



15QRHD Series Positive Feed Drill

January 2015

Productivity

- 1.0hp/1.5hp options at the spindle to maximize cutting speed
- Governed vane motor option to minimize speed drop when drilling
- Mitis™ option for chip fragmentation

Compact

- Low head height
- Low side to center distance
- Access hard to reach areas

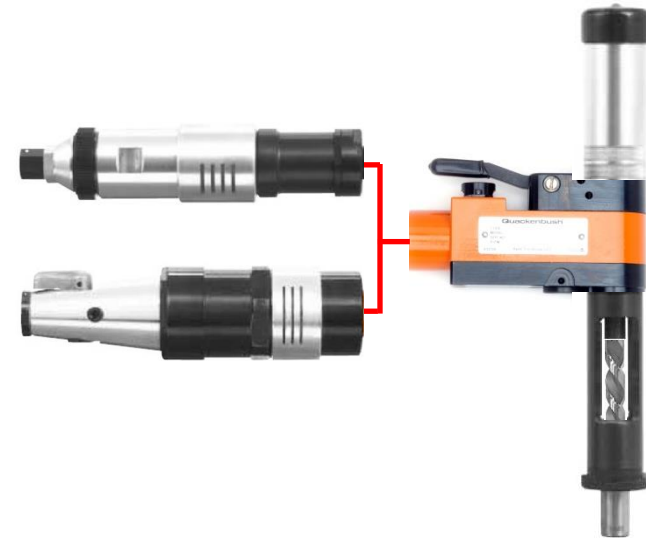
Ergonomic

- Low weight

Quality

- Proven Design
- Minimized speed drop for optimum hole quality and cutter life
- Optional counter for cutter change and service monitoring

