

LEAN ON US



AEROSPACE
Simple, Flexible and Capable Solutions



WHY INGERSOLL RAND?

For more than 100 years, Ingersoll Rand® has inspired progress by driving innovation with revolutionary technology and creating new standards for how the world gets work done. We're proud of our legacy for developing ruggedly reliable, class-leading industrial technologies and outstanding customer service and technical support. Turn to us for breakthrough thinking, the finest equipment and a true partnership at every stage of your operation.

UNMATCHED QUALITY & DEPENDABILITY

- Lower Cost of Acquisition** as you are buying tools, not a platform
- Lower Lifecycle Costs** as a result of durable, longer-lasting products and ease of maintenance & serviceability
- Increased Productivity** from high performance and efficient operation for more up time and less worker fatigue
- Commitment to Quality** by providing maximum comfort, safety, efficiency even in most demanding applications

PARTNERING WITH INGERSOLL RAND

Ingersoll Rand offers a wide range of electric and cordless solutions delivering the flexibility you need to fit even the most unique and demanding applications.

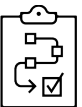
HOW IT WORKS:



- Information Gathering:**
- Opportunity Information: Brand, Product Type, Part Numbers, etc.
 - Application Information: Specific uses, annual quantity/usage, location information
 - Any additional relevant information



- Opportunity Validation:** Qualify data from Information Gathering phase and perform a tool and application audit to understand the opportunity
- Develop deep understanding of customer issues, pain points, and areas for improvement
 - Focus on fully understanding the complexity and the size of the opportunity



- Solution Assessment:**
- Utilize data from previous phases and Ingersoll Rand's industry-leading experts to determine best practice application recommendations



- Proposed Solution:**
- Communicate our understanding of the opportunity and propose a solution based on Ingersoll Rand's value of lower cost of acquisition, improved productivity, and lower cost of ownership

