

### Metal and Concrete Working Tools 2015



## FLEX Innovation -Made in Germany

### **Innovation - Made in Germany**

**FLEX** manufactures top performance, quality power tools. We continuously explore new technological frontiers and implement designs that increase the lifespan and performance of each tool. We also focus on optimizing the handling of each tool and increasing the overall comfort and productivity of the end user. Everything we do is based on people and their work and this leads to solutions.

#### Your satisfaction is our guiding principle

All professionals who have worked with FLEX power tools recognize what is truly important: well thought out design and proven quality solutions.

**FLEX** will do everything to ensure you quality from our continuous product improvements. Whether you are grinding, cutting, sawing, drilling or polishing, our ultimate objective is your complete satisfaction.

### **FLEX Electronics**

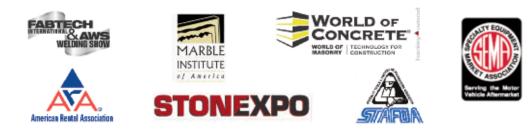
**FLEX** motors are designed with the latest technology. FLEX electronics include unique features such as soft start, RPM pre-setting, RPM cruise control, overload protection and heat sensitive temperature sensors to prevent the machine from overheating in case of extreme workloads.

All **FLEX** electric power tools feature spring loaded **FLEX** Longlife<sup>™</sup> carbon brushes. When the brushes start to wear down, a tension spring is released pushing the brushes away from the armature, resulting in an overall longer life of the product.

All **FLEX** electric power tools also feature the **FLEX** advanced airflow system, where cooling air is drawn in at the rear of the machine and blown forward through a specially designed air chamber, before exiting the machine in the front.

#### **Trade Associations**

FLEX North America associated with the following trade associations:





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#### ACCESSORY LISTING

223.670	22	319.066	22
223.689	22	326.739	22
230.230	9	326.755	22
250.496	23	326.771	22
250.498	23	326.801	22
250.499	23	326.836	22
250.501	23	326.852	22
250.522	23	326.879	22
250.610	22	326.895	22
255.731	23	326.917	22
256.285	23	326.933	22
256.286	23	327.603	22
256.287	23	334.464	6
256.289	23	348.503	9
256.290	23	348.511	9
256.415	20	348.546	9
256.973	23	348.554	9
256.974	23	348.562	9
256.975	23	348.570	9
257.004	23	348.589	9
257.375	23	349.216	9
260.230	9	349.224	9
260.237	9	349.232	9
266.132	22	349.240	9
280.992	9	349.259	9
281.018	9	349.267	9
281.026	9	350.346	9
281.034	9	350.362	9
281.042	9	352.306	9
281.050	22	354.988	9
281.077	22	366.862	9
281.085	22	368.881	8
284.718	22	368.903	8
284.726	22	368.911	8
317.950	23	368.938	8
317.969	22	369.152	8
317.977	22	370.924	9
317.985	22	370.932	9
318.175	23	370.940	9
710.175			
318.183	23	370.959	9

## New Powder Coating Operation for Magnetic Fields

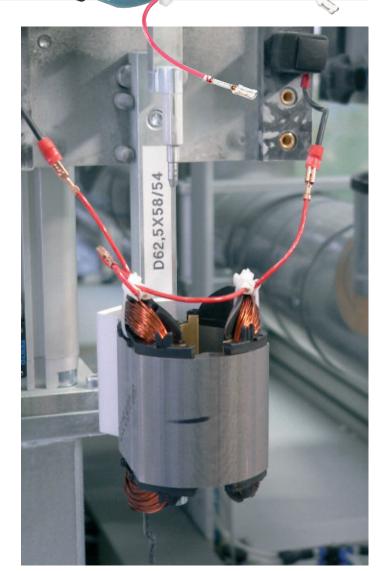
## The Most Innovative Technique On The Market

The new FLEX powder coating process for magnetic fields offers an important advantage by prolonging the longevity of FLEX machine motors.

Powder coating is a process that offers the best possible protection against abrasive elements. This is achieved by covering the coils in a uniform protective coating. Air is blown through the bottom of a container holding powdered plastic. The powder is held in suspension inside the container and behaves similar to a liquid. A magnetic field is dipped into the container where the plastic powder melts onto the pre-heated coils. The metal packet is not affected.

The new FLEX plant has 12 stations which hang from a continuous belt. After loading and connecting the magnetic field to the heating element, the process of heating, baking, coating, cleaning, hardening and cooling starts automatically. The plant is completely enclosed and has its own air extraction system. The powder feed is fully automatic. We use bondable enameled wire for the coils, which allows for the baking process, and guarantees a stable geometry of the coil head.





## Concrete Masonry

## POWERFUL IN EVERY POSITION

The wall chaser MS 1706 FR cuts grooves effortlessly into walls, limestone and porous concrete. Its patented, swivelling motor makes horizontal push cutting as well as vertical pull cutting possible.



#### **ROTATION VACUUM ADAPTER**

Depending on the direction you are working, the hose of the FLEX industrial vacuum cleaner can be fed through the rotatable nozzle so that it does not hinder the user.

## **Concrete Application**

FLEX



MILLING CUTS WITH 2 PARALLEL RUNNING FLEX HIGH-PERFORMANCE DIAMOND CUTTING DISCS

The middle partition can then be broken out using the supplied slot breaker. Wall chaser MS 1706 FR-Set



#### THE PATENTED TURN

It's only possible with the FLEX wall chaser, pull cutting for vertical and push cutting for horizontal slots. Just unlock, swivel the motor, lock - finished!



EASY CUTTING DEPTH ADJUSTMENT You can use the scale - which is divided into 5 mm increments - on the disc guard to set how deep the milled cut should be.

#### COMPLETE KIT

Plastic carrying case and two Diamant Jet Vi-speedcut cutting discs for rapid cutting of masonry, limestone and porous concrete.

## **Concrete Application**

### MS 1706 FR-Set

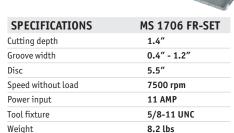
#### 333.816

## The new FLEX wall chaser for push and pull cutting

The unique rotating motor system allows the machine to be used for pull cutting for vertical slots, and push cutting for horizontal slots. Now wall chasing for the laying of cables or conduits is childs play. Cuts two parallel slits up to 35 mm deep and 30 mm wide.

