

Safety – Operation – Maintenance

Keep this document in a safe place

Read and understand this manual before operating your air tool



Clear Revolution TR/TS/TP Shrouds



1" Shroud Models with Prefix: 674-A1216TR, 674-A1216TS, 674-A1216TP, 774-A1216TR, 774-A1216TS, 774-A1216TP

Designed for 1" abrasive discs on a right angle or straight grinder

Maximum Speed: 25,000 RPM, Recommended Speed: 12,000 RPM

2" Shroud Models with Prefix: 674-A1232TR, 674-A1232TS, 674-A1232TP, 774-A1232TR, 774-A1232TS, 774-A1232TP

Designed for 2" abrasive discs on a right angle or straight grinder

Maximum Speed: 25,000 RPM, Recommended Speed: 12,000 RPM

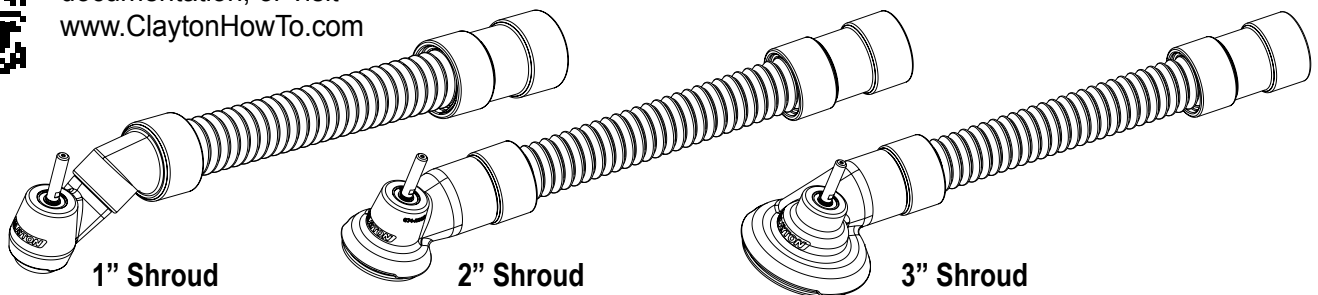
3" Shroud Models with Prefix: 674-A1248TR, 674-A1248TS, 674-A1248TP, 774-A1248TR, 774-A1248TS, 774-A1248TP

Designed for 3" abrasive discs on a right angle or straight grinder

Maximum Speed: 25,000 RPM, Recommended Speed: 12,000 RPM



Scan this QR code for
online instructions and
documentation, or visit
www.ClaytonHowTo.com



⚠ WARNING

Follow all safety rules for the protection of operating personnel as well as adjacent areas. Always inspect and maintain this tool before use. Clayton Dust Collection Shrouds are designed for use with a variety of air tools. Please refer to the Air Tool Manufacturer's Documentation for Safety, Operations and Maintenance of all air tools used in conjunction with Clayton Dust Collection Shrouds.

SAFETY LEGEND



⚠ WARNING

Read and understand operator's manual before using this equipment.



⚠ WARNING

Eye protection is required when operating this equipment.



⚠ WARNING

Hearing protection is recommended when operating this equipment.



⚠ WARNING

Respiratory protection is recommended when operating this equipment.

⚠ WARNING

Some dust created by sanding, grinding, drilling, and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products
- Chromium and other heavy metals from paint and primers

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

Clayton Dust Collection Shrouds aid in the collection of airborne dust and debris, but the level of collection is dependent upon the performance of the vacuum to which it is connected, the speed of the air tool used, and the way in which a tool is handled by the user.

Do not assume that the Dust Collection Shroud is collecting 100% of the dust.

SAFETY INSTRUCTIONS

Please refer to the Air Tool Manufacturer's Documentation for Safety, Operations, and Maintenance of all air tools in conjunction with Clayton Dust Collection Shrouds.

Carefully read all instructions before operating any Clayton Dust Collection Shroud.

Products offered by Clayton should not be modified, converted or otherwise altered from the original design without express written consent from Clayton Associates, Inc.

Tool Intent

Clayton Dust Collection Shrouds are designed for use with a variety of air tools and provide dust collection during operations such as grinding, deburring, blending and polishing operations on materials such as metal, plastic, fiberglass, composites, rubber, glass and stone. Please refer to the air tool manufacturer's documentation for Tool Intent of all air tools used in conjunction with Clayton Dust Collection Shrouds.

