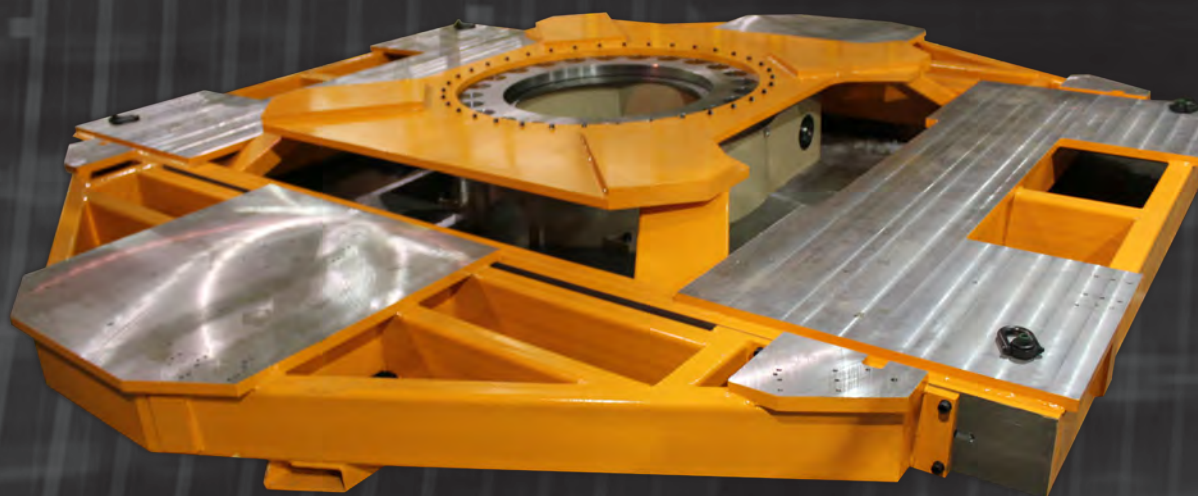




MOTION INDEX DRIVES

ADDITIONAL PRODUCTS & SERVICES



Trunnion Solutions

Motion can provide in addition to the trunnion headstock drive a complete trunnion assembly. The complete trunnion solutions we provide utilize our standard, high-reliability and precise indexing equipment with custom weldments that exceed our customers' expectations.

Features

- Headstock (RT, TR, and TMF Series)
- Tailstock (bearing assembly or thru-hole bearing housing)
- Center Frame (custom length and weldment design)
- Optional Controls Drive for Motor
- Optional Micarta isolation kits
- Customer specified paint finish on all stationary components
- Black oxide head and tailstock flanges

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from one source



Rotary Index Table Tooling Frames

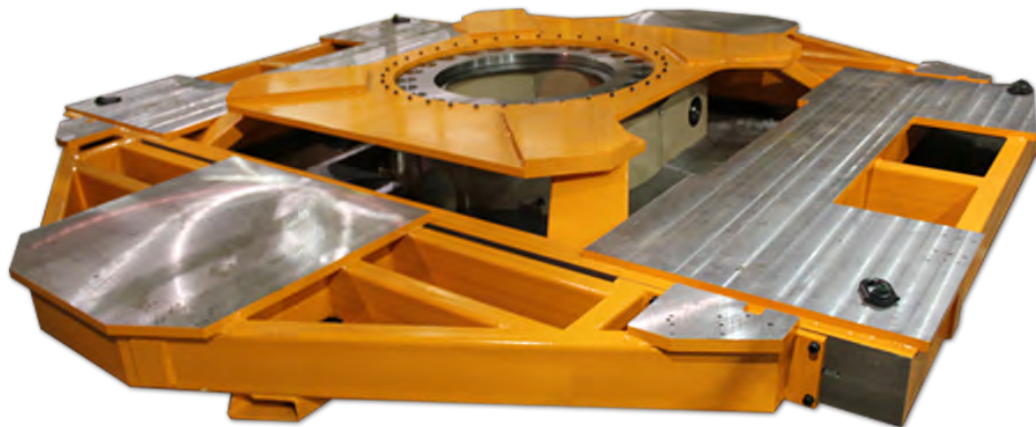
Tooling frames and weldments can be manufactured to our customers print. These can be delivered complete with our index drives, to allow for a simpler installation. Weldments can be manufactured to your drawings and can be offered upon receipt of the drawing for quoting.

