



Husqvarna[®]

**OSHA SILICA
REGULATION GUIDE**

Surface Preparation and
Dust/Slurry Collection



What is silica dust?

Silica dust is what is produced when concrete, bricks, blocks, etc are cut, and while it might seem harmless, it contains crystalline silica. The existence of crystalline silica and the hazards it can cause to a worker's body – silicosis, chronic obstructive pulmonary disease and kidney disease – has been known for decades. That is why Husqvarna Construction Products has been developing solutions to control dust for decades.

Since OSHA released the final ruling on crystalline silica exposure on March 24, 2016, how to control this dust has been a major concern for contractors. Mostly because the ruling places a lot of weight on the contractor's shoulders, but Husqvarna is here to support you with information and products to assist with compliance.

We always work towards finding the best solution for our customers – from both an efficiency standpoint and from a worker's view. OSHA has been working on a final ruling for the past several years, and since the first ruling on silica exposure Husqvarna Construction Products has been working to develop ways to suppress the crystalline silica and keep workers more safe.

This document will help guide you through how our products will help meet and/or exceed the OSHA rules, keeping you in compliance.

For more information on OSHA
silica exposure guidelines visit:

<https://www.osha.gov/silica/>



START DATE: September 23, 2017

The final OSHA ruling revises the amount of crystalline silica a worker should be exposed to. The key takeaways of the ruling include:

- The permissible exposure limit will be set at 50 micrograms per cubic meter of air, averaged over an eight hour shift.
- ***Employers will be required to take measures to control silica, either through using water, dust collection systems, ventilation or providing respirators.*** Employers will also be required to limit the amount of time a worker can be exposed to hazardous environments, write an exposure control plan, designate a competent person, offer medical exams to highly exposed workers and train workers on the risks and how to avoid silica dust.

Penalty Amounts Adjusted for Inflation as of January 13, 2017

TYPE OF VIOLATION	MAXIMUM PENALTY
SERIOUS/OTHER THAN SERIOUS POSTING REQUIREMENTS	\$12,675.00 per violation
FAILURE TO ABATE	\$12,675.00 per day beyond abatement date
WILLFUL OR REPEATED VIOLATIONS	\$126,749.00 per violation

Penalty amounts listed above may change.
For more information on OSHA penalty guidelines visit:

<https://www.osha.gov/penalties/>

What does OSHA require from you?

FROM TABLE 1 §29 CFR 1926.1153			
Equipment/ Task	Engineering & work practice control method	Required respiratory protection and minimum Assigned protection factor (apf)	
		Less than or equal to 4 hours/shift	Greater than 4 hours/ shift
(xiii) Walk- behind milling machines and floor grinders	Use machine equipped with integrated water delivery system that continuously feeds water to the grinding surface OR Use machine equipped with dust collection system recommended by the manufacturer. Dust collector must provide the airflow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. When used indoors or in an enclosed environment, use a HEPA filtered vacuum to remove loose dust in between passes.	None	None

How Husqvarna can help you meet requirements:

PRIMARY RECOMMENDED DUST SUPPRESSION EQUIPMENT

Dry grinding with appropriately sized vacuum

The **Husqvarna T-line** is developed for large-scale projects that demand substantial dust extraction. Individually tested and certified HEPA class H13 filters, required for silica dust, are fitted as standard. The Longopac® bag system ensures simple, dust-free bag changes. Any remaining debris can be cleaned up with the wand and floor tool, standard accessories with any T-line dust collector.

1 **Husqvarna S-line** machines have been designed specifically for HEPA H13 filters, which are individually tested and certified. Advanced Jet Pulse cleaning ensures dust is continuously collected throughout a full work day and the Longopac® collecting bag enables the machine to be emptied quickly and simply; without exposing the operator to dust. Any remaining debris on the site can be cleaned up with the wand and floor tool attachment, standard on any S-line dust collectors.