#### STANDARD EQUIPMENT

34.464
94.034
53.049
18.914
91.612
29.253
27.026
52.188
27.034



FLEX



#### **ADVANTAGES AT A GLANCE**

- FLEX four-fold FR electronic control: with consistent speed control by tachometer generator, soft start, overload protection and temperature monitoring
- Quality shut-off carbon brushes: if the carbon brushes wear down, the motor will be automatically switched off and thus protected from damage.
- Rotating motor allows for push and pull cutting
- Optimal dust extraction and maximum safety due to enclosed guard
- Toolless blade changing and slit width adjustment
- Rotating adaptor for dust extractor
- Adjustable cutting depth
- Plunge cut stop
- Complete kit: with plastic carrying case and 2 Diamantjet VI- Speedcut discs for rapid cutting of masonry, limestone, concrete and porous concrete



## Concrete Masonry

## FLEX

## **Floor and Wall Finishing**



## The small FLEX bushhammer for stairs

60 aggressive hard-metal tips of the machinetake care of the job quickly and with precision. The rotating bushhammer with the hard-metal discs cushioned by rubber shock absorbers which reduces vibration and is easy on your joints. The machine can be expertly guided by the grip hood.

SPECIFICATIONS	LST 1503 VR
Speed without load	1,000-3,000 RPM
Powerinput	11 AMP
Working width	40-92 mm
Weight	13.0 lbs

#### STANDARD EQUIPMENT

1 grip cover	254.212
1 stop, complete	259.193
1 carbide tipped complete 100	261.653
1 hexagon socket screw key, special tool	115.460



#### Bushhammering prevents slippage

Smooth natural stone floors can turn into slippery danger zones in wet weather. Roughening helps alleviate this problem and ensures better traction. In the past this was difficult once the natural stone slabs had been set. With the FLEX bushhammer this job is taken care of in just a few minutes even on the hardest granite surfaces.

## Call 1-877-331-6103

www.FlexNorthAmerica.com

#### LST 1503 VR ADVANTAGES AT A GLANCE

- FLEX four-fold full-wave electronics: with speed selection and consistent speed control, soft start, overload protection.
- Dust extraction: for use even in occupied buildings
- Quality shut-off carbon brushes: if the carbon brushes wear down, the motor will be automatically switched off and thus protected from damage

Sanding discs/polishing pads are to be purchased separately.

## **Concrete Mixers**

### MXE 1102

390.860

#### 1080 Watt Two Speed Mixer With Speed Control

FR Full-wave electronic control with soft start, temperature monitoring, overload protection and accelerator switch for a controlled run-up to the optimum mixing speed. Sustained power in all ranges. Large, rugged 2-gear unit with optimum ratios for powerful torque and correct speed for different materials. Ergonomic handles on the drive unit. Low weight, fatigue-free arm posture and upright body posture allow comfortable, ergonomic operation. Second gear provides exceptional sustained power in the top and low speed range. Ideal for tile adhesive, grout, filler compound, adhesive, finished plaster, adhesive mortar.

SPECIFICATIONS	MXE 1102
Speed without load-1st gear	150-530 RPM
Speed without load-2nd gear	200-750 RPM
Powerinput	1010 watts
Power output	600 watts
Tool fixture	M14
Clamping neck	1.7"
Max. mixing head	5.12"
Weight	11.7 lbs.

### **MXE 900**

390.879

#### 900 Watt Single Speed Mixer

Large, rugged single-speed gear unit with optimum gear ratio for high torque. Soft start accelerator switch smoothly adjuLow weight, fatigue-free arm posture and upright body posture allow comfortable, ergonomic operation. Perfect for mixing low-quantity mixtures. Mixing paddle for pasty to tough materials incuding tile adhesive, grout, filler compound, adhesive, finished plaster and adhesive mortar. Ideal for tilers and painters.

**STANDARD EQUIPMENT** 1 WR2 helix paddle 120x600 M14

1 open ended wrench SW19

368.881

368.881

SPECIFICATIONS	MXE 900
Speed without load	200-750 RPM
Power input	900 watts
Power output	520 watts
Tool fixture	M14
Clamping neck	1.7"
Max. mixing head	4.72"
Weight	11.3 lbs.

#### Accessories for the MXE 1102 and MXE 900 Concrete Mixers

		QP	Order Number
UT	Helix Paddle WR2	1	368.881
	Spiral Paddle RR2	1	368.903
-730	Helix Paddle WR3R	1	368.911
	Disc Paddle SR2	1	368.938
	Beater RB	1	369.152



## Grinding Sanding Polishing

## Wall and Ceiling Sander

### WSE 7 Vario Plus

#### 396.400

## The new FLEX Handy-Giraffe® Wall And Ceiling Sander

The unique sander is ideally suited for sanding plaster boards, solid styropor insulation slabs, and for preparation for painting. VR electronic control includes stepless speed selection, tachogenerator-controlled constant speed, overload protection, re-start inhibit and temperature monitoring.

#### STANDARD EQUIPMENT

Round sanding head with velcro	
60 grit	(3) 348.503
Round sanding head with velcro	
100 grit	(3) 348.538
Round sanding head with velcro	
180 grit	(3) 349.232
Triangular sanding head 80 grit	(3) 348.562
Triangular sanding head 100 grit	(3) 348.570
Velcro Sanding Grid, 80 grid	(2) 260.237
Velcro Sanding Grid, 100 grid	(2) 230.230
Dust Collector Nozzle	(1) 3135030



#### **ADVANTAGES AT A GLANCE**

 VR electronic control: stepless speed selection, tachogenerator-controlled constant speed, overload protection, restart inhibit and temperature monitoring.

FLEX

- Completely cast electronic components prevent damage due to metal dust; 3-fold winding protection reduces motor wear and increases service life.
- Grip hood for easy handling and precise working.
- Interchangeable head system for round and triangular sanding head for sanding close to edges.
- Effective dust extraction from between the brush ring and sanding pad (round) and through the 10-hole extraction
- ports prevents clogging of the abrasive . • Brush ring is spring-mounted so the
- round sanding head accurately follows all uneven contours.
- Backing pad with hook and loop face.
- Defined hose guidance and effective dust extraction due to large hose cross-section.
- Lightweight and easy-to-use

#### Accessories for the WSE 7 Vario Plus Handy-Giraffe® Wall and Ceiling Sander

#### Sanding Heads/Backing Pads

S.	Description	QP	Order number
	Round Sanding Head	1	350.346
	Triangular Sanding Head	1	388.289
	Velcro Backing Pad Round, Hard 8.85"	1	350.362
	Velcro Backing Pad Round, Medium 8.85"	1	352.306
	Velcro Backing Pad Round, Soft 8.85"	1	366.862
	Velcro Triangular Backing Pad	1	354.988

#### Sanding Paper, Round 8.85"

	Description	QP	Order number
	P 40 Grit, Sanding Paper, Round 8.85"	20	370.924
	P 60 Grit, Sanding Paper, Round 8.85	25	348.503
	P 80 Grit, Sanding Paper, Round 8.85	25	348.511
	P 120 Grit, Sanding Paper, Round 8.85	25	349.216
	P 150 Grit, Sanding Paper, Round 8.85	25	349.224
	P 180 Grit, Sanding Paper, Round 8.85	25	349.232
	P 220 Grit, Sanding Paper, Round 8.85	25	348.546
	Pack of 80/100/120/150/180 Grit	25	370.932

