



Abrasive Safety Guide



SCOTCH-BRITE™ CLEAN AND STRIP XT PRO DISCS



Abrasive Safety

Abrasive applications such as coating removal, cleaning and surface preparation can involve hazards, and identifying those hazards and the best safety solutions to address them is not always easy. The high speeds, temperatures and forces involved with the use of abrasives can create immediate safety hazards such as cuts and burns. If not properly managed, the routine use of abrasives can also create longer-term health risks from the vibration encountered.

Abrasive Workplace Hazards



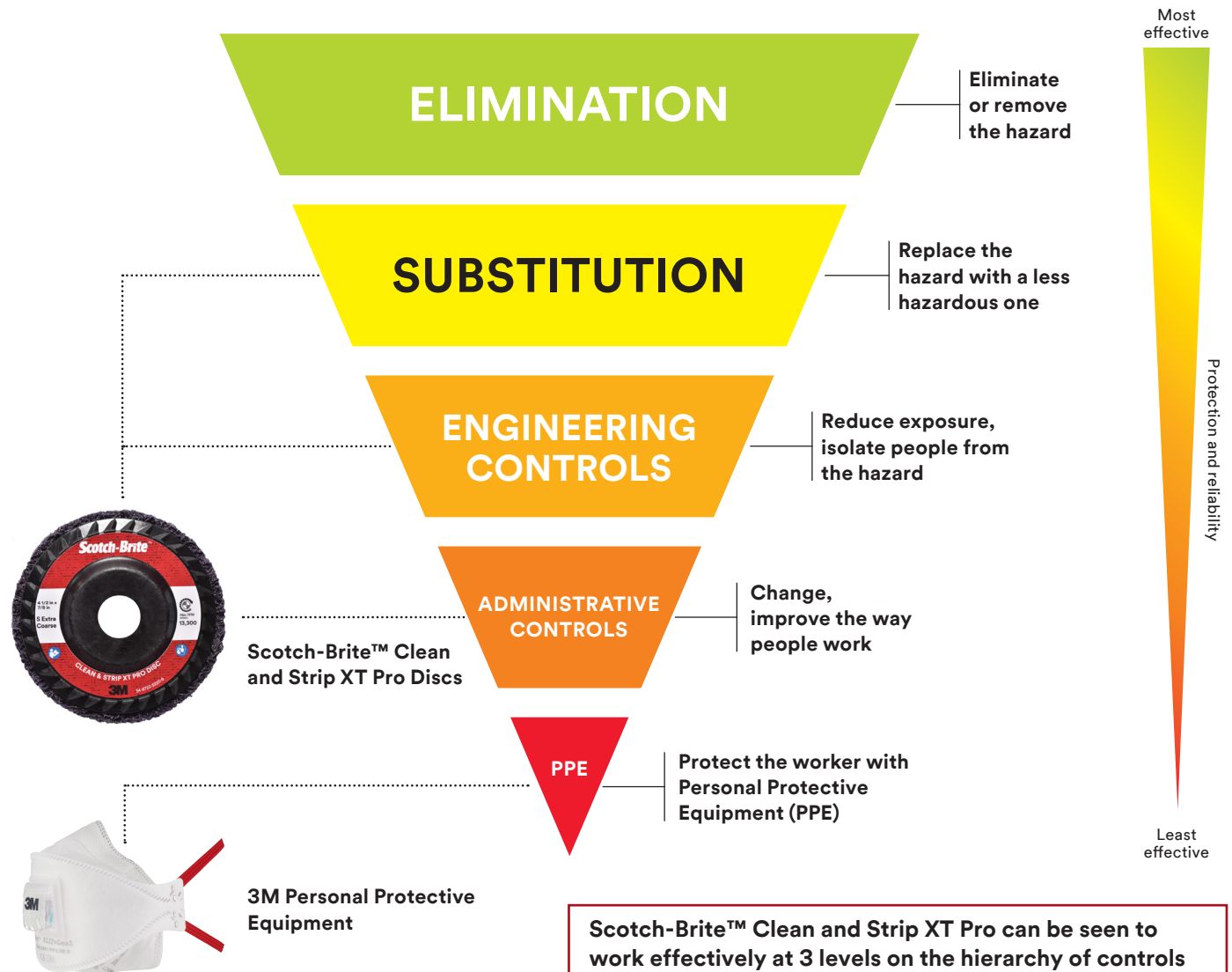
HAND-ARM VIBRATION



INJURY

Best practice in health and safety management begins with a thorough risk assessment. Once hazards have been identified and categorized for risk, the next step is to implement preventative measures and appropriate controls. The hierarchy of control (pictured) is a tool to aid reduction or minimising of risk. It is a step-by-step approach to achieving high effectiveness as it ranks risk controls from the highest level of protection and reliability through to the lowest and least reliable protection. Eliminating the hazard is the highest level.

Hierarchy of Controls*



Scotch-Brite™ Clean and Strip XT Pro can be seen to work effectively at 3 levels on the hierarchy of controls depending upon the original risk. For example replacing a wire wheel application with XT Pro could be shown to reduce the cut hazard and remove the hazard of flying wires (substitution).

* Content source: Hierarchy of Controls (National Institute for Occupational Safety and Health) www.cdc.gov/NIOSH

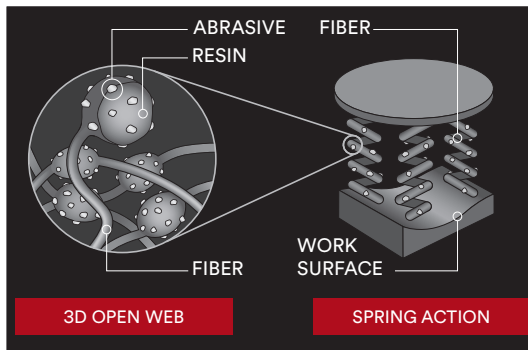
Features & Benefits



Scotch-Brite™ Non-woven Technology