Do not use this tool for anything other than its intended applications.

This tool is not intended for use in potentially explosive atmospheres and is not insulated against contact with electrical power.

Clayton Dust Collection Shrouds are not designed to replace manufacturer installed safety guards and shields.

Never remove the factory installed safety devices from air tools used in conjunction with Clayton Dust Collection Shrouds.

Accessories

- Do not use abrasives, pad holders, or other accessories that exceed the speed rating of this Dust Collection Shroud
- Do not use an air tool that exceeds the speed rating of this Dust Collection Shroud
- Do not use abrasives or pad holders that exceed the size rating of this Dust Collection Shroud
- Never replace the mandrels on Clayton Dust Collection Shrouds with other commercially available mandrels. Mandrels included with the shrouds have been engineered and balanced specifically for this application
- Before mounting accessories, visually inspect for defects. Do not use defective accessories
- Follow tool specifications before choosing size and type of accessory

WARNING

- Always wear eye protection. Operator of tool is responsible for following: eye, face, respiratory, hearing and body protection.

CAUTION

- Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.
- Keep hand and clothing away from working end of the tool
- Be sure that any loose clothing, hair and all jewelry is properly restrained

CAUTION

- Never exceed the RPM rating of the shroud or abrasive.
- Disconnect air hose from tool when changing abrasives, removing the shroud, or otherwise handling the working end of the tool

CAUTION

DO NOT USE if tool vibration is excessive. Correct cause, and retest to ensure safe operation

- Make sure that work area is uncluttered, and others are at a safe range from the tools and debris
- Use a vise or clamping device to hold work piece firmly in place
- Do not apply excessive force on tool or apply "rough" treatment to it
- Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Always use dust extraction or suppression systems which are suitable for the material being processed
- Use only the proper size and style abrasive for the shroud, pad holder, and mandrel
- Oversized or improper abrasives may contact the shroud and cause premature wear or failure

GETTING STARTED

Hose Length

The vacuum hose included with the tool may be shortened to suit your particular needs. The hose can be easily cut to the desired length with a knife or hose cutting tools. Follow all safety instructions provided with cutting tools to prevent injury.

Connecting the Shroud

Always disconnect the tool from power before connecting or disconnecting the Dust Collection Shroud.

- The mandrel is integral to the shroud and should not be removed. Connect the mandrel and shroud to the air tool as a single unit
- This tool is designed to work with air tools that use a collet. See illustrated parts breakdown to identify the collet size that matches your mandrel
- Loosen the tool collet
- Slide the end of the shroud mandrel into the tool collet
- Tighten the collet, maintaining a small space (1-2 mm) between the end of the collet and the shroud
- The shroud should rotate freely around the mandrel when properly connected
- Hold the vacuum hose firmly when activating the tool to prevent the shroud from rotating
- If excessive vibration occurs, stop using the tool immediately, find, and correct the cause

Replacing the Pad Holder

Always disconnect the tool from power before changing abrasives.

- Hold the collet to prevent rotation or hold the shaft of the shroud with the supplied wrench
- Unthread the existing pad by turning counter clockwise. Thread on the new pad by turning clockwise

Attaching Abrasives

Always disconnect the tool from power before changing abrasives.

- Depending on the pad holder used, the tool will accept either TR, TS, or TP style abrasive
- Hold the collet to prevent rotation or hold the shaft of the shroud with the supplied wrench
- For TR or TS style abrasives, thread the abrasive disc onto the pad holder by turning clockwise until tight
- For TP style abrasives, snap the abrasive disc onto the pad

MAINTENANCE INSTRUCTIONS

Important

A Preventative Maintenance Program is recommended whenever portable power tools are used.

