



Planetary Gearheads



Precision Planetary Gear Heads – Helical Series

Designed by SPG, development of Helical series precision planetary gear heads is a result of our experience over three decades in manufacturing a variety of gear heads for demanding and critical application.



Applicable to various Servo Motors

- ▶ Higen motors
- ▶ LS Mecapion
- ▶ Komotek Co., Ltd.
- ▶ Mitsubishi Electric Corporation
- ▶ Yaskawa Electric Corporation
- ▶ Tamagawa Seiki Co., Ltd.
- ▶ Panasonic Corporation
- ▶ FANUC Corporation
- ▶ Fuji Electric Co., Ltd.
- ▶ Nikki Denso Co., Ltd.
- ▶ Omron Corporation
- ▶ Sanyo Denki Co., Ltd.
- ▶ Toshiba Machine Co., Ltd.
- ▶ Sanmei Co., Inc.
- ▶ Nidec Sankyo Corporation
- ▶ Allen Bradley
- ▶ B&R Automation
- ▶ Oriental Vexta
- ▶ Parker
- ▶ Bosch Rexroth
- ▶ Schneider
- ▶ Siemens

Quality First & Customer's Satisfaction

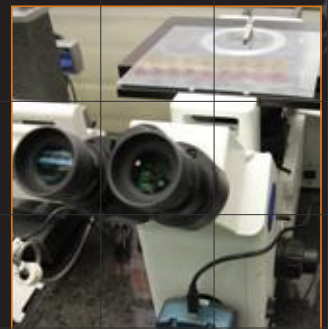
High Precision Performance & Reliability

Manufacturing with full range of Automatic processing equipments and Comprehensive quality control equipments.

Processing

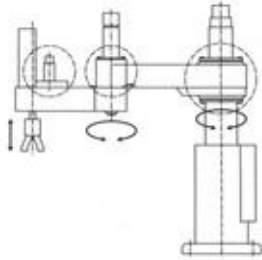


Quality Control

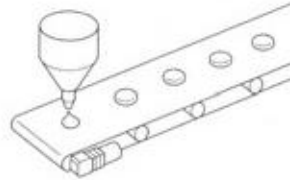


Applications

Scara Robot



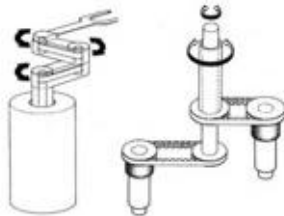
Belt Conveyor



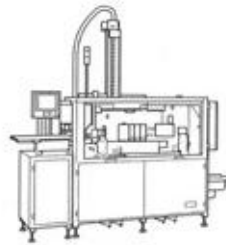
Printing Machine



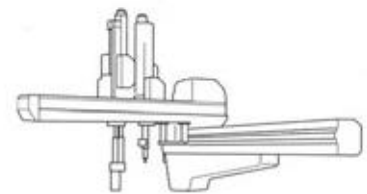
Wafer Transfer Robot



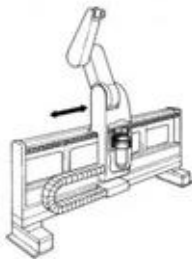
Automated Packing Machine



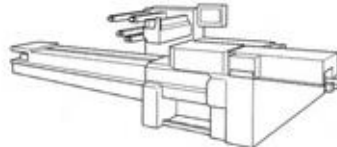
Gantry Robot



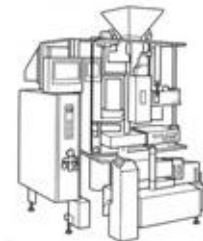
Robot(Rack&Pinion)



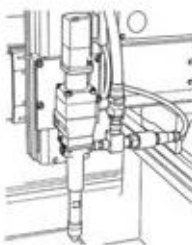
Fill Seal Machine(Horizontal Type)



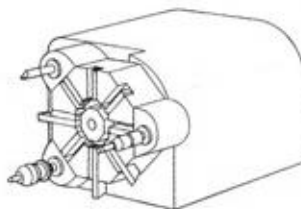
Fill Seal Machine(Vertical Type)



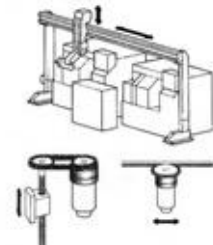
Dispenser Robot



Turret-Head



Loader Robot

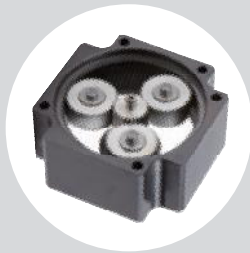


- Parts Transfer Robot Systems
- Robot peripherals
- FA units
- Liquid glass return robots
- Semiconductor manufacturing devices
- Machine tools
- Loader drive shafts

- Printing Machinery
- Woodworking machinery
- Laser processing machinery
- Medical devices(CT)
- Monitoring & security cameras
- Bending Machinery
- Testing devices

- Measuring devices
- Pallet stackers
- Conveyors
- Extrusion machinery, blow-down devices etc.
- blow-down device etc.

