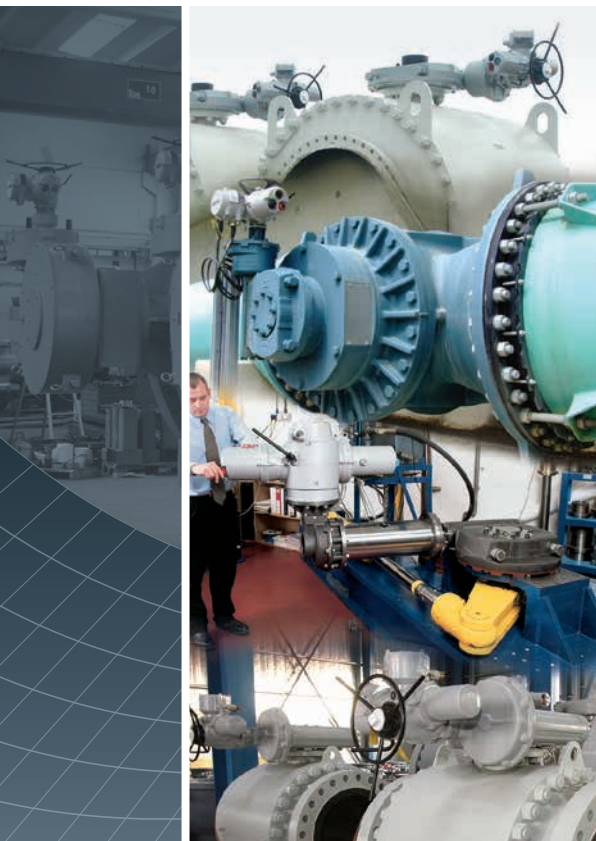




Capabilities & Facilities



Worldwide Manufacturing Facilities
International Service and Support
Innovative Design and Technology
Industry Leading Reliability

Keeping the World Flowing

Contents

rotork® Gears

Section	Page
Introduction	2
Engineering Capabilities	3
Test Facilities	4
Quality Assurance	5
Worldwide Manufacturing and Support Facilities	6
Quarter-turn Products	8
Multi-turn Products	13
Valve Mounting Kits	16
Valve Accessories	17



rotork®
Controls

rotork®
Fluid Systems

rotork®
Gears

rotork®
Instruments

Rotork is the global market leader in valve automation and flow control. Our products and services are helping organisations around the world to improve efficiency, assure safety and protect the environment.

We strive always for technical excellence, innovation and the highest quality standards in everything we do. As a result, our people and products remain at the forefront of flow control technology.

Uncompromising reliability is a feature of our entire product range, from our flagship electric actuator range through to our pneumatic, hydraulic and electro-hydraulic actuators, as well as instruments, gearboxes and valve accessories.

Rotork is committed to providing first class support to each client throughout the whole life of their plant, from initial site surveys to installation, maintenance, audits and repair. From our network of national and international offices, our engineers work around the clock to maintain our position of trust.

Rotork. Keeping the world flowing.

Engineering Capabilities

From the moment you first contact Rotork Gears you benefit from industry leading expertise gained over several decades working at the forefront of valve technology. Our world class engineering team is committed to providing the marketplace with the latest innovative technology achieved using leading-edge design methods.

Concept visualisation and proving:

- In-house 3D rapid prototyping to allow next day creation of 3D concept models: 100 micron accuracy fused deposition modelling 3D printer creates strong ABS (Acrylonitrile butadiene styrene) parts.
- Production trials on rapid prototypes removes uncertainty from the design prior to the design being frozen, allowing greater flexibility of the product early in the development process.



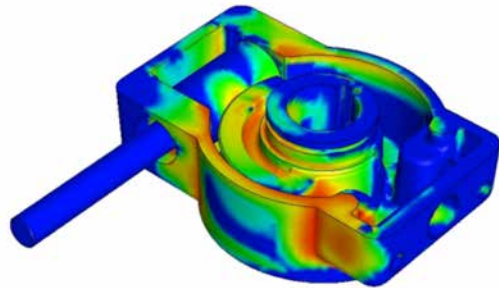
Leading edge design methods:

- Use of parametric and direct 3D modelling and design allows design intent to be accurately captured.
- 3D product manufacturing information from CAD models allows the design to be accurately manufactured, allowing for more complex forms to further optimise part geometry.
- FMEA (Failure Modes and Effects Analysis) and other DFSS (Design for Six Sigma Tools) allow the design to be robust whilst maximising the mapping of customer requirements to the product.



Thorough virtual validation:

- Use of the latest Finite Element Analysis methods for structural, vibration and impact virtual testing of designs prior to prototyping to reduce development time and optimise design integrity.
- Detailed analysis of designs under key operating conditions to reduce mean time between failures.
- Full assembly analysis to accurately recreate operating conditions, specifically related to part interactions incorporating friction and hardware components.



Flexible application Engineering:

- To be able to deliver the standard of service expected by technically demanding customers we have the product knowledge, design expertise and people with a strong commitment to quality to provide dedicated solutions for our customers.

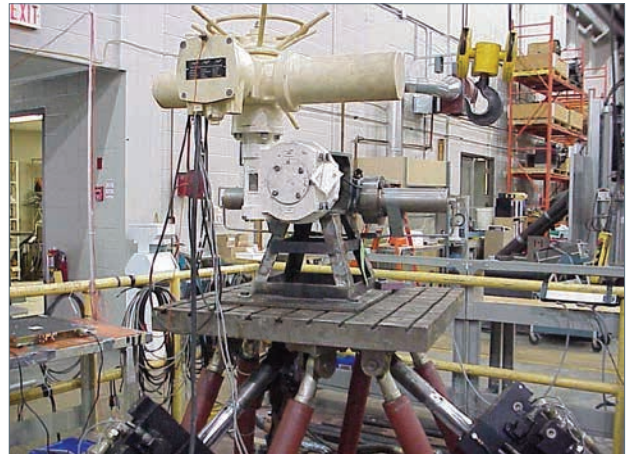
Highly skilled and experienced team:

- A dedicated research and development team to ensure new product design and development, from concept to customer.
- Highly qualified and industry experienced professional engineers in the core design team, plus broad skillset people with specialisms to ensure all aspects of product development are catered for.