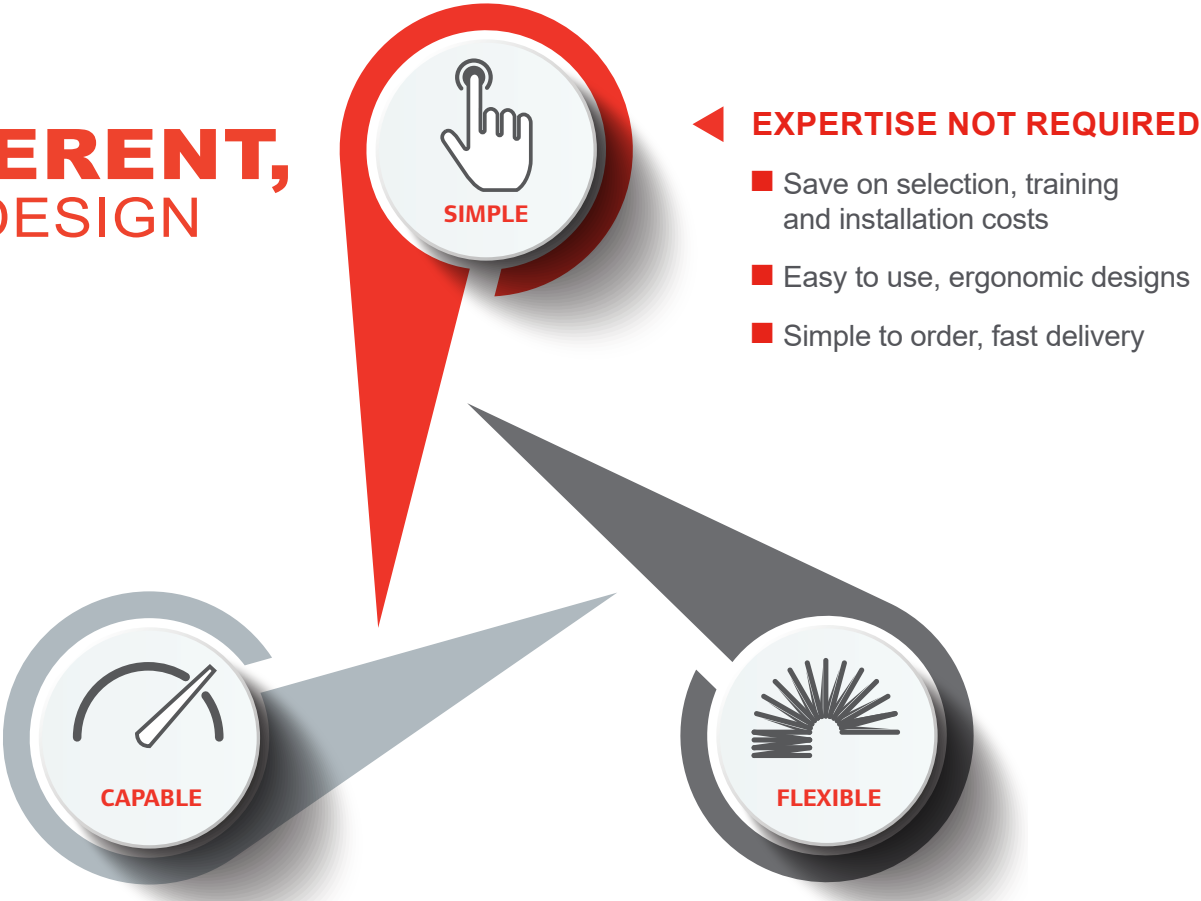


- Implementation & Expansion:**
- In partnership with your team, we will implement the aligned solution, delivering results and opening up new partnership opportunities

TAKE TOTAL CONTROL

Taking total control of your fastening process doesn't have to be complicated. Our comprehensive family of fastening systems deliver simple, flexible and capable solutions for all of your assembly requirements. No matter the industry or application, you can count on Ingersoll Rand® as a trusted partner to help you get the job done right.

DIFFERENT, BY DESIGN



EXPERTISE NOT REQUIRED

- Save on selection, training and installation costs
- Easy to use, ergonomic designs
- Simple to order, fast delivery

MEET YOUR REQUIREMENTS

- Performance that optimizes your productivity
- Durable designs, lower cost of ownership
- Advanced diagnostics identify problems and enhance safety

EASILY IMPLEMENT CHANGE

- Easy line integration and rebalancing
- Multiple product options
- Custom solutions available

AEROSPACE INDUSTRY

Where We Fit

Advanced Assembly Tools Meet Rigorous Aerospace and Defense Manufacturing Demands

The manufacturing of aerospace and defense parts and sub-assemblies requires maximum precision and quality in all areas of the assembly process.

Meeting today's rigorous industry demands requires increased automation and consistent, reliable processes. Manufacturers need to maintain 100 percent accurate, efficient, and cost-effective operations. In addition, the entire assembly process needs to be reproducible and traceable to ensure quality and precision.

Aerospace manufacturers are always looking for ways to optimize production efficiencies. In order to keep up with an increasingly competitive landscape, it is imperative that aerospace and defense manufacturers anticipate ways to make their labor force more productive and reduce overhead costs.



SIMPLY PRODUCTIVE

The innovative QX Series™ is simple for anyone to use. It offers flexibility because of its feature-rich configurations, and can manage everything from data and fast programming to modifications on your line. The QX Series™ increases productivity and lowers costs — all at a price you can afford.

SIMPLE

- Multi-function display module for quick setup and feedback
- Compact, lightweight and ergonomically balanced so the operator can work without restraints
- The intuitive INSIGHT Connect app will help you stay productive and mobile on the plant floor

FLEXIBLE

- Provides up to eight fully programmable configurations on a single tool, reducing costs and workspace clutter
- Fast and intuitive programming makes the tool easily adaptable to any needed changes on your assembly line
- Cordless and portable, allowing for effortless movement around your facility

CAPABLE

- At the heart of every tool is the closed-loop transducer control that delivers precise torque and accurate, traceable results
- Available in a variety of configurations, including pistol grip, angle wrench, multiplied, Class 1 Div 2 and ETS
- Wireless communication option enables flexible line integration, remote monitoring and simple system programming across a plant wide network
- Manage cycle data, control the process, receive system status alerts and implement configuration adjustments in real time using Ethernet, Fieldbus and digital I/O



SIMPLE



FLEXIBLE



CAPABLE



QX SERIES™ FEATURES



SUPERIOR CONTROL

When it comes to fastening, standard clutch tools don't stand a chance. The QX Series™ line of products give you closed loop control of your fastening process. Each tool allows for programmable tightening strategies to deliver higher quality joints and control that outperforms the competition. The diverse line of tools offers a simple solution to meet your fastening needs.