Features

- Available in extremely low profile designs
- A-Frame, H-Frame welded structures to meet ergonomic load requirements
- FEA studies completed by Motion based on your tooling/fixture loads
- Reduce mass moment of inertia by utilizing our design experience
- Machine enamel, Epoxy or Powder Coating to customers color spec.
- Frames manufactured to allow customer to simply bolt on tooling and fixtures

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from one source



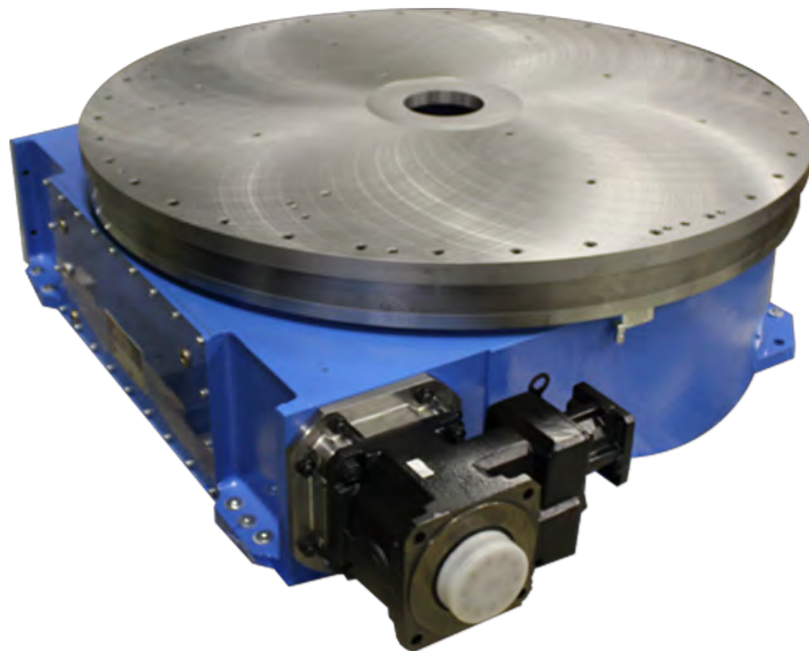
Motion Index Drives can supply any dial plate required, made from nearly any material, including steel, aluminum, and plastics. Simply specify the thickness, diameter, material and special coatings (if required) of the plate and we will supply this with the index drive complete. We can also have the dial plate machined to your drawing, allowing for less work for our customers.

Features

- Round, rectangle, triangle or custom shape
- Machining to your print
- Special tolerances
- Bushings
- Thread inserts
- Anodizing
- Nickel plating
- Stainless steel
- Black oxide
- Teflon

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from one source



Machine Bases

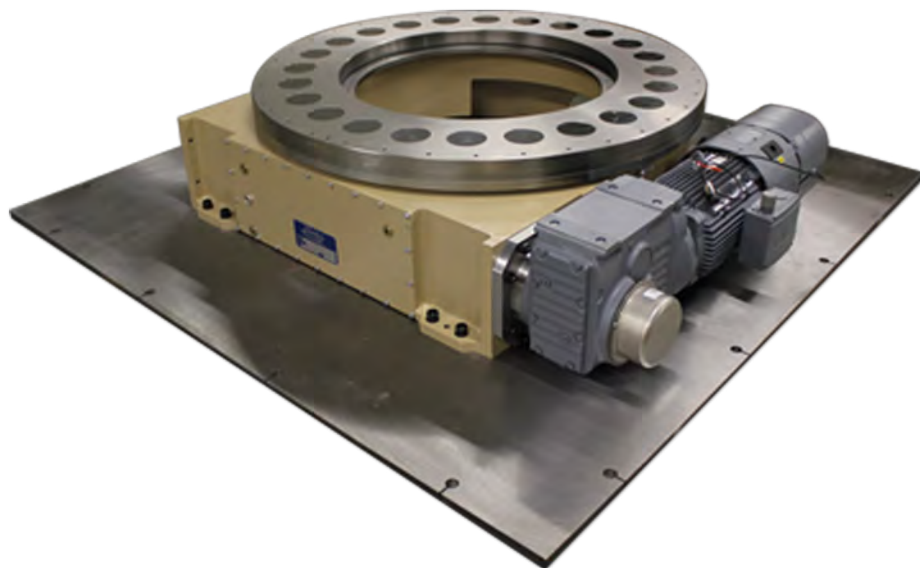
Machine bases can be manufactured to our customers print or we can recommend a standard base to fit. These can be delivered complete with our index drives, to allow for a simpler installation. Bases can be manufactured to your drawings and can be offered upon receipt of the drawing for quoting.