Test Facilities – Quality and Safety

Rotork Gears have extensive test facilities at our Leeds location. We have a comprehensive set of test rigs for testing multi-turn and quarter-turn gearboxes across a wide range of torques. We can carry out life testing, overload testing and some environmental testing in-house.

For tests outside our in-house capabilities, such as extremely high torques or salt-spray testing, we can call on the resources of the wider Rotork Group. We also use third party facilities for procedures including nuclear, deep-sea hyperbaric and seismic/vibration testing. The climatic chamber allows us to simulate environments with different temperatures (from -70 to +180 °C) and humidity (from 10% to 98% relative humidity). It is fully self-contained and electronically controlled, and is large enough to allow us to test the majority of our gearboxes in-house. The chamber has intervention panels on both sides which allows us to drive the gearbox from outside the chamber for maximum reliability and flexibility of testing.



Seismic qualification of nuclear actuator and gearbox.



Discovery climatic chamber.



Hydrostatic qualification for subsea gearbox.



Endurance testing of prototype subsea gearbox.

Quality Assurance

Rotork Gears is committed to fully understanding customer needs and expectations, and meeting or exceeding these needs. In support of this Rotork Gears has an established quality management system that meets the requirements of BS EN ISO9001:2008.

The quality management system embraces all aspects of the organisation from new product design and life testing, to specialist application engineering, purchasing, the control of suppliers, verification of purchased materials, assembly and inspection processes.

Rotork Gears is committed to:

- Building business success through customer satisfaction.
- The promotion and full understanding of customer needs within the organisation
- Establishing objectives to promote continuous improvement with the ultimate goal of error free performance and to actively encourage employee contribution towards this goal
- Creating a quality culture by making continuous improvement and quality a fundamental part of every employee's performance and responsibility

Quality objectives with measurable outputs are established on an annual basis and reviews held through the year to verify progress against the objectives. The quality manual and policy documents are also reviewed on an annual basis for adequacy and effectiveness. These documents are available to interested parties on request.



Concentricity test with dial indicator.



Bore and Key dimension check with gauge blocks.