#### Sanding Paper, Triangular 11.41"

Description	QP	Order number
P 40 Grit, Sanding Paper, Triangular 11.41"	20	370.940
P 60 Grit, Sanding Paper, Triangular 11.41"	25	348.554
P 80 Grit, Sanding Paper, Triangular 11.41"	25	348.562
P 100 Grit, Sanding Paper, Triangular 11.41"	25	348.570
P 120 Grit, Sanding Paper, Triangular 11.41"	25	349.240
P 150 Grit, Sanding Paper, Triangular 11.41"	25	349.259
P 180 Grit, Sanding Paper, Triangular 11.41"	25	349.267
P 220 Grit, Sanding Paper, Triangular 11.41"	25	348.589
Pack of 80/100/120/150/180 Grit	25	370.959

#### Velcro Abrasives, Round 8.85"

Description	QP	Order number
80 Grit Velcro Sanding Grid, Round 8.85"	25	260.237
100 Grit Velcro Sanding Grid, Round 8.85"	25	260.230
S320 Grit Superfinishing Pad, Round 8.85"	10	281.026
S1200 Grit Superfinishing Pad, Round 8.85"	10	281.018
A 100 Grit Velcro Sanding Fleece, Round 8.85"	10	281.042
A 180 Grit Velcro Sanding Fleece, Round 8.85"	10	281.034
Soft Velcro Polishing Sponge, Round 8.85"	5	280.992

## **Stainless Steel Vacuum**



#### **Stainless Steel Vacuum**

The new FLEX Stainless Steel Vacuum delivers the rugged durability and professional performance you need for garage, shop, factory, workshop or office. Stainless steel tank is easy to clean an features a tank drain that lets you empty the tank without lifting the vac. Super quiet performance for use in a variety of office, hospital and school environments. Comes equipped with static guard strap and full dolly with tool holder.



SPECIFICATIONS	VC 12
Tank Capacity	12 Gallons
Peak HP	6.0
Sealed Pressure	60"
Electrical Specs	12V, 60 Hz, 12 amps
Weight	40 lbs.
Hose Length	12' LockOn
Airflow	175 CFM
Power Cord	18 Foot

#### STANDARD EQUIPMENT

12' x 1.25" hose (friction)90571001.25" extension wands(2) 906140010" dual surface nozzle9060300Round brush nozzle9061500Cartridge filter with retainer9030400Collection bag9067200

#### Accessories for the VC 12 Stainless Steel Vac



	QP	Order Number
Gore HEPA Cartridge Filter	1	9034005
Disposable Filter Bag	1	9067205
Cartridge Filter with Retainer	1	9030400
Claw Nozzle for Car Upholstery	1	9196105

#### ADVANTAGES AT A GLANCE

- Super Quiet Operation.
- Tank drain lets you drain water without lifting the unit.
- Variety of 1.25" accessories available.
- Stainless steel for extra durability
- Static guard strap
- Fully dolly with tool holder
- Extra outlet on vac for power tools



**On Demand Feature** 



Static Guard Strap



## Metal Working

## FLEX

## Metal Working Tools



# What do professionals use for grinding?

# The Innovator and Leader in Grinder Technology

**FLEX** grinders are designed as rugged power tools and have been engineered to take a beating. We listened to our customers and have designed a family of power tools that will effectively get the job done. Any job, anywhere.

All **FLEX** grinders are equipped with our innovative Longlife carbon brushes. The carbon brushes inside the motor are tension spring loaded.

Many of the grinders are designed with full wave electronics and feature soft start, overload protection and temperature sensors to prevent the motor from overheating.

These products also feature an RPM cruise control. The full wave electronics will automatically adjust the motor strength to deliver consistent and constant RPM regardless of the pressure applied to the tool. Consistent and constant RPM are important, because it delivers superior grinding results and increases the overall life of the grinder. FLEXGRIP – THE MULTI-HANDLE With built-in holding wrench for exchanging the discs without additional tools.



SLENDER REAR SPECIAL GRIP Ideal for surface finishing because of extremely flat attack angle and balanced weight distribution. Equipped with dustprotected on/off switch located underneath, safety catch and lock.



FIGHT VIBRATION – FLEX SOFTVIB-HANDLE The vibration damping construction of the elastic body of the SoftVib-Handle reduces vibration levels when compared to standard handle by up to 60%. The hand and arm joints of the user are subjected to less stress and fatique.



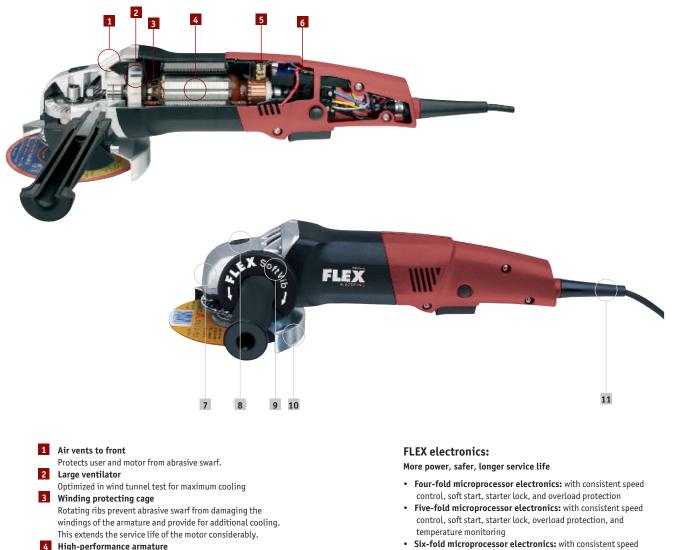
PATENTED SAFETY DISC GUARD Can be adjusted without tools in 24 stop positions by 360 degrees. Turnable in one direction only.



## Grinding Sanding Polishing

## FLEX

## For metal and concrete surfacing Angle grinders



Sustained power and endurance, heat-resistance. Winding protected from aggressive swarf by a winding protecting cage.

- 5 Quality auto-stop carbon brushes
- Protects the motor from damage.
- 6 Microprocessor electronics
- Greater performance, safer, more convenience. 7 Gearbox housing made of die-cast aluminum Light, sleek, robust.
- Spindle lock
- double safety because of recessed design.
- 9 FLEX SoftVib the multi-handle The vibration damping construction of the elastic body of the SoftVib-Handle reduces vibration levels noticeably. Equipped with built-in holding wrench - for exchanging the discs without additional tools.

#### 10 Patented safety disc guard Adjustable without tools, impossible to lose, with rotation lock. Perfection to the very last detail Highly flexible cable bushing prevents cable breakage. 13-foot power cable with FLEX-red plug.