The **Husqvarna DC-line** machines have been designed with optional HEPA filtration. The **DC 6000** includes an individually certified HEPA class H13 rated filter. Patented precyclone technology pre-separator delivers up to 95% separation of dust.

SECONDARY RECOMMENDED DUST SUPPRESSION EQUIPMENT

2 Wet grinding with external misting

The **Husqvarna W-line** of slurry vacs is designed for the toughest jobs a slurry vacuum cleaner can handle. The W-line can deal with liquids such as concrete slurry, oils and machining coolants.

SUPPLEMENTARY RECOMMENDED DUST SUPPRESSION EQUIPMENT

3 The **Husqvarna A-line** is tested and certified for use as both Air Scrubbers and Negative Air Machines. Due to a safe filter system and a design that is perfectly matched to operation with HEPA class H13 filters, both air cleaners put out ISO5 Clean 100 Air.

The **Husqvarna C-line** of pre-separators separates 80–90% of the vacuumed material before it reaches the dust extractor, which greatly increases the suction capacity and filter life. Using a pre-separator enhances the dust extractor's capacity to handle material that would normally be considered difficult to manage such as soot, burning particles, liquids and light material in large quantities.

Surface Preparation Equipment OSHA Compliance Cross Reference

1	Series	Equipment	Efficiency	HEPA Filter	PG 280	PG 400	PG 450	PG 530	PG 680	PG 820
	T LINE	T 18000 3-PHASE	99.99% @ .3 Microns	4 HEPA CLASS H 13					X	X
		T 10000 3-PHASE	99.99% @ .3 Microns	3 HEPA CLASS H 13					X	X
		T 8600 3-PHASE	99.99% @ .3 Microns	2 HEPA CLASS H 13					X	X
		T 7500 3-PHASE	99.99% @ .3 Microns	2 HEPA CLASS H 13					X	X
		T 8600 Propane	99.99% @ .3 Microns	2 HEPA CLASS H 13					X	X
	S LINE	S 36 1-PHASE	99.99% @ .3 Microns	3 HEPA CLASS H 13		X	X	X		
		S 26 1-PHASE	99.99% @ .3 Microns	2 HEPA CLASS H 13	X		X			
		S 13 1-PHASE	99.99% @ .3 Microns	1 HEPA CLASS H 13						
	DC LINE	DC 1400	99.97 @ .3 Micron (HEPA filter)	OPTIONAL	X					
		DC 3000	99.97 @ .3 Micron (HEPA filter)	OPTIONAL		X	X			
		DC 3300	99.9% @ 1 MICRON	N/A		X	X	X		
		DC 5500	99.9% @ 1 Micron	N/A					X	X
		DC 6000	99.97 @ .3 Micron	HEPA 13					X	X

2	W LINE	W 70 P WET SLURRY	Wet only	N/A						
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3	A LINE	A 1200 AIR SCRUBBER W/ PRE-FILTER	99.99% @ .3 Microns	1 HEPA CLASS H 13	600 cfm X 60 = 36,000 cf/hour or 5 air changes per hour on 900 sq ft space 8' height (7,200 cu ft)					
		A 600 AIR SCRUBBER W/PRE-FILTER	99.99% @ .3 Microns	1 HEPA CLASS H 13	1200 cfm X 60 = 72,000 cf/hour or 5 air changes per hour on 1800 sq ft space 8' height (14,400 cu ft)					

	Equipment	Efficiency	S 13	S 26	S 36	T 7500	T 8600	T 10000	T 18000	DC 6000
C LINE	C 5500 PRE-SEPARATORS	Separated 80-90% material before dust extractor				X	X	X	X	X
	C 3000 PRE-SEPARATORS	Separated 80-90% material before dust extractor	X	X	X					