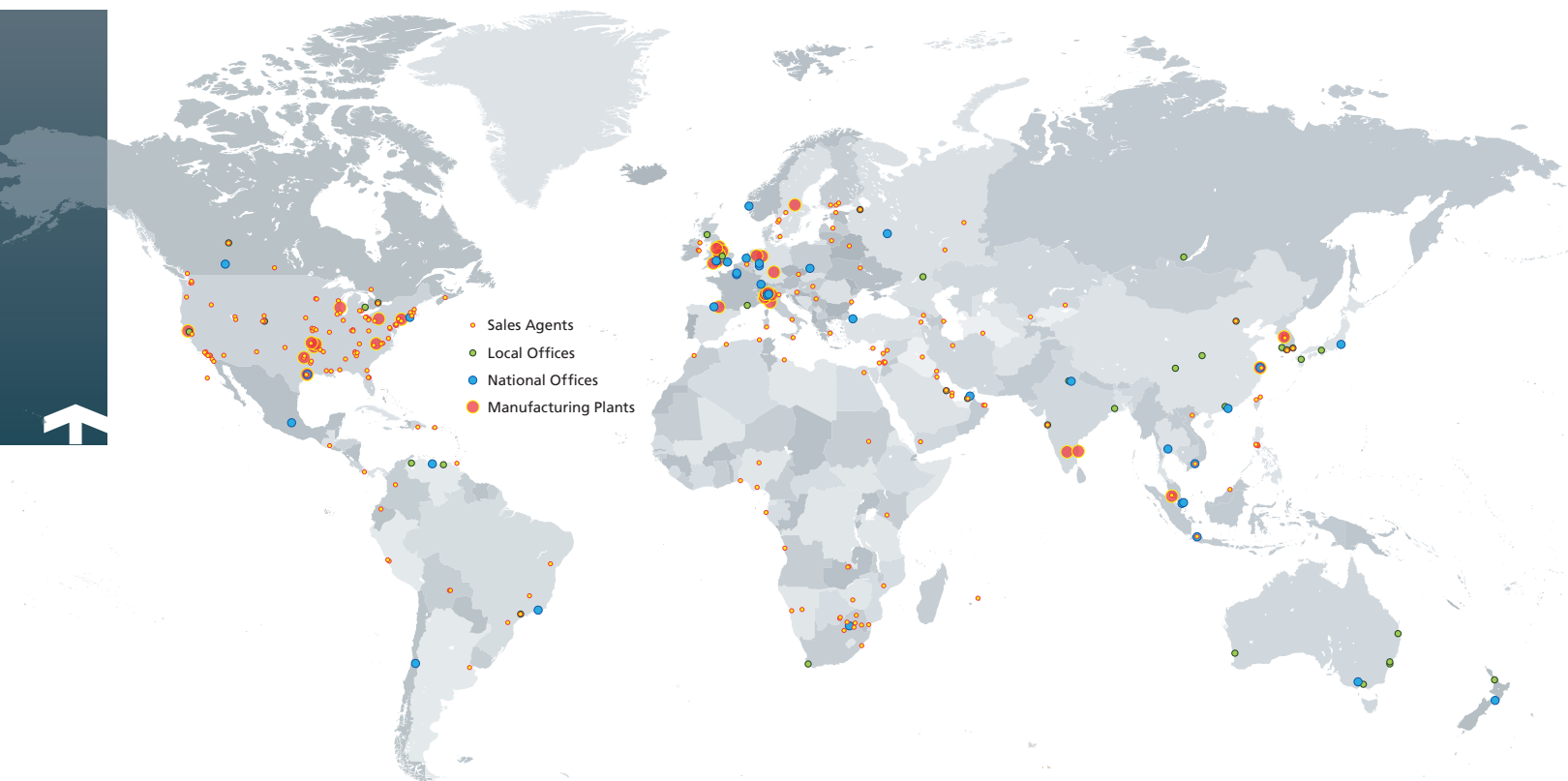


Gear teeth dimension check with vernier gear tooth.



Hardness check of drive sleeve with Equotip hardness tester.

Worldwide Manufacturing and Support Facilities



Rotork Gears has manufacturing facilities in the UK, the Netherlands, Italy, the USA, China and India and, as part of the market-leading Rotork Group, are able to offer customers the benefits of responsive, local support through Rotork's extensive international network of offices.

We are the only gearbox manufacturer able to offer service and support to our customers throughout the world.

Our worldwide manufacturing and service network enables us to be close to our customers wherever they are. With local sales offices, service engineers and stocking centres located throughout the world, we can simplify your logistical requirements and deliver product with unrivalled support, quickly and efficiently to your site.

Whatever the product, all our customers enjoy the back-up of 225 Rotork offices and representatives located throughout Europe, North and South America, The Far East, Africa, Asia, Australasia and the Middle East. Our global service network

ensures that we are able to respond quickly and efficiently at local and international level – from initial enquiry through to supply, installation, maintenance and upgrades.

The Rotork global sales and service network supports all Rotork Gears products. This network is the biggest global actuation support organisation in the world with direct sales offices and agents in all industrialised countries.

Customer service and field support provides quick and effective response to customer requirements.

Gears





Leeds, UK.



Huthwaite, UK.



Losser, The Netherlands.



Shanghai, China.



Tulsa, USA.



Houston, USA.



Parabiago, Italy.



Broken Arrow, USA.



Jigani, India.

In addition to these manufacturing centres, Rotork Gears has stocking facilities in South Africa, Australia and Russia.

Quarter-turn Products

Aluminium worm gear operators

232 range



Light duty cast aluminium quarter-turn gearboxes suited for HVAC, fire protection, and general industrial applications.

Torque range up to 1,500 Nm (1,106 lbf.ft).
7 sizes. Ratios from 37:1 to 45:1.

- Light weight
- Rugged construction
- Removable output drive sleeves
- IP65
- High pressure aluminium cast housing
- Protected input shaft

Worm gear operators

242 range



Robust and light weight quarter-turn cast iron gearbox for low torque manual applications. Suited for ball, plug and butterfly valves.

Torque range up to 2,100 Nm (1,549 lbf.ft).
6 sizes. Ratios 40:1 to 60:1.

- Worm gear
- Manual drive
- Designed using the latest analytical design tools

Worm gear operators

AB range



Heavy duty cast iron quarter-turn gearboxes suited for ball, plug and butterfly valves serving the water, gas, chemical, power, and demanding industrial applications.

Torque range up to 32,000 Nm (23,600 lbf.ft).
15 sizes. Ratios from 34:1 to 729:1.

- Cast iron
- Axial needle bearings
- Rugged construction for all environments
- IP67

Options: Stainless steel input shaft. Ductile iron. IP68. AWWA. Various environments. Padlockable handwheels. Limit switches. High and low temperatures. Buried service.

Nuclear rated manual worm gearboxes

242P range



The 242P series is a range of nuclear safety related gearboxes, qualified for outside containment and passive duty. The 242P gearboxes are intended for the operation of ball, butterfly, plug and any other quarter-turn valves.

Torque range up to 1,000 Nm (8,851 lbf.in).
5 sizes. Ratios of 40:1 to 60:1.

Quarter-turn Products

AB motorised quarter-turn gearboxes

ABM range



Quarter turn devices for the motorised operation of ball, plug & butterfly valves and power & process dampers.

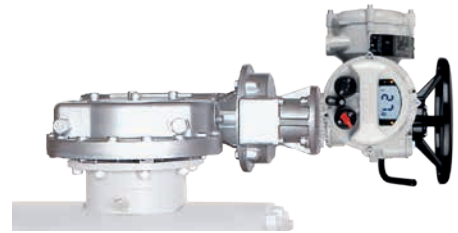
Torque range up to 2,000 Nm (1,475 lbf.ft).
4 sizes. Ratios 34:1 to 198:1.

- Supports electric actuator weight up to 46 kg (101 lbs) and a speed up to 96 rpm
- Input: F/FA10
- Ductile iron housing and protected steel input shaft
- Axial thrust bearings
- Removable insert
- IP67 and ATEX approved

Options: High and low temperatures, Firesafe to ISO 10497, IP68 marinised & buried service.

For electric actuators

IW range



Complete range of heavy duty cast and ductile iron quarter-turn worm gearboxes suited for plug, ball and butterfly valves serving the water, gas, chemical, power, and general industrial applications.

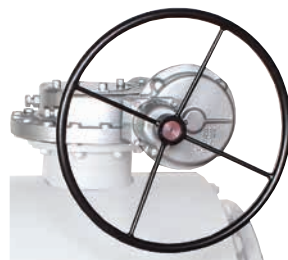
Torque range up to 850,000 Nm (626,890 lbf.ft).
21 sizes. Ratios from 40:1 to 9,600:1.

