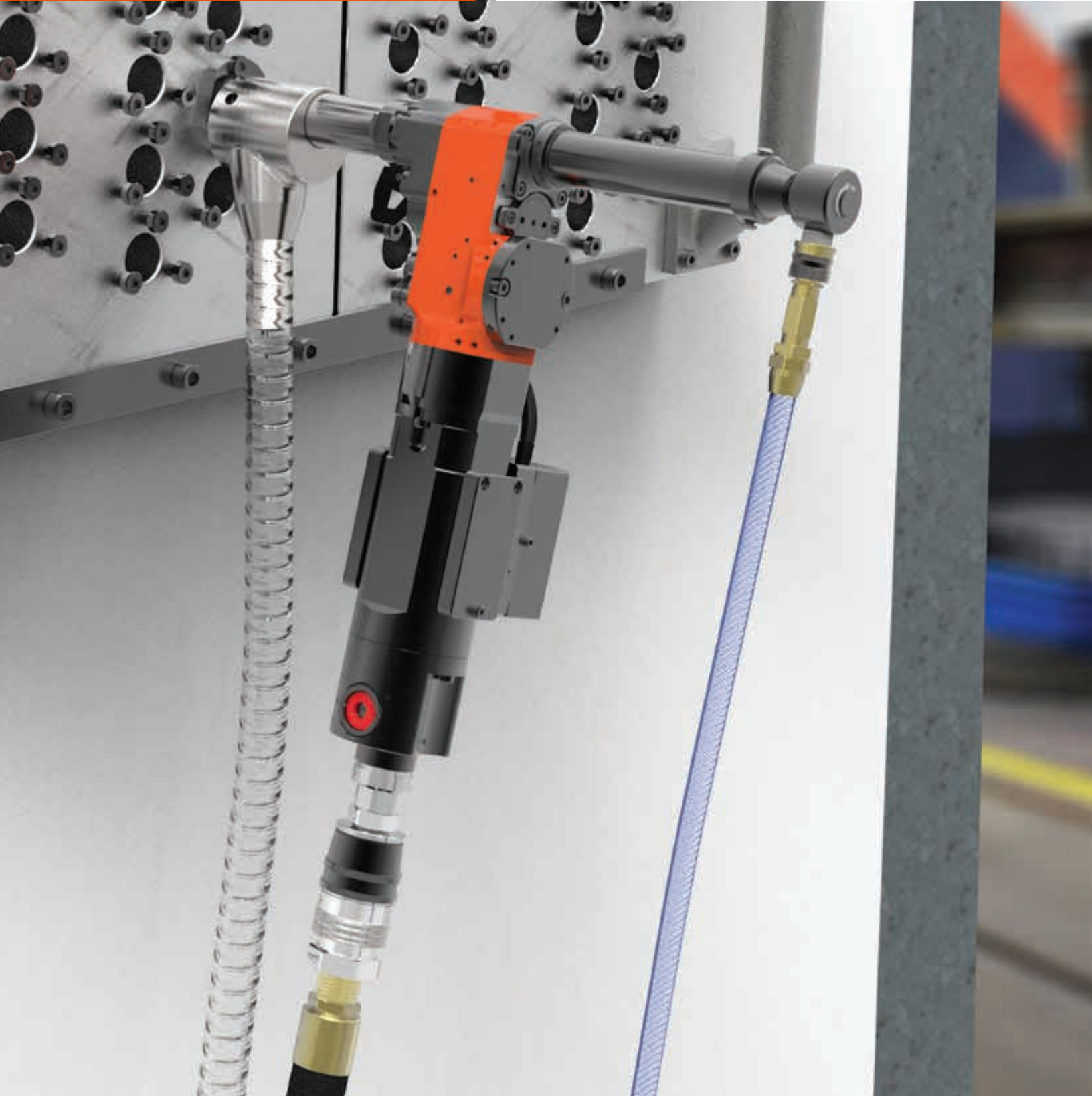


**A1 SERIES**  
**POSITIVE FEED DRILLS**

**Recoules®**  
**Quackenbush**



# Recoules<sup>®</sup> Quackenbush A1-SERIES

INTRODUCING THE NEW ADVANCED DRILLING EQUIPMENT PLATFORMS

**EASYCHANGE**  
FOR FEED RATE AND MITIS™

- Feed change in less than 15 minutes (Allows easy configuration and/or less time to repair)
- Mitis™ change in less than 15 minutes\* (Allows easy configuration and/or less time to repair)

**DURASLIP**

- Clutch in home position to prevent jamming on high speed.

