



RemoveFaster.com

A GRACO COMPANY



SMITH FS351 Electric Self-Propelled Surfer



SMITH MV1000 HEPA Dust Collector

SMITH MVSA Cyclone Debris Separator

Get the Perfect Prep in 4 steps



ON CONCRETE OR ASPHALT

See page 5

FASTEST AND EASIEST REMOVAL SYSTEMS SINCE 1990

© 2019 SMITH Surface-Prep Solutions



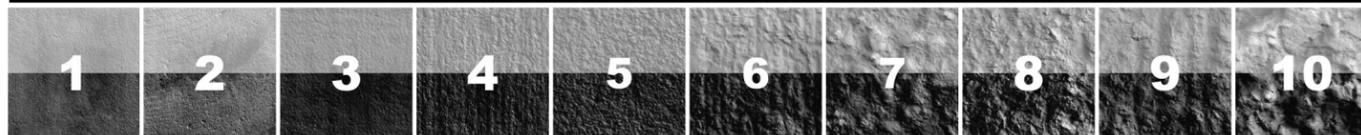
What drives our passion?

Our customers' work can be dangerous and thankless, but it's very essential to us all. When we deliver the right tools to our customers on time, their jobs can finish faster, and their work stays in place longer.

When surfaces are under construction, the places where we live, work, and play become inaccessible. When the job calls for proper surface-prep work SMITH products and methods are applied, coatings, markings, repair, and overlay materials last. Longer life reduces work zone inconveniences, and saves lives.

Being accountable and solutions-driven with a strong work ethic are SMITH core values. Building solutions that create jobs for our customers to make surfaces safer and sustainable for everyone is what drives our passion.

Call us with your challenges, and together we'll find the right solution to make the hard work of removal faster and easier for you.



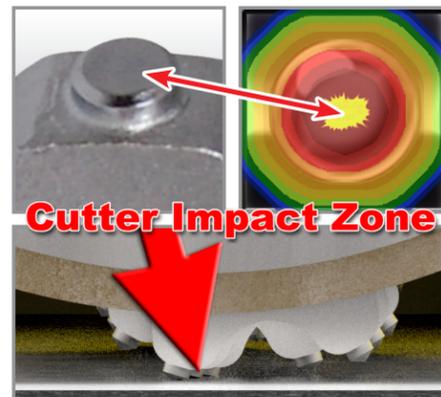
Proper Prep Work Starts by SMITHing, Ends With Performance

With surface-prep practices written correctly in the specs as a separate pay item, everyone benefits from manufacturers selling more materials and less performance failures, to design engineers getting their specified products to perform its entire engineered life, the contractor gets value for their service and pavement or flooring surface owners and the public gets a safer, sustainable pavement marking, coating or overlay material.

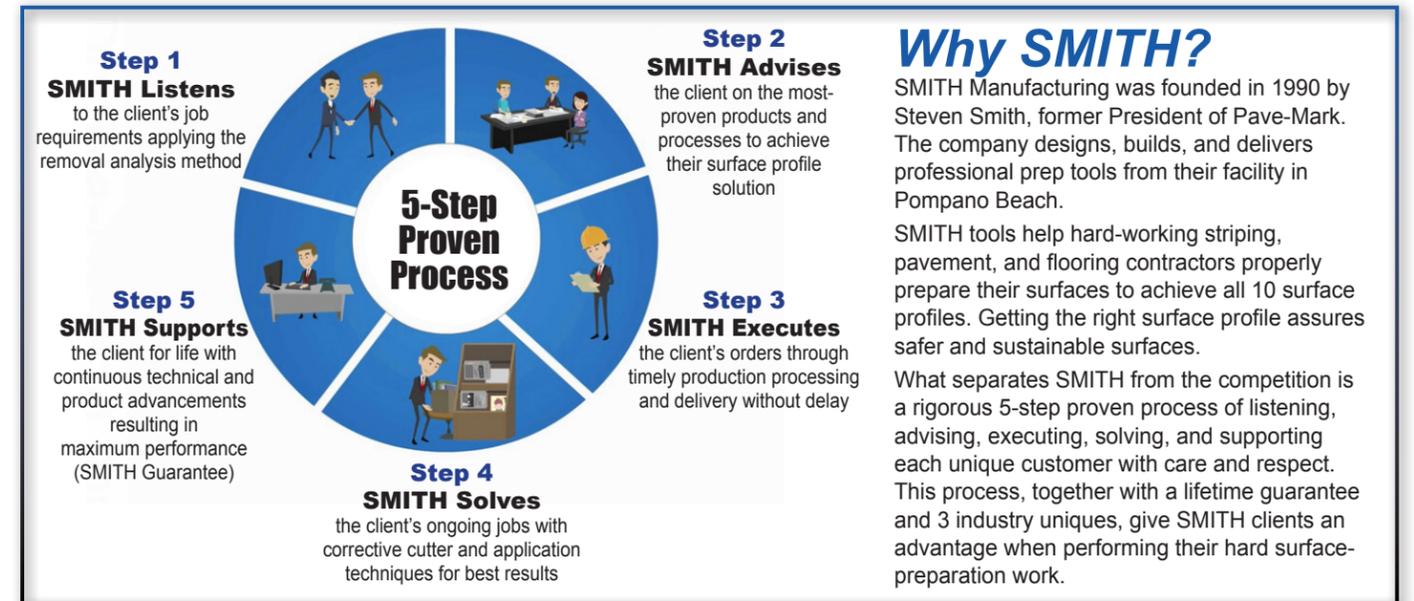
Proper surface-prep should be defined as the act of removing all surface contamination leaving the surface clean, dry, profiled, and sound.

SMITHing is a prep process with a drum or rotary-style impact device outfitted with the right cutters, operating in the "impact zone." This process changes the existing surface profile conditions from smooth, rough, or unsound to the right CSP or SP (1-10) conditions to maximize performance of whatever is applied.

If prep work is not properly defined in your contracts, all you get is pressurized air for final surface cleanup.



The cutter impact zone is described as the narrow band where the cutter tip contacts the surface, where performs at its best. If it strikes the surface too deeply, or at the wrong angle or incorrect feed rate, performance is lost, and surface profiles become inconsistent.



Why SMITH?

SMITH Manufacturing was founded in 1990 by Steven Smith, former President of Pave-Mark. The company designs, builds, and delivers professional prep tools from their facility in Pompano Beach.

SMITH tools help hard-working striping, pavement, and flooring contractors properly prepare their surfaces to achieve all 10 surface profiles. Getting the right surface profile assures safer and sustainable surfaces.

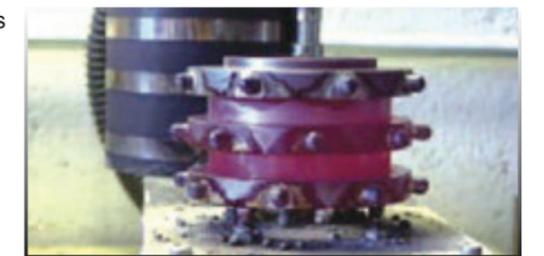
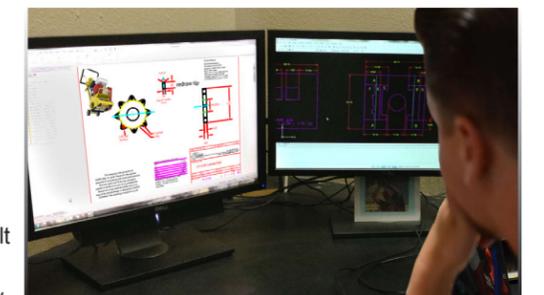
What separates SMITH from the competition is a rigorous 5-step proven process of listening, advising, executing, solving, and supporting each unique customer with care and respect. This process, together with a lifetime guarantee and 3 industry uniques, give SMITH clients an advantage when performing their hard surface-preparation work.



