

# ANE series

ANE

## ANE 系列可調背隙蝸輪減速機

雙導程設計·高扭力·高剛性·低噪音·低震動·低背隙 (0~6 弧分)

- 背隙調整容易·倍增精度壽命
- 特殊規格歡迎訂製
- 適用高精度傳動及分度·定位·定寸之應用
  - 工具機第四軸
  - 旋轉工作檯·分度盤
  - 機器人
  - 各式產業機械定位·定寸裝置



## ANE Series Adjustable Backlash Worm Gear Reducer Characteristic:

Dual-lead design, high output torque, high rigidity,  
low noise, low vibration and low backlash ( 0~6 arcmin ).

- Easy to adjust backlash for increasing accuracy and service life.
- Customized specifications are available.
- Suitable for high-accuracy transmission system, indexing, positioning and sizing applications:
  - 4th-axis of machine tables
  - Rotary tables and index tables
  - Robots
  - Positioning and sizing devices of various industrial machinery

## 生產機型 Type & 速比 Raio :

- 40# : 1/20
- 50# : 1/30
- 60# : 1/40
- 70# : 1/50
- 110# : 1/40 · 1/50 · 1/60



### ANE110

○中空軸免鍵式 Clamping output shaft



### ANE

○實心軸傳動 Solid output shaft

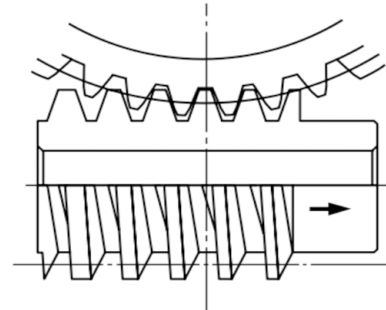


### ANEOM

○中空軸傳動 Hollow output shaft

# Characteristic of ANE Series

## ANE 系列產品特性



### 雙導程蝸桿傳動及齒隙調整原理

由於普通蝸桿蝸輪是用蝸桿沿蝸輪徑向移動來調整嚙合側隙，因而改變了傳動組的中心距，中心距的改變會引起齒面接觸情況變差，甚至加劇磨損，不利於保持蝸輪組的精度；而雙導程蝸桿是用蝸桿軸向移動來調整嚙合側隙，不會改變傳動組的中心距，可避免上述缺點。

雙導程蝸桿簡單說就是蝸桿的齒厚是變化的，左齒面與右齒面導程長度不同，使得齒厚形成有連續變化的齒形，蝸輪的齒面也為了與蝸桿配合，而製作成左右不同的齒面，這樣就可以調整蝸輪蝸桿的間隙達到最佳狀態。當使用過程由於蝸輪磨損，造成蝸輪蝸桿的間隙變大，可以通過調整蝸桿的軸向位置，使蝸輪蝸桿的間隙變小。

雙導程蝸桿傳動具有改變嚙合側隙的特點，能夠始終保持正確的嚙合關係；並且結構緊湊，調整方便，因而在要求連續精確分度的結構中被採用，以便調整嚙合側隙到最小程度。

### Principle of Dual-lead Worm Transmission and Backlash Adjustment

The backlash adjustment on a conventional worm / worm gear set is made by moving the worm along the worm gear in radial direction, which may result in a change of center distance of the transmission set. Such change of center distance will cause poor contact between teeth, wearing and affection on accuracy of worm / worm gear set.

However, the backlash adjustment on a dual-lead worm is made by moving worm in axial direction, which does not change the distance of the transmission set and avoid above problems.

The dual-lead worm features varied teeth thickness. There is a different lead length between the right and left tooth faces, that creates a continuous teeth shapes. To properly engage with the worm, the teeth faces of worm gear are also designed with different right and left tooth faces. This permits backlash adjustment to achieve the best condition.

After a period of operation, if a backlash between worm and worm gear increases due to wear, it can be adjusted by moving the worm in axial direction until a proper backlash is obtained.

The dual-lead worm transmission allows for changing side backlash to keep correct teeth-engagement at all times. In addition, it has a compact structure and easy adjustment. Therefore, it is ideally suited for indexing devices that require continuous accuracy by adjusting teeth backlash to the minimum extent.