- Comprehensive gear ratios with a selection of input reducers
- High efficiency
- Angular contact bearings
- Removable output drive sleeves
- IP67

Options: Ductile iron. IP68. AWWA. Nuclear. All types of environment. High and low temperatures. Lever arms. Travelling nut for applications requiring more or less than 90 degrees travel. Buried service.

Worm gear operators

IW range



Heavy duty cast and ductile iron quarter-turn worm gearboxes suited for plug, ball and butterfly valves serving the water, gas, chemical, power, and general industrial applications.

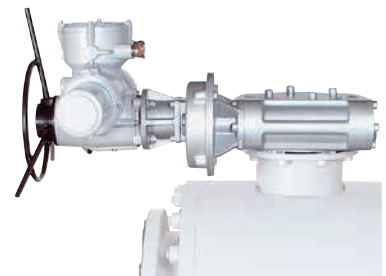
Torque range up to 850,000 Nm (626,890 lbf.ft).
21 sizes. Ratios from 40:1 to 9,600:1.

- Comprehensive gear ratios with a combined selection of input reducers
- High efficiency
- Removable output drive sleeves
- IP67
- Angular contact bearings

Options: Ductile iron. IP68. AWWA. Nuclear. All types of environment. High and low temperatures. Padlockable handwheels. Limit switches. Lever arms. Travelling nut for applications requiring more or less than 90 degrees travel. Buried service.

Worm gear operators

MOW range



Heavy duty quarter-turn modulating gearboxes suited for control valves.

Torque range up to 47,000 Nm (34,500 lbf.ft).
9 sizes. Ratios from 40:1 to 3,000:1.

- Up to 1,200 starts per hour
- Ground and polished worm shaft
- Aluminium bronze worm wheel
- Comprehensive gear ratios combined with a selection of spur input reducers
- Angular contact bearings
- Removable output drive sleeves

Options: All types of environment.

Quarter-turn Products

Nuclear rated worm gear operators

IWN range



Heavy duty quarter-turn gearboxes suited for plug, ball and butterfly valves in nuclear installations. Built to exceed the IEEE 382 specification and the 10CFR50 quality standard. Fully tested for inside containment and active duty but can also be used for outside containment, passive duty.

Torque range up to 48,809 Nm (36,000 lbf.ft).
7 sizes. Ratios from 40:1 to 70:1

- Ductile iron cast body
- Viton O-rings
- Special bearings
- Nuclear grease

Stainless steel worm gear operators

300 range



Light duty pressed stainless steel quarter-turn gearboxes suited for pharmaceutical, wash down, and corrosive environments.

Torque range up to 1,000 Nm (738 lbf.ft).
3 sizes. Ratios from 37:1 to 45:1.

- 304 stainless steel housing and input shaft
- Aluminium bronze worm wheel
- Light weight
- Suitable for corrosive environments
- IP65
- Removable output drive sleeves

Stainless steel worm gear operators

AB-SS range



Heavy duty stainless steel 316 housing quarter-turn gearboxes suited for ball, plug and butterfly valves serving the water, gas, chemical and power industries in corrosive environments.

Torque range up to 26,000 Nm (19,177 lbf.ft).
14 sizes. Ratios from 37:1 to 592:1.

- Worm gear
- Manual drive
- Stainless steel 316 housing
- Stainless steel 316 input shaft
- Stainless steel 316 fasteners

Stainless steel worm gear operators

WG-SS range



Heavy duty stainless steel 316 housing quarter-turn gearboxes suited for ball, plug and butterfly valves serving the water, gas, chemical and power industries in corrosive environments.

Torque range up to 125,000 Nm (92,195 lbf.ft).
2 sizes. Ratios up to 3,795:1.

- Worm gear
- Manual or electric actuator drive
- Stainless steel 316 housing
- Stainless steel 316 input shaft
- Stainless steel 316 fasteners

Quarter-turn Products

Override worm gear operators

ILGD range



Complete range of manual declutchable sandwich override quarter-turn gearboxes for double-acting pneumatic actuators.

Torque range up to 17,000 Nm (13,000 lbf.ft).
9 sizes. Ratios from 35:1 to 468:1.

- Protected input shaft
- Cast iron housing
- Axial needle bearings
- IP65

Options: High and low temperature. ISO drive coupling. Solenoid valve to evacuate air automatically. IP67.

Override worm gear operators

ILGS range



Complete range of sandwich manual override quarter-turn gearboxes for spring-return pneumatic actuators.

Torque range up to 32,000 Nm (23,600 lbf.ft).
10 sizes. Ratios from 34:1 to 729:1.

- Protected input shaft
- Cast iron housing
- Axial needle bearings
- IP65

Options: High and low temperature. ISO drive coupling.

Lever arms

Lever arms



Used on dampers to transfer the 90° operation from the worm gearbox to the damper spindle.

Option for IW range

This is an optional feature on all our IW and MTW ranges of worm gearboxes.

WGS subsea quarter-turn operators

WGS worm gear operator



The WGS range of quarter-turn operators are designed for heavy-duty subsea applications at any depth with carefully chosen materials to offer the highest level of reliability required in this very harsh environment. The operators are equipped with membrane or piston type pressure compensators to balance the pressure and allow them to work at any depth.

Torque range from 2,200 to 500,000 Nm (1,623 to 368,800 lbf.ft).

- Worm shaft supported on taper roller bearings
- High strength alloy steel worm screw hardened and ground
- Vertical or horizontal carbon steel ROV input (class 2 to 7)
- Stroke: 0 to 90° (± 5° adjustable)

Quarter-turn Products

Worm gear operators

ABLX (FM-UL) range



Cast iron quarter-turn gearboxes with integrated limit switches for remote position indication suited for fire protection.