15QRHD Series Positive Feed Heavy Duty Gear Head



- Head retrofittable to existing tools

- Low head height

- Low side to center distance

- Positive Feed

- Integrated Thread for Nose

- Bearing support retract clutch

15QRHD Series Positive Feed Heavy Duty Gear Head

- Overtorque – Shear Pin

- Flexpower power unit options
1.0/1.5hp

- One Piece support plate

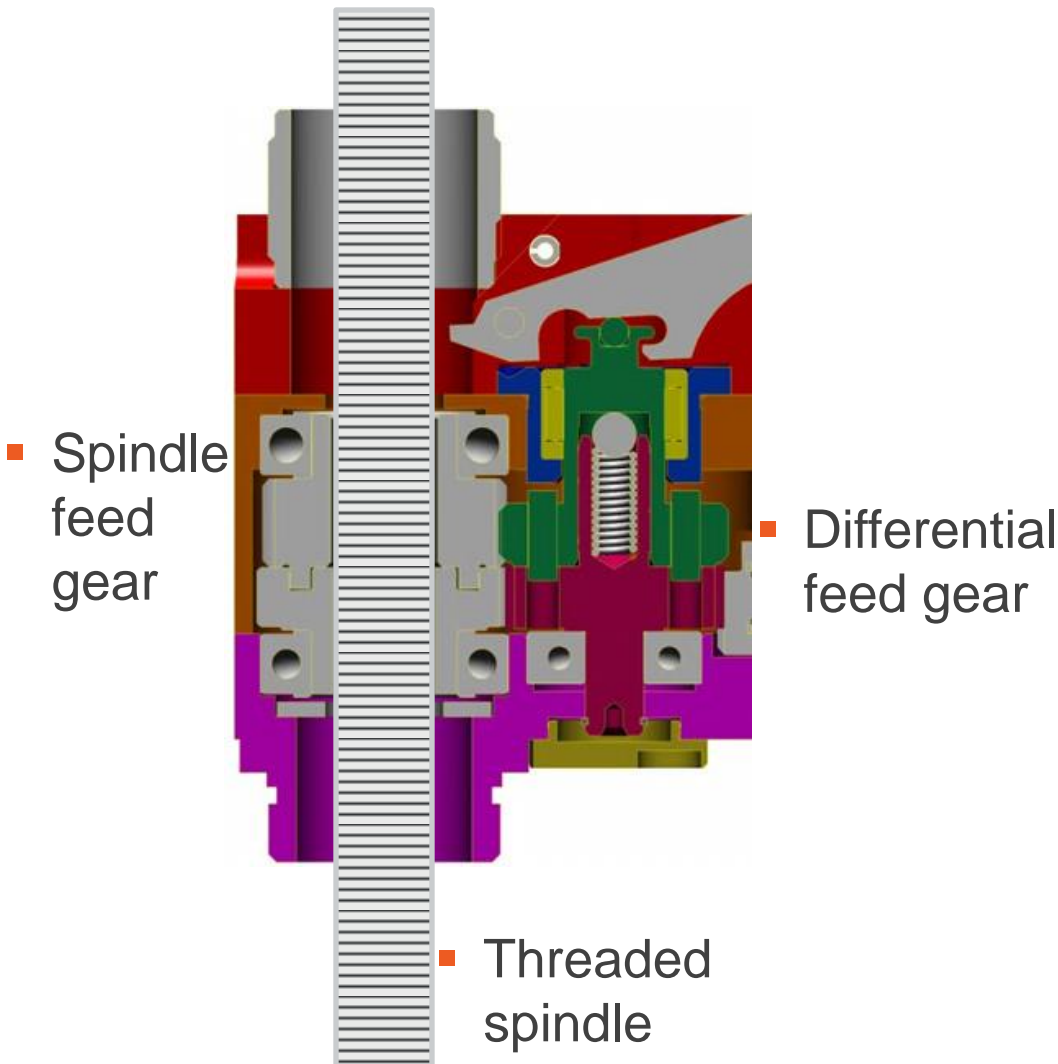
- Adaptive two speed option

- External Mitis™ Option





Positive Feed - Gear driven inches per rev(ipr) or mm/rev

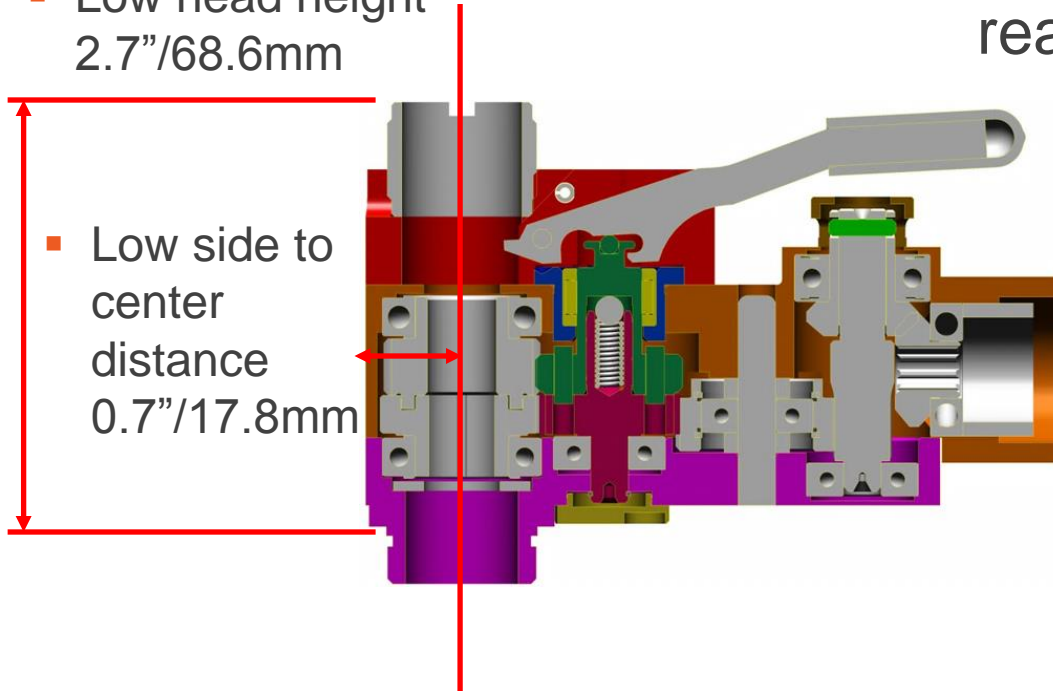


- Feed rate fixed through gearing
- Consistent chip load
- Controlled breakthrough
- Operator tamper proof