FEATURES

- Number of Tightening Configurations
- Compatible with INSIGHT Connect App
- Compatible with ICS Software
- Total control of torque, speed, & degrees of rotation
- Multi-step tightening configuration support
- Multi-color visual status indicators`
- Optional ETS models available
- Optional QXM Torque Multiplier models available
- Displays quantitative result of actual torque
- Programming directly from the back of the tool
- Integration with line control systems for error proofing
- Integration with plant network for data collection
- Integration with standard accessories such as: *light stack, socket tray, bar code scanner, etc.*
- Supports remote access and programming using ICS

| | QXN | QXC | QXX |
|--|-----|-----|-----|
| Number of Tightening Configurations | 1 | 8 | 8 |
| Compatible with INSIGHT Connect App | ✓ | ✓ | ✓ |
| Compatible with ICS Software | ✓ | ✓ | ✓ |
| Total control of torque, speed, & degrees of rotation | ✓ | ✓ | ✓ |
| Multi-step tightening configuration support | ✓ | ✓ | ✓ |
| Multi-color visual status indicators` | ✓ | ✓ | ✓ |
| Optional ETS models available | ✓ | ✓ | ✓ |
| Optional QXM Torque Multiplier models available | | ✓ | ✓ |
| Displays quantitative result of actual torque | | ✓ | ✓ |
| Programming directly from the back of the tool | | ✓ | ✓ |
| Integration with line control systems for error proofing | | | ✓ |
| Integration with plant network for data collection | | | ✓ |
| Integration with standard accessories such as: <i>light stack, socket tray, bar code scanner, etc.</i> | | | ✓ |
| Supports remote access and programming using ICS | | | ✓ |

With the addition of QXN, you can now more simply harness the superior transducerized control, operator feedback, and simple setup that these tools offer. This innovation is **a revolutionary step** for your entire facility; one that can show you how a smarter tool can improve process control, operator comfort, lower costs and provide invaluable assurance that your process is done right, every time.



QX ETS ERGONOMIC TIGHTENING SYSTEM

Reducing the torque reaction in your fastening process doesn't have to be complicated. Control and ergonomics, not compromise - that is what the QX ETS is all about. The QX ETS offers all the capabilities found in the **QX Series™** platform, without the torque reaction.

FEATURES

- Ergonomically enhanced motor control algorithm significantly reduces the average force experienced by the operator during the tightening process
- Red tool highlights provide clear indication of ETS tool identity vs standard QX tool
- Continuously flashing blue light above keypad provides operator assurance that ETS is ACTIVE
- All the capability of the QX platform, without the torque reaction
- Common software and battery platform for simple integration
- QXN, QXC and QXX versions available in pistol grip, low torque angle and high torque angle
- Onboard 'pulse' counter supports proper optimization and application of ETS tools on ideal applications (10 pulses or less per cycle)



SIMPLE SETUP

In addition to standard direct drive mode, each tool configuration can be independently programmed to utilize one of the three available single-parameter ETS modes, simplifying setup:

Ergonomic Mode, with the lowest energy pulses, is ideal for hard joints or when arm, wrist or tool angles are most difficult.

Performance Mode, with medium energy pulses, is the best all-purpose mode.

Productivity Mode, with the highest energy pulses, is the fastest mode. Ideal for soft joints or when high production rates are required.

INSIGHT™ CONNECT APP



The INSIGHT™ Connect app will help you stay productive, mobile and in control of your fastening process. It programs any Ingersoll Rand® QX Series™ tool without the need for additional technical training, special software, plant network permissions or a laptop computer. Working from a smartphone or tablet, operators can use the app to quickly program the torque and angle control configurations on these closed-loop, transducerized tools.