SMITH Prep Solutions

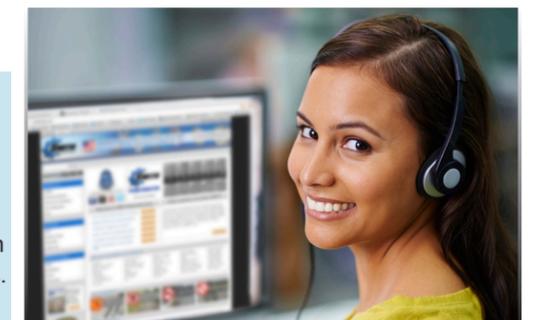
At the weekly "L10" production, engineering, and sales team meetings, employees are using the IDS process to find solutions. Processes refined over the years are thoughtfully designed to make everyone's hard work inside and outside our company faster, easier, and more effective"

"We consider manufacturing a core competency, which give our customers an advantage," says Rich Stankiewicz, Head of Operations. "Our equipment is custom built in-house in small batches, so we can reliably deliver quality products in the quantities needed by our customers. We are most proud of our research and development of new products, while continuously improving our established product line. Solving customer's removal problems is a challenge I take pride in, and with our experienced personnel, flexibility and capabilities, we can ramp up quickly to meet our customers' demanding schedules. As a quality-responsible supplier, SMITH maintains the largest inventory of machines and consumable wear components for those with a variety of scarifiers, planers, grinders, line removers, routers, groovers, shavers, scabblers, and other prep tools. And for anyone looking for better performance and cost savings, SMITH components out-perform the originals," says Rich. "That's because we continuously improve every product, from the cutter impact zone on up."



How May We Help You?

It's not only how SMITH answers the phone, but a core value commitment to providing our customers with trusted service and support. If you are not already a SMITH customer, ask your peers about their SMITHing experience, and you'll soon discover the real benefit from partnering with a company whose vision is to find the right solution to make the hard work of removal faster and reliable for safer and sustainable surfaces.





Perfect Prep in 4 Steps

STEP 2 • SELECTing



Getting coatings to last on concrete is tough. To assure a long-term mechanical bond, new coatings must be applied onto surfaces that are properly cleaned, dried, profiled and sound.

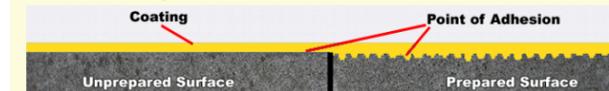
Most jobs specify the prep work as sweeping, power washing, or air blowing. These traditional topical treatments are not long-term solutions for stay-in-place coatings in high-traffic locations.

Some jobs specify the use of grinders or blasters to remove prior coatings, dirt, oil, films, paint, coatings, cure or sealer.

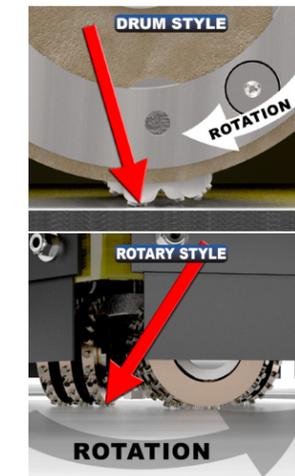


The indiscriminate application of these prep tools may cause more harm than good by destabilizing, cracking, or undermining the original sound concrete substrate.

The perfect way to prepare surfaces is through a 4-step SMITHing process that not only removes surface contaminants, but creates the right surface porosity to maximize mechanical bonding for the new coatings or overlays without surface micro-cracking.

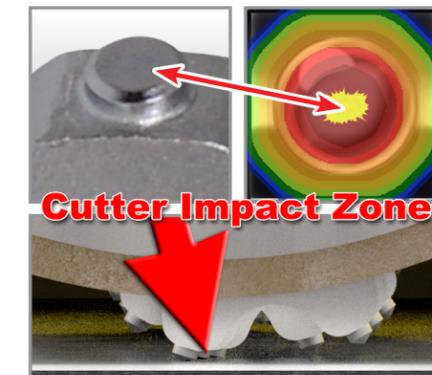


Mechanical bonding occurs when the coating material seeps into the pores of the surface to create a tight mechanical bond, assuring any new binders that are applied perform for their entire engineered life.



After your surface-improvement solution approval, select the correct rotary or drum-style removal equipment (with the correct cutters and drum assembly setup pattern), and test it prior to the start of the job. It may require more than one machine, cutter, and method to produce the desired results. Record results in your job log.

STEP 3 • PREPping



Apply the Prep Method by consistently operating in the "cutter impact zone" to achieve the right SP (1-10) profile.

Always use a HEPA vacuum to collect dust and debris and protect the operator, job site and environment.

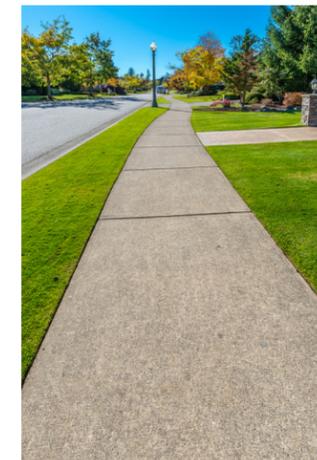
Organizational Removal Checkup Survey

Taking this 10-question survey will help your organization better understand a "state of readiness" to best perform current and upcoming removal and surface-prep projects on time... and on budget!

This survey is available online at:
<http://www.smithmfg.com/news/organizational-checkup-survey>

1. We have a clear vision in writing of our removal/surface-prep operations that has been properly communicated and is shared by everyone.
2. Our removal/surface-prep specifications are clear, and written as a separate line item in our contracts. We are reviewing, planning, and operating around them.
3. Our removal/surface-prep process is clear, and our systems and procedures to complete the work reflect that.
4. We have the right removal/surface-prep equipment and right consumables to consistently deliver the desired surface finishes (profiles) for all our jobs.
5. Our removal/surface-prep equipment and consumables are properly serviced, and our efforts are focused on maintaining it.
6. Our personnel are properly trained to prepare for any concrete or asphalt surface or marking material inconsistencies by using the correct equipment and consumables to achieve the correct surface finishes (profiles).
7. We have a proven removal/surface-prep process for doing the right work without damaging the surface, or changing the surface characteristics that our customers expect. It has been named and visually illustrated, and everyone is adhering to it.
8. All of the people involved in our removal/surface-prep operations are the right people who are properly trained, and want to do the job correctly.
9. We keep daily records of our removal/surface-prep operations using a daily job log to record all variables, and to track our performance metrics.
10. Everyone practices on the job "safety first" using the right personal protection and dust-collection equipment to protect the operator, job site, and environment.

STEP 1 • PREPARing



Before starting, evaluate the surface condition by walking the jobsite and taking photos of the work to compare against the site plans.

Write down all discrepancies and deficiencies, and include your surface-improvement solutions.

To ensure client's long-term success, introduce these tools available on line at smithu.com *Surface Profile Inspection Tool, Selection Guides, Best Practice Worksheets and Surface-Preparation Specs.*

STEP 4 • PERFECTing



After prepping, test to determine the surface is sound and clean using ASTM chain and pull tests. If not, go back to step #2 for corrective actions.

Confirm the correct profile is achieved using the surface profile inspection tools.

Apply a final vacuum pickup for the Perfect Prep ending prior to the new application. For further details, please contact your SMITH Rep.





HOW TO USE THIS GUIDE

Knowing what machine, cutter, set-up pattern and removal process to bring to the job is essential. This Removal Selection Guide will help you best manage job expectations before starting, bidding, or while completing the job. Simply answer some or all of the 20 common job questions to help you select the right equipment, cutter tool and removal process. After submitting the form, you will receive an answer collected from a database of best contractor practices.