Compact – Low head height and low side to center distance

- Low head height
2.7"/68.6mm

- Low side to center
distance
0.7"/17.8mm

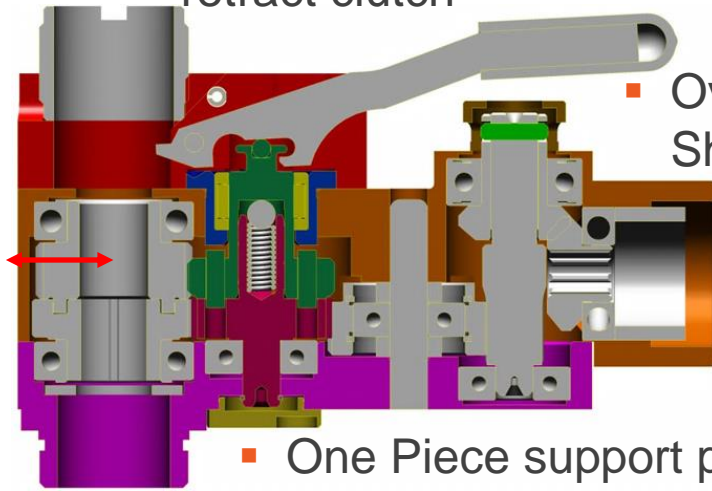


- Compact size to
access difficult to
reach areas



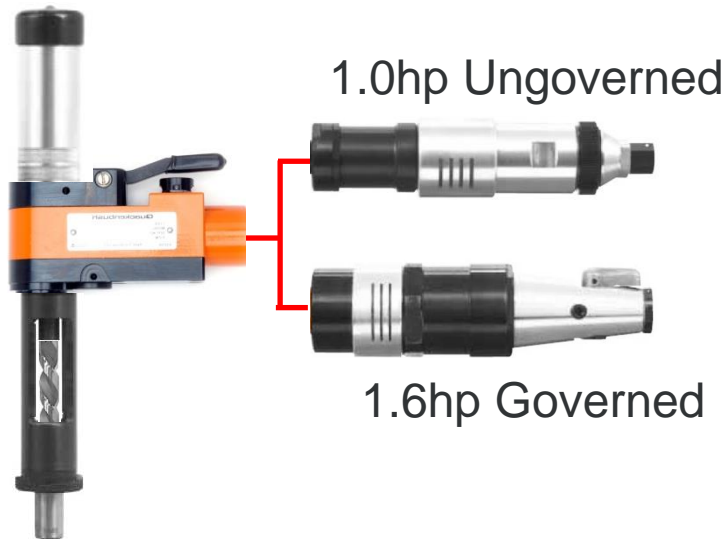
Increased Durability/Retrofittable

- Bearing support retract clutch
- Overtorque – Shear Pin
- One Piece support plate
- Integrated Thread for Nose



- Improved robustness gives greater torque and hole capacity up to 150inslbs
- Shear pin protection in event of over torque protects gear train damage
- Head can be retrofitted to existing 15QR series to give greater durability/hole capacity

Flexpower – Power Unit Options



- 1.0hp Ungoverned
 - Lower weight
 - Less air consumption at peak power

- 1.6hp Governed
 - More power/torque
 - Less speed drop under load
 - Less no load air consumption
 - Wider range of speed options

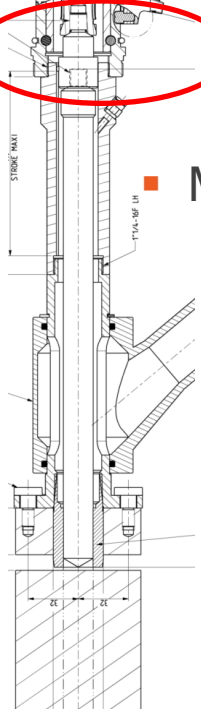
Chip Fragmentation – External Mitis™ Option



■ Mitis Module

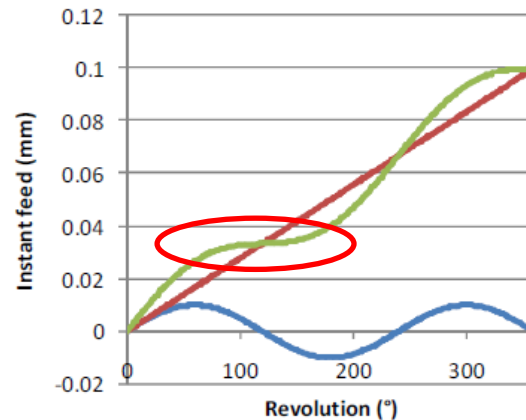
■ Mitis Nose

■ Vacuum Nose



- Mitis™ module
 - Varying feed causes chips to fragment
 - Improves vacuuming/reduces clean up
 - Less lubrication – chip dissipates heat
 - Potential tool life extension

— Combined Feed
— Tool Feed
— Mitis Feed



Standard Chips

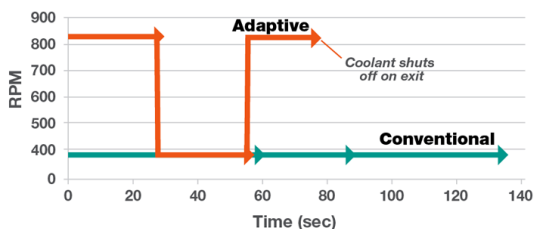
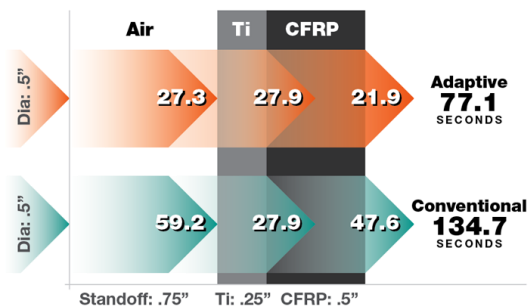
Fragmented Chips