Routine Maintenance

- Use only genuine Clayton replacement parts to ensure quality
- Clean the tool with a damp cloth. Do not use petroleum based cleaners
- Visually inspect shafts, bearings, pad holders, and abrasives for frays, visible damage and signs of deterioration. Replace damaged or worn components before use

TROUBLE SHOOTING

Excessive vibration is felt during tool use

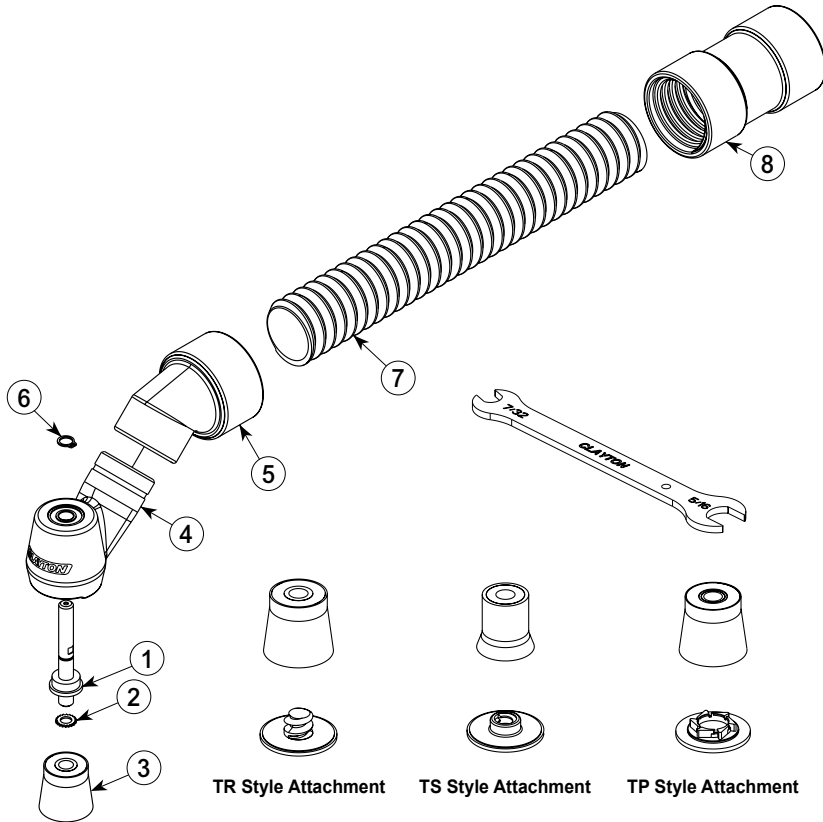
- Shroud mandrel may be damaged or bent – stop using tool immediately, identify cause and correct
- Pad holder may be worn or damaged – replace pad holder

Excessive dust is evident during operation

- Try to keep the abrasive as flat to the work surface as possible. Use the leading edge of the abrasive so grinding debris is being thrown towards the shroud's 2 o'clock position where the vacuum hose is at the 6 o'clock position
- Clayton Dust Collection Shrouds reduce airborne (respirable) dust. You may see some larger debris not being collected that may require vacuuming at the end of grinding operations. This is normal
- Vacuum may be turned off, or vacuum filters may be clogged – check vacuum to ensure that it is operating properly, and that filters are clean
- Hose or shroud may be blocked – disconnect all hose fittings, and ensure that the pathway from shroud to vacuum port is clear
- Abrasive grit may be too coarse. On softer materials, coarse abrasives may generate overwhelming amounts of dust – switch to a finer grit abrasive, and or use a slower speed tool

ILLUSTRATED PARTS BREAKDOWN

1" Shroud



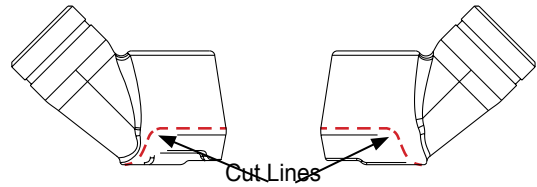
| # | ITEM NO | DESCRIPTION |
|---|-----------------|----------------------------------|
| 1 | 672-004R | MANDREL 1/4IN |
| 2 | WE12050400-LTSZ | STAR WASHER NO 12 EXTERNAL TOOTH |
| 3 | 672-1016TR | DISC PAD 1IN TR |
| 3 | 672-1016TS | DISC PAD 1IN TS |
| 3 | 672-1016TP | DISC PAD 1IN TP |
| 4 | 674-A10161 | 1IN COMPOSITE SHROUD & BEARINGS |
| 5 | 673-M16F-45 | SWIVEL MALE |
| 6 | 929-RR.250EX | RETAINING RING 1/4IN EXTERNAL |
| 7 | 921-1000WBKSC | VAC HOSE 1IN CONDUCTIVE |
| 8 | 673-M16C16 | SWIVEL MALE FEMALE |
| * | 672-0WR | WRENCH |

MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

| ITEM NO SUFFIX | REPLACEMENT MANDREL | MANDREL SIZE | COLLET SIZE |
|----------------|---------------------|--------------|-------------|
| -480S | 672-004R-480S | 4.8MM SHORT | 4.8MM |
| -480L | 672-004R-480L | 4.8MM LONG | 4.8MM |
| -495S | 672-004R-495S | 4.95MM SHORT | 4.95MM |
| -495L | 672-004R-495L | 4.95MM LONG | 4.95MM |
| -600S | 672-004R-600S | 6MM SHORT | 6MM |
| -600L | 672-004R-600L | 6MM LONG | 6MM |

Clayton Clear Revolution shrouds are made of Lexan (polycarbonate). In some instances part of the shroud may be removed to allow access to tight areas. The diagrams below show the maximum permissible cut lines on each shroud. The shrouds may be cut using a band saw, dremel, or similar cutting tool. Remove the least amount of material possible. Cutting the shroud may reduce the ability of the shroud to collect dust. Once a shroud is altered, it is no longer returnable for refund or replacement.



ABRASIVES

The following Clayton ventilated abrasives are recommended for maximum dust collection. Additional grits and minerals are available.

TR STYLE DISCS

| ITEM NO | DESC |
|------------|----------|
| 800-16M036 | 36 GRIT |
| 800-16M060 | 60 GRIT |
| 800-16M080 | 80 GRIT |
| 800-16M100 | 100 GRIT |
| 800-16M120 | 120 GRIT |
| 800-16M180 | 180 GRIT |
| 800-16M240 | 240 GRIT |
| 800-16M320 | 320 GRIT |
| 800-16M003 | COARSE |
| 800-16M006 | MEDIUM |
| 800-16M009 | FINE |

TS STYLE DISCS

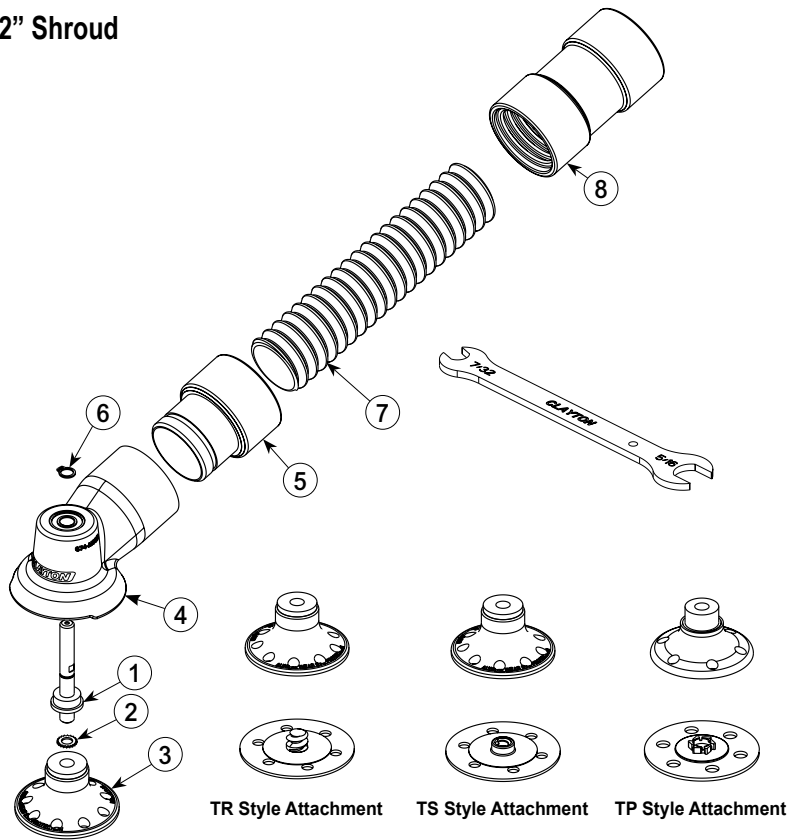
| ITEM NO | DESC |
|------------|----------|
| 800-16F036 | 36 GRIT |
| 800-16F060 | 60 GRIT |
| 800-16F080 | 80 GRIT |
| 800-16F100 | 100 GRIT |
| 800-16F120 | 120 GRIT |
| 800-16F180 | 180 GRIT |
| 800-16F240 | 240 GRIT |
| 800-16F320 | 320 GRIT |
| 800-16F003 | COARSE |
| 800-16F006 | MEDIUM |
| 800-16F009 | FINE |