Once installed, the INSIGHT™ Connect app can operate offline, so it functions in large facilities or other locations where Internet signal loss may be a problem, reducing downtime and maximizing ease of use. You can quickly perform key tasks with your mobile device, including:

- Strategy
 - Torque
 - Angle
 - Torque + angle
- Back-up and restore tool settings
- Retrieval of tool logs and the ability to send via email for post-processing
- Review audit logs



INSIGHTqcx™ CONTROLLER



When trying to achieve simple manufacturing goals in a complex manufacturing world, understanding the fastening process doesn't have to be complicated. The new Ingersoll Rand® INSIGHTqcx™ is different, by design. This cordless controller is designed to be easy to use and integrate, while providing a common platform to meet your assembly requirements worldwide.

| | <div></div> <div>SIMPLE</div> | <div></div> <div>FLEXIBLE</div> | <div></div> <div>CAPABLE</div> |
|--|---|--|---|
| | <div>EXPERTISE NOT REQUIRED</div> | <div>EASILY IMPLEMENT CHANGE</div> | <div>MEET YOUR REQUIREMENTS</div> |
| WHAT DOES THIS MEAN TO ME? | <ul style="list-style-type: none">■ Save on selection, training and installation costs■ Reduce errors and downtime■ Remove user dependencies | <ul style="list-style-type: none">■ Reduce line rebalancing costs■ Easy line integration■ Remove device dependency | <ul style="list-style-type: none">■ Get the job right, every time■ Assurance via traceability■ Optimize your productivity |
| HOW DOES INGERSOLL RAND PROVIDE VALUE? | <ul style="list-style-type: none">■ Intuitive, visual programming interface■ Plug and play accessories and protocols■ Integrated backup and recovery■ Bundled controller options | <ul style="list-style-type: none">■ Web based programming use any operating system via any browser■ Meets current industry communication needs■ Integrated logic controls■ Easy hardware and software upgrades■ Onboard wireless energy scan | <ul style="list-style-type: none">■ Touch screen interface■ Industry leading cycle data storage■ Robust audit and system logs■ Advanced tightening strategies and features■ Onboard diagnostics■ Integrated statistical process controls |

SIMPLY INSIGHTFUL

The controller's web-based software eliminates device dependencies and enables full programming capability with any device that can run an internet browser, including smart phones, tablets or computers. The INSIGHTqcx™ controller is easy to integrate with the manufacturing line, provides flexible logic controls for job sequencing and helps reduce line rebalancing costs through a simple and intuitive user interface.

SIMPLE FLEXIBILITY

QX PISTOL SPECIAL HEAD ADAPTER

The QX Pistol Special Head Adapter is the perfect solution to simply increase the flexibility of your QX pistol screwdriver. Using this adapter leverages the closed loop capability of the QX tool to the most unique applications. The adapter helps manufacturers meet the requirements of unique applications, including where restricted access requires a custom head to reach the fastener. Common applications requiring a Special Head Adapter include assembling aircraft wings or installing door hinges on cars and trucks.

SIMPLE

Ready made and easy to install.

VP1-K40
Special Head Adapter



FLEXIBLE

Use your QX pistol grip tool for unique applications

CAPABLE

Employ closed-loop control capabilities on specialty applications



TK-VP1-550-S6

Standard 3/8" Square Drive Anglehead

TK-VP1-550-Q4

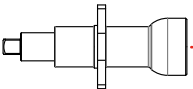
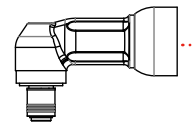
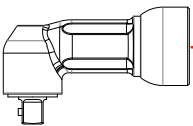
Standard 1/4" QC Drive Anglehead

TK-VP1-58

Standard 3/8" Square Drive Inline Floating Spindle with Flange Mount

Custom Attachment

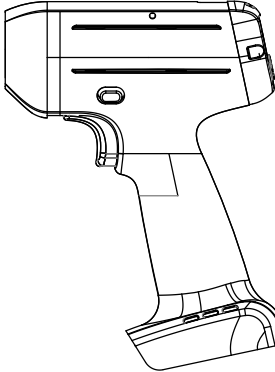
Employ closed-loop control capabilities on specialty applications.