Adaptive – Automatic two speed drilling



- For CFRP/Ti/Al stacks



- Productivity
 - Two speed drilling – up to 50% drilling time saving
 - Coolant shut off – up to 90% clean up time saving/reduced FOD
 - More holes per cutter possible by running at higher speed in CFRP
- Error Proofing
 - Limit number of holes per cutter reducing chance of using a worn cutter/cost of a blown hole
 - Monitor tool performance/service and life
- Flexibility
 - Programmable – allows better tool utilization for different applications
 - Can be retrofitted to existing standard tools
- Running Costs
 - Optimizes use of air to actual drilling requirements
 - Programmable coolant rates to optimize usage



Productivity

- Optimize drill time
- Minimize clean up time
- Reduce coolant use
- Optimize cutter usage
- Access to tight areas for automatic drilling

Ergonomics

- Reduce operator exposure to drilling forces
- Low tool weight reduces operator fatigue

Quality

- Controlled cutting with positive feed
- Electronic counter to monitor cutter cycles, maintenance interval

Up to 5/8" in Ti

- Spindles
 - Interface for cutter and length stroke dependent
- Spindle guard
 - Standard
 - Coolant inducing
- Attachments
 - Noses standard and vacuum
 - Concentric Collet
- Accessories
 - Mitis™
 - Cutters
 - Handles
 - Electronic counter, service and overall life

15QRHD-Base Tool



Speeds	1650	1000	660	465	335	265	165
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Up to 5/8" in Ti

- Spindles
 - Interface for cutter and length stroke dependent
- Spindle guard
 - Standard
 - Coolant inducing
- Attachments
 - Noses standard and vacuum
 - Concentric Collet
- Accessories
 - Mitis™
 - Cutters
 - Handles
 - Electronic counter, service and overall life

158-15QRHD-Base Tool



Speeds	3000	2000	1200	1000	600	490	290	230	140	110
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Adaptive two speed drilling up to 7/16" in Ti

158-15QRAHD-Base Tool

- Spindles
 - Interface for cutter and length stroke dependent
- Spindle guard
 - Standard
 - Coolant inducing
- Attachments
 - Noses standard and vacuum
 - Concentric Collet
- Accessories
 - Mitis™
 - Cutters
 - Handles



Speed

1200/400 Programmable

Related ATG Products

Products

Advanced Drilling

- Positive Feed

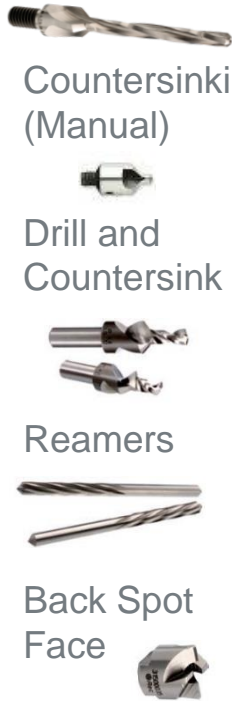


- Self Colleting



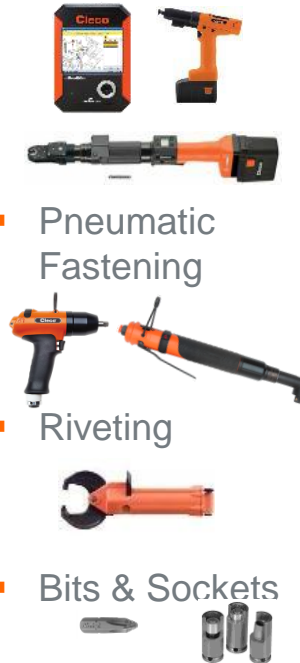
Specialty Cutters

- Drilling
- Countersinking (Manual)
- Drill and Countersink
- Reamers
- Back Spot Face



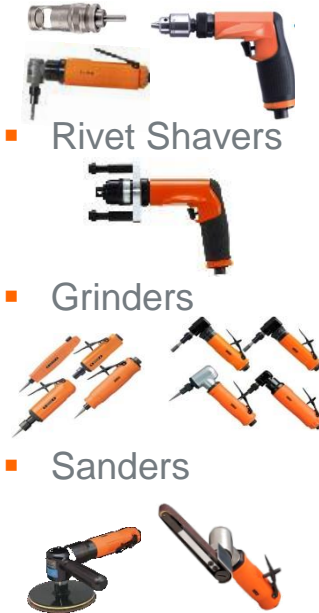
Tightening

- DC Electric Fastening
- Pneumatic Fastening
- Riveting
- Bits & Sockets



Material Removal

- Hand Drills & Microstop Cages
- Rivet Shavers
- Grinders
- Sanders



Universal Joints

- Universal Joints



APEX

Custom Solution/Service



Brands

Recoules®
Quackenbush® 

 Recoules™

Cleco
APEX

 Recoules™
DOTCO

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