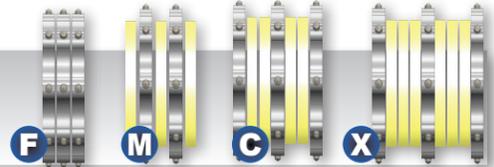
The goal of this guide is to help you save time, money, and help you achieve the right surface profiles on your current or future jobs.

What material are you removing?	<input type="checkbox"/> Asphalt <input type="checkbox"/> Build-ups <input type="checkbox"/> Coatings <input type="checkbox"/> Cold-plastics <input type="checkbox"/> Concrete <input type="checkbox"/> Concrete forms	<input type="checkbox"/> Dirt, Oil or Grease <input type="checkbox"/> Epoxy <input type="checkbox"/> Flaking paint <input type="checkbox"/> High-spots <input type="checkbox"/> Mastics or Glues <input type="checkbox"/> Mortar or Grouts	<input type="checkbox"/> Non-skids <input type="checkbox"/> Overlays <input type="checkbox"/> Preform tapes <input type="checkbox"/> Polyurea <input type="checkbox"/> Prep surfaces <input type="checkbox"/> Raised sidewalks	<input type="checkbox"/> Sealer or Cures <input type="checkbox"/> Surface-marks <input type="checkbox"/> Thermoplastic <input type="checkbox"/> Traffic paints <input type="checkbox"/>
What surface are you working on?	<input type="checkbox"/> Balconies or Decks <input type="checkbox"/> Brick or Pavers <input type="checkbox"/> Commercial floors <input type="checkbox"/> Dairy barns	<input type="checkbox"/> Dense-grade HMA <input type="checkbox"/> Ice <input type="checkbox"/> Open-grade HMA <input type="checkbox"/> Roughen concrete	<input type="checkbox"/> Sidewalks/Walkways <input type="checkbox"/> Slurry, chip, fog seals <input type="checkbox"/> Smooth concrete <input type="checkbox"/> Stamped surface	<input type="checkbox"/> Steel surfaces <input type="checkbox"/> Tined concrete <input type="checkbox"/> Uneven surfaces <input type="checkbox"/> Wood floors
Age of surface?	<input type="checkbox"/> 0 – 30 days	<input type="checkbox"/> 1 – 12 months	<input type="checkbox"/> 1 – 4 years	<input type="checkbox"/>
Surface condition?	<input type="checkbox"/> Smooth	<input type="checkbox"/> Tined	<input type="checkbox"/> Rough	<input type="checkbox"/>
Ambient conditions?	<input type="checkbox"/> Wet	<input type="checkbox"/> Dry	<input type="checkbox"/> Temperature _____°F _____°C	
Will toppings be applied?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Type _____	
Your removal depth?	<input type="checkbox"/> -1/4" - 0"	<input type="checkbox"/> 0" - 1/8"	<input type="checkbox"/> 1/8" - 1/4"	<input type="checkbox"/>
Working altitude?	<input type="checkbox"/> Below sea level <input type="checkbox"/> 0 – 500 feet	<input type="checkbox"/> 501 – 2,000 feet <input type="checkbox"/> 2,001 – 5,000 feet	<input type="checkbox"/> 5,001 – 15,000 feet <input type="checkbox"/> 15,001 +	
Desired finished profile?				
Will dust need to be collected?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes—HEPA	
Walls or obstacles?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Type _____	
Your power needs?	<input type="checkbox"/> Air	<input type="checkbox"/> Electric	<input type="checkbox"/> Gas	<input type="checkbox"/> Propane
When does your job start?	<input type="checkbox"/> 0–5 Days	<input type="checkbox"/> 6–29 Days	<input type="checkbox"/> 30–60 Days	<input type="checkbox"/>
When will your job end?	<input type="checkbox"/> 0–5 Days	<input type="checkbox"/> 6–29 Days	<input type="checkbox"/> 30–60 Days	<input type="checkbox"/>
Daily production needs?	<input type="checkbox"/> 0–99 SF	<input type="checkbox"/> 100–999 SF	<input type="checkbox"/> 1000–9,999 SF+	<input type="checkbox"/>
Your labor experience?	<input type="checkbox"/> None	<input type="checkbox"/> Novice: 0-1 yr	<input type="checkbox"/> Apprentice: 1-4 yr	<input type="checkbox"/> Expert: 5+ yrs
Got equipment?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Make/Model _____	
Got cutters?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Type/Qty. _____	
Capital budget?	<input type="checkbox"/> 0 to \$1,999	<input type="checkbox"/> \$2,000 to \$4,999	<input type="checkbox"/> \$5,000 to \$14,999+	<input type="checkbox"/>
Cutter budget?	<input type="checkbox"/> 0 to \$1,999	<input type="checkbox"/> \$2,000 to \$4,999	<input type="checkbox"/> \$5,000 to \$14,999+	<input type="checkbox"/>

What customers say about SMITH

"Before starting any surface preparation job, we use this guide to assure we have the right cutters, equipment and personnel to complete the job on-time and on-budget." S. Hendren

Desired Surface Finish Profiles (SP1-10) by selecting the right cutter drum, offset spacing pattern (F, M, C, X) and removal process. Cutters can be set inline to groove, and to narrower widths. Adding spacers increases cutter penetration. (F) - 0 spacer; (M) - 1 spacer; (C) - 2 spacers; (X) - 3 spacers.



Drum Style Cutters									
Best Cutter Selection	Wire Brush	Star Steel Cutters	Blunt Steel Cutters	Carbide Flails	4N1 Carbide Full-Widths	Carbide Millers	Carbide Scrapers	Carbide Picks	Diamond Shavers
Cutter Drum Setup/Style	F	F M C	F M C	F M C X	F M	F M C	F M	OFFSET	F M
Profile	SP1	SP3-5	SP3-5	SP4-9	SP3-6	SP3-6	SP3-6	SP9-10	SP3 – 4
Service Life	Short	Short	Short	Long	Long	Long	Long	Long	Long
Cost	\$	\$	\$	\$\$	\$\$	\$\$	\$\$\$	\$\$	\$\$\$
Ease of Use	Easy	Easy	Easy	Easy	Moderate	Moderate	Moderate	Easy	Moderate
Best For: A - Asphalt C - Concrete S - Steel O - Other	Dirt, oil, grease, sealer, cure, flaking paint A • C • S • O	Brush blast, cleaning, paints, cures, dirt, grease, sealer, cure A • C • S • O	Brush blast, cleaning, paints, cures, dirt, grease, sealer, cure A • C • S • O	Hard surfaces, paints, coatings, epoxies, leveling, profiling, grooving A • C • O	Stripping, control depth, grooving, cleaning, coating and paint removal A • C	Soft surfaces, coatings, tapes, thermosets, thermoplastics A • C	Mastics, glues, tapes, thermosets, plastics, joint compounds A • C	Leveling, bulk removal, fracturing C	Leveling, grooving, grinding, shaving without microcracking C

Rotary Style Cutters					
Best Cutter Selection	Wire Brush Rotary Disc	Carbide Pin Rotary Bits	Carbide Pin Rotary Bits	Carbide Pin Rotary Bits	Carbide Pick Rotary Disc
Cutter Style	6 BRUSHES	216-PIN	144-PIN	72-PIN	OFFSET
Profile	SP0-1	SP3-6	SP4-7	SP5-8	SP3
Service Life	Short	Long	Long	Long	Long
Cost	\$	\$\$\$	\$\$	\$\$	\$\$
Ease of Use	Moderate	Easy	Easy	Easy	Moderate
Best For: A - Asphalt C - Concrete S - Steel	Dirt, oil, grease, sealer, cure, flaking paint A • C • S • O	Coatings/paints, non-skids, surface marks C	Thermosets, thermoplastics, overlays, high-build paints A • C	Thick coatings, thermoplastics, thermosets, tapes A	Hard material, surface leveling, bulk removal A • C • O



SMITH drums are available for all machine makes and models. Contact your SMITH Representative for the best cutter selection for your equipment and job.