The precision planetary gear head series meet most of specifications which servo applications require.

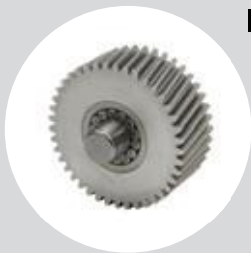


High torque & low backlash

- ▶ Helical gear type planetary gearing
- ▶ Improvement of wear resistance by gear heat treatment

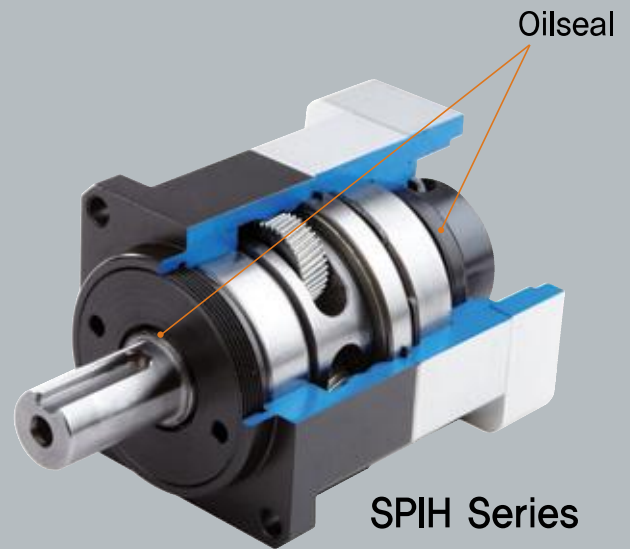
Sealed units

- ▶ Viton oilseals provided IP65 protection to prevent leaks and protect against harsh environments.



Increased service life

- ▶ Full complement needle planet bearings. (Solid uncaged needle roller bearings)



High stiffness & Higher radial load capacity



- ▶ One piece integral ring gear, rigid sun gear and planet carrier output shaft design.

Precision Spiral bevel gears



Dynamic balanced clamp ring mechanism



- ▶ Error-free installation and the balanced clamping system allows higher input speeds and no backlash for power transmission.







Universal mounting motor flange

- ▶ Quicker deliveries and easier mounting to any servomotor.

Group	Figure	Series Name	Frame Size	* Ratio (i)	Page		
Helical Gear Type	In-Line		□42 ~ □220	1/3 ~ 1/10	08		
				1/15 ~ 1/100	09		
			□60 ~ □220	1/15 ~ 1/100	09		
					□42 ~ □220	1/4 ~ 1/10	12
						1/16 ~ 1/100	13
		□60 ~ □220	1/16 ~ 1/100	13			
	Right Angle		□42 ~ □220	1/3 ~ 1/20 (1/3 ~ 1/10)	16		
				1/25 ~ 1/100 (1/15 ~ 1/100)	17		
			□60 ~ □220	1/25 ~ 1/100	17		
					□42 ~ □220	1/4 ~ 1/20 (1/4 ~ 1/10)	20
1/25 ~ 1/100 (1/20 ~ 1/100)						21	
	□60 ~ □220	1/25 ~ 1/100	21				

* Ratios in parenthesis are based on □42 model

Group		Figure	Series Name	Frame Size	* Ratio (i)	Page
Spur Gear Type	In-Line		SPI	□42 ~ □115	1/3 ~ 1/10	24
					1/15 ~ 1/100	25
			SPI-D	□60 ~ □115	1/15 ~ 1/100	25
	Right Angle		SPL	□42 ~ □115	1/3 ~ 1/20 (1/3 ~ 1/10)	28
					1/25 ~ 1/100 (1/15 ~ 1/100)	29
			SPL-D	□60 ~ □115	1/25 ~ 1/100	29

* Ratios in parenthesis are based on □42 model