TP STYLE DISCS

| ITEM NO | DESC |
|-------------|----------|
| 800-16TP036 | 36 GRIT |
| 800-16TP060 | 60 GRIT |
| 800-16TP080 | 80 GRIT |
| 800-16TP100 | 100 GRIT |
| 800-16TP120 | 120 GRIT |
| 800-16TP180 | 180 GRIT |
| 800-16TP240 | 240 GRIT |
| 800-16TP320 | 320 GRIT |
| 800-16TP003 | COARSE |
| 800-16TP006 | MEDIUM |
| 800-16TP009 | FINE |

ILLUSTRATED PARTS BREAKDOWN

2" Shroud



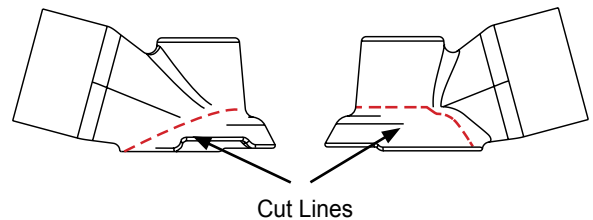
| # | ITEM NO | DESCRIPTION |
|---|-----------------|----------------------------------|
| 1 | 672-004R | MANDREL 1/4IN |
| 2 | WE12050400-LTSZ | STAR WASHER NO 12 EXTERNAL TOOTH |
| 3 | 672-1032TR-09 | DISC PAD 2IN TR |
| 3 | 672-1032TS-09 | DISC PAD 2IN TS |
| 3 | 672-1032TP-06 | DISC PAD 2IN TP |
| 4 | 674-A10321 | 2IN COMPOSITE SHROUD & BEARINGS |
| 5 | 673-M16M | SWIVEL MALE |
| 6 | 929-RR.250EX | RETAINING RING 1/4IN EXTERNAL |
| 7 | 921-1000WBKSC | VAC HOSE 1IN CONDUCTIVE |
| 8 | 673-M16C16 | SWIVEL MALE FEMALE |
| * | 672-0WR | WRENCH |

MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

| ITEM NO SUFFIX | REPLACEMENT MANDREL | MANDREL SIZE | COLLET SIZE |
|----------------|---------------------|--------------|-------------|
| -480S | 672-004R-480S | 4.8MM SHORT | 4.8MM |
| -480L | 672-004R-480L | 4.8MM LONG | 4.8MM |
| -495S | 672-004R-495S | 4.95MM SHORT | 4.95MM |
| -495L | 672-004R-495L | 4.95MM LONG | 4.95MM |
| -600S | 672-004R-600S | 6MM SHORT | 6MM |
| -600L | 672-004R-600L | 6MM LONG | 6MM |

Clayton Clear Revolution shrouds are made of Lexan (polycarbonate). In some instances part of the shroud may be removed to allow access to tight areas. The diagrams below show the maximum permissible cut lines on each shroud. The shrouds may be cut using a band saw, dremel, or similar cutting tool. Remove the least amount of material possible. Cutting the shroud may reduce the ability of the shroud to collect dust. Once a shroud is altered, it is no longer returnable for refund or replacement.



ABRASIVES

The following Clayton ventilated abrasives are recommended for maximum dust collection. Additional grits and minerals are available.

