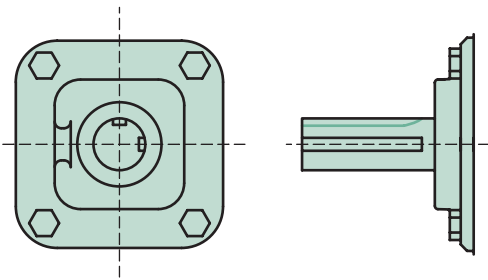


Modified Output Shaft Options

SE Encore worm gear speed reducer output shafts can be modified to suit the requirements of most applications. These examples depict some of the more

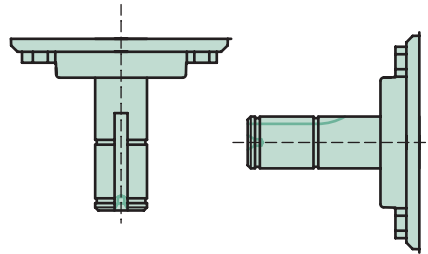
commonly requested modifications. Please contact Winsmith for additional output shaft modification capabilities and requirements.

SOLID OUTPUT SHAFT EXTENSIONS AND MODIFICATIONS



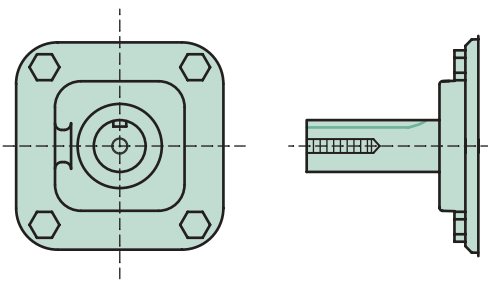
Extra Keyway at 90°

- Secure connection for applications where direction changes are common



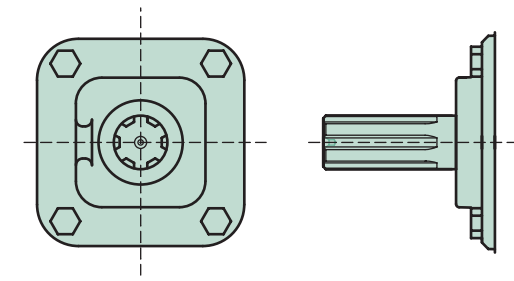
Snap Ring Groove

- Strong position control for attachments



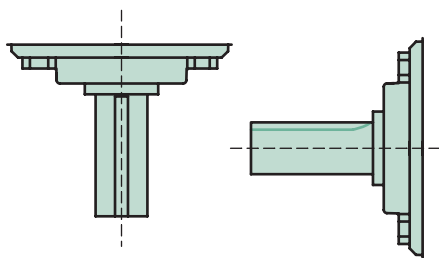
Drilled and Tapped Ends

- Secures end plates or keeper plates to the shaft

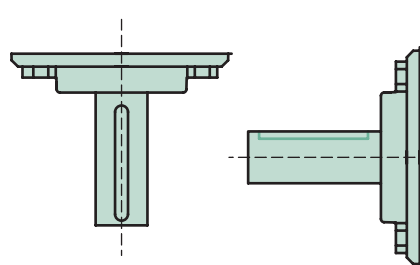


External Spline

- For frequent fitting/dismantling, starts or direction changes



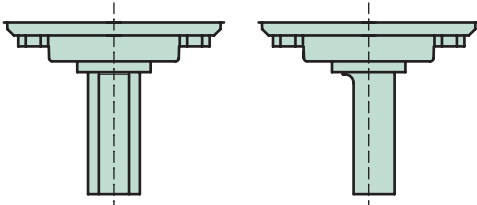
Turned Down Shaft



End Milled Keyway

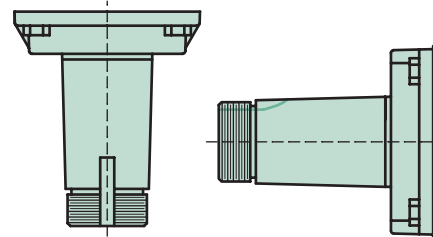
- Captured key for ease of installing the mating components

Modified Output Shaft Options



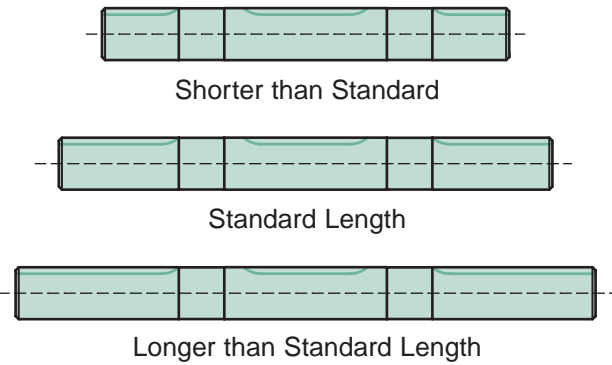
Shaft Flats

- Accommodate a flat in the driven machine



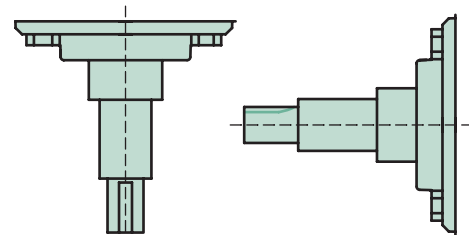
Taper with External Threads

- Eliminates fretting corrosion between two mating shafts



Custom Shaft Lengths

- As required by an application



Multiple Step/Turned Down Shafts

- For consistent attachment positioning (pulleys or sprockets)