Torque range up to 1,620 Nm (1,196 lbf.ft).
4 sizes. Ratios from 34:1 to 40:1.

- Cast iron housing
- Rugged construction
- Removable output drive sleeves
- IP67
- Different types of position indicators
- Suitable for FM/UL/APSAD applications

Worm gear operators

232LX range



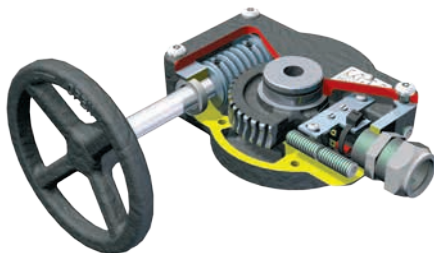
Light duty cast aluminium quarter-turn gearboxes with integrated limit switches for remote position indication suited for fire protection.

Torque range up to 500 Nm (366 lbf.ft).
2 sizes. Ratios 37:1 to 45:1.

- High pressure aluminium cast housing with stainless steel input shaft
- Light weight
- Suitable in corrosive environments
- IP65
- Removable output drive sleeves
- Powder coated
- Different types of position indicators

Worm gear operators

FB range



Quarter-turn cast iron gearbox suitable for use with fire protection (i.e. sprinkler) systems, includes limit switches to be incorporated into a supervisory electrical circuit. Designed and tested specifically to meet UL1091 specification and FM1112 Approval.

Torque range up to 1,000 Nm (737 lbf.ft).
5 sizes. Ratios from 40:1 to 60:1.

- Worm gear
- Manual drive
- 3 x overload capacity
- 1000 duty cycles

Bronze worm gear operators

BR range



The BR series gear operators are manufactured from high quality cast aluminium bronze and Arcor treated stainless steel materials and designed for extended life operation of metal seated butterfly valves in corrosive man hole and vault steam distribution environments where road salts, standing water and elevated temperatures are common.

Torque range to 7,000 Nm (5,163 lbf.ft).
3 sizes. Ratios from 34:1 to 217:1.

- Temperature range up to +200 °C (+392 °F)

Multi-turn Products

Worm gear operators

MTW range



The multi-turn worm gearboxes are used for applications such as sluice gates and dampers.

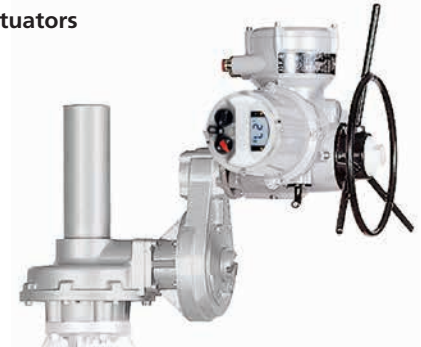
Torque range up to 162,000 Nm (119,000 lbf.ft).
11 sizes. Ratios from 40:1 to 5,760:1.

- Ground and polished worm shaft
- Aluminium bronze worm wheel
- Comprehensive gear ratios combined with a selection of spur input reducers
- Angular contact bearings supporting worm shaft
- Removable output drive sleeves

Options: Travelling nut for applications requiring mechanical stops. Lever arms. AWWA. All types of environment.

For electric actuators

IB range



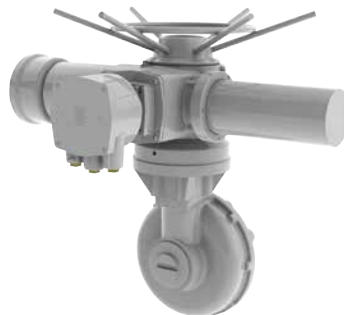
Complete range of heavy duty cast iron multi-turn bevel gearboxes suited for the most demanding motorised applications for cast and fabricated sluice gates, gate valves and globe and pinch valves.

Torque range up to 8,135 Nm (6,000 lbf.ft).
Thrust range up to 1,320 kN (296,750 lbf).
13 sizes. Ratios from 1:1 to 120:1.

Common options for IB: Spring loaded temperature compensators. Various position indicators. AWWA. High and low temperature. Nuclear. All types of environment. IP68. Cast steel.

Nuclear rated bevel gear operators

IBN range



Heavy duty multi-turn bevel gearboxes suited for nuclear installations. Built to exceed the IEEE 382 specification and the 10CFR50 quality standard. Fully tested for inside containment and active duty but can also be used for outside containment, passive duty.

Torque range up to 8,135 Nm (6,000 lbf.ft).
Thrust range up to 1,320 kN (296,750 lbf).
6 sizes. Ratios from 2:1 to 8:1.

- Ductile iron cast body
- Viton O-rings
- Special bearings
- Nuclear grease

Bevel gear operators

HOB/MPR range



Cost effectively designed commodity hand operated bevel gears suited for sluice gates, gate, and globe valves.

Torque range up to 8,018 Nm (5,914 lbf.ft).
Thrust range up to 1,557 kN (350,028 lbf).
11 sizes. Ratios from 2:1 to 81:1.

- Cast iron body
- Maintenance free
- IP67

Options: All types of environment. Position indicators. IP68.

Multi-turn Products

Spur gear operators

HOS/MPR range



Multi-turn devices intended for the manual operation of gate, globe, sluice and penstock valves. For use above and underground with upward or downward input orientation.

Torque range up to 15,917 Nm (11,740 lbf.ft).

Thrust range up to 1,557 kN (350,000 lbf).

14 sizes. Ratios from 2.04:1 to 151.9:1.

- Totally enclosed gearing
- Cast iron gearcase
- IP67

For electric actuators

IS range



Complete range of heavy duty cast iron multi-turn spur gearboxes suited for the most demanding motorised applications where the gearbox input shaft needs to be parallel with the valve stem for globe and gate valves and sluice gates.