Performance. Durability. Reliability. Quality of finish.

The Scotch-Brite™ non-woven product solutions will deliver on all four: Built with non-woven synthetic fibre webs, our solutions deliver uniform, consistent results with no compromise on quality.



Scotch-Brite™ Technology Explained

The non-woven web technology from Scotch-Brite™ is made with nylon that has been soaked in resin and abrasive mineral. The fibers and particles are bound together to form an open, three-dimensional structure. This construction provides spring-like action, which helps the product conform and bounce back without leaving an uneven finish. 3M Non-Woven web is engineered to continually expose fresh abrasive to the surface for a consistent, smoother finish – without the risk of overworking the part or disturbing critical tolerances.



Productivity and Safety Benefits

3M non-woven abrasives run cool and resist loading due to their open & tough web construction. This reduces the risk of substrate discolouration and warping, improves finish and prolongs product life.

Better conformability means, they follow the surface of the substrate easily – without altering the surface geometry. This means less rework and rejects which helps save time during production process.

Faster action means less ‘trigger time’ spent on the tool which means less exposure to hand-arm vibration.

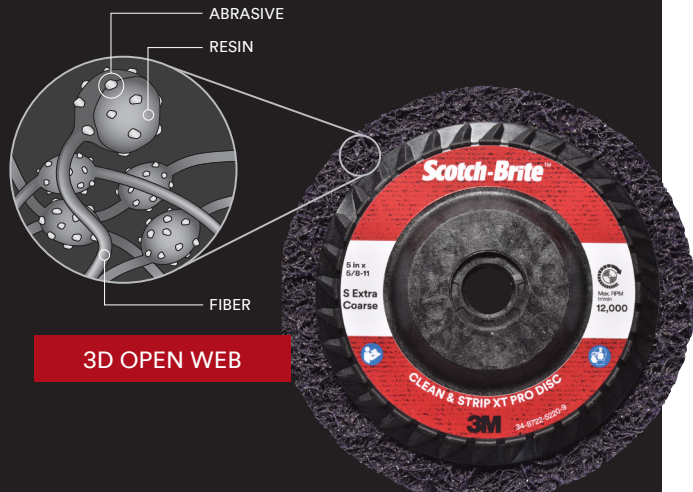
SCOTCH-BRITE™ CLEAN AND STRIP XT PRO DISCS

TOUGH JOBS MADE EASIER WITH SCOTCH-BRITE™

Featuring silicon carbide abrasive mineral incorporated into an open nylon web, it effectively removes rust, paint, mill scale and coatings from surfaces without significantly altering the base material. It has increased conformability without compromising strength.