• Six-fold microprocessor electronics: with consistent speed control, soft start, starter lock, overload protection, temperature monitoring, and speed selection set by an adjustment wheel

#### **FLEX Performance:**

What is transferred to the disc is critical

- **Outstanding output:** thanks to highly machined armature
- High operating efficiency: great energy with cost-efficient operation
- · Best endurance run characteristics: due to high manufacturing precision

#### **FLEX Ergo design:**

created for precise, low-fatigue work

- Optimal center of gravity: precisely in the middle of the machine: finely balanced
- Sleek motor case: with ergonomic, waisted grip depression
- Structure surface\*: no slipping, for a secure grip

\* on G-versions with super-slender rear special grip

## **Metal Finishing**



#### **Compact, High Performance** 6" Variable Speed Sander/Polisher

Powerful 10 AMP sander/polisher specially designed for work on soft natural stone and sensitive metal surfaces. When plastic grinder head cover is removed, tool is able to reach into the tightest areas.

SPECIFICATIONS	L 1503 VR
Max. tool diameter	6″
Speed, without load	1,200-3,700 RPM
Power input	10 AMP
Tool fixture	5/8-11
Weight	4.2 lbs

STANDARD EQUIPMENT		
1 side handle	194.034	
1 grip cover	259.403	

Sanding discs/polishing pads are to be purchased separately.

### L 1506 VR

267.023



#### Compact, Heavy Duty 5" Variable Speed Sander/Polisher

Powerful 11 AMP full wave electronic sander/ polisher with infinitely adjustable variable speed (2,200-6,800 RPM). Used in metal, automotive and natural stone industries.

L 1506 VR
5″
2,200-6,800 RPM
10 AMP
700 Watts
5/8-11
4.2 lbs

#### STANDARD EQUIPMENT

1 guard	267.503
1 side handle	194.034
1 clamping flange	132.322
1 retaining nut	132.330
1 spanner wrench	100.110
1 removable plastic sander head cover	259.403

#### **ADVANTAGES AT A GLANCE**

- Spindle lock: for easy disc changes
- Tool fixture: 5/8-11 spindle thread
- Quality shut-off carbon brushes: protects the motor against damage

#### **ADDITIONALLY FOR L 1503 VR**

- FLEX VR electronics: with consistent speed control by tachometer generator, soft start, overload protection, and speed selection.
- Compact dimensions

#### **ADDITIONALLY FOR L 1506 VR**

- FLEX four-fold VR electronics: with consistent speed control by tachometer generator, soft start, overload protection, and speed selection.
- Compact dimensions
- Spindle lock: for easy disc changes
- Tool fixture: 5/8-11 spindle thread
- Quality shut-off carbon brushes: protects the motor against damage.

## Grinding Polishing

## FLEX

## **Grinding - Polishing**



#### Compact, Electronic 5" Variable Speed Sander/Polisher

This 6.6 AMP angle grinder/polisher is two tools in one. When operated at low RPMs the tool can be used as a polisher. When operated at high RPM the tool becomes a grinder.

L 1106 VE
5″
2,000-6,500 RPM
6.4 AMP
5/8-11
3.5 lbs

#### STANDARD EQUIPMENT

1 Guard 5″	267.503
1 side handle	194.034
1 clamping flange	132.322
1 retaining nut	132.330
1 spanner wrench	100.110
1 removable plastic grinder head cover	259.403

Sanding discs/polishing pads are to be purchased separately.

#### **ADVANTAGES AT A GLANCE**

- Spindle lock: for easy disc changes
- Tool fixture: 5/8-11 spindle thread
- Quality shut-off carbon brushes: protects the motor against damage

#### ADDITIONALLY FOR L 1106 VE

- Compact dimensions
- Grip cover: detachable and extremely sensitive guiding
- Additional handle: can be used in 2 positions

## Metal Finishing Tool/Grinding

#### L 3410 VRG ADVANTAGES AT A GLANCE

- FLEX Six-fold microprocessor electronics: Speed selection, consistent speed control by tachometer generator, soft start, restart protection after power interruption, overload protection, and temperature monitoring
- FLEX Motor: designed to handle substantial loads with highest efficiency for powerful output, great endurance thanks to perfect cooling, and air vents aimed to front
- FLEXgrip: ingenious solution with integrated pin spanner for wrench-free disc changing. It can be fitted on the left or right
- Gearbox: particularly flat and robust aluminum die-cast construction, accesses all corners
- Safety guard: patented, with anti-twisting lock

#### **ADDITIONALLY FOR LE 9-10 125**

- Microprocessor electronics: with tachogenerator constant speed control, speed control, soft start, restart protection after power failure, overload protection and temperature monitoring
- Powerful, strong motor for quick working progress
- Kickback stop shuts down the motor on the disc being blocked
- Additional handle: can be used in 2 positions



Tool-free adjustment of safety guard for easy, convenient operation.

## L 3410 VRG

#### 337.714

## Compact, High Performance 5" Variable Speed-Grinder

Powerful 10 AMP variable speed grinder is small and agile. A master of versatility, thanks to variable speed and excellent power. Ideal for grinding, roughing,

cutting, deburring and removal of rust. No matter what the task may be, the slim, saddleshaped motor housing and grip handle mean that this FLEX sits perfectly in your hand. The flat aluminum die cast gear head allows the tool to reach into the tightest areas.

L 3410 VRG
5″
3,000-11,000 RPM
10 AMP
5/8-11
4.1 lbs

#### STANDARD EQUIPMENT

1 grinder guard	294.438
1 FLEXgrip™ handle	292.354
1 clamping flange	132.322
1 retaining nut	132.330

FLEX II.

### LE 9-10 125

#### 350.672

#### High Performance Variable Speed Angle Grinder

This universal angle grinder is ideally suited for steel/metal surface finishing, for work on the jobsite, renovations as well as for vehicle bodywork and construction firms. Toolfree adjustment of safety guard for convenient operation. Double winding protection from metal dust reduces motor wear and lengthens service life.

LE 9-10 125
5"
6,000-10,000 RPM
7.5 AMP
500 watt
4.3 lbs.

#### STANDARD EQUIPMENT

1 grinder guard	358.029
1 handle	335.274
1 clamping flange	335.282
1 clamping nut	100.080

Sanding discs/polishing pads are to be purchased separately.

## Metal Finishing

## FLEX

## **Metal Finishing**

THE SPECIALIST FOR LARGER PIPE DIAMETERS The sanding belt nestles itself to any curve up to 10" diameter. Weld seam and pipe sander LBR 1506 VRA.



THIS ROUNDS IT OFF Rubber drive and polishing fleece mirror-finish stainless steel guard-rails. Burnishing machine LP 1503 VR.