Features

- Many different hollow structural tubular frame choice
- Aluminum Anodized and Stainless Steel Top Plates
- Steel top plates
- Nickel, Black Oxide or other finishing available
- Surface ground for precision
- Leveling and tie down foot pads
- Casters for mobility if required
- Machine enamel, Epoxy or Powder Coating to customers color spec.

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from one source



TripleDex Indexer

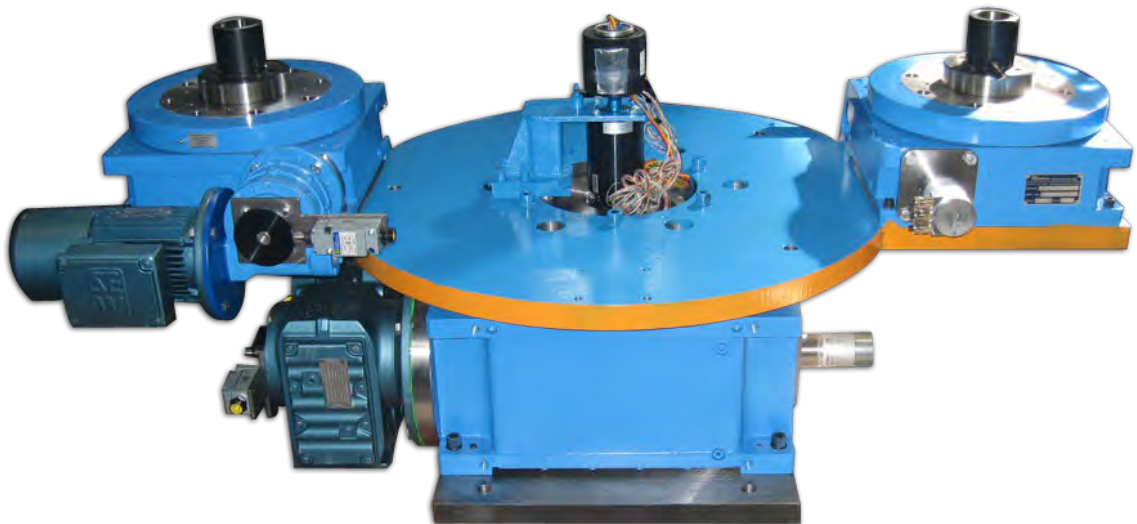
Motion's Multidex Indexer solution provides one large base rotary index table with smaller satellite indexers. This allows the tooling or part to be rotated on one end of the work cell while the other end can be safely interfaced or rotated to allow for different access. The standard units include a base rotary index table with 2, 3 or 4 satellite indexers. The base and satellite indexers can have either a fixed or flexible number of stations. Multidex units come complete with baseplate or base frame ready to be mounted in your cell.

Features

- Utilizes high precision TMF or RT series rotary index tables
- Complete with high voltage slip ring to power satellite indexers
- Large through hole on base indexer in the housing and in the center
- Through holes enable you to run utilities at ground level
- Absolute encoder on satellite indexer input shaft for high accuracy
- Special sealing on all indexers for harsh environments

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from one source



Other Complimentary Components

Slip Rings / Rotary Unions

Our MSR series rotary union / slip ring assembly can be manufactured to our customer's specification. These can be delivered complete with our index drives, to allow for a simpler installation.