SMITH Premium Dry-Cutting Diamond Blades

Professionals select SMITH stacked drum assemblies for their grinding, grooving, recessing, and inlay equipment because they simply perform better than the originals. SMITH only selects ultra-premium grade diamonds, PCD, and TCT to create our unique matrix-bonding system to assure optimum cut speed and service life.

Shave, groove, grind, route, plunge-cut and more with SMITH blades engineered to provide the longest-lasting performance. Call SMITH for the matched blade sets for your next grinding project.

Use with all popular truck-mounted, self-propelled and walk-behinds for grooving, grinding, and plunge-cut operations.



Grooving

Ultra-premium high-performance diamond blades for wet/dry cut on AC and PCC substrates.

Widths: 0.125", 0.250", other sizes available
O.D.: 7" – 20"
Grit: Coarse, Medium, Fine
Bond: Soft, Medium, Hard



SMITH diamond drum assemblies can be adjusted for use on multiple surfaces just by changing the blades and spacing patterns.



Concrete Shaving

Contact SMITH with your requirements (application, pavement and equipment) for a quote on the right cutting tools to meet your job needs

PCDs, Diamond Discs, Plugs and Block Inserts

Xtreme PCDs (polycrystalline diamond) cutting materials are available in various disc and cut-segment formats. Strips, cuts, and slices elastomeric, glue, epoxy, paint, urethane, and waterproof membranes.

Contact your SMITH Representative with your application and grinder to select the right size, grit, and bond format.

12, 24, 30-segment turbo-style for fast grinding on concrete and asphalt. Segments can be configured in other patterns. Available with or without locking nuts.

Use SMITH diamond discs, plugs and block inserts with your floor grinders to wet or dry-grind down high spots or smooth rough, uneven surfaces, mastics, thin sets, urethanes, epoxy, and more. Achieve your CSP profile, polish concrete, terrazzo, granite and flint. Repair surface damage to concrete and remove trowel or surface marks.

Use with: Floor grinders, preparators, premaster, terco and other brands.



W.4.24T.NB (4.5")
W.7.24T.NB (7")

Grit: Coarse, Medium, Fine
Bond: Soft, Medium, Hard
O.D.: 4.5", 7", 9", 10", 12"



W.EGD.19181A



W.EGD.19111

Only SMITH offers a 5-edge diamond segments to improve grinding speed. Specify if you prefer rubber bushed or quick-release mounting blocks.

Sizes are approximate. Other sizes available.

If you don't see what you need here, please contact your SMITH Representative today at 954-941-9744 or cutters@smithmfg.com

SMITH cutters (tungsten carbide, diamond and steel) are an "ultra-premium" grade, the industry's highest quality manufacturing process and performance standard. SMITH flails, 4N1, cast, millers, picks and scrapers are preferred by professionals who want long life performance. Use 300s with SMITH Drums for guaranteed performance.

STRIP-IT 4N1 FULL-WIDTH CARBIDES

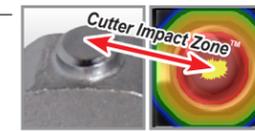
SMITH 1994 original design 4N1 Strip-it "full-width carbide cutters" are the perfect removal tool to strip, groove, mill and clean when operating in the "cutter impact zone."

	PART #	O.D.	I.D.	WIDTH
	6 Teeth CF2526	1.85"	0.61"	0.24"
	8 Teeth CF2228	2.38"	0.79"	0.24"
	16 Teeth CF4116	3.23"	1.04"	0.32"

GUARANTEE-IT 300 FLAIL-IT CARBIDES

SMITH 300s forged flail-it 10X larger carbide lasts up to 300 hours or 10X longer than conventional cutters when cutting in the "impact zone."

	PART #	O.D.	I.D.	WIDTH
	CF3001 (12 flail pins)	3.26"	1.06"	0.43"
	CF3002 (12 flail pins)	3.26"	1.37"	0.43"



Cutter Impact Zone

Ultra-Premium-LifeSM Guarantee-itSM SMITH Cutter Assemblies are 3 times longer lasting – up to 300 hours when working in the Cutter Impact Zone

ULTRA-PREMIUM LIFE CARBIDE FLAILS

Select ultra-premium long life flail pin cutters for your toughest asphalt and concrete removal projects. Last up to two times longer than competitive cutters.

	PART #	O.D.	I.D.	WIDTH
	8 Spike Flail CF2118	2.29"	1.02"	0.25"
	CF2128	2.38"	0.79"	0.24"
	CF2618	2.30"	0.68"	0.25"
	CF2119	2.68"	1.02"	0.25"
	CF3158	3.26"	1.18"	0.32"
	CF3159	3.27"	1.03"	0.32"
	12 Spike Flail CF3150.1	3.15"	1.03"	0.32"
	CF3151.1	3.15"	1.18"	0.32"
	CF3152.1	3.15"	1.30"	0.32"

	PART #	O.D.	I.D.	WIDTH
	8 Spike Round Flail CF1519	1.40"	0.47"	0.24"
	5 and 6 Spike Flail CF2514	1.68"	0.63"	0.24"
	CF2516	1.85"	0.61"	0.25"
	CF2616	2.24"	0.68"	0.25"
	CF2116	2.23"	1.02"	0.25"

ULTRA-PREMIUM LIFE CARBIDE EDGE MILLERS

We braze ultra-premium grade tungsten carbide to machined tool-steel millers in a proprietary process resulting in a cutter that removes thick film coatings, thermoplastics or asphalt fast.

	PART #	O.D.	I.D.	WIDTH
	5 or 6 Edge Scraper CM2535	1.66"	0.60"	0.85"
	CM2150	2.23"	0.68"	0.87"
	CM2151	2.23"	0.79"	0.87"

	PART #	O.D.	I.D.	WIDTH
	6 Edge Scraper CM3136	3.20"	1.03"	0.87"
	CM3137	3.20"	1.18"	0.87"
	CM3146	3.25"	1.03"	1.54"

SINTERED TUNGSTEN CARBIDE CAST SCRAPERS

It starts with the finest tungsten carbide powders sintered in a precision cast mold providing a variety of cutters designed to remove mastics, plastics, epoxy, and paint on concrete or asphalt.

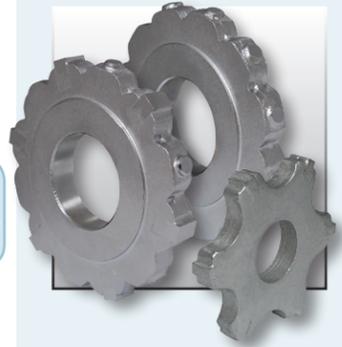
	PART #	O.D.	I.D.	WIDTH
	Scraper Squares CP2400	0.75"	0.26"	0.26"
	CP2401	0.75"	-	0.19"
	CP2402.8N	1.00"	0.38"	0.19"
	CP2403	1.00"	0.38"	0.32"
	CP3160	0.65"	0.21"	0.31"
	7 and 12-Edge Scraper CM2520	1.68"	0.53"	0.47"
	CM2550	2.22"	0.87"	0.79"

	PART #	O.D.	I.D.	WIDTH
	15-Sided Stars CF0410	1.20"	0.45"	0.14"
	CF0411	1.20"	0.45"	0.21"
	CF0412	1.20"	0.45"	0.25"
	23-Sided Star CF0413	1.55"	0.57"	0.24"
	10-Sided, Angled CF0409	1.05"	0.47"	0.16"
	12-Sided, Blunt CF0415	1.67"	0.61"	0.16"

Sizes are approximate. Other sizes available. (*bold part numbers are cutters depicted)

What customers say about SMITH
 "We know it costs less to run our equipment with SMITH cutters and parts." S. Vines

Guarantee-ItSM



Flail-ItSM



Mill-ItSM



Scrape-ItSM





What customers say about SMITH
 "Cutters may look alike but don't wear the same. We earn more on each job with the SMITH cutter vs. other brands." M. Allen



TOOL STEEL CUTTERS - BEAM, STAR, SAW-TOOTH

SMITH cutters are machined from high quality tool steel to close tolerances for even wear, easy set-up, and heat treated for long life. Select **Beam** for gentle removal, **Stars** for deeper substrate penetration and **Saw-Tooth** for aggressive removal.