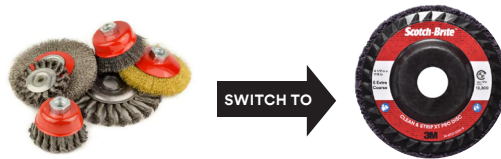
In addition to high conformability, Scotch-Brite™ Clean and Strip XT Pro Discs offer low vibration, decreased chunking and low spark, increasing safety for operators to use. The high-speed rating and faster material removal shortens the amount of time the operator spends using the tool, further reducing vibration exposure.



Improve personal safety:

Scotch-Brite™ Clean and Strip XT Pro Disc is designed when removing rust, to help minimise hand-arm vibration*.

RUST REMOVAL:



OTHER BENEFITS:

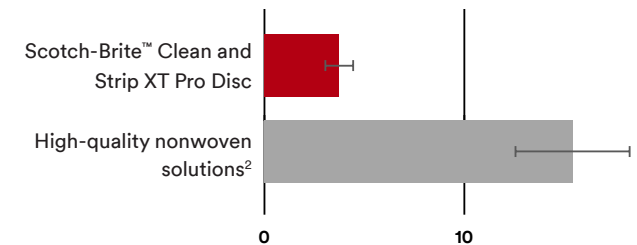
Non-woven web of nylon fibres - less risk of injuries caused by misuse or overloaded tool.

No steel wires or high impact particles - mitigate risk, no injuries caused by flying wires to yourself or colleagues.

Eliminates the need for chemicals for cleaning - no chemical burns - safe to use in areas where chemicals are restricted like food production.

Scotch-Brite™ Clean and Strip XT Pro Disc vs. high-quality non-woven solutions tested

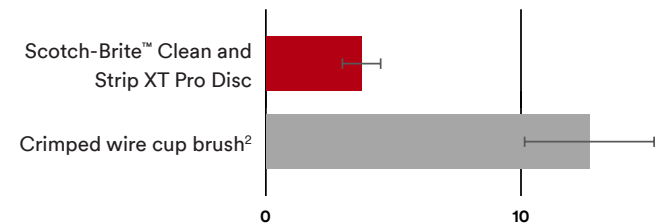
Operator exposure to vibration from rust removal process (points).



↓ 76% LESS VIBRATION EXPOSURE COMPARED TO HIGH-QUALITY NON-WOVEN DISCS TESTED*

Scotch-Brite™ Clean and Strip XT Pro Disc vs. crimped wire cup brushes tested

Operator exposure to vibration from rust removal process (points).¹



↓ 90% LESS VIBRATION EXPOSURE COMPARED TO CRIMPED WIRE CUP BRUSHES TESTED*

↓ ↓ Less pressure required: helps minimise operator fatigue



Less trigger time: due to a faster material removal rate helps to reduce vibration exposure

¹Error bars show a range of likely values for the mean with a confidence level of 95%.

²Average result of 3 high-quality non-woven products.

*Performance testing in a typical rust removal process; Scotch-Brite™ Clean and Strip XT Pro Discs average compared to the average of the high-quality 125mm non-woven discs and wire cup brushes tested, according to independent testing by Fraunhofer Institute



Scotch-Brite™ Clean and Strip XT Pro Discs can help minimise hand-arm vibration compared to high-quality non-woven discs.*

Surface Cleaning

Whenever surface contaminants can be spotted on the metal parts prior to weld or paint preparation processes, cleaning needs to be added as an additional step in the process to achieve a desired final outcome on the surface.

