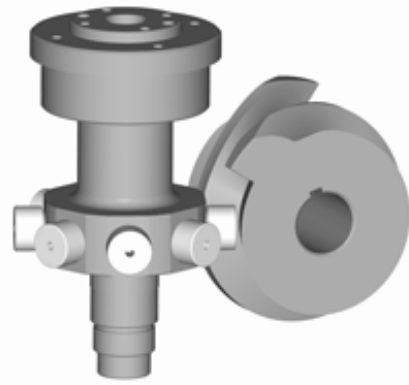


IMC's versatile **Roller Gear Index Drives** uses a **globoidal cam** in conjunction with followers mounted radially outward from the circumference of the follower wheel, much like the teeth of a gear. The **input shaft is perpendicular to the output shaft**. With this right angle configuration, it is possible to provide an **optional large through-hole** along the axis of the output shaft, or design a large output flange to accept dials (dial mounting). Large cam diameters relative to the output follower wheel allow for a **wide range of special motions**, short motion periods and a large output displacement for relatively smaller input displacement.



Roller Gear Index Drives provide:

- Compact Low Profile Design
- Flanged Output Capability for Dial Mounting Applications
- Through-Hole Capability (for electric and pneumatic lines or stationary center post)
- Motion Flexibility (special and complex motions) due to relatively large cam
- 2 to 24 Stop Range



RDM Style: RDM, ED & Pinnacle

The RDM-style index drives are IMC's most popular product and are designed specifically for rotary table applications. Key features include:

- **Low profile** housing
- **Large center thru hole**, standard on all RDM and most ED models, facilitates passage of coolants, wiring or linkages to work area of dial.
- **Large output mounting surface** supported by a 4-point contact bearing offering superior thrust and moment capacity.
- **Precision, hardened cam** delivers zero backlash for indexing accuracy and reliability
- **Precision grade cam followers** assure indexing accuracy and repeatability with long life
- **Output dial supported by a 4-point contact bearing** which, with its streamlined profile and preload characteristics, offers superior performance in dial applications.
- **Optional Stationary Center Post** with thru hole provides mounting for upper tool plate.
- **Double extended camshaft** standard. Unit may be driven from either side of the unit in clockwise or counter clockwise direction.
- **Standard drive packages** with reducers and AC or DC motors and controls.
- **Optional output overload clutch** to protect your indexer.



In addition, the **Pinnacle Series** offers an optional patented **Internal Torque Limiting Clutch with External Adjustment**. This provides design and assembly flexibility and reduces critical debugging time. Also ideal in harsh environments.

Applications

The RDM-Style index drive is ideal for **Dial Applications** in the assembly, welding, processing and packaging industries

Roller Dial Index Drives: RD & Intermittor®

IMC Roller Dial Index Drives offer superior load capabilities making them ideal for medium to high torque applications. Other features include:

- **Short camshaft motion periods** due to oversized roller gear cam design are well-suited for continuous running applications or for special motion requirements such as oscillating motions.
- **Universal mounting** including a horizontal mounting ideal for trunion applications.
- **Option Center Thru-Hole** facilitates passage of coolants, wiring or linkage to work area of dial.
- **Optional Stationary Center Post** with Thru Hole provides mounting for upper tool plate.



Applications

The RD and Intermittor Series Index Drives have a robust, flexible design with features ideal for continuous-running applications requiring complex motions.

Roller Gear Series: RGD, RGS, FD & Sentry

IMC's Roller Gear Series Index Drives are robust, versatile units suitable for a wide variety of applications. Roller Gear Index Drives feature:

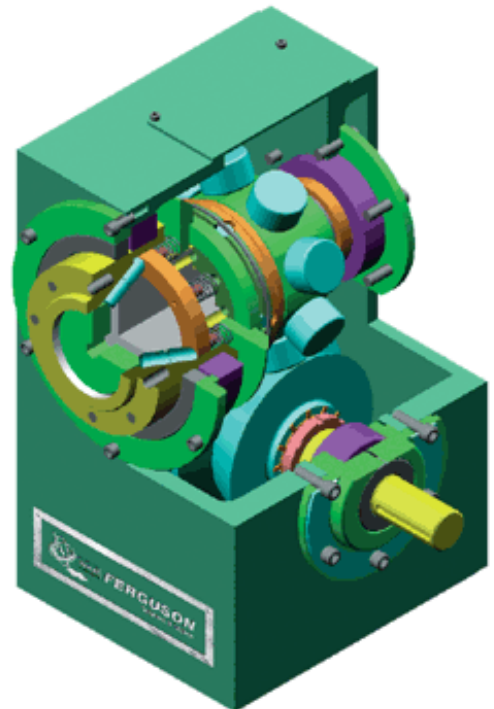


- **Flange or Shaft output** can be used with an indexing dial or with an inline transfer mechanism.
- **Universal Mounting:** The six machined mounting surfaces of Roller Gear Drive make it adaptable to most indexing applications.
- **Optional Thru Hole** in Flange versions facilitates passage of plumbing, wiring or linkage to work area of dial.
- **Short camshaft motion periods**, due to oversized cam design, are well-suited for continuous running applications or for special motion requirements such as oscillating motions.
- **Optional Double Extended Output** - allows auxiliary equipment to be driven from either side of unit at the same time.