#### FLEX Metal Surface Treatment Guide

#### Removal of weld seams on stainless steel, steel and aluminum

- a. Pre-sand with coarse grinding grits (60-100 grits) depending on the thickness of the welding seam.
- b. As soon as the welding seam has almost been sanded to the level of the surface, change to a finer grit (120-180 grits). Work through the sequence of ever finer grits until the requested finish is achieved. Do not skip grit levels.
- c. Use SCM belts to achieve a decorative finish:
  - Use a 100/120 or a 180/240 granulation SCM belt to achieve a dull finish. Machine should be set to "3" on the RPM pre-set dial.
  - Use a 400 granulation SCM belt to achieve a brilliant finish. Machine should be set to "6" on the RPM pre-set dial.

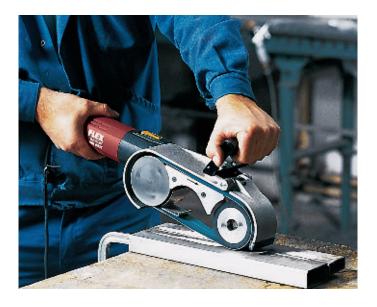
#### Removal of scratches from stainless steel and non-ferrous metal

- a. The deeper the scratch, the coarser the grit is to be used.
- b. Start sanding with the coarsest grit. Machine should be set to "2" on the RPM pre-set dial. Move the sander over the entire area of the scratch.
- c. When the scratch is almost invisible, start working with even finer grits until desired finish has been achieved. Do not skip grit levels as this will leave an unfavorable finish.

#### Achieving a polished mirror finish on stainless steel and non-ferrous metal

- a. Start with a coarse grit. Work the surface until you have a "universal scratch pattern".
- b. Step through the various grit levels (grit 400, grit 600, grit 1,500) until you have finished with the finest grit. Only proceed to the next grit level when a universal scratch pattern has been achieved.

## Metal Surface Treatment Tools



## Revolutionary Metal Treatment Tools

FLEX metal surface treatment products were designed with a very specific purpose: To reduce the time needed to treat metal products and thus increase the productivity of the metal surface treatment professional.

The metal surface products include the revolutionary LBR 1506 VR pipe sander, the LBS 1105 VE finger belt sander and the LP 1503 VR finishing machine.

#### METAL SURFACE TREATMENT TOOLS

	TYPE OF TOOL	APPLICATION	INDUSTRY
LBR 1506 VRA	"wrap around" pipe sander	<ul> <li>Pipe sanding</li> <li>Removal of welding seams</li> <li>Removing paint/varnish</li> <li>Sanding handrails</li> </ul>	<ul> <li>Refineries</li> <li>Liquid/Gas process manufacturers</li> <li>Food processing industry</li> <li>Marine applications</li> <li>Hospitals</li> <li>Kitchen/Bath</li> </ul>
LP 1503 VR	Infinitely adjustable universal metal finish- ing machine	<ul> <li>Polishing, smoothing, dulling, graining, brushing, deburring and roughening of stainless steel, aluminum and synthetic surfaces</li> </ul>	<ul> <li>Metal fabrication shops</li> <li>Automotive</li> <li>Kitchen/bath stainless steel sink manufacturers</li> <li>Faucet manufacturers</li> <li>Decorative finishing shops</li> </ul>
LRP 1503 VRA	Boa sander- All around polishing solution	<ul> <li>The perfect solution for sanding and polishing pipe construction</li> </ul>	• All industries that have hard to reach areas requiring sanding and polishing

## Metal Finishing

# Metal Surface

### **LBR 1506 VRA**

282.510

## Pipe Belt Sander for Weld and Seam Sanding Applications.

The LBR 1506 VRA is a "wrap-around" pipe sander. The sanding belt wraps around the pipe and consequently requires only a few steps to sand the entire circumference of the pipe. The LBR 1506 VRA is designed to work on 3/8 to 10" diameter pipes and renders welding seams invisible and carefully gives every stainless steel pipe a high gloss finish. Due to its very powerful 11 AMP motor, its infinitely adjustable speeds and its unique wrap-around technology, this product is used where many pipes and handrails are found (refineries, liquid/ gas operations, food processing industries and hotels).

#### Accessories: see page 22.

SPECIFICATIONS	LBR 1506 VRA
Power input	11 AMP
Belt speed	33-98 ft/sec
Belt dimensions	618 x 40 mm
Weight	11.25 lbs

#### STANDARD EQUIPMENT

1 side handle	252.721
1 bail handle	259.290
1 set of grit sanding belts	
(36, 60, 120, 240)	246.816
1 Hexagon socket	
screw key, special tool 5	115.460
1 Hexagon socket	
screw key, special tool 6	104.167
1 Hexagon socket	



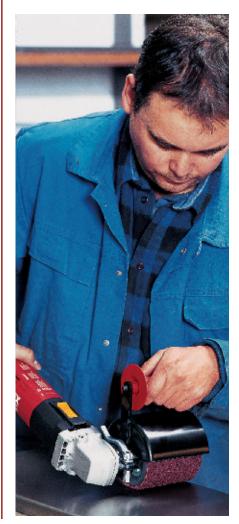
#### **ADVANTAGES AT A GLANCE**

• Quality shut-off carbon brushes: protects the motor against damage

**Treatment Tools** 

#### **ADDITIONALLY FOR LBR 1506 VRA**

- FLEX four-fold full-wave electronic control: with consistent speed control, soft start, overload protection and speed pre-selection
- Sanding belt tension: spring loaded, adapts to pipe diameter from 3/8 to 10"
- Sanding belt replacement: quick and easy
- Light design: for work without fatigue
- Sanding belts: wide assortment included sanding fleece for stainless steel applications



## Metal Surface Treatment Tools

### LP 1503 VR

254.037



#### The FLEX burnishing machine for highly polished surfaces

This machine specializes in shadow-free, transitionless finishes on metal (i.e. stainless steel, aluminum), wood and plastic surfaces. Electronic control and speed preselection over a broad RPM range lends it unique versatility. Ideal for finishing, polishing, smoothing, dulling, graining, brushing and deburring, thanks to an extensive range of accessories. **Grinding discs/polishing pads are to be purchased separately.** 

Accessories: see page xx-xx.