Scotch-Brite™ Clean and Strip XT Pro Disc gives a safe and productive solution for these jobs:

- Preparing the surface for welding
- Paint preparation
- Aesthetic finish creation

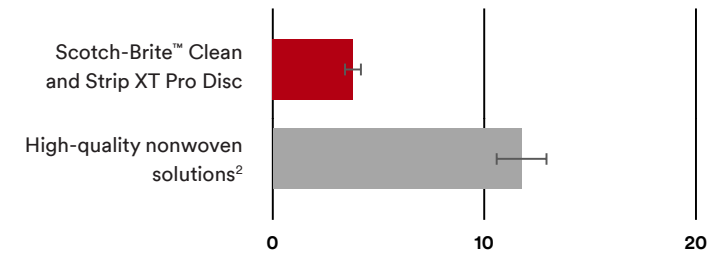
Also, it is able to reach surface irregularities and clean to bare metal.

PAINT REMOVAL:



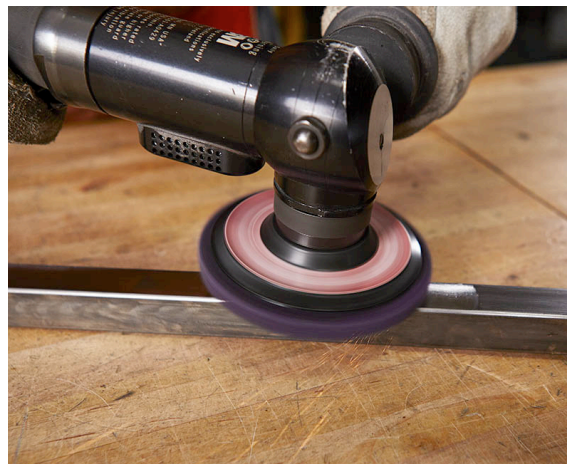
Scotch-Brite™ Clean and Strip XT Pro Disc is designed when removing paint, to help minimise vibration:

Operator exposure to vibration from paint removal process (points).¹



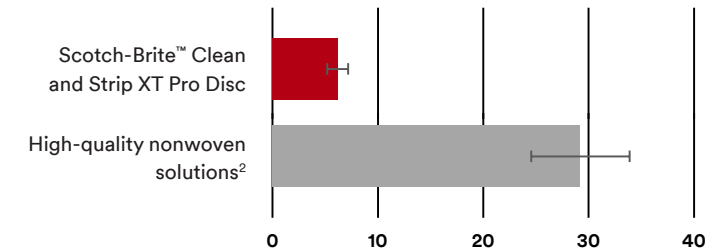
↓ 68% LESS VIBRATION EXPOSURE COMPARED TO HIGH-QUALITY NON-WOVEN DISCS TESTED*

MILL SCALE REMOVAL:



Scotch-Brite™ Clean and Strip XT Pro Disc is designed when removing mill scale, to help minimise vibration:

Operator exposure to vibration from scale removal process (points).¹



↓ 79% LESS VIBRATION EXPOSURE COMPARED TO HIGH-QUALITY NON-WOVEN DISCS TESTED*

¹Error bars show a range of likely values for the mean with a confidence level of 95%.

²Average result of 3 high-quality non-woven products.

*Performance testing in a typical paint and mill scale removal process; scotch-brite™ clean and strip xt pro discs average compared to the average of the high-quality 125mm non-woven discs and wire cup brushes tested, according to independent testing by fraunhofer institute.

↓ ↓ Less pressure required: helps minimise operator fatigue

⌚ Less trigger time: due to a faster material removal rate helps to reduce vibration exposure



Scotch-Brite™ Clean and Strip XT Pro and Extra Cut Discs. Find the right product for different jobs

Scotch-Brite™ Clean and Strip XT Pro Discs advantages.

With reengineered fibre, Scotch-Brite™ Clean and Strip discs offer increased conformability without undercutting strength.

- Rapid coating removal and surface preparation
- Decreased chunking - extended life
- Highly conformable and larger contact patch
- High speed rating and low vibration

XT Pro

Sharp silicon carbide mineral and re-engineered web make a durable disc that won't damage the base metal

XT Pro Extra Cut

Hard aluminium oxide mineral and re-engineered web make a durable disc that cuts to bare metal quickly

- Made with silicon carbide material, perfect for cleaning
- Rust, paint, light mill scale removal
- Maintains workpiece shape, removes coatings
- Low sparking

- Made with aluminium oxide material, ideal for cleaning plus blending and surface preparation
- Heavy rust and rust pit removal without leaving divots
- Thick paint and coating removal
- Blend, strip and refine to bare metal quickly



Boost your safety and productivity with the complete solution by 3M.