FOR USE WITH (All can be used as HEPA vacuum for cleaning purposes)		S 13*	S 26**	S 36***	T 7500	T 8600	T 10000	T 18000	DC 6000
Hand grinder, saw, chipping hammer, drill, etc		X							
Hand grinder, saw, chipping hammer, drill, etc. Plus small floor grinder or walk behind saw			X						
Hand grinder, saw, chipping hammer, drill, etc.Plus small to medium floor grinder or walk behind saw				X					
Any hand tools or walk behind tools or saws or grinders					X	X	X	X	X

*Size of cutting tool up to 5" **Size of cutting tool up to 10" or 2x5" ***Size of cutting tool up to 2x7"

Husqvarna Dust & Slurry Management

PRIMARY DUST SUPPRESSION EQUIPMENT



T 7500



T 8600



T 8600 P



T 10000



T 18000



S 13



S 26



S 36



DC 1400



DC 3000



DC 3300



DC 5500



DC 6000

SECONDARY DUST SUPPRESSION EQUIPMENT



W 70 P

SUPPLEMENTARY DUST SUPPRESSION EQUIPMENT



C 3000



C 5500



A 600



A 1200



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Phone: 800-288-5040 Fax: 800-825-0028

Web: www.husqvarnacp.com

HUSQVARNA SERVICE CENTERS USA

CORONA AREA SERVICE CENTER

520 East Rincon St., Ste. 101 Corona, CA 92879

Office: 951-893-4415 Hours: 8:00 a.m. - 4:30 p.m.

CHICAGO AREA SERVICE CENTER

180 Stanley St. Elk Grove Village, IL 60007

Office : 847-378-1330 Hours: 7:30 a.m. - 4:00 p.m.

DALLAS SERVICE CENTER

2933 Eisenhower St., Ste. 160 Carrollton, TX 75007

Office: 214-351-9990 Hours: 7:00 a.m. - 4:30 p.m.

OLATHE SERVICE CENTER

17400 West 119th Street Olathe, KS 66061

Office: 913-928-1226 Hours: 7:00 a.m. - 3:30 p.m.

NEW HAVEN SERVICE CENTER

6 Sycamore Way, Unit 2 Branford, CT 06405

Office: 203-433-3491 Hours: 8:00 a.m. - 4:00 p.m.

ATLANTA SERVICE CENTER

6650 Oak Ridge Commerce Way Austell, GA 30168

Office: 770-948-0658 Hours: 8:00 a.m. - 5:00 p.m.

QUERETARO SERVICE CENTER

Carretera Querétaro - San Luis Potosí 16368 Int. 12

Santa Rosa Jaurequi, Querétaro CP. 76220

P: 52 442-294-5244 Horario: 8:30 a.m. - 5:30 p.m.

CUSTOMER SERVICE & TECH SERVICE CONTACT INFO

USA Customer Service: 800-288-5040

Technical Service: 800-365-5040



2077 Bond St. North Bay, ON P1B 4V7

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Web: www.husqvarnacp.ca

HUSQVARNA SERVICE CENTERS CANADA

QUEBEC SERVICE CENTER

9430 Rte Trans Canadienne St. Laurent,

Quebec H4S 1R7

P: 514-335-9769

Hours: 8:00 a.m. - 5:00 p.m.

BRITISH COLUMBIA SERVICE CENTER

1515 Broadway St., Unit 504 Port Coquitlam,

British Columbia V3C 6M2

P: 604-944-0532

Hours: 8:00 a.m. - 5:00 p.m.

ONTARIO SERVICE CENTER

850 Matheson Blvd. Mississauga,

Ontario L5V 0B4

P: 905-817-8012

Hours: 8:00 a.m. - 5:00 p.m.

ALBERTA SERVICE CENTER

2520 23rd Avenue NE, Unit 15, Calgary,

Alberta T2E 8L2

P: 403-717-0716

Hours: 7:30 a.m. - 4:30 p.m.

CUSTOMER SERVICE & TECH SERVICE CONTACT INFO

Canada Customer and Technical Services: 800-461-9589



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HUSQVARNA CONSTRUCTION PRODUCTS

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