10 AMP
4.5″
4″
3/4″
1,200-3,700 RPM
7.9 lbs

250.522

STANDARD E	QUIPMENT
------------	----------

1 set of distance rings

## LP 1503 VR PROFI-Set

335.096



#### The FLEX burnishing machine for highly polished surfaces in the PROFI-Set

Shadow-free and transmission-free metal, wood, or plastic surfaces are its specialty. Its extensive FLEX accessories make it ideal for satin-finishing, polishing, descaling, smoothing, matting, structuring, brush polishing, and deburring. Start right up with the PROFI set in the toolboxes; everything is included. Machine without standard equipment: Order no. 254.037

SPECIFICATIONS	LP 1503 VR PROFI-SET
Power input	10 AMP
Max. tool diameter	4.5"
Tool width	4"
Tool fixture	3/4"
Speed, without load	1,200-3,700 RPM
Weight	7.9 lbs

#### STANDARD EQUIPMENT

•		
1 air pump	257.004	256.284
1 rubber air roller		256.415
1 drive roller		255.731
1 kit of distance rings		250.522
1 fleece grit 280/320		256.975
1 sanding sleeve, 60 grit		256.285
1 sanding sleeve, 100 grit		256.286
1 sanding sleeve, 180 grit		256.287
1 fleece sanding sleeve, red		256.289
1 fleece sanding sleeve, blue		256.290
1 sanding-polishing sleeve 600 g	ırit	318.175
1 sanding-polishing sleeve 1500	grit	318.183
2 Velcro drive belts		281.050
1 Velcro drive belts A 180		281.077
2 Velcro sanding belts, 120 grit		284.726
1 Velcro polishing belt, 1500 grit		318.736
1 plastic carrying case with padd	ing	319.066

#### **ADVANTAGES AT A GLANCE**

- FLEX four-fold full-wave electronic control: with consistent speed control, soft start, overload protection and speed pre-selection
- Sanding tool replacement: tool-free
- Adjustable guard: for sanding tools up to 4-1/2" diameter
- Quality shut-off carbon brushes: protects the motor against damage
- 10 ft black power cord



Everything needed for universal application of the burnishing machine is clearly arranged in the case. Beyond that it provides sufficient room for additional accessories.



## Metal Finishing

## FLEX

## Metal Surface Treatment Tools

## **LRP 1503 VRA**

331.694

#### The FLEX Boa sander: all-round solution

The perfect solution for sanding and polishing pipe constructions. The sanding arm wraps itself around the pipe like a snake when pressure is applied, tackling radii up to 270°. Spring resistance between the deflection rollers means that the sanding arm and sanding belt are always uniformly pretensioned. The Boa needs only be be rotated slightly to continue treatment and achieve the perfect finish. In tight places - i.e. handrails that are fixed close to walls - the additional handle can be rotated 180°.

SPECIFICATIONS	LRP 1503 VRA
Power input	11 AMP
Belt speed	4-12 m/sec
Belt dimension	760 x 40/20 mm
Pipe max.	5″
Weight	8.2 lbs

#### STANDARD EQUIPMENT

1 sanding belt, continuous,	
80 grit, 760 x 40 mm	326.739
1 sanding belt, continuous,	
120 grit, 760 x 20 mm	326.801
1 sanding belt, continuous,	
220 grit, 760 x 20 mm	326.836
1 sanding fleece, continuous,	
fine, 760 x 40 mm	326.852
1 sanding fleece, continuous,	
medium, 760 x 40 mm	326.879
1 sanding-polishing belt,	
continuous, 600 grit, 760 x 40 mm	326.917
1 sanding-polishing belt,	
continuous, 1500 grit, 760 x 40 mm	326.933
1 plastic carrying case with padding	327.603

#### **ADVANTAGES AT A GLANCE**

- Quality shut-off carbon brushes: protects the motor against damage
- FLEX four-fold full-wave electronic control: with consistent speed control by tachometer generator, soft start, overload protection and speed preselection
- Sanding belt replacement: quick and tool-free
- High-quality 270° sanding arm: light alloy with 2 deflection rollers. Quicker progress, perfect finish, simple operation
- Additional side handle: can be rotated 180°, for narrow places
- Quality shut-off carbon brushes: if the carbon brushes wear down, the motor will be automatically switched off and thus protected from damage
- 10' black power cord
- Plastic carrying case: everything where you want it, when you want it. Standard design with extensive accessories



## **Quality Accessories Metal Finishing**

#### Continuous belts for LBR 1506 VRA and LP 1503 VR

#### Sanding belt, continuous



For pre-sanding pipes and pipe fittings

Dimensions in inches	Grit	QP	Order number
24″ x 1 1/2 "	36	10	223.670
24″ x 1 1/2″	60	10	223.689
24″ x 1 1/2″	120	10	266.132
24″ x 1 1/2″	240	10	250.610

#### Sanding fleece, continuous

	For pre-sanding pipes and pipe fittings			
	Dimensions in inches	Grit	QP	Order number
Charles P	24″ x 1 1/2″	240	3	317.977
	24″ x 1 1/2″	400	3	317.985
	24″ x 1 1/2″	100	3	317.969

#### Belts with Velcro<sup>™</sup> attachment for burnishing machine LP 1503 VR

#### Velcro<sup>™</sup> sanding belt

CONTRACTOR OF	For pre-sanding pipes and pipe fittings			
	Dimensions in inches	Grit	QP	Order number
	24" x 1 1/2"	60	10	284.718
	24″ x 1 1/2″	120	10	284.726
	24" x 1 1/2"	120	10	284.72

#### Velcro<sup>™</sup> polishing belt

For high-gloss polishing of stainless steel			
Dimensions in inches	Grit	QP	Order number
24″ x 1 1/2″	1500	2	318.736

#### Velcro<sup>™</sup> fleece



QP	Order number
2	281.077
2	281.085
	2 2

ror nigh-gloss polisining of stanitess steel			
Dimensions in inches	Grit	QP	Order number
24" x 1 1/2"	1500	2	318.73

#### Velcro<sup>™</sup> drive belt, blue

For closing and releasing the different belts. Simp tensile strength up to 220 lbs.	le applic	ation -
Dimensions in inches	QP	Order number
27.5″ x 1 1/4″	2	281.050

#### Accessories for Boa sander LRP 1503 VRA

#### Sanding belt, continuous



For polishing pipes and pipe fittings Dimensions Grit in inches

in inches			number
30″ x 1 1/2″	80	10	326.739
30″ x 1 1/2″	120	10	326.755
30″ x 1 1/2″	220	10	326.771
30″ x 3/4″	120	10	326.801
30″ x 3/4″	220	10	326.836

QP

Order

#### Sanding fleece, continuous



For polishing pipes and pipe fittings
---------------------------------------

Dimensions in inches	Grit	QP	Order number
30″ x 1 1/2″	Fine	3	326.852
30″ x 1 1/2″	Medium	3	326.879
30″ x 1 1/2″	Coarse	3	326.895

#### Sanding-polishing belt, continuous

For high-gloss polishing without polishing agents in two steps			
Dimensions in inches	Grit	QP	Order number
30" x 1 1/2"	600	1	326.917
30" x 1 1/2"	1500	1	326.933

#### QP = Quantity per package

## Metal Finishing

## Quality Accessories Metal Finishing

#### Accessories for the LP 1503 VR finishing machine for metal and stainless steel

#### Poli-clean

ALC: NOT
a sure

Hard-structured fleece wheel. For cleaning welds and intensive, pore-deep removal of rust and oxidation layers. Also creates particularly decorative longitudinal finishes on stainless steel. Dimensions in inchs QP Order numb

in inchs		number
4″ x 4″	1	257.375

#### Flap wheel sanding



Flexible sanding wheel with individual flexible flap-type sanding lamellae and keyway. 2 wheels are required. For paint removal, sanding and strong graining applications. Removes scratches, rust, old paint, scale and burrs. The 40 grit employed enables the removal of even deep scratches on stainless steel.