Features

- Low and high voltage capabilities from 24 VDC up to 600 VAC 3 phase
- Single circuit up to 96 circuits
- Multiple or single air or fluid ports ranging in size 1/8" to 1 1/2" dia.
- Device Net, Profibus, USB, CanBus and ProfiNet compatible
- Rotary union is capable to transmit air or fluids
- Special connections available for data and electrical
- Custom tail connections with customer specified lengths

Benefits

- Purchase multiple components from one source reducing purchasing management time
- Reduce project management time by utilizing Motion to order necessary components
- Minimize your design time by utilizing our standard designs that are readily available
- Minimize assembly time while decreasing your required man hours on your projects
- We will mount customer supplied motors and other
- Minimize shipping and handling cost by purchasing from the source

Switch Packages

- Encoders
- Proximity Switches
- Mechanical Switches

Tooling and Accessories

- Adapter Plates
- Dial Plates
- Base Plates
- Trunnion Riser Weldments
- Pillow Blocks for Trunnion Mounting
- Mechanical Safety Lock-Outs
- Satellite Index Drive Machines
- Partially Built Indexer Cells

Motors and Reducers

- Explosion-Proof Motors
- Servo Motors
- Stainless Steel Motors
- Low-Backlash Gear Reducers

Custom Cams

- Custom Auxiliary Cam operations
- Custom Cams to implement into existing operation

Custom Coatings

- Powder Coatings
- Nickel Plating
- Anodizing
- Stainless Steel
- Black Oxide

Controls

- VFD's
- Servo Drives
- Complete Integrated Index Drive Control Panel

Services

Motion Index Drives offers extensive support for new startup and existing products. If you are in search of product information regarding installation, CAD drawings and/or maintenance manuals, please visit our website downloads section.

- On-Site Support
 - Repairs
 - Installs
- Refurbishing
 - Customers can send their units back to Motion and have certified technicians refurbish their equipment back to new
- Retrofitting
- Training and certification courses for large projects implementation
- Replacement motors
- Recycling of old turntables

On-Site

All on site service is performed by a certified Motion Index Drives technician with minimum 5 years of experience. Our customers will benefit from a full warranty on refurbished units. Any parts needing to be replaced will have 100% Motion Index Manufactured components used where applicable. All components will be adjusted to original manufactured specifications when applicable. Our technicians can provide preventative maintenance programs. All of our technicians are available for 24 hour emergency breakdowns. To schedule a service call to your facility please contact Motion Index Drives at 1-248-743-9999.

At Facility

Our technicians can perform a full disassembly to inspect all major components. Any components that are replaced will be adjusted to original manufacturing specifications, all units we be re-tested before leaving our facility. Our customer receives full warranty on repaired units. Motion Index Drives can also arrange pickup and delivery of equipment. Please contact Motion Index Drives at 1-248-743-9999.

Spare Parts

When calling to order spare parts, please have our shop order number available to give to our Service and Parts Department to ensure that you will be getting the correct parts for your specific unit. The shop order number can be found on our nameplate located on each unit. Spare parts are very important for our customers to have on hand. In the event a customer has a "crash" (robot crashing into tooling) internal components could have unnecessary forces applied to them and may become damaged. This could then cause down time to your line. When customers stock our spare parts the down time is kept to a minimum. The most common spare parts to have on hand are cam followers, seals, and bearings for your specific unit.

NANO Indexer Technology

Motion Index Drives' NANO Index Technology is a series of barrel cam indexers equipped with a specially designed cam to achieve extremely high accuracies. This line is the most accurate series of barrel cam indexers in the world, with accuracies as high as 0.002 mm or 0.0001". Motion's NANO Index Technology can be used for any application where extremely high accuracy and repeatability is required, such as electronic device assembly, microchip assembly, circuit board assembly, microscopic movement, laser interfaced applications, precision medical equipment manufacturing or 4-color printing applications.