VP1-K40
Special Head Adapter

Thrust washer
Lock spacer

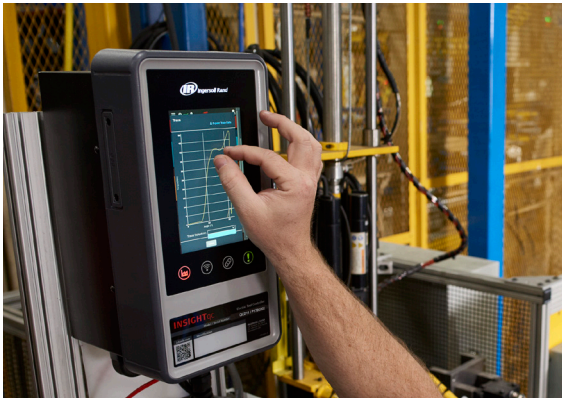
Any non-multiplier pistol grip QX tool



* The VP1-K40 kit & QX pistol tool are sold separately and are to be used in conjunction with one of the standard attachments shown above or with a custom engineered attachment, also sold separately.

SIMPLY INSIGHTFUL

When trying to achieve simple manufacturing goals in a complex manufacturing world, taking control of and understanding the fastening process doesn't have to be complicated. The new Ingersoll Rand® INSIGHTqc™ is different, by design. The INSIGHTqc™ controller is designed to be easy to use, easy to integrate, and provide a common platform to meet the global assembly needs of our customers. This controller offers advanced tightening control and a simple user experience to improve efficiency on production lines, and get the job done right, every time.



| | SIMPLE | FLEXIBLE | CAPABLE |
|-------------------------------------|---|--|---|
| WHY DO I CARE? | EXPERTS NOT REQUIRED | EASILY IMPLEMENT CHANGE | MEET YOUR REQUIREMENTS |
| WHAT DOES THIS MEAN TO ME? | <ul style="list-style-type: none">• Save on selection, training and installation costs• Reduce errors and downtime• Remove user dependencies | <ul style="list-style-type: none">• Reduce line rebalancing costs• Easy line integration• Remove device dependency | <ul style="list-style-type: none">• Get the job right, every time• Assurance via traceability• Optimize your productivity |
| HOW DOES INGERSOLL RAND OFFER THIS? | <ul style="list-style-type: none">• Intuitive, Visual Programming Interface• Plug and Play Accessories and Protocols• Backwards Capability• Integrated Backup and Recovery• Bundled Controller Options• Context Specific Integrated HELP | <ul style="list-style-type: none">• Web Based programming use any operating system via any browser• Meets current industry communication needs• Adjustable to meet any tightening control requirements• Integrated logic controls• Easy hardware and software upgrades | <ul style="list-style-type: none">• Touch Screen Interface• Industry leading cycle data storage• Robust audit and system logs• Advanced tightening strategies and features• Onboard diagnostics• Integrated statistical process controls• Preventative maintenance alarms• Configurable email alerts |


The web-based software eliminates device dependencies and enables full programming capability with any device that can run an Internet browser, including smart phones, tablets or computers. The INSIGHTqc™ controller is easy to integrate with the manufacturing line, provides flexible logic controls for job sequencing, and helps reduce line rebalancing costs through a simple and intuitive user interface.

Bottom line, the INSIGHTqc™ controller is a Simply Insightful solution.


INSIGHTqc™ CONTROLLER

BY THE NUMBERS


Software




256
JOBS PSETs




31
Steps per PSET



5
Alarms




User Logins



Web-Based Programming

NOT Required



• PC Software
• PC License

- ✓ Logic rules for JOB sequencing

✓ Barcode function: USB, Serial, Ethernet

✓ Manual barcode entry option

✓ Tubenut controls (configurable modes)

✓ Quick programming mode

✓ Advanced programming mode
- ✓ Unrestricted programming from controller or remote

✓ Embedded, context-specific help

✓ Email statistics alarms direct from controller

✓ Multi-language support

✓ Onboard tool diagnostics

✓ Trade transfer over open protocol

ONBOARD DATA STORAGE

✓ Removable SSD Card that stores ALL settings and data

✓ Complete controller settings and data recovery through SSD swap

✓ Tightening curve displayed on Home screen of controller

✓ Full USB Backup and Restore Function

50,000

• Audit Logs

• Event Logs

• System Logs

• Tightening Results

• Tightening Curves

Connectivity


4
Fieldbus Options

Ethernet IP, ProfiNet, ProfiBus, DeviceNet


7
MES Protocol Options

Open Protocol, Ford Open Protocol, ToolsNet, Toyota PokeYoke, VW XML, IR Ethernet EOR, & Nissan Serial EOR