Dimensions in inches	Grit	QP	Order number
4″ x 2″	40	1	250.496
4″ x 2″	60	1	250.498
4″ x 2″	80	1	250.499
4″ x 2″	120	1	250.501

#### Sanding fleece



Flexible polishing wheel made of sanding grit-impregnated nylon web with a keyway. Achieves effective surface finishes on stainless steel, copper, aluminum, brass, etc. Also ideal for cleaning oxidized coatings and smoothing plastic and wood.

Dimensions in inches	Grit	QP	Order number
4″ x 4″	80/100	1	256.973
4″ x 4″	180	1	256.974
4″ x 4″	280/320	1	256.975
4″x 4″	400	1	256.976

#### **Cotton buffing wheel**



 Polishing ring made of impregnated cotton cloth. 8 are required.

 Achieves a high-gloss polishing finish on aluminum, brass and stainless steel.

 Dimensions
 QP

 order
 number

 4" x 1/2"
 8
 317.950

#### **Distance ring set**



Required for nylon brushes, stainless steel wire brushes, stranded wire brushes, cotton buffing wheels. Also necessary for sanding flaps, sanding fleeces, sanding fleece flaps, fine sanding rollers and sanding wheels less than 100 mm wide if only one sanding wheel is to be mounted.

	QP	Order number
Distance Ring Set	1 set	250.522

#### Rubber air roller

With air pump and ring fastener. For sensitive contour sanding					
Dimensions in inches	QP	Order number			
3 1/2″ x 4″	1	257.004			

#### Sanding-polishing sleeve

For high-gloss polishing without polishing agents in two steps

Dimensions in inches	Grit	QP	Order number
3 1/2″ x 4″	600	1	318.175
3 1/2″ x 4″	1500	1	318.183

#### Zirconium corundum sanding sleeves

For coarse and medium sanding					
Dimensions in inches	Grit	QP	Order number		
3 1/2″ x 4″	60 blue	5	256.285		
3 1/2″ x 4″	100 grey	5	256.28		
3 1/2″x 4″	180 brown	5	256.287		

#### Fleece sanding sleeves

For decorative	finishes		
Dimensions in inches	Grit	QP	Order number
3 1/2 "x 4"	100/120 brown	1	256.288
3 1/2″ x 4″	180/240 red	1	256.289
3 1/2″ x 4″	400 blue	1	256.290

#### **Drive roller**

For sanding belt drive		
Dimensions	QP	Order
in inches		number
3″ x 4″	1	255.731

## **Service Centers**

## Master Parts Distributor For FLEX North America Powerhouse Distributing 11011 "I" Street • Omaha, NE 68137

Toll Free: 888-809-4749 • Fax: 888-809-4748

#### **ALABAMA**

Alabama Jack 1140 5th Avenue North Birmingham, AL 35203 Phone: 205-251-8156

#### **ARIZONA**

Arizona Armature 4641 S 33rd Phoenix, AZ 85040 Phone: 602-296-4434

Glenn's Tool Service 2149 E. Indian School Road Phoenix, AZ 80160 Phone: 602-264-6203

Precision Tool And Supply 4857 East 29th Street Tucson, AZ 85711 Phone: 502-745-1100

UltraTuf Diamond 3206 E. President Street Tuscon, AZ 85714 Phone: 520-294-5006

#### **ARKANSAS**

Tool Service Co. 5732 Wheeler Avenue Fort Smith, AR 72901 Phone: 479-648-3125

#### **CALIFORNIA**

Cut It 1950 Channel Drive West Sacramento, CA 95691 Phone: 916-372-8848

Davis Tool Company 2911 S. Main Street #1 Santa Ana, CA 92707 Phone: 714-549-7836

Kleer-Vu Repair 11728 Johnson Lake Road Lakeside, CA 92040 Phone: 619-561-1720

Lee's Tools 1924 N. Long Beach Blvd. Comptom, CA 90221 Phone: 310-639-1900

#### CALIFORNIA (cont.)

Minit Tool Co., Inc. 4170 E. Washington Blvd. Los Angeles, CA 90023 Phone: 323-264-7006

#### **CONNECTICUT**

Colony Tool & Supply 15 Stiles Road New Haven, CT 06512 Phone: 203-469-0000

CS Unitec Inc. 22 Harbor Avenue Norwalk, CT 06850 Phone: 800-700-5919

Utility Electric Service 255 Chapell Road South Windsor, CT 06074 Phone: 860-246-7271

#### **FLORIDA**

Tool Master Inc. 196 East 4th Avenue Hialeah, FL 33010 Phone: 305-883-1903

Empire Tool Company 2296 W. 80th Street Hialeah, FL 33016 Phone: 305-821-0740

Florida Tool Repair 5821 Hallandale Beach Blvd. Hollywood, FL 33023 Phone: 954-892-2310

#### **GEORGIA**

South City Tool Inc. 5442 Frontage Rd. Ste 100 Forest Park, GA 30297 Phone: 404-608-9999

Romedy Power Tool Repair 121 Price Hills Trail Sugar Hill, GA 30518 Phone: 770-932-8175

#### **KENTUCKY**

Value Tools Inc. 2501 Crittenden Drive Louisville, KY 40217 Phone: 502-636-2835

#### **LOUISIANA**

Beerman Precision Inc. 4206 Howard Avenue New Orleans, LA 70125 Phone: 504-207-6000

#### MARYLAND

Machine Doctor 311 Conowingo Road Conowingo, MD 21918 Phone: 410-378-0094

#### MASSACHUSETTS

Renner-Colony LLC 5 Robert J Way Plymouth, MA 02360 Phone: 800-339-2219

Star Sales 29 Commerce Way Woburn, MA 01801 Phone: 781-933-8830

#### **MINNESOTA**

Thomas Tool & Supply 1081 E. Highway 36 Maplewood, MN 55109 Phone: 651-765-4900

Thomas Tool & Supply 945 37th Avenue NW Rochester, MN 55901 Phone: 507-281-3786

Thomas Tool & Supply 3401 West Highway 13 Burnsville, MN 55337 Phone: 952-895-5613

Thomas Tool & Supply 2987 West Highway 12 Willmar, MN 56201 Phone: 320-231-1009

Thomas Tool & Supply 4901 West Broadway Crystal, MN 55429 Phone: 763-533-2499



## Service Centers

#### MINNESOTA (cont.)

Tool Warehouse Inc. 3410 East 42nd Street Minneapolis, MN 55406 Phone: 612-727-4260