Torque range up to 43,386 Nm (32,000 lbf.ft).

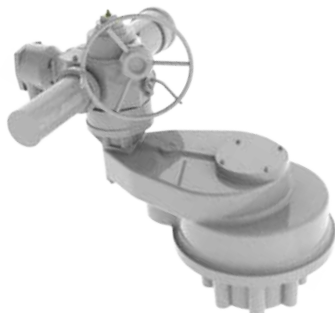
Thrust range up to 2,900 kN (652,000 lbf).

20 sizes. Ratios from 1:1 to 360:1.

Common options for IS: Spring loaded temperature compensators. Various position indicators. AWWA. High and low temperature. Nuclear. All types of environment. IP68. Cast steel.

Nuclear rated spur gear operators

ISN range



Heavy duty multi-turn spur gearboxes suited for nuclear installations. Built to exceed the IEEE 382 specification and the 10CFR50 quality standard. Fully tested for inside containment and active duty but can also be used for outside containment, passive duty.

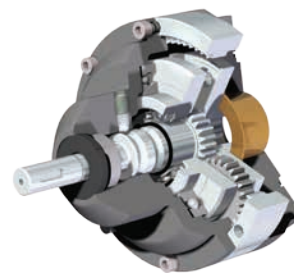
Torque range up to 43,386 Nm (32,000 lbf.ft).

Thrust range up to 2,224 kN (500,000 lbf)

3 sizes. Ratios from 6:1 to 24:1.

Combination gear operators

DSIR



The Dual Speed Input Reducer is used to reduce the number of input turns required and therefore the operating time on manual gearbox applications. It can be used with any manual gearbox which can be fitted with an F14 or FA14 input flange.

Output torque 720 Nm (6,373 lbf.in).

Ratio can be switched between 1:1 and 4.25:1.

Multi-turn Products

Bevel gear operators

NTB range



Cost effectively designed bevel gearboxes suited for valves which do not transfer thrust to the operator.

Torque range up to 700 Nm (516 lbf.ft).
2 sizes. Ratios 2:1 and 4:1.

- Cast iron body
- Maintenance free
- IP67

Options: All types of environment. Various Position indicators. IP68. Approval to GOST standard ST CKBA 062-2009 "Valve Rotation & Actuator Mounting Dimensions."

Non thrust Bevel GOST Standard

NTBG range



Designed specifically to meet the requirements of valves complying with the Russian GOST standard ST CKBA 062-2009.

The NTBG series gearboxes are intended for the operation of gate and globe valves without a thrust capacity requirement.

Torque range up to 10,000 Nm (7,376 lbf.ft).
Various sizes.
Ratios from 2:1 to 120.2:1.



Bevel gear operators

RAB range



The Radial Acceptance Bevel is suitable for AWWA and where side load movement is likely to happen on penstocks or gate valves.

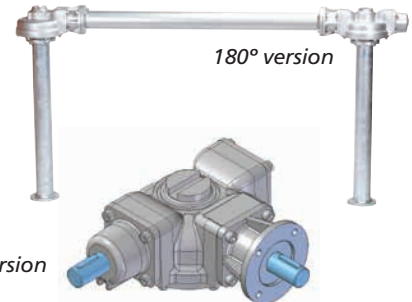
Torque range up to 678 Nm (500 lbf.ft).
Thrust range up to 178 kN (40,000 lbf).
2 sizes. Ratios from 2:1 to 6:1.

- Comprehensive gear ratios combined with a selection of input reducers
- Removable drive sleeves designed to accommodate for heat build-up
- Tapered roller bearing to withstand side loading
- IP68

Options: Various types of position indicators. All types of environment.

Dual shaft bevel gear operators

DSB range



Complete range of multi-turn bevel gearboxes with two shafts for use with dual stem sluice gates and penstocks.

Torque range up to 8,135 Nm (6,000 lbf.ft).
Thrust range up to 1,320 kN (296,750 lbf).
13 sizes. Ratios from 1:1 to 120:1.

- Ductile iron baseplates
- Comprehensive gear ratios combined with a selection of spur input reducers
- Pinions mounted on ball bearings
- IP67

Options: All types of environment. Various position indications. IP68. Input shafts available at 90° & 180° to each other.

Valve Mounting Kits

Ball, butterfly and plug valve kits designed to order, precision CNC machined in stainless steel

Mounting kits

Ball, butterfly and plug valve kits



A complete range of stainless steel or carbon steel mounting kits, engineered from certified material, individually bagged and labelled ready for assembly.

- Complete kits for valves from 1/4" to 48"
- F03 - F35 Mounting flange - ISO 5211/DIN 3337
- Open or closed construction
- Manufactured in stainless steel
- Designed, manufactured, and delivered in days
- CNC precision machined
- 3 year guarantee, free from manufacturing defects

Options: Alternative materials, custom design, material certification, logo or brand names.

Spool and pedestal adaptors

Quarter-turn valve adaption for rack and pinion or pneumatic actuators can be provided in the form of spool or pedestal type mounting kits.

These are fully enclosed adaptors with options of DD, square or keyed drives.

Construction materials will be carbon steel, supplied complete with fasteners, painted or natural.

- Valves from 1/4" to 48"
- F03 - F35 Flanges - ISO 5211/DIN 3337
- Welded to ASME 9 standards
- Square, key or double D drive
- 100 to 500 mm in length

Options: O-ring seals, stress calculations, material certification.



SafeOperator™ - Flexible Valve Extensions



Rotork gearboxes combined with Elliott's SafeOperator™ systems provide the flexible solution for the operation of valves located in hazardous or difficult to access locations. System components are available for almost all valve configurations to provide reliable, remote operation up to 30M (100 feet) away.