PART #	O.D.	I.D.	WIDTH
Beam (Blunt)			
HS1013	1.65"	0.64"	.125"
HS1000	2.00"	0.59"	.156"
HS1001	2.00"	0.78"	.160"
HS2024	2.38"	0.80"	.160"
HS2025	2.38"	1.03"	.160"
HS3001.1	3.02"	1.03"	.197"
HS3030	3.02"	1.18"	.197"

PART #	O.D.	I.D.	WIDTH
Star (Sharp)			
HS1043	1.50"	0.53"	.13"
HS1053	1.65"	0.53"	.125"
HS1003	1.65"	0.64"	.13"
HS1004	2.00"	0.57"	.160"
HS1008	2.00"	0.79"	.156"
HS3002	3.00"	1.03"	.197"
Saw-Tooth (Sharp)			
HS0010	1.00"	0.44"	.125"
HS0011	1.48"	0.64"	.125"
HS0012.1	1.24"	0.63"	.125"
HS0013	1.60"	0.64"	.125"
HS2687	2.00"	0.68"	.625"

WIRE BRUSHES



PART #	Wire Brush Assembly For
107500	SPS10
920.3010A	FS200, FR200, RT200, others
65059NA	SPS8, CPM8
MR-7512A	MRL Grinders
SW-7510A	FS351, FS391, Stripe Eater
X3.00.101.00A	Set of 6 cup discs, X3, LNX8

Applications: Remove curing compounds, oil and grease deposits while protecting the substrate.
Typical Finish: SP1
Surfaces: Concrete, Asphalt or Steel
Best for: light removal (curing compounds, grease, oil, flaky paints)

ROTARY BIT CARBIDE AND STEEL PIN CUTTERS

Only SMITH's ultra-premium cutters contain the thickest and longest-wearing cutter pin and body. All cutters, sold in sets of 3, come assembled with the longest-lasting, failsafe, sealed ball bearings available. SMITH's 216 and 144-pin cutter spindles remove coatings without the grooving common when using other cutters.

16, 24, 48, and 72-pin cutters for thick film removal and thermoplastic markings, or for smoothing down high spots.



PART #	# PINS/SET	NBC*	Finish	OEM for
ED3000	72 Carbide	2	SP6	TLR7
ED3001	144 Carbide	2	SP5	TLR7
ED3002	216 Carbide	2	SP4	TLR7
PM3000	72 Carbide	3	SP6	PMEraser, LNX8, GLC, X3
PM3001	144 Carbide	3	SP5	PMEraser, LNX8, GLC, X3
PM3002	216 Carbide	3	SP4	PMEraser, LNX8, GLC, X3
LX3000	48 Carbide	1	SP6	PMEraser, Linax
LX3518	54 Steel	1	SP6	PMEraser, Linax
LX3524	72 Steel	1	SP5	PMEraser, Linax
GX024	72 Carbide	2	SP6	HMS, 20H
GX048	144 Carbide	2	SP5	HMS, 20H

Sizes are approximate. Other sizes available. (*Bold part numbers are cutters depicted)
 OEM listed models are not affiliated with SMITH. (+ NBC - # of bearings / cutter)

CARBIDE ROAD PLANING BITS



WHY SMITH?
 SMITH ultra-premium grade™ road-planing bits work best on your orbital and rotary cold planers for asphalt milling, concrete planing, micro-surfacing or coating removal.

ILL #	PART #	Description
1	MB81	Sharp tip for Bobcat, Ranjo, Alitec, etc.
2	MB83NB	Blunt tip for Bobcat Alitec, Wirtgen
3	MB28NB	Blunt tip for Wirtgen planers
4	MB28NS	Sharp tip for Wirtgen planers
5	MB89NS	Sharp tip for Bobcat, Ranjo, Alitec, etc.
6	MB66	Sharp tip for Bobcat Alitec, Wirtgen
7	MB69	Blunt tip with double wear guard
8	MB68L	Blunt tip style for Schibeci, cold-planers, etc.
9	CC81	C-clip for MB-81
10	CM01	Weld-on block for ILL # 1,2,5
11	CM02	Block for ILL # 6-9

CARBIDE CUTTER HOLDER ASSEMBLIES

Carbide Scrape-It-Away Holder
 SMITH 8-sided sharp scraper holder assemblies with CP2402 perform best on your grinders for removal of mastics, glues, plastics, epoxies and paints.



Scrape-it carbide set-up
 P/N: E-12400.2402A

SCABBLER BITS



Hard-hitting SMITH brand Scabblers are preferred by contractors, and fit your air scabblers. Sold with mounting hardware.

PART #	DESCRIPTION
SCAB.MA.5	5 Point for hard impact
SCAB.MA.9	9 Point for fine finish

DRUMS, SHAFTS AND SPACERS, BUSHING AND MORE



Need Parts?
 Ask for SMITH...
 • Bushed cutter drums with spider supports
 • Chrome plated tool-steel shafts
 • Wear-resistant drum bushings
 • Hardened plated spacers
 • Specialty wear components for your removal equipment

Got planers and don't see your cutter size?
 Visit our website or call your SMITH Representative



What customers say about SMITH
 "I don't own SMITH equipment yet, but I buy SMITH cutters and drum assemblies for my scarifiers." B. Feller

Cutter Selection (page 5)
Drums can be spaced inline with cutters to groove (G), or offset with no spacers (F), one spacer (M), two spacers (C) or three spacers (X) at full or narrow widths.



Height-adjustable vibration tension setting with comfort grips



FS200/209 Compact Scarifier/Grinder

Power Options Electric, gasoline
Weight, Dimensions 150 lbs. (42"x14"x39")
Removal Width, Depth ≤ 8" (1/8" pp)
Production Rate ≤ 400 SF (@ 1/8" pp)



POWER OPTIONS

- 160 or 270cc Honda 208 or 277cc Kohler
- 1.5 HP 110V
- 2 HP 110/220V
- 3 HP 220V or 230/460V

FS200 Deluxe™ Performance Benefits



FS200 Deluxe™ is ideal for striping contractors to remove markings and as a surface preparation tool to improve adhesion.



FS209D™ is depicted with standard front wheel and 9 HP Honda eliminating sidewalk trip hazards fast with flail-it carbide cutters.



Narrow the cutter drum to 1/4" and use the Strip-it carbide 4N1 to chase random concrete or asphalt cracks.



FS050™ Performance Edger Scarifier

Power Options Electric, pneumatic
Weight, Dimensions 12 lbs. (19"x8"x9")
Removal Width, Depth ≤ 2" (1/16" pp)
Production Rate ≤ 100 SF (@ 1/16" pp)

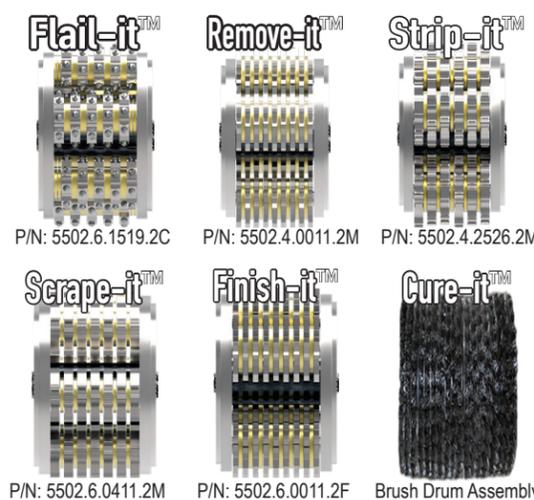


POWER OPTIONS



FS150™ Planetary Scarifier/Grinder

Power Options Electric, pneumatic
Weight, Dimensions 15 lbs. (20"x12"x11")
Removal Width, Depth ≤ 6" (1/16" pp)
Production Rate ≤ 100 SF (@ 1/16" pp)



Use the FS050™ or FS150™ to remove graffiti on walls, floors or ceilings.