Advantages for Designers and Machine Builders

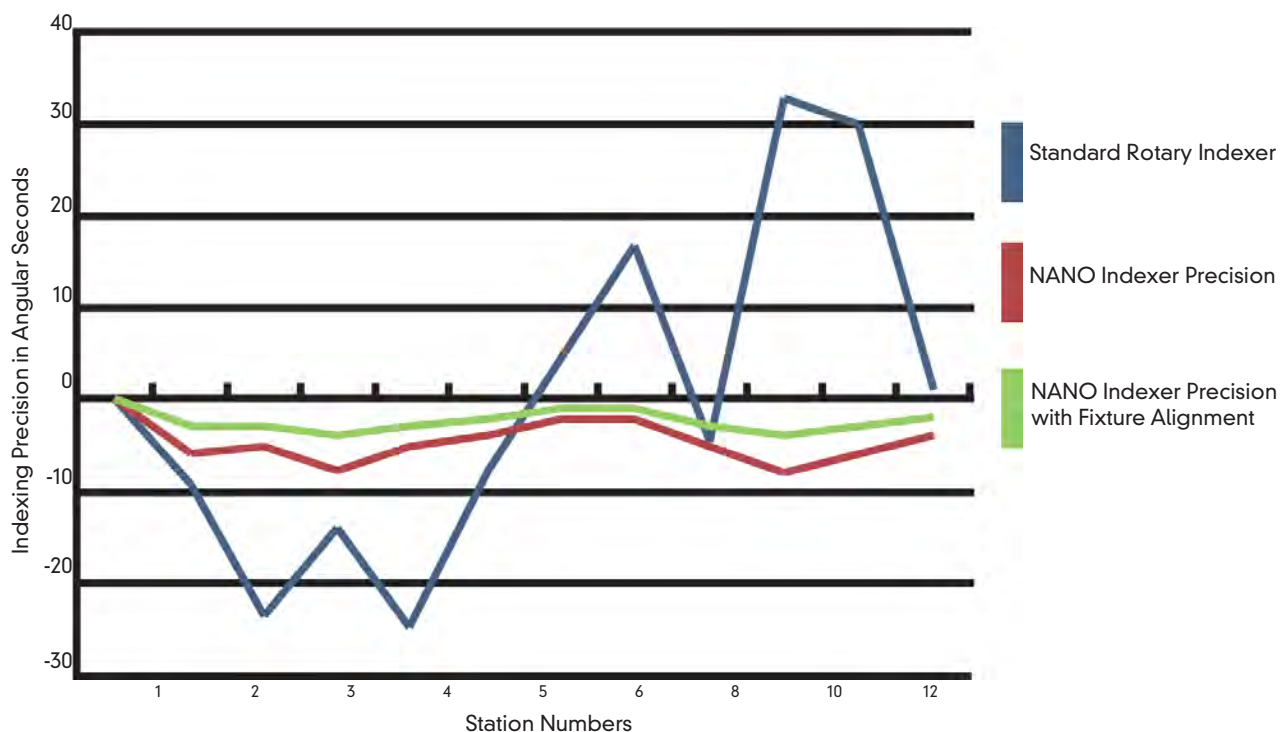
- Oscillating index operation capabilities
- Easy synchronization of other mechanical devices
- Large center thru-hole to feed pneumatic, electrical and other lines
- Housing machined on all sides for use in any mounting position

Options Available

- Reinforced output flange
- Nickel-plated output flange and shafts
- Special output flange adapters to seal out any contaminants
- Custom index and dwell angles
- Clean room ready with MEDEX Index Drives

Technical Benefits for End Users

- NANO Index Technology is applied to our standard line of Rotary Index Drives
- In-station true accuracy of 0.002 mm (0.0001"), 8 arc seconds or better
- NANO equipped indexers actively seek dwell
- Equipped with servo motor
- This unit can offer nearly 100% accuracy and repeatability



Clean Room Solutions

Clean room environments place the very highest demands on equipment, protection of people, assets and processes due to the high-risk substances, cross-contamination risks and very stringent regulatory requirements. At Motion Index Drives we have not only met but continuously exceed these demands to produce the highest quality clean room ready indexing devices on the market. The Motion Index Drives **MEDEX line** brings a variety of solutions to all of Motion's standard products. The **MEDEX line** is ready to be placed in clean room environments, such as manufacturing settings for medical equipment, pharmaceuticals, microelectronics and food processing. Our complete line of indexing equipment can be ordered to exceed all clean room requirements.

Advantages for Designers and Machine Builders

- Oscillating index operation capabilities
- Easy synchronization of other mechanical devices
- Large center thru-hole to feed pneumatic, electrical and other lines
- Housing machined on all sides for use in any mounting position



Technical Benefits for End Users

- Utilizes the same reliable and high-quality technologies as our standard line of indexing equipment
- Meets the requirements for clean room environments
- Stainless steel, nickel plating, or other
- Sealed with medically-approved seals
- Paint and aluminum treatments on the index drive and gear motor

Options Available

- Custom index and dwell angles
- Specified motors and reducers (TEFC, Motor Coatings, special oil filled reducers)
- User-controlled stations and timing with the MOTION Flex line
- More Options