Hardware




40sec
Boot Time
40 Seconds




8
Tool Families




109
Volume
10.9 dm³



4
USB
2.0 Ports



7"
Touch Screen
7 Inch Color



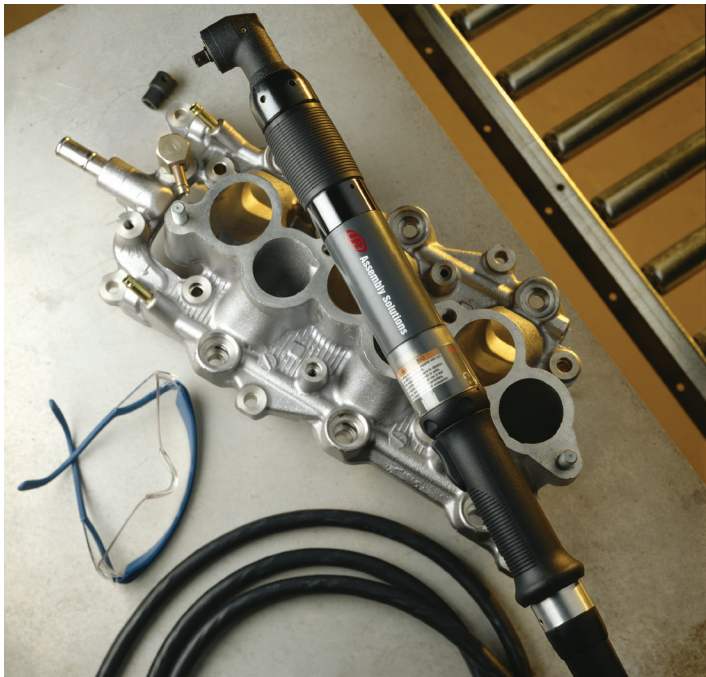
2
Ethernet Ports
10/100, 10/100/1K

QE SERIES HANDHELD TOOLS

The ultimate world-class combination — QE Series tools and QC Series controllers — team up to make meeting your critical fastening requirements simple. Offering flexibility, these durable, ergonomically designed tools are easy to use — no experience needed.

FEATURES

- Torque range from 0.3 to 400 Nm
- Closed-loop transducerized control delivers excellent capability and traceability
- Compact and lightweight design
- Optional bright LED headlights illuminate work space
- Multicolored light ring and TactAlert, our tactile feedback option, provide clear operator feedback
- Seamlessly runs on any Ingersoll Rand® controller
- ESD-safe and RoHS-compliant options
- High durability cable
- Comfortable, ergonomically contoured grip
- Easy to use push-button reverse and indicator light options
- Highly configurable platform allows users to select their output torque, body style, actuation and spindle type to create the perfect tool for the application



QE SERIES FEATURES



SIMPLE



FLEXIBLE



CAPABLE



LIGHTWEIGHT RIVETERS

Ingersoll Rand® lightweight riveting tools are time-tested performers for industrial riveting, hammering and cutting applications. The Industrial Aerospace Riveter boasts flexible configurations to suit your needs. It's easily controlled and has a built-in power regulator in the A1 and B1 models that allow you to change power on the job with no downtime. It also includes a standard beehive retainer that allows use of a wide variety of accessories.

FEATURES

- Durable- sturdy enough to withstand any environment
- Reliable- You can count on this riveter to be one of the most trusted tools in your arsenal
- Accurate- Helps you get the job done right, the first time



SELF FEED DRILLS

Our Bant-A-Matic, Par-A-Matic, & Super Par-A-Matic Series self feed drills provide the selection, performance, and degree of precision to automate a wide range of secondary machining applications imply and economically.

FEATURES

- Utilizes compressed air for both the spindle rotation and feed/controls function
- Reliable rotary vane air motor offers high power-to-size performance which minimizes tool size and weight for added machine design flexibility
- Tools are easily installed requiring only simple pneumatic circuitry
- May be used individually or in conjunction with other Ingersoll Rand® electric and pneumatic tools
- Speed range from 350 to 19,000 RPM
- Twin head spindles available



1 SERIES SCREWDRIVERS

With a coated grip, this general purpose screwdriver offers a smooth operation while minimizing vibration.