Cutter Selection (page 5)
Drums can be spaced inline with cutters to groove (G), or offset with no spacers (F), one spacer (M), two spacers (C) or three spacers (X) at full or narrow widths.



Height-adjustable multi-positional ergonomic comfort grip handlebar

Reversible handle controls

Operator dashboard for speed controls, safety shutoff, disengage cam c/w deluxe 10-setting exclusive micro-depth knob

All-steel unitized heavy-duty construction, reinforced at stress points c/w industrial powder coat

Two-stage cyclone air cleaner

Forward, reverse and side-to-side operation with and without optional Sulky Driver and hitch connection

Dual 2" OD vacuum dust-collection ports

Removable side plate for side-loading drum with twin maintenance-free drive bearings and brush and chip guard

Twin in-line front with twin in-line front wheels with optional feathering caster wheel and pitch-control wheel extensions



Heavy-duty bushed carbide and diamond cutter drums



Exclusive NO-Hard-Drop cradle shock engagement



Walk or ride operator control dashboard with optional tach/hour meter



Optional water tank with wet controls

SPS10 Deluxe™ Performance Benefits:



Achieve SP 3-9 surface profiles when reducing high spots or removing coatings



Get close to walls with optional edger with diamond shaving or carbide scarifying drums



Achieve any finish with Flail-itSM, Strip-itSM, Mill-itSM, Plane-itSM, Scrape-itSM, Finish-itSM, Cure-itSM and diamond grooving and shaving drums

SPS10™ All-Purpose Surface Preparator

Power Options Electric, gasoline 250 lbs.
Weight, Dimensions (38"x19"x44")
Removal Width, Depth ≤ 10" (1/4" pp)
Production Rate ≤ 700 SF (@ 1/8" pp)



SPS8™ "Original Rugged Scarifier"

Power Options Electric, gasoline
Weight, Dimensions 225 lbs. (38"x19"x44")
Removal Width, Depth ≤ 8" (1/8" pp)
Production Rate ≤ 500 SF (@ 1/8" pp)



POWER OPTIONS

270cc Honda
277cc Kohler

Single or 3-phase
5 HP 230/460V



Get close to walls with up to 4" width cut edger assembly



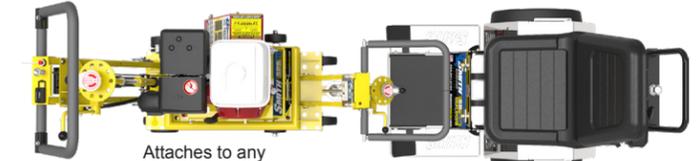
Standard 4 outboard wheels for consistent finish



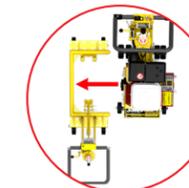
Gasoline-powered version available

EZOFF™ Up-Cut Removal System

Power Options Gasoline
Weight, Dimensions 450 lbs. (85"x34"x48")
Removal Width, Depth ≤ 10" (1/4" pp)
Production Rate ≤ 1500 SF (@ 1/8" pp)



Attaches to any Hydraulic Power Driver



SPS10 quick-mounts into Up-Cut carriage



Easy-access seated operator controls

SPS8™ Performance Benefits:



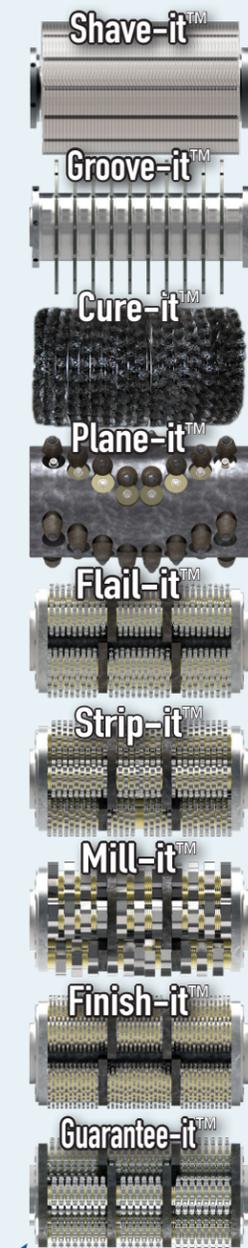
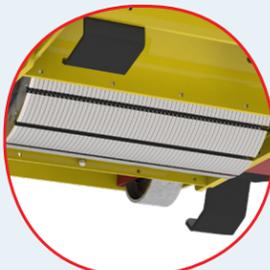
SPS8 and SPS10 have a no-bounce center-weight design for consistent finishes. Deluxe models are two times faster with larger cutters, shafts, wheels, bearings and cradle.



Prep, remove or groove easier and faster using the EZOFF™ up-cut carriage with your SMITH SPS10™ and Sulky driver

What customers say about SMITH
"Our SMITH has been a great money maker for our rental business. Its our toughest scarifier that rarely needs servicing with cutters that never seem to wear out." R. Barry

Cutter Selection (page 5)
Drums can be spaced inline with cutters to groove (G), or offset with no spacers (F), one spacer (M), two spacers (C) or three spacers (X) at full or narrow widths.



What customers say about SMITH

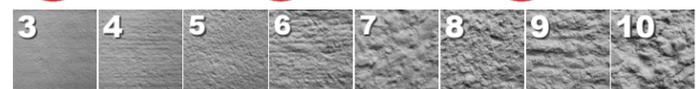
"We use SMITH diamond grooving blades because they cost less to use and cut faster than any brand we tried. We groove miles of various cut widths of up to 8" wide at 200 mil deep. The last set of blades lasted over 690,000 LF on medium hard concrete at a running rate of 900 LF/hr. No other company can match SMITH's performance and price."
G. Cheever

"I have been a fan of SMITH Manufacturing for over 10 years, SMITH has always provided excellent service, a great machine and even better cutters. I am impressed with SMITH and look forward to trying their next productivity enhancer."
R. James

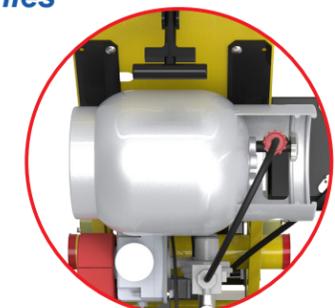
FS351™ Self-Propelled Shaver/Planer/Scarifier

Power Options Electric, gasoline, propane
Weight, Dimensions 650 lbs. (48"x26"x44")
Removal Width, Depth ≤ 15.3" (3/8" pp)
Production Rate ≤ 1000 SF (@ 3/8" pp)

POWER OPTIONS



Only the FS351 can shave, scarify, strip, scrape, plane or groove to achieve SP3 - SP10 surface profiles



Optional propane or gasoline power



What customers say about SMITH

"My SMITH FS351 diamond-shaves, planes or scarifies, and is the easiest, fastest and most reliable surface-prep tool in my fleet"
R. Bridges, Sunbelt

FS351™ Performance Benefits:



I Order your FS351 for Diamond Shave-it or Groove-it applications (high RPM), or for scarification, milling or planing removal (low RPM) operations.



- A. All-steel chassis flexibility with your equipment
- B. Lockable cut-depth controls to remove in the impact zone
- C. Adaptable for shaving, rotoplaning or scarifying
- D. Vacuum pickup maximizes containment
- E. Lowest vibration and longer bearing life
- F. Rapid lifting carriage integrated depth controls
- G. Fewer moving parts increases uptime
- H. Direct hydrostatic "no-fault" drive with variable speed
- I. Quick-change diamond or cutter drum assemblies
- J. Opt: Center depth controls for precision multi-pass removal
- K. Opt: PLC controls for accurate depth and feed rates
- L. Opt: Diamond shave up to 1½" cut depths

Cutter Selection - page 5
Equipment Specs - page 19



The easy rolling, bevel-edge tri-cut rotary scraping/smoothing erasing action of the X-Series Erasers will not groove or undermine the surface like scarifiers, planers and waterblasters.