Elliott's Uniflex-Stow offers remote mechanical valve control for Naval, Nuclear & special purpose industrial installations. Using high grade materials and with shock and seismic qualifications Uniflex-stow offers well proven solutions for challenging environments.

Locking levers - secure and tamper proof designs

- Locking Plates, for quarter-turn ball and butterfly valves
- Multi-turn locking flanges for valves and gearboxes
- Interlocked valves



Valve Accessories

Switch box and position indication

SOLDO range



The SolDO range of switch boxes for use on quarter-turn valves and actuators. They are available in durable polycarbonate, 316 stainless steel and aluminium, and can be used on actuators, valves, or in conjunction with a hand wheel or lever.

- IP66, IP67, IP68, Safe area operation
- Hazardous approval, Exd IIC, Ex ia IIC +H2 -ATEX
- Beacon/Local indicator available
- 4 to 20 mA
- V3 micro switches or Inductive sensors
- Open/Closed feedback sensors for multi-turn valves are also available

Packaging, assembly and testing

One stop shop

Rotork Valvekits can offer a comprehensive service for the supply of valve actuator assemblies, packaged to your requirements, and stroke tested. Free issue supply of the valve and or actuator, Valvekits will do the rest.



- Site surveys
- Design, manufacture and assembly
- Stroke test packages
- Supply of solenoids, mounting kits, gearboxes, switch boxes, hand wheels all from the 'in house' design and manufacturing cell
- Complex linkages or limit sensing designs
- Guards, pipe work, pneumatic controls

Dead man's handle Spring Return Handle



Guarantee failsafe operation for Ball valves, the Spring Return Handle (SRH) will mount on any ball valve, either "direct on" or with a mounting kit designed to suit application.

- Ball valves with torque of 24 or 45.5 Nm
- F03, F05, F07 pcds
- Direct mount or with mounting kit
- Sealed for life, zero maintenance
- Stainless steel handle, shaft and fasteners, precision die cast body
- Durable powder coated finish

Interlocking Systems

Alcatraz Interlocks range



Interlocking systems for safe operation. Used to prevent potentially hazardous situations caused by errors in the operating sequence of industrial processes. The operator is forced to follow a predetermined sequence by means of a mechanical coded key transfer.

- Bespoke interlock systems designed to suit individual needs
- Easy to install and operate, maintenance free
- Stainless steel 316
- Fire tested according to API 607
- Test certificate EN 10204 3.1 available on request
- Resistant to dirt, sand and moisture ingress
- Non-intrusive, placed between existing handwheel and gearbox

Valve Accessories

Remote Mounting and Extension Spindles

Valve and actuator remote mounting and extension spindles

Remote actuator mounting can be achieved using valve extension spindles or pedestal adaptors. Design and manufacture is done in house for specific applications. Lengths can be from 500 mm to 8 metres, in stainless steel or carbon steel.

Extension Spindle

- Underground applications
- Customer specified extension
- Welded construction for weight saving
- Position indication option
- Suitable for manual or actuated drives

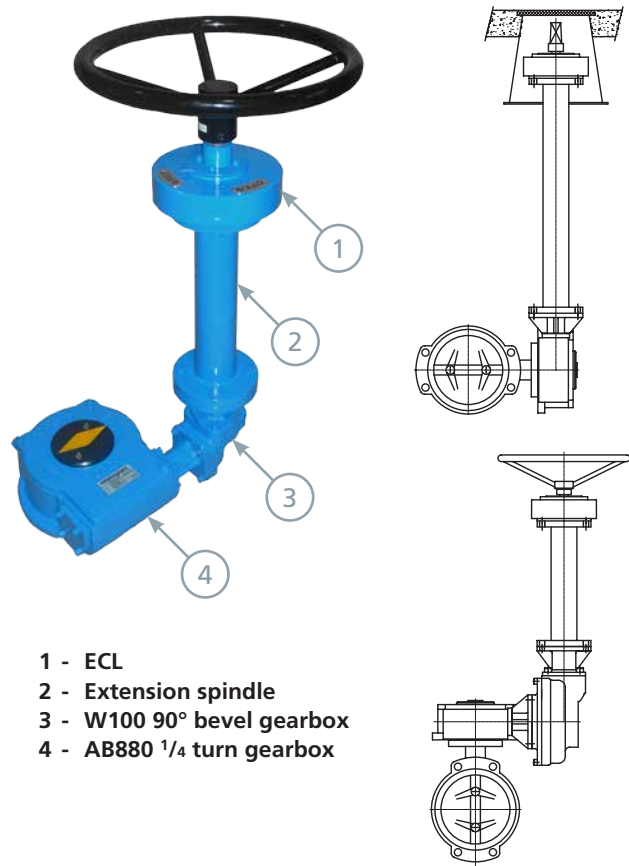
Options: Oil filled, environmental sealing, galvanized, plain or dynamic bearings, swivel joints.

ECL Position Indicator

Mechanical remote position indicators for buried service and shaft extension applications. 3 sizes. Ratios: ECL1 up to 35:1, ECL2 up to 120:1, ECL3 up to 394:1.

W100 1:1 Bevel Gearbox

1:1 bevel gearbox designed primarily to be used on AB and manual duty IW 1/4 series gearboxes to change the input shaft direction by 90° for underground applications.



- 1 - ECL
- 2 - Extension spindle
- 3 - W100 90° bevel gearbox
- 4 - AB880 1/4 turn gearbox

Roto Hammer Chainwheels



Roto Hammer offers the very best solutions for hard-to-reach and difficult to operate valves, with the purpose of protecting employees and equipment with safe, dependable valve operation.

