



## **HOLLOW ROTARY GEARBOX**

Hollow shaft gear reducer is used in various types of application like indexing table, packaging industry, Laser cutting machine, Waterjet cutting machine, Turn table. SMD already provided their solution to above type of industry before. SMD provide an integrated solution as per customer requirements. Hollow rotary gearbox is used in Space applications, medical and electronic equipment.

Hollow shaft gearbox mounting is also used in robotic arms for its smooth functioning. It allows flexible use; it is available for matching with any servo motor based on a flexible flange system. Equipment table and robot arm can be directly mounted on the output table of hollow rotary gearbox. It can save time and cost of mechanical design, parts allocation, belt debugging etc.

The adoption of the top spiral bevel gear and optimized design of contact tooth surface makes the even load and allow high torque output in hollow shaft right angle gearbox. When it combines with planetary reducer or right-angle reducer, the gear ratio shall become bigger. Wiring and piping are more convenient and simpler in SMD hollow rotary gearbox, advantage of this is particularly prominent in complicated wiring and piping environment.

Hollow output shaft gearbox is also known as hollow rotary table or stage. It features a hollow table that allows inertia-large discs or arms to be installed directly. The rotary actuators (rotary platform) can be a combination of servo or stepping motor and turntable. They are ideal for applications featuring an indexing drive. The actuator (rotary platform) has an internal speed reduction mechanism (reduction ratio 10 AND MORE), which makes high power driving possible.

SMD Hollow Rotary Table is a new kind of rotating load device. Incorporating high transmission efficiency, high precision, high rigidity, and high cost performance, it combines the advantages of the servo motor, cam indexer and DD motor, obtaining a balance between these three products. It takes full advantage of the flexibility of servo motor, providing designer greater freedom of mechanism design. It provides large diameter hollow output table. Equipped with servo motor, the hollow rotary actuator can make segments at any angle. The positioning accuracy is comparable with the direct drive motor which can realize

Features of SMD hallow gearbox are as follows

- Max backlash of 0.5 Arc min/30 Arc Sec
- Large hollow rotary flange – hollow bore for wiring or shafts
- Hollow bore driven by your servo motor via large helical ring gear integrated in rotating flange provides smooth, accurate and fast positioning & indexing.
- Can achieve Larger reduction ratios by inputting with planetary or right angle gearhead.
- Efficiency of hollow shaft worm gearbox at full load is 90%.
- Larger reduction ratios can be possible by inputting right angle gearhead.
- Output limit speed at 60 rpm
- Permissible input speed and continuous output torque.
- The rotary surface can be locked directly with workplace for added convenience in work piece loading.
- The hollow structure design allows for wiring or piping work and it meets requirement for speed reducer
- The speed reduction mechanism adopts ultra-precision gears to eliminate backlash through its own adjustment mechanism. Therefore, there will be no backlash in the mechanism.

SMD is committed to developing its business through different growth strategies: expanding the geographical range of its operations through full-scale globalization, purposefully expanding its domains through the development of new business areas, and utilizing technology.

## Head Quarters

**SEIMITSU MOTION DRIVES CO. LTD. (Taiwan)**

No. 339, Taishun Rd., Taiping Dist., Taichung City, Taiwan

Mobile No : [+886 \(09\) 67388376](tel:+886(09)67388376)

Mail ID: [sales@smdgearbox.com](mailto:sales@smdgearbox.com)

## Head Office (Overseas)

**SEIMITSU MOTION DRIVES PVT. LTD. (India)**

A - 51, H Block, MIDC, Pimpri - Chinchwad, Pune – 411018, MH, India.

Mobile No : [+91 7030669818](tel:+917030669818)

Mail ID: [sales@smdgearbox.com](mailto:sales@smdgearbox.com)