**EXTRALIFE**  
NO IMPACT CONE CLUTCH FOR RETRACT MECHANISM

- Improved reliability
- No impact, less servicing
- Easy access for servicing
- Lower service cost

**LOGIPORT**  
AVAILABLE CONNECTION FOR ACCESSORIES/ERROR-PROOFING

- Allows easy implementation of:
  - Remote start
  - Start safety interlock
  - Air supply to accessories
  - Remote retract
  - Cycle complete
- Makes customization easier
- Coolant shut-off in retract
- Get the configuration you want in less time

**FLEXMOTOR**

- Available in Right Angle or Inline Configuration

**LIFTSWITCH**  
MECHANICAL INITIATION OF RETRACT

- Improved reliability
- Longer life
- Less defects
- Depth/dwell incorporated for accurate countersinking +/- 0.001" (0.03mm)

**OVERTORQUE**  
OVERLOAD FOR TORQUE THROUGH SHEAR PIN TRAIN

- Protects gears if torque is too high
- Longer gear head life
- Keeps tool weight down
- Can prevent drilling with damaged cutter
- Less hole defects

**FLEXPOWER**  
VANE- AND TURBINE-GOVERNED MOTOR OPTIONS

- Wide range of speed options through modular planetary gearboxes
- Vane motor options for either higher power or lower noise

**ATTACHMENTS & ACCESSORIES**

- Guard with Fluid Influencer
- Handle
- Indexer
- Vacuum Nose

\* Mitis Chip Fragmentation System

## LOW MAINTENANCE

- Up to 500 hours/100000 cycle PM interval\*\*
- Quickchange gearhead for easy repair or reconfiguration
- Extralife clutch accessible for change in less than 15 minutes
- Easy-change access to change both feed and MITIS™ in less than 15 minutes

## INCREASE PRODUCTIVITY

- Most flexible power train design configurable to minimize speed drop
- Line re-balancing drill configuration in hours vs. months
- Turbine 2.4hp/1.8kW, Vane 1.7hp/1.3kW at spindle for maximum speed/torque
- Integrated MITIS™ for optimum chip evacuation

## LOW OPERATING COST

- Up to 500 hours/100000 cycle PM interval\*\*
- Uniquely configurable power train to maximize cutter life
- Fastest wear item replacement in gearhead / MITIS™
- Selectable turbine/vane motors to minimize operating cost based on usage
- Minimal spare parts required

## QUALITY

- Configurable error-proofing
- Anti-jam spindle
- Add on counter for operator independent cutter change
- Minimized speed drop for consistent hole quality

\*\* Mitis™ may require more frequent PM, refer to service manual

Max Spindle Power 2.5hp\* at 90psi/6.3bar dynamic air supply  
Tool thrust 500lbs at 90psi/6.3bar dynamic air supply

## A SERIES BASE TOOL OPTIONS

Base Tool				Standard Option		Rated Speeds: Vane +10%/-0%   Turbine +/-10%										Feeds		
Code	Base weight lbs	kg	Noise	Configuration		Code	Configuration									ipr	mm/rev	
<b>VANE</b>																		
A14V	7.6	3.4	<=85dBA	Right Angle	Vane Motor	M	Internal Mitis	3100	2800	2500	2100	1900	1700	1450	950	850	0.001	0.025
A16V	7.4	3.4	<=85dBA	In Line	Vane Motor			760	670	600	510	460	410	350	320	250	0.002	0.05
																0.003	0.08	
<b>TURBINE</b>																		
A14T	7.2	3.3	<=82dBA	Right Angle	Turbine												0.004	0.10
A16T	7.0	3.2	<=82dBA	In Line	Turbine												0.006	0.15
																0.007	0.18	
																0.008	0.20	