Roto Hammer manufacture a variety of Chainwheel ranges, including standard clamp-on and direct mount models, to fit handwheel size 4" up to 40". Chainwheels are available with RCK safety cable kits, and with different materials such as Ductile Iron, Aluminium, Stainless Steel, Galvanised Ductile Iron and Epoxy Coating.

Roto Hammer also make a variety of innovative custom solutions.

Chainwheels

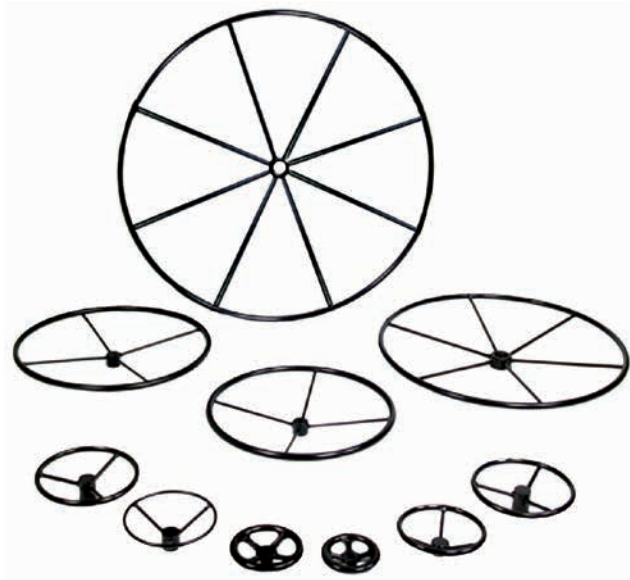


- Cast iron chain wheels from 135 to 330 mm diameter, larger dimensions can be supplied.
- Chain guides and bearing are standard
- Galvanized or stainless steel chain available
- Epoxy coating for durability available
- Direct mount on the input shaft

Options: AISI316 chainwheel & chain, sheradisation protection, adaption design to suit application, alternative chainwheel which mounts on existing handwheel using brackets.

Valve Accessories

Hand wheels



- 125 to 2,000 mm diameter
- Stainless steel or powder coated
- Keyed, pinned or square drive
- Fabricated or pressed design
- Oval or round designs for small valves
- Open and closed indication marking

Options: Locking flange, handle, specials, galvanised, rotating handle, flat or dished.

Lagging extensions



- Butterfly, plug and ball valves from 1/4" to 10"
- 65 to 1,000 mm high
- Stainless steel, with stop and fasteners
- Designed to suit any valve mounting pad
- Optional locking facility
- Tee bar or lever operator

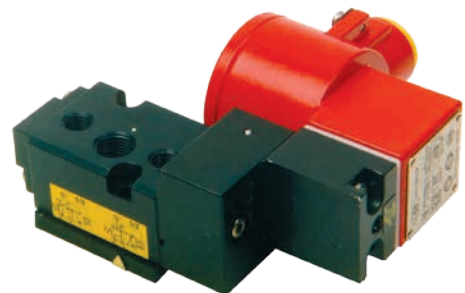
Options: Environmentally sealed, oil filled, bearings, low cost carbon steel.

Indexed levers (notch plates)



- For butterfly valves
- Stainless steel plates
- Indexed by degrees or open/closed
- Padlock option
- Supplied with all fasteners
- Engraved position indication
- Castell lock option

Solenoid valves



Rotork Valvekits has available a large range of quality solenoid valves to cover all the range of safe and hazardous areas. These include Exia and Exd in various materials with Namur and remote mount options.



Keeping the World Flowing

Rotork Gears UK

9 Brown Lane West,
Holbeck, Leeds,
LS12 6BH
England

tel +44 (0)113 256 7922
email sales@rotorkgears.com

Rotork Gears BV

Nijverheidstraat 25
7581 PV Losser
P.O. Box 98
7580 AB Losser
The Netherlands

tel +31 (0)53 - 5388677
fax +31 (0)53 - 5383939
email info@rotorkgears.nl

Rotork Gears India

165/166, Bommasandra,
Jigani Link Road,
Kiadb Industrial Area,
Anekal Thaluk,
Jigani Hobli, Bangalore 562106
India

tel +91 80 3098 1600
fax +91 80 3098 1610
email sales@rotork.co.in

Rotork Gears Americas

1811 Brittmoore,
Houston,
Texas 77043
USA

tel +1 713 9837381
fax +1 713 8568022
email gears@rotorkgears.com

Rotork Gears Shanghai

No. 260 Lian Cao Road
Xin Mei Urban Industrial Park
Min Hang District
Shang Hai 201108
China

tel 0086 21 33236200
fax 0086 21 64348388
email info@rotorkgears.com.cn

Rotork Valvekits

Brookside Way,
Nunn Park,
Huthwaite,
Nottinghamshire NG17 2NL
England

tel +44 (0)1623 440211
fax +44 (0)1623 440214
email sales@rotorkvalvekits.com

Rotork Valvekits Americas

501 South 12th St.
Broken Arrow,
Oklahoma 74012
USA

tel +1 (918) 259-8100
fax +1 (918) 259-9167
email usasales@rotorkvalvekits.com

Rotork Gears S.R.L.

Viale Europa 17
20090 Cusago (MI)
Italy

tel +39 0290 16711
fax +39 0290 390368
email rgsrl.sales@rotork.com

Roto Hammer Industries

2804 W. 40th St.
Tulsa,
Oklahoma 74107
USA

tel +1 (918) 446-3500
fax +1 (918) 446-6218
email sales@rotohammer.com

www.rotork.com

A full listing of our worldwide
sales and service network is
available on our website.

Rotork plc
Brassmill Lane, Bath, UK
tel +44 (0)1225 733200
fax +44 (0)1225 333467
email mail@rotork.com

Rotork is a corporate
member of the Institute
of Asset Management