Tool Warehouse Inc. 9 Lincoln Avenue SE St. Cloud, MN 56302 Phone: 800-868-7896

#### **NEBRASKA**

Powerhouse Distributing 11011 "I" Street Omaha, NE 68137 Phone: 402-715-5999

#### **NEW YORK**

Authorized Tool Repair 153-27 Barclay Avenue Flushing, NY 11355 Phone: 718-939-2661

Five Boro-Tronics, Inc. 801 East 42nd Street Brooklyn, NY 11210 Phone: 718-338-8911

Forestiere Power Tool & Equip. Co. 62-02 64th Street Middle Village, NY 11379 Phone: 718-416-0378

Sunrise Tool Repair 124 Sunrise Highway West Islip, NY 11795 Phone: 631-661-5548

#### **NORTH CAROLINA**

Chris Supply Co. Inc. 1640 S. Saunders Street Raleigh, NC 27603 Phone: 919-833-4499

#### <u>OHIO</u>

Cincinnati Electrical Repair LLC 2023 Elm Street Cincinnati, OH 45202 Phone: 513-621-2183

Spartan Tools 1660 Alum Creek Drive Columbus, OH 43209 Phone: 614-443-7607

Tool House, Inc. 11909 Tramway Drive Sharonville, OH 45241 Phone: 513-821-3000

#### <u>OREGON</u>

Chas H. Day Company 602 SE 11th Avenue Portland, OR 97214 Phone: 503-232-1659

Eugene Power Tool Repair 245 Van Buren Eugene, OR 97402 Phone: 541-232-5081

#### **SOUTH CAROLINA**

Trado Supply Inc. 1015 Whitehall Road Anderson, SC 29625 Phone: 800-868-7896

#### **TEXAS**

American Tool & Fastener 1331 E. Plano Pkwy, Ste. B Plano, TX 75074 Phone: 972-801-9909

Empire Tools 6327 West 34th Street Houston, TX 77092 Phone: 713-957-8665

Floor Care Equipment Repair 902 Old Austin Hutto Rd., #204 Pflugerville, TX 78660 Phone: 512-990-7177

The Tool Clinic 5126-K Broadway Avenue Haltom City, TX 78117 Phone: 817-656-5640

Tread-Mill Industrial 5006 Railroad Avenue Deer Park, TX 77536 Phone: 832-248-5952

#### <u>UTAH</u>

A-1 Industrial Tool 564 W. 9320 S Sandy, UT 84070 Phone: 866-802-6383

#### CANADA SERVICE CENTERS ALBERTA

Power Tool Klinic LTD Bay 6-2520 23rd St NE Calgary, Alberta T2E 8L2 Phone: 403-276-4633

Dan's Power Tool Repair Service 6331-13 Ave. N.W. Edmonton, Alberta T6L 2E5 Phone: 780-490-1955

#### **BRITISH COLUMBIA**

Apollo Stone Art Co. LTD Unit 105-4471 #6 Road Richmond, BC V6V 1PS Phone: 604-279-8577

#### **MANITOBA**

Athena Small Equipment Repair 1125 Empress Street Winnipeg, MB R3E 3H1 Phone: 204-786-1900

#### **NEW BRUNSWICK**

Electric Motor Services 129 West Morland Street Fredericton, NB E2B 3L4 Phone: 506-458-8770

#### **ONTARIO**

Original Power Tools Co. Ltd. 7508 Bath Road Mississauga, ON L4T 1L2 Phone: 905-612-8252

Kingspoint Small Engine 16-190 Bovaird Drive West Brampton, ON L7A 1A2 Phone: 905-453-8048

Struthmann Enterprises 13 287 Tiffin Barrie, ON L4N 7R8 Phone: 705-726-9892

#### **QUEBEC**

GranQuartz Stone Canada 137 Rue Junction Stanstead, Quebec JOB 3E4 Phone: 800-520-7223

Derusha Supply, Inc. 33 Canusa Street Stanstead, Quebec JOB 3E2 Phone: 819-876-2722

#### **MEXICO SERVICE CENTERS**

ERI Garela, S.A. de C.V.Equipos Y Refacciones Industriales Gareli Av. Plan de Ayala #3487 Fracc. Revolucion Tlaquepaque, Jal. C.P. 45580 Phone: 3587-5953

LaGacero Abrasivos S.A. DE C.V. Cuencame No. 190 Parq. Industrial LanguneroComez Palacio, DGO. Mexico C.P. 35078 Phone: 871-719-1141

## Notes

### **Recommended Extension Cords**

FLEX tools operate efficiently within 110-120 volts. Improper cord sizing will cause a drop in voltage, resulting in loss of power, overheating, and possible damage to the tool. Determine the rated amp listing of your tool from the specification label on the tool, then use the chart below to determine the proper gauge and length of cord to use.

Cord Length									
AMP Rating	25	50	100	150	200	250	300	400	500
0-2	18	18	18	16	14	14	14	12	12
2-3	18	18	16	14	14	12	12	10	10
3-4	18	16	14	14	12	12	10	10	
4-5	18	16	14	12	10	10	10		
5-6	18	16	12	12	10	10			
6-8	16	14	12	10	10				
8-10	16	14	12	10					
10-12	16	14	10						
12-15	12	12	10						
15-20	10	10	10						

### Conversion Chart

#### inch to mm

1 inch = 25.4 mm 1mm = 3/64 inch

#### To Convert to Millimeters (mm) Multiply inches x 25.4

**To Convert to Inches** Multiply milimeters x 0.03937 or divide by 25.4



## Warranty

# FLEX North America limited **ONE YEAR WARRANTY**

FLEX North America warrants its Professional Power Tools for a period of one year from the date of original purchase. The PLW 923 S Air Stone Sander/Polisher has a 90 day manufacturers warranty. Pneumatic Tools carry a 90 day warranty from the date of purchase. We will repair or replace at our option, any part or parts of the product and accessories covered under this warranty which, after examination, proves to be defective in workmanship or material during the warranty period. For repair or replacement, return the complete tool or accessory, transportation prepaid, to your nearest Authorized Service Station. Proof of purchase may be required. This warranty does not apply to o-rings and driver blades, or to repair or replacement due to misuse, abuse, use of electrical converters, normal wear and tear or repairs attempted or made by someone other than our Authorized Service Stations.

ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, WILL LAST ONLY FOR ONE (1) YEAR FROM THE DATE OF PURCHASE.

To obtain information on warranty performance please write to:

FLEX - North America, Inc. 2720 E. Phillips Road Greer, SC 29650, U.S.A. 1-877-331-6103 (main line) 1-888-331-6104 (fax line) www.FlexNorthAmerica.com

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Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Your FLEX distributor

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