## A SERIES CUSTOM TOOL OPTIONS AND ACCESSORIES

Spindles	Specified based on stroke requirement and cutter thread interface	
	Item Number	Select from 1/2" - 20 Spindles
	633809F-G0702-104	Spindle Fluid 9/16"-18 6.5 OAL
	633809F-G0702-128	Spindle Fluid 9/16"-18 8 OAL
	633809F-D0401-128	Spindle Fluid 3/8"-24 8 OAL
Nose Attachment	Based on application requirements	
	Item Number	Select from 1" - 20 Noses
	615457	Nose Std 21k 7 OAL
	624206	Nose Std 22k 6 OAL
	615475	Nose Std 23k 6 OAL
	624086	Nose Std 24k 6 OAL
	641379	Nose Vacuum Swivel 22k 6 OAL
Concentric Collet	Based on application requirements	
	Item Number	Description
	22016936PT	Concentric Collet Actuator Vacuum 150lbs Nominal Force
	22016937PT	Concentric Collet Actuator Vacuum 250lbs Nominal Force
	22016938PT	Concentric Collet Actuator Vacuum 550lbs Nominal Force
Other Options	Spindle Guard	
	Specific based on spindle stroke and coolant method used	
	Indexer, Item Number: 642551PT	
	Indexer 1" - 20 Noses	
	Template Foot	
	Based on application requirements	
	Handles	
We have a range of standard handles development or can customize one to suit your needs		
Electronic Counter		
For cutter, maintenance, and overall tool life		
Lubricator		
Based on application requirements		

## CONFIGURATION OPTIONS



### North America

Apex Tool Group  
670 Industrial Drive  
Lexington, SC 29072  
United States  
Phone: +1 (800) 845 5629  
Phone: +1 (919) 387 0099  
Fax: +1 (803) 358 7681  
[www.apexpowertools.com](http://www.apexpowertools.com)

Apex Tool Group  
Manufacturing México  
S. de R.L. de C.V.  
Vialidad El Pueblito #103  
Parque Industrial Querétaro  
Querétaro, QRO 76220  
México  
Tel: +52 (442) 211 3800  
Fax: +52 (800) 685 5560

### Europe | Middle East | Africa

Apex Tool Group  
GmbH & Co. OHG  
Industriestraße 1  
73463 Westhausen  
Germany  
Phone: +49 (0) 73 63 81 0  
Fax: +49 (0) 73 63 81 222

Apex Tool Group S.A.S.  
25 rue Maurice Chevalier  
B.P. 28  
77831 Ozoir-la-Ferrière  
Cedex, France  
Tel: +33 1 64 43 22 00  
Fax: +33 1 64 43 17 17

Apex Tool Group  
Hungária Kft.  
Platánfa u.2  
9027 Győr  
Hungary  
Tel: +36 96 66 1383  
Fax: +36 96 66 1135

### Asia Pacific

Apex Power Tool Trading  
(Shanghai) Co., Ltd  
Building A8, No. 38  
Dongsheng Road  
Pudong, Shanghai  
China 201201  
Phone: +86 21 60880320  
Fax: +86 21 60880298

Apex Power Tools India  
Private Limited  
Gala No. 1, Plot No. 5  
S. No. 234, 235 & 245  
Indialand Global Industrial Park  
Taluka-Mulsi, Phase I  
Hinjawadi, Pune 411057  
Maharashtra, India  
Phone: +91 020 66761111

### Latin America

Apex Tool Group  
Ind. Com. Ferram. Ltda.  
Av. Liberdade, 4055  
Zona Industrial Iporanga  
Sorocaba, São Paulo  
CEP# 18087-170  
Brazil  
Tel: +55 15 3238 3820  
Fax: +55 15 3238 3938