



Function and Applications

FREEWHEEL CLUTCHES are machine elements with the following characteristics:

DRIVES IN ONE DIRECTION

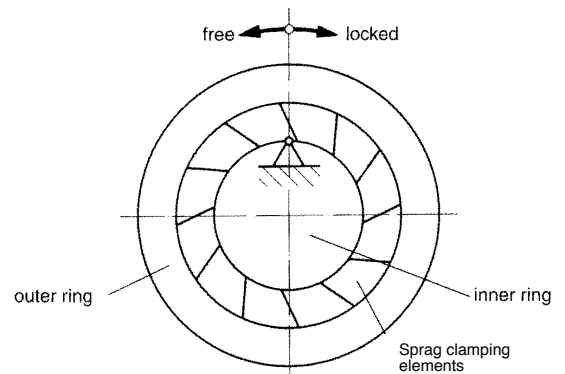
The sprags lock the inner race to the outer race to drive and transmit torque.

SLIPS IN THE OTHER DIRECTION

The sprags do not lock but slip and allow the inner or outer race to “freewheel”. No torque is transmitted.

The Freewheeling Function allows for:

- INDEXING
- OVERRUNNING
- BACKSTOPPING



Indexing

Function

RINGSPANN Freewheels, as indexing clutches, allow for a unidirectional, intermittent motion when a reciprocating motion is applied to a driving race.

Advantages

- Noiseless operation
- Fine setting of the feed path
- No backlash

Applications

- Printing machines
- Wire forming machines
- Forging presses
- High voltage current controls
- Packaging machines
- Paper converting
- Agriculture machines
- Wood processing



Overrunning

Function

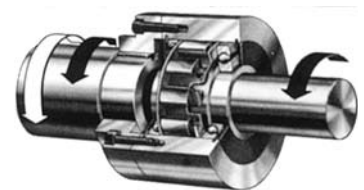
RINGSPANN Freewheels, as overrunning clutches, provide for the automatic separation between the driver and driven equipment when the direction of force is changed.

Advantages

- Completely automatic
- Smooth transmission of torque

Applications

- Dual drives
- Starter & creep drives
- Planetary gears
- Ventilators and fans
- Rollout tables
- Rolling mills
- Continuous heating furnaces
- Conveyors



Backstopping

Function

RINGSPANN Freewheels, as backstop clutches, provide for the prevention of rotation in the reverse direction for safety and functional reasons.

Advantages

- Long life
- Lower cost
- Completely automatic

Applications

- Inclined Conveyors and Elevators
- Pumps, blowers, and ventilators
- Grain Elevators
- Cranes and winches
- Torque converters
- Fans
- Gear drives
- Ski lifts