Sentry Series

In addition to the standard Roller Gear series features, the **Sentry Series** drives incorporate the patented **Internal Torque Limiter**, available only from IMC, as a standard feature. The advantages of the Internal Torque Limiter include:

- **Ideal for Harsh Environments.** Dusty, dirty, humid and washdown environments do not reduce indexer or machine performance due to the Sentry Series totally enclosed design.
- **Provides For Overload Protection.** The Sentry Series recognizes machine jams and disengages the drive. This reduces downtime, eliminates the need for costly spare parts, prolongs indexer life, improves output and increases productivity.
- **Reduces Assembly Time.** External clutches or torque limiters require an additional alignment operation and add overall tolerances to placement accuracy. With the addition of an Internal Torque Limiter, the time required for installation has been significantly reduced.
- **Self Lubricating.** The clutch is housed in an oil bath with no additional lubrication needed. An optional lubrication monitoring system signals host computers when oil is low or abnormally high in temperature.



rotoblock index drive

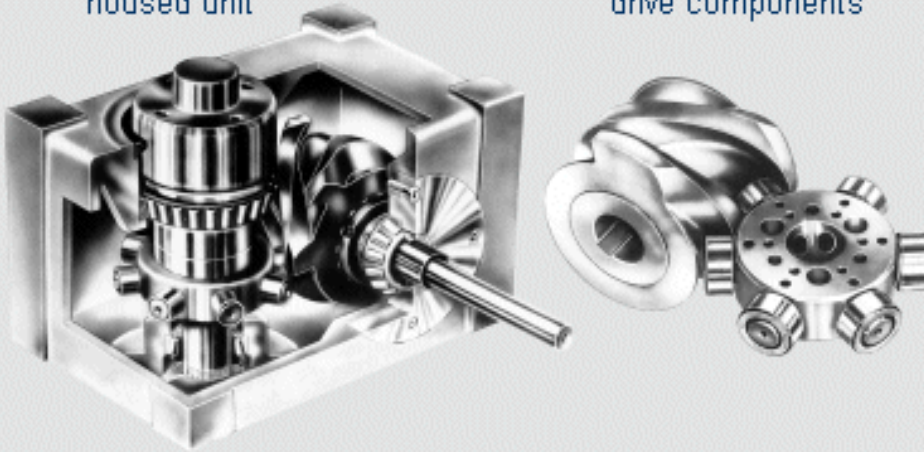
no. of stations

shaft position

1-6,8,10,12,16,20,24 cross wise

housed unit

drive components



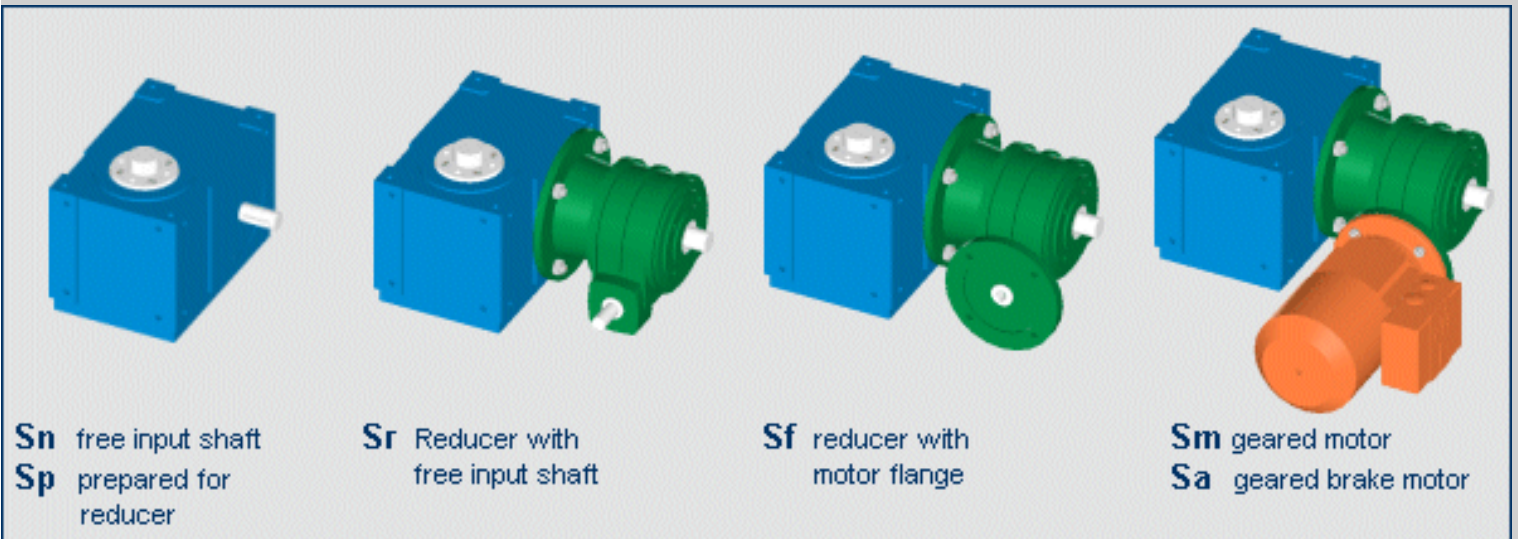
globoid-cam drive

can be supplied in the housing and as drive components
cams hardened and ground
cast iron housing (processed on all sides)

Nm*	43	78	160	346	561	728	1031	2136	3636	6800
series	50	63	80	100	125	140	160	200	250	315

Overview of construction series

* The permissible torque is strongly dependent on the number of stations and index angle. (Specifications for 4 stations, index angle 270°)



Design of drives

All gears in the housing can be supplied with drives in various design standards. Worm gears or bevel gear units are applied as step-down gears. The applied three-phased current (braking) motors are products of the manufacturer SEW, Georgii Kobold und HEW.

The assembly of the drives on the stepping gear is possible in 8 different attachment positions.