TR STYLE DISCS

| ITEM NO | DESC |
|-------------|----------|
| 800-32M036V | 36 GRIT |
| 800-32M060V | 60 GRIT |
| 800-32M080V | 80 GRIT |
| 800-32M100V | 100 GRIT |
| 800-32M120V | 120 GRIT |
| 800-32M180V | 180 GRIT |
| 800-32M240V | 240 GRIT |
| 800-32M320V | 320 GRIT |
| 800-32M003V | COARSE |
| 800-32M006V | MEDIUM |
| 800-32M009V | FINE |

TS STYLE DISCS

| ITEM NO | DESC |
|-------------|----------|
| 800-32F036V | 36 GRIT |
| 800-32F060V | 60 GRIT |
| 800-32F080V | 80 GRIT |
| 800-32F100V | 100 GRIT |
| 800-32F120V | 120 GRIT |
| 800-32F180V | 180 GRIT |
| 800-32F240V | 240 GRIT |
| 800-32F320V | 320 GRIT |
| 800-32F003V | COARSE |
| 800-32F006V | MEDIUM |
| 800-32F009V | FINE |

TP STYLE DISCS

| ITEM NO | DESC |
|--------------|----------|
| 800-32TP036V | 36 GRIT |
| 800-32TP060V | 60 GRIT |
| 800-32TP080V | 80 GRIT |
| 800-32TP100V | 100 GRIT |
| 800-32TP120V | 120 GRIT |
| 800-32TP180V | 180 GRIT |
| 800-32TP240V | 240 GRIT |
| 800-32TP320V | 320 GRIT |
| 800-32TP003V | COARSE |
| 800-32TP006V | MEDIUM |
| 800-32TP009V | FINE |

LIMITED LIFETIME WARRANTY TERMS AND CONDITIONS

Warranty Terms

Clayton Associates, Inc. guarantees its manufactured products against defects in materials or workmanship and will either repair or replace all parts that prove defective under normal use during the lifetime of the products. The warranty period shall commence from the date of paid invoice.

This warranty does not cover (a) repairs due to normal wear, accident, neglect, misuse, or use other than as indicated in the instruction booklet (b) products manufactured by third parties and distributed by Clayton (c) wear items such as bearings, rotor blades, regulators, valve stems, levers, shrouds, guards, O-rings, seals, gaskets, motor brushes, and other wearable parts.

Repair within the Continental US

During the first 90 days of the warranty period, Clayton will provide parts and labor to the customer's site at no charge or pay freight costs associated with returning the products for repair to a Clayton selected service location and repair the product at no charge. Clayton personnel will determine the best way to repair the product.

Past 90 days, Clayton will provide parts to the customer's site at no charge or the customer may ship the product to a Clayton selected service location at customer's expense and Clayton will repair the product at no charge and provide return shipping.

Repair Outside the Continental US

Clayton will provide parts to the customer's site at no charge or the customer may ship the product to a Clayton selected service location at customer's expense and Clayton will repair the product at no charge and provide return shipping.

Limitation of Liability

Clayton shall not in any event be liable for any damages, loss of production time or profits, whether based on contract, warranty, negligence, strict liability or otherwise, including without limitation any consequential, incidental or special damages, arising with respect to the equipment or its failure to operate.

Clayton Associates, Inc. makes no other warranty or representation of any kind, except that of title, and all other warranties, express or implied, including warranties of merchantability or fitness for any particular purpose, are hereby expressly disclaimed.

EC DECLARATION OF CONFORMITY



Clayton Associates, Inc. of 1650 Oak Street, Lakewood New Jersey 08701 U.S.A. declare on our own responsibility that the interchangeable equipment,

Clear Revolution Rotary Shrouds

- Shroud Models **674-A1216xx**, **674-A1232xx**, **674-A1248xx**, **774-A1216xxyyy**, **774-A1232xxyyy**, **774-A1248xxyyy**
- Where xx indicates the pad type and yyy indicates the mandrel size
- When used in combination with a pneumatic hand-held power unit having a maximum rotation speed not exceeding 25,000 revolutions per minute, having an adjustable chuck or otherwise capable of securely holding a mandrel 3.2 - 6.35mm in diameter

Are designed and manufactured in compliance with the essential requirements and other relevant provisions of the following applicable directives:

- **Machinery Directive 2006/42/EC**

Compliance has been obtained by application of the following standards:

- **EN ISO 12100:2010-11**

The legally authorized entity, established in the EU for retaining compiling the technical file is ExVeritas Limited, Unit 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ, United Kingdom.

File Number: 18FILE0423

Subject to use for the purpose for which it was designed in accordance with relevant standards and with the manufacturer's recommendations. We hereby declare that the equipment specified above conforms to the listed Directives and Standards.

Brad Clayton
President
Clayton Associates, Inc.

Place of Issue: Lakewood, New Jersey, USA November 23, 2018



Clayton products are proudly made in the USA