P/N: 169068.3000
P/N: 169068.3001
P/N: 169068.3002



P/N: X3.00.101A

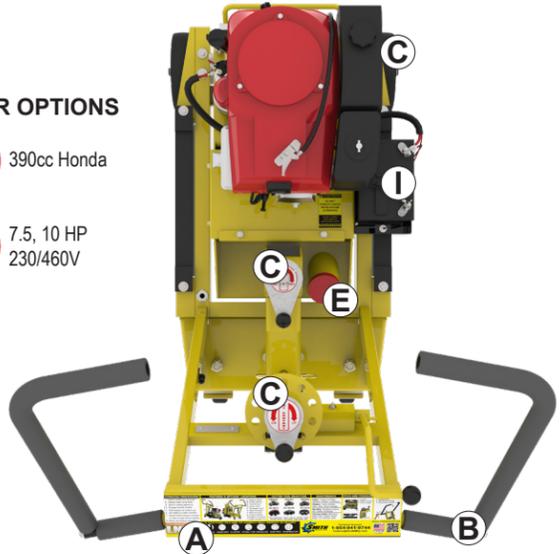


P/N: X3.00.120.68

LNx8™ No-Groove Line Eraser™
"When you must remove without grooves."
Power Options Gasoline, electric
Weight, Dimensions 450 lbs. (47"x31"x40")
Removal Width, Depth ≤ 8" (1/8" pp)
Production Rate ≤ 800 SF (@ 1/8" pp)



POWER OPTIONS

 390cc Honda
 7.5, 10 HP
230/460V


Optional automatic engagement system (AES) Ball hitch for easy attachment of power drivers and accessories

LNx8™ Performance Benefits:

Push, pull, or ride



- A. Dashboard with choke, start and stop controls
- B. Swing-style adjustable anti-vibration handle
- C. Control cutter pitch, depth and pressure to erase on all surfaces
- D. Maintenance-free bearing and dual tensioned drive belt
- E. Dust and debris control with vacuum port
- F. Tilt-up chassis for cutter access
- G. Cutter pitch spindle leveler
- H. Twin removable 45 lb. weight ballast (optional add-on plates)
- I. Optional electric start and automatic engagement system (AES)
- J. All-steel rugged construction and powder coat
- K. 10-position micro depth and engage/disengage cam with shock cradle

X1™ No-Groove Eraser™ Attachment
Power Options 13-45 HP, low-flow hydraulic
Weight, Dimensions 480 lbs. (27"x18"x24")
Removal Width, Depth ≤ 8" (1/8" pp)
Production Rate ≤ 1000 SF (@ 1/8" pp)



POWER

 Low-flow hydraulic


X1 powers a single rotary cutter spindle, and the X3 powers three spindles for 3X faster removal, or up to 24" widths. All offer up to 10 styles of cutters for SP 1-7.

Performance Benefits of X3™ and X1™ Erasers

WHY Do SMITH Erasers Leave "No-Grooves" and Undulations?

What makes the SMITH X-Series (LNx8, X1 and X3) Dry Rotary "Erasers" so unique is the suspension keeps the multi-point tri-cut removal tool spindle parallel and held at a pre-set height to the removal surface regardless of road irregularities. A simultaneous vertical and horizontal floating cutting action breaks up the coatings from the surface with a vibratory scabblor action (greater cutter pin count reduces vibration to break up thinner coatings, resulting in less surface microcracking) while the rolling cutting pins scrape across the surface at the same time, leaving a smoothed (erased) or feathered, bevel-edge blended appearance with the surrounding pavement surface, eliminating any deep scars, grooving or undulated patterns.

"Faster than a waterblaster, our X3 removes stripes, NOT the road."

Will Kirk, Asphalt Management Corp.



X3™ No-Groove Eraser™ Attachment
Power Options Gasoline, high-flow hydraulic
Weight, Dimensions 680 lbs. (60"x46"x40")
Removal Width, Depth ≤ 24" (1/8" pp)
Production Rate ≤ 2400 SF (@ 1/8" pp)

POWER OPTIONS

 High-flow hydraulic
 725cc Kohler gasoline


Adjustable spring-tensioned removal tool height and pitch control with floating terrain-following suspension for beveled finishes



HERE'S HOW WILL DID IT:
"We purchased a SMITH X3 instead of a waterblaster or grinding truck to remove the airfield markings on the island of Ascension, one of the most remote locations on earth. After many months of exhaustive research we concluded the SMITH X3 equipment will meet the remedial expectations of the Air Force considering the beginning/ending surface conditions. Set up and operational confidence in the SMITH X3 allowed us to establish and achieve completion goals while flight operations continued. The final surface was removed of markings without unsightly grooving or undulations for same day re-stripe."
—W. Kirk, Asphalt Mgt.

Make the Job Easier with SMITH's All-New, Redesigned Sulky Driver!

SR-25 Sulky Driver

Power 160cc Honda GX gasoline engine
Operating Speed Up to 10MPH (16 Km/h)
 Reverse - 6MPH (10 Km/h)
Fuel Capacity .95 gal (3.6L)



Exclusive FlexBeam™ Break-A-Way Light System

- » Fully adjustable for all types of low-light applications
- » Break-A-Way design helps protect against costly repairs and keeps you on the job

Patented Dual Foot-Pedal System

- » For forward and reverse – move between jobs without having to push
- » Patent No. 6,883,633

Exclusive ProStart™ Engine Starting System

- » Up to 50% less pulling effort to start the engine – no more broken recoils
- » Outperforms manual pull and electric-start systems when the weather starts turning cooler

Honda Engine

- » Compact, lightweight and powerful, Honda engines are reliable, technologically advanced, and easy to start
- » Oil Alert shuts down engine if oil level drops too low, preventing damage
- » Contractor preferred



The **SMITH MV5500, MV1000, and MV360** HEPA vacuums are rugged, all-steel compact, portable, industrial-grade non-clogging auto filter-cleaning dry HEPA-dust vacuum collector, with cyclone separator for use with heavy-duty concrete and asphalt grinding or cutting machines.

All machines include hour meter, collection hose, bags and pickup accessories.

Vac Model	Power	Cyclone Separator	Filtration	Airflow CFM	Waterlift	Weight	Dimensions
MV5500.H13	390cc Honda, 440cc Kohler gasoline, opt. electric start	Optional MV-SB	2-stage cloth and HEPA	550	149"	375lbs. (170kg)	55x28x59" 139x71x150cm
MV5500.E7	7.5HP 3ph/230V (50/60Hz)	Optional MV-SB	2-stage cloth and HEPA	550	149"	375lbs. (170kg)	55x28x59" 139x71x150cm
MV1000	5.3HP 220V (50/60Hz)	Optional MV-SA	HEPA automatic filter cleaning	330	118"	175lbs. (80kg)	27x27x62" 67x67x155cm
MV360	3HP 110V (50/60Hz)	Optional MV-SA	HEPA automatic filter cleaning	203	118"	128lbs. (58kg)	33.5x28.5x43.3" 85x72x110cm

Prep Essentials That Belong in Your Toolbox

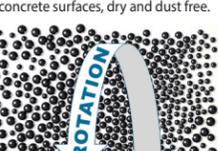


It's not always easy to figure out what type of surface-prep tools to own. Even for a concrete flooring contractor with a strong business model, putting together the right mix of surface-prep and removal equipment takes thought, time, and inevitably, money.

But regardless of what mix you eventually arrive at, there are some standards, like drum-style scarifiers, rotary grinders, HEPA vacuums, blowers, power sweepers and pressure washers that every concrete flooring contractor should have in his toolbox.