Scotch-Brite™ Clean and Strip XT Pro Discs

PRODUCT	DESCRIPTION
	Scotch-Brite™ Clean and Strip XT Pro Discs
	Scotch-Brite™ Clean and Strip XT Pro Extra Cut Discs
3M™ Electric Grinder grinder is recommended for use with XT Pro and Extra Cut Discs.	



3M™ Electric Grinder with variable speed

Tools and accessories must be purchased separately.

3M™ Personal Protective Equipment (PPE)

PRODUCT	DESCRIPTION
	3M™ SecureFit™ 400X Series Safety Glasses
	3M™ Headgear combination G500V5F11H51-GU (includes hearing protection)
	3M™ Aura™ Particulate Respirators 9300+Gen 3 Series
	3M™ E-A-R™ Flexible Fit Earplug HA 328-1000
	3M™ PELTOR™ Earmuff X4

For more information on the PPE solutions 3M can offer to your business, please visit www.3M.co.uk/safety

LEARN MORE AT 3M.CO.UK/SCOTCHBRITEABRASIVES



Scotch-Brite™
Clean and Strip XT Pro
and XT Pro Extra Cut
consistently demonstrates
higher conformability, which
provides the following
benefits:

- Large contact area for fast removal rates
- Conforms to contoured or hard-to-reach spaces
- Delivers uniform, consistent finish
- Gentle on parts

XT Pro Silicon carbide

Product ID	Size	Max RPM	Grade	MOQ
Fibre Backed Discs - DB				
7100192333	115mm x 22mm	10,000	XCRS	10
7100192334	178mm x 22mm	6,500		10
Plain Disc - DC				
7100176374	100mm x 13mm	9,000	XCRS	30
7100176347	150mm x 13mm	6,000		20
7100176348	200mm x 13mm	4,500		12
Roloc - DR				
7100175521	50.8mm x NH	18,000	XCRS	40
7100173795	76.2mm x NH	15,000		40
Rigid Disc - RD				
7100192330	115mm x 22mm	13,000	XCRS	10
7100192331	125mm x 22mm	12,000		10
7100192332	178mm x 22mm	8,500		10
Roloc Plus - ZR				
7100192704	100mm x 13mm x 6mm	8,000	XCRS	10
7100192705	125mm x 13mm x 6mm	7,000		8
7100192706	150mm x 13mm x 6mm	6,000		6
Spindle Mounted - ZS				
7100192707	75mm x 13mm x 6mm	10,000	XCRS	10
7100192708	75mm x 25mm x 6mm	10,000		10
7100192709	100mm x 13mm x 6mm	8,000		10
7100192711	100mm x 25mm x 6mm	8,000		10
7100192710	150mm x 13mm x 8mm	6,000		6

XT Pro Extra Cut Aluminium oxide

Product ID	Size	Max RPM	Grade	MOQ
Fibre Backed Discs - DB				
7100192339	115mm x 22mm	10,000	XCRS	10
7100192340	178mm x 22mm	6,500		10
Plain Disc - DC				
7100175138	100mm x 13mm	9,000	XCRS	30
7100175139	150mm x 13mm	6,000		20
7100175140	200mm x 13mm	4,500		12
Roloc - DR				
7100179815	50.8mm x NH	18,000	XCRS	40
7100173790	76.2mm x NH	15,000		40
Rigid Disc - RD				
7100192336	115mm x 22mm	13,000	XCRS	10
7100192337	125mm x 22mm	12,000		10
7100192338	178mm x 22mm	8,500		10
Roloc Plus - ZR				
7100192712	100mm x 13mm x 6mm	8,000	XCRS	10
7100192733	125mm x 13mm x 6mm	7,000		8
7100192734	150mm x 13mm x 6mm	6,000		6
Spindle Mounted - ZS				
7100192735	75mm x 13mm x 6mm	10,000	XCRS	10
7100192736	75mm x 25mm x 6mm	10,000		10
7100192737	100mm x 13mm x 6mm	8,000		10
7100192739	100mm x 25mm x 6mm	8,000		10
7100192738	150mm x 13mm x 8mm	6,000		6

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