





# REVOLUTIONARY EFFICIENT EASY TO USE PERFECT RESULTS



RANDOM ORBITAL POLISHING SYSTEM



# This is



# **BigFoot System** Random orbital polishing

# THE POLISHING REVOLUTION

The innovative BigFoot random orbital polishing system designed and developed by RUPES is a revolutionary method for reducing traditional polishing times without creating holograms on any part of the painted surface.

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The process is completely new and allows excellent results to be obtained in just one step, creating substantial savings in time, energy consumption and cost of consumable products. The BigFoot system is based on a large diameter random orbital movement. The long throw eliminates holograms and takes away the necessity for a secondary removal step of them, an operation that is generally necessary when traditional rotary polishing systems are used.







# THE ENERGY EFFICIENCY OF THE BIGFOOT SYSTEM

"Each element must contribute to the perfect end result." This is the RUPES philosophy. Each and every detail of the BigFoot system has been designed to produce the best possible efficiency from all points of view. Energy savings are a particular concern of the BigFoot development team. Thanks to its innovative design, BigFoot uses an amazingly low 500 Watts of energy in the polishing process. Additionally, BigFoot uses far less consumable product than traditional polishers and accomplishes the same amount of work in a fraction of the time!



Diagram showing a comparison between energy consumptions expressed in Watts for the same activities.

## THE BIGFOOT ELECTRONIC MODULE GUARANTEES:

-Soft start and torque control

- -Maximum motor efficiency due to the ability of the electronic module to regulate motor output according to the torque requirements of the specific application
- -The motor will not restart automatically following a power outage, as restart protection is an inherent design feature of the tool
- -The operator and motor are protected from any danger caused by motor overload by the current limitation device

# **ENERGY EFFICIENCY TEST**

Comparative energy consumption between BigFoot and competitor in identical applications.







# **EASY TO USE**

The BigFoot system is the perfect solution for the novice user or the professional in search of a flawless finish.

BigFoot's design characteristics make it unique in the world of polishers.

The exceptional balance and lack of vibration afford the operator complete control and maximize the maneuverability of the tool during the polishing operation.

Normally difficult areas such as edges, contours and corners are easily handled with the operator employing a consistent and harmonious motion.

Ensuring maximum comfort of the operator during use was an important aspect taken into account by RUPES technicians right from the first feasibility studies of the project.

The unique design and concentrated approach to ergonomics result in a very stable tool that is light and maneuverable while still delivering all the power necessary to accomplish a world class finish.

With BigFoot, polishing becomes easy, comfortable and produces excellent results.

RUPES





# **PERFECT RESULTS**

Obtaining a perfectly polished surface in the least amount of time possible was a primary aim of the BigFoot project. Traditional polishing methods generally require an experienced technician and are very time consuming due to the various steps of sanding, polishing and treating post-polish holograms.

# BigFoot simplifies the polishing process, substantially reducing time and producing an optimum result with just one step.

Thanks to the random orbital movement, BigFoot's innovative approach eliminates holograms and the need for post-polishing steps generally associated with traditional polishing methods.

Traditional polishing methods often overheat the workpiece surface due to the excessive friction caused by the rotary movement of the pad and the long dwell time necessary to accomplish the required work.

The random orbital oscillations of the BigFoot system prevent this risk by reducing friction and, as a result, any overheating of the surface.

RUPES attention to design detail of our accessories also helps to reduce overheating of the work surface. The backing pads are designed with special holes that create an air flow that immediately dissipates any surface heat.

The innovative "open cell" structure of the BigFoot foam polishing pads prevents the build-up of heat generated during the polishing process.

The center hole allows better ventilation and heat dispersion through special channels in the backing pad.

BigFoot's abrasive compounds are specially formulated to obtain the perfect mix of viscosity and aggressiveness.

These unique compounds offer the perfect consistency for the foam polishing pad and create a constant lubrication between the surface and the pad that prevents the work surface from overheating. Thanks to the perfect combination of BigFoot's random orbital movement and specially designed accessories, the BigFoot system keeps the work surface at very low temperatures, virtually eliminating the risk of "burning" the clear coat.



The BigFoot system can guarantee optimum results even with just one step





# LHR 21ES

Characterised by its large **Ø 21 mm orbit and Ø 150 mm RUPES** backing pad, the electric LHR 21ES random orbital polisher is perrfect for working **large surface areas**.

The perfectly balanced polisher, combined with the Ø 150/180 mm foam polishing pads of the RUPES BigFoot range, guarantees rapid cutting and an impeccable finish.



#### ERGONOMICALLY PERFECT

The RUPES R&D and Design departments have paid particular attention to the design and ergonomics of the BigFoot polishers. The perfectly balanced machine body, the practical handgrip, the silent operation and minimum vibration are just some of the characteristics that help make BigFoot the market's most versatile and sought-after system.



#### ANTISPINNING SHROUD

The dual function antispinning shroud is designed to **protect the operator against the moving parts** and act as a clutch for the backing pad, preventing further stress on the foam polishing pad when it is not in direct contact with the surface.



#### ELECTRONIC SPEED CONTROL MODULE

The speed controller on the handle is both practical and easy to use. The speed of the polisher can also be regulated during use, thus avoiding any interruption of the polishing operation.



#### **ON-OFF SWITCH LOCK**

Pressing the button on the LEFT-hand side of the handgrip while polishing **locks the on-off switch.** This allows the operator to move his/her hands freely to different gripping positions while the tool is operating.



#### DESIGN

The attention to detail is not limited to just the **innovative and attractive design**. The modern lines and exceptional technical quality are combined with a number of details that are the result of meticulous research aimed at achieving maximum operator comfort.