These are the building blocks upon which you can actually get your coatings or overlay materials to perform better, and remove the mistakes you make permanently without a trace.

Whether you're a newbie just growing your business, or a flooring veteran ready to ditch your inefficient tools that just don't get the job done, take a look and see what's currently missing from your arsenal:

<p>Mill/Plane when the surface is in a poor condition and requires complete restoration.</p> 	<p>Scarify with selected cutter for light, medium or heavy profiling, dust free.</p> 	<p>Shave/Groove for cutting control trenches, grooves or leveling surfaces, dust free.</p> 
<p>Water Blast to clean and profile dust free finish on hard surfaces.</p> 	<p>Rotary Erase leaves a bevel-edge no-groove surface finish, dust free.</p> 	<p>Grinding and Polishing for leveling and leaving a polished finish.</p> 
<p>Shot Blasting to clean and profile flat concrete surfaces, dry and dust free.</p> 	<p>Sand/Soda Blasting cleans and profiles surfaces.</p> 	<p>Stripping/Scraping cut and lifts glue-down vinyl, carpet and tile.</p> 

4-Step Surface-Prep Equipment Selection Process

We are frequently asked if there is a simple technique that companies can use to help select the right machine to remove coatings or prepare surfaces.

Here is a four step process to obtain unbiased information to purchase equipment.

Step 1: Meet with everyone who will be involved in operating and maintaining the equipment and develop a list of critical machine requirements.



Step 2: After the list is created, there should be a ranking so that all critical requirements have been established. The group should rank the importance of each of the critical machine requirements.

Step 3: Rate each equipment manufacturer against the ranked critical requirements. A scale of 1 to 5 is an effective rating method.

Step 4: Evaluation of objective and subjective criteria. Sometimes, certain removal machines just have a feel or reputation, that people are comfortable with. If an operator has some previous experience with a certain prep machine, and likes the way it performed, this is useful information that should be included in the decision-making process.

In conclusion, the key to any machine selection process is getting everyone to participate and offer ideas based on their unique perspectives. The more people that participate in this process, the greater the likelihood that a company will select the best machine for its needs.

Read more at <http://www.smithmfg.com/news/never-buy-prep-equipment-until-you-read-this>

Equipment Specifications

Drum Rotation Power Options	FS050 FS150		FS200 FS209		SPS8 SPS8D		SPS10 EZOFF		FS351		LNX8 X1 X3		
	D	R	D	D	D	D	D	U	D	R	R	R	
Cutter Rotation (Down, Up, Rotary)	D	R	D	D	D	D	U	D	D	R	R	R	
Electric (E), Air (A), Hydraulic (H)	EA	EA	E	E	E	E	E	E	E	E	H	H	
Gasoline (G), Propane (P)			G	G	G	G	G	G	GP	G		GP	
Cutter Drum/Tool choices	Erase-it (24, 48, 72 carbide pins)												
	Shave/Groove-it (diamond packs)												
	Plane-it (carbide picks)												
	Strip-it (4N1 full-width carbide)												
	Flail-it (carbide flails)												
	Mill-it (carbide millers)												
	Scrape-it (carbide scrapers)												
	Finish-it (beam or stars)												
	Cure-it (wire brush packs)												
Standard Specifications and Available equipment options	Removal width/pass (≤ inches) (^ swivel engaged)	2	7	8	8	8	8	10	10	16	8	8	17
	Removal depth/pass (≤ inches)	1/16	1/16	1/8	1/8	1/8	1/8	1/4	1/4	3/8	1/8	1/8	1/8
	Hourly Production rate (SF) (approx.)	100	100	400	400	500	500	700	1500	1000	800	1000	2400
	Height (inches)	9	11	39	39	44	44	44	48	48	40	24	40
	Width (inches)	8	12	14	14	19	19	19	34	26	31	18	46
	Length (inches)	19	20	42	42	38	38	38	85	44	47	27	60
	Weight (lbs) (without drum, attachments)	12	15	125	150	225	225	250	450	790	450	480	680
	● Variable depth adj + Engage cam lever (○)			●	●	●	●	●	●	●	●	●	●
	Cut distance to wall (in inches)	.25		.60		1.25		6		4	8	6	6
	● Pressure controls + Weight plates (○)										●	●	●
	Vacuum Port w/Containment shroud	●	●	●	●	●	●	●	●	●	●	●	●
	Cutter shaft OD (● Bushed drums)	10 mm	10 mm	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	25 mm	●	●	●
	Qty wheels + Feathering caster (○)			③	③	4	④	④	④	③ or ④	④	④	④
	● Optional water controls Tank (○)			●	●	●	●	●	●	●	●	●	●
	Remote power shut-off			●	●	●	●	●	●	●	●	●	●
Vibration Dampening Handlebar	●	●	●	●	●	●	●	●	●	●	●	●	
Easy Drum Access (S-sideplate, L-lift unit)	S	L	S	S	L	S	S	S	S	L	L	L	
Direct (D) or Belt-drive (B) system	D	D	B	B	B	B	B	B	B	B	D	B	
Bearings Sealed(1) or Serviceable(2)	1	1	1	1	2	1	1	1	1	1	1	1	
Parking Brake—Standard vs. Optional					O	O	O	O	O	S			
Manual, Self-Propelled, Ride-on	M	M	M	M	M	M	M	R	S	M	R	R	

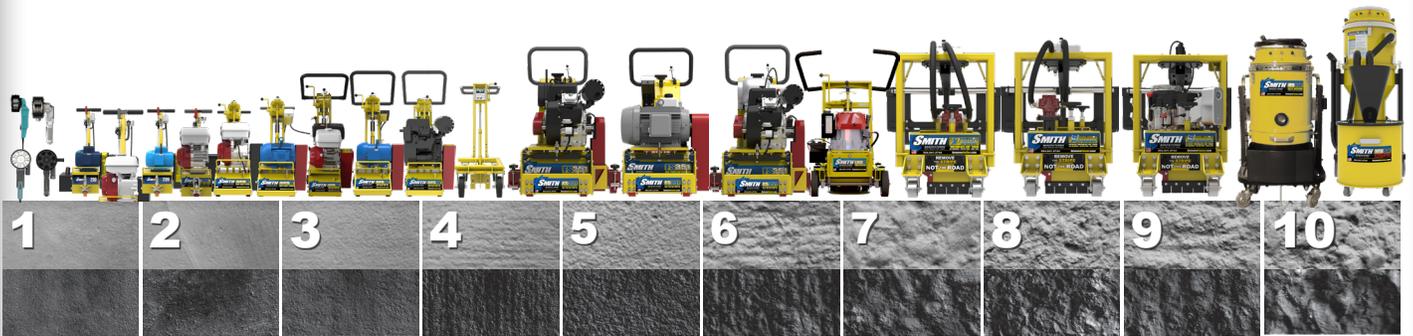


A GRACO COMPANY

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Pompano Beach, FL 33069

1-954-941-9744

www.smithmfg.com



SMITHing Helps You Achieve All 10 Profiles on Asphalt or Concrete Assuring Your Surfaces are Sound, Profiled, Dry, and Clean

	Spalled Floor or Failing Slurry Cap		Exposing Aggregate to Seal, Densify, or Polish		Route or Chase Cracks		Stripe Removal
	Concrete Risers, Deflections, or Curled Joints		Cleanup For Coatings or Polishing		Remove Cures and Sealers		Groove Inlay
	Profiling For Overlays		Texturize Surfaces		Eradicate Surface Marks		No-Groove Erasing
	Uneven Surfaces or Floor Undulations		Level Trip Hazards		Peel Off Glues and Mastics		Surface Preparation
	Failed Coatings, Contaminants, Coverings or Overlays		SMITH Surfaces For Striping		Rumble Strips		Marker Installation

Don't Just Remove It...



...for Safer, Sustainable Surfaces!