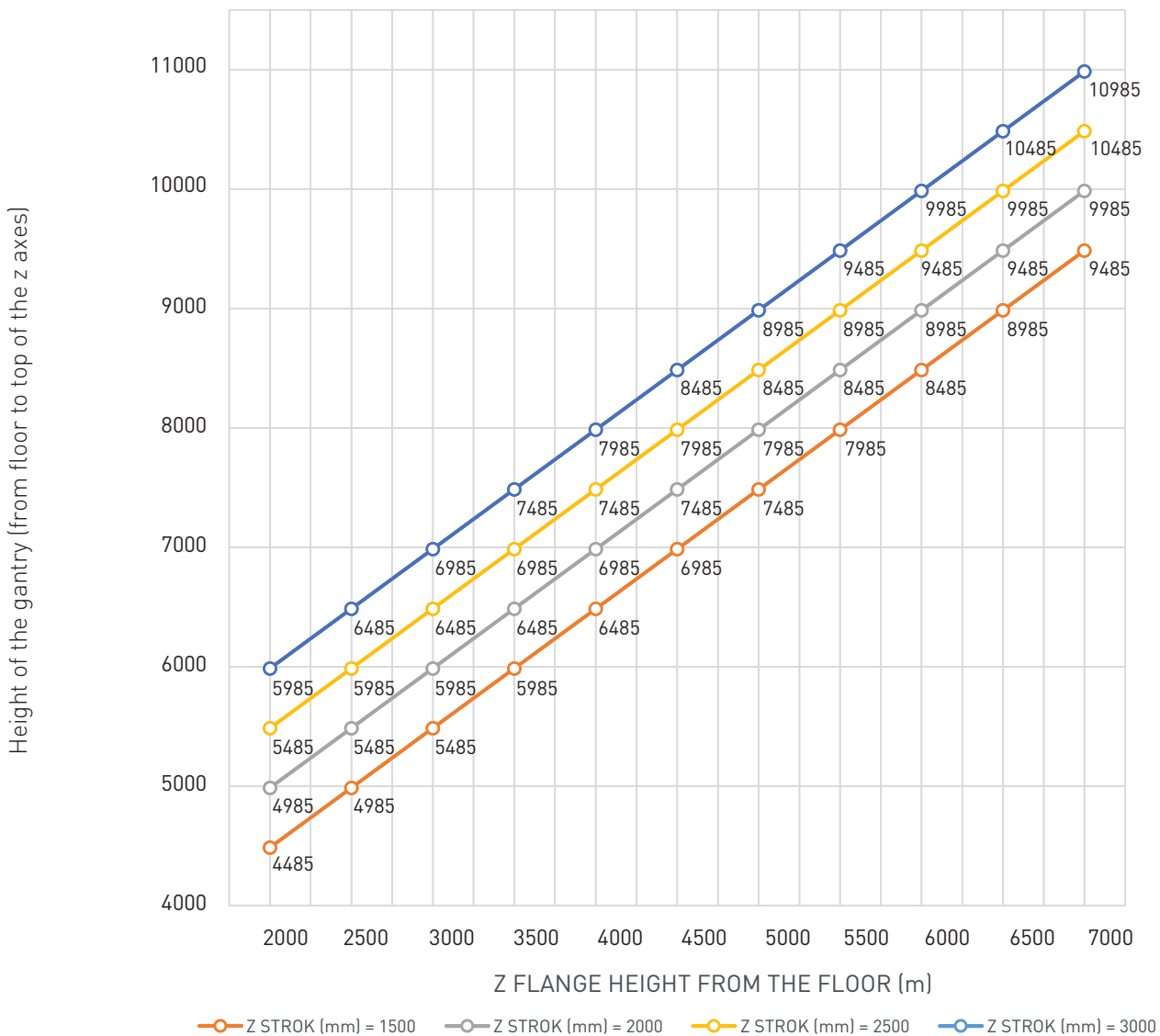
XZ Axes



Options

- INA, HIWIN, SCHNEEBERGER, REXROTH Linear Guiding Systems.
- Coated rollers, guideways and racks.
- Linear carriages auto lubrication.
- Telescopic Z axes.
- Limit switch option.
- Zone switches.
- Automatic lubrication unit (guides and rack).
- Automatic lubrication unit (only rack).
- 300mm wide cable track (default 200mm). Cable chain dividers.
- Enclosed cable chain.
- Robot integration.
- Welding package carriages.
- Standard Service platform (ladder with side barriers).
- Robot Control Unit Carriage.
- Special color of paint.

SGP-300 GANTRY MAX HEIGHT GRAPHICS



Suitable Robots Depend to Gantry Axes Configuration

Given robots are heaviest robots that can be carried by gantry depend to gantry axes configuration. Lighter than given robot can be carried as well.

AXES CONFIGURATIONS	MAX TOTAL PAYLOAD (kg)	EXTRA MOVING LOAD (kg)	ALLOWABLE ROBOT WEIGHT (kg)	HEAVIEST ROBOT THAT CAN BE CARRIED BY GANTRY		
				FANUC	KUKA	ABB
XY	1500	100	1400	M-800	KR QUANTEC PRO	IRB-6620
XZ	300	20	300	M20 (all series)	KR16 (all series)	IRB-2600-ID
XYZ	300	20	300	M20 (all series)	KR16 (all series)	IRB-2600-ID
XYZ ROTARY	300	20	300	M20 (all series)	KR16 (all series)	IRB-2600-ID