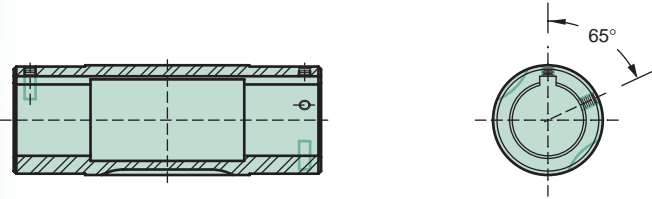
Optional Materials, Platings & Coatings

Bronze
4140 Hardened Steel
Stainless Steel
Hard Chrome
Thin Dense Chrome
Electroless Nickel



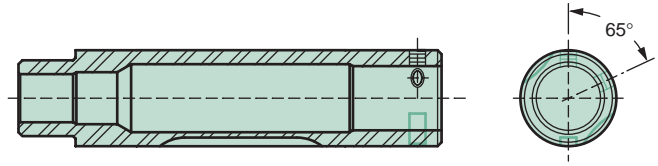
Modified Output Shaft Options

HOLLOW OUTPUT SHAFT MODIFICATIONS



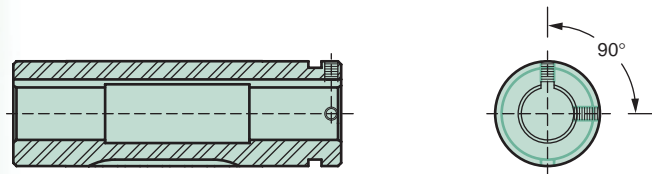
Standard Double Extended (Symmetrical)

- In non-standard sizes including metric dimensions



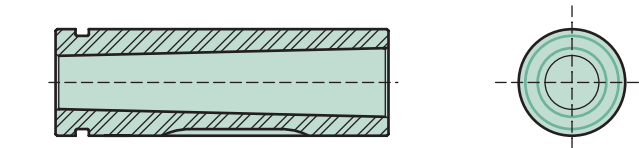
Stepped Shaft for Shrink Disc

- For a shaft locking device



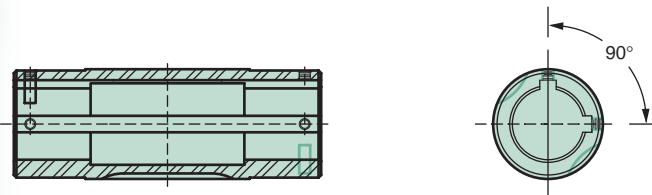
Single Extensions (Asymmetrical)

- Used when a double extended (symmetrical) shaft creates interference



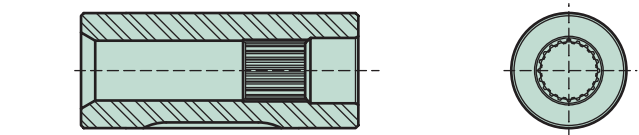
Self Locking Taper

- Eliminates fretting corrosion between two mating shafts



Extra Keyway 90°

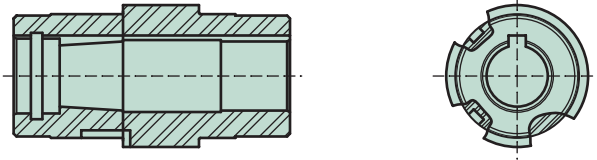
- For a more secure connection (for applications where direction changes are common)



Internal Spline

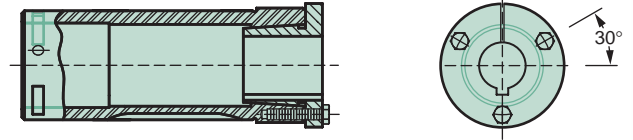
- For frequent fitting and dismantling or for frequent starts or direction changes

Modified Output Shaft Options



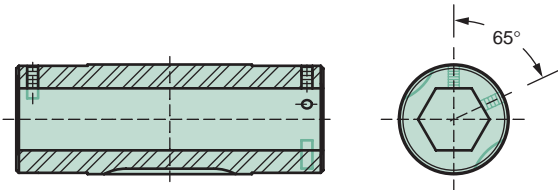
Step Bores, Tapered & Grooved

- Accommodates special shaft requirements



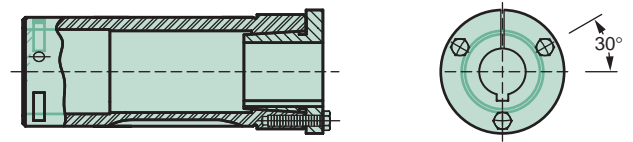
Tapered Bushing Connection

- Provides a rigid shaft connection (see page 128)



Hex Broach

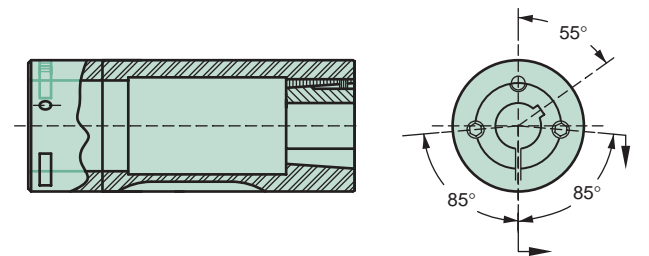
- Provides shaft engagement without a keyway and easy assembly to standard hex stock



QD® Type Bushing (see page 128)

Optional Materials, Platings & Coatings

- Stainless Steel
- Hard Chrome
- Thin Dense Chrome
- Electroless Nickel



Taper-Lock® Bushing (see page 128)

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