FEATURES

- Torque range: 2.7 – 45 in-lbs (0.3 – 5.1 Nm)
- Speeds: 250 – 2,000 rpm
- Compact and lightweight
- Coated grip for operator comfort
- Available in pistol & inline configurations
- Recommended for applications where precise torque control is required



DURABILITY- Spend your time working, not waiting on a repair. Tested to 1 million cycles without failure.

PERFORMANCE- This screwdriver delivers the power you need to get the job done.

COMPACT- Easy to store and carry, this screwdriver packs plenty of performance into a small package.

WELL-BALANCED, LIGHTWEIGHT DESIGN- Steady in your hand for a comfortable, stable feel each time.

Q2 SERIES SCREWDRIVERS

The Q2 Series sets the standard for assembly tool ergonomics while delivering repeatable performance day in and day out across a full range of screwdrivers and nutrunners.

ACCURACY – SPEED – DURABILITY

Performance:

- Powerful – up to 5.7Nm (Screwdrivers), 11.5Nm (Nutrunners)
- Fast – up to 2800rpm

Ergonomics:

- Compact and lightweight; featuring an eggshaped housing design for natural fit and maximum operator comfort
- Flexible configurations in Pistol, Inline, & right angle with varying torque, clutch, and air inlet options available



DRILLS

Any material, any size, all the time - The Ingersoll Rand suite of handheld drills offer the speed, power and accuracy to deliver true holes, day in and day out. Our handheld drills feature compact size, superior ergonomics, excellent power-to-weight ratios and durability making them ideal for production and maintenance applications. Choose from our broad range of models, including inline, angle, & pistol configurations to meet your exact requirements

Broad Range of Speeds, Torques, Clutches & Throttle Handles:

- Providing operators the right tool for the right job to improve working conditions and quality of production.

Heavy duty double-row spindle:

- Leads to minimum spindle runout which contributes to more accurate holes & less damage to parts.
Runout or wobble of the twist drill can cause the bit to shift creating considerable damage to the materials.

Tease-type, full feather control throttle:

- Allows operators to start the bit at a slow speed, enabling the bit to center itself & prevent shifting. Once hole is started, speed may be increased leading to improved higher quality production & reduced takt time, and reduced repair expenses.

High quality chuck:

- Prevents costly replacements, long lasting, and durable.

Ergonomic Design:

- Cantilever, mounted planet gears as a part of design. Gearings provide a shorter, easier to handle, and better balanced tool that reduces operator fatigue & helps promote improved high quality production. Impressive ergonomic design makes drill easy to use by enabling accurate aiming of the drill bit.



DRILLS

1 Series: For quality and performance at an affordable price, the 1 Series Pistol is excellent for day-in day-out production drilling.

FEATURES

- Speed -This series comes with variable speed control which allows for slow starting and high speed for fast drilling.
Up to 3,800 RPM
- Power-to-Weight - The optimized power-to-weight ratio of this drill makes getting the job done faster and easier
- Performance -The double row ball bearings construction allows you to make precise, concentric holes
- Coated grip for operator comfort
- Available in pistol & inline configurations
- Recommended for applications where precise torque control is required



Q2 Series: Compact and light weight, this tool delivers more power in a smaller package to get the job done in less time. Contoured rear radius provides comfortable, convenient position for gripping.

FEATURES

- Variable speed control allows slow starting and high speed for fast drilling
- Excellent power-to-weight ratio gets the job done with less fatigue
- Speeds: 500 to 5100 RPM
- Maximum stall torque: 110 in-lbs (12.5 Nm)
- Maximum TIR of .005” ensures precision holes for critical applications



DRILLS

5 Series: With variable speed control, a great power-to-weight ratio and high quality materials, the 5 Series Pistol Non-Reversible & Reversible drills deliver day after day. They're tools you can count on.

FEATURES

- Performance-The ergonomic design of these pistol tools allow you to work precisely and efficiently, so your jobs will always be done with ease. With speeds up to 4,800 rpm
- User Comfort -The power-to-weight ratio of these tools were specifically designed to allow for faster completion of projects without user fatigue
- Durability -Built with high quality chuck, these tools are able to withstand harsh conditions
- Various configurations to meet your needs
- Stall Torque: 20 – 320.4in-lbs (2.3 – 36.2Nm)
- Speeds: 700 – 4,800 rpm
- Power: 0.40hp
- Variable speed control allows slow starting and high speed for fast drilling
- Skinsulate housing for operator comfort and productivity
- Excellent power-to-weight ratio gets the job done with less fatigue



DRILLS

6 Series: Compact and light weight, this tool delivers more power in a smaller package to get the job done in less time. Contoured rear radius provides comfortable, convenient position for gripping.

FEATURES

- Stall Torque: 7.1 – 320.4in-lbs (0.8 – 36.2Nm)
- Speeds: 350 – 20,000rpm
- Power: 0.40hp
- Variable speed control allows slow starting and high speed for fast drilling
- Skinsulate housing for operator comfort and productivity
- Excellent power-to-weight ratio gets the job done with less fatigue



7 Series: Compact and light weight, this tool delivers more power in a smaller package to get the job done in less time. Contoured rear radius provides comfortable, convenient position for gripping.

FEATURES

- Stall Torque: 10 – 270 in-lbs (1.13 – 30.5 Nm)
- Speeds: 600 – 20,000 rpm
- Power: 0.75 hp
- Skinsulate housing for operator comfort and productivity
- Cantilever-mounted planetary gears are easily accessible without need to press from gear frame; simplifies maintenance
- Excellent power-to-weight ratio gets the job done with less fatigue



G1, M2 AND G3 SERIES GRINDERS

The **G1, M2 and G3 Series** are the premium grinder offering by Ingersoll Rand. With superior power to weight ratio, these tools crush the daily grind with ease. Different speed ratings across the full range of premium grinders ensure we have one for virtually any job.

The G1 Series grinders pack 0.4 hp in a small package, ideal for light material removal, cleaning rough castings, deburring parts, cleaning up welds, and other finishing tasks.

The M2 Series grinders run longer and cooler than our G1 Series on a 1 hp lube-free motor. These grinders are suited for heavy-duty grinding, cutting, cleaning, and polishing applications. An added feature to the M2 Series angle tools, spindle locks make changing accessories easier and faster.

The G3 Series grinders are the toughest of the premium grinder line-up delivering a mighty 1.35 hp on every job. Ideal for industrial-duty material removal with burrs, grinding wheels and coated abrasives. The vibration reducing handle allows for extended operation.



G1 SERIES
0.4 hp
35+ Models



M2 SERIES
1.0 hp
25+ Models



G3 SERIES
1.35 hp
20+ Models



AIR CHAIN HOISTS



CLK HOIST



- Full flow pendent provides maximum control and precision load positioning
- Ergonomic pendant designed to reduce operator fatigue
- Key available options include ATEX Zone 2/22 certification and CE Compliance with emergency stop
- Precision machined motor parts provide exceptional durability with 100% duty cycle meeting ASME HST-5 rating of A5
- **Capacity:** 275 lbs - 1,100 lbs (125 kg – 500 kg)
- **Speed:** 15 – 43 fpm



MLK HOIST



- Spark resistant models and a wide range of options and accessories are available including custom engineered to order designs
- Precision machined motor parts provide exceptional durability with 100% duty cycle meeting ASME HST-5 rating of A5
- Multiple control options available including slow speed models to satisfy load positioning needs
- Upper and lower limit stops prevent over-travel of the hook in either direction, reducing possible damage to the hoist or load
- **Capacity:** 550 lbs - 2,200 lbs (250 kg – 1000 kg)
- **Speed:** 11 – 101 fpm



HLK HOIST



- Spark resistant models and a wide range of options and accessories are available, including custom engineered to order designs
- Precision machined motor parts provide exceptional durability with 100% duty cycle meeting ASME HST-5 rating of A5
- Incorporates a larger chain wheel to accommodate load capacities up to 6 tons
- **Capacity:** 2,200 lbs - 13,200 lbs (1,000 kg – 6,000 kg)
- **Speed:** 3.5 – 26 fpm



ARO HOIST



- Spark resistant models and a wide range of options and accessories are available
- Rotary-vane air motors and efficient gearing combine to deliver one of the fastest lift speeds available and further reduce the chance of causing sparks in volatile environments
- External speed and brake adjustments included as a standard feature
- **Capacity:** 275 lbs - 4,400 lbs (125 kg – 2,000 kg)
- **Speed:** 7 – 110 fpm

www.ingersollrand.com



Ingersoll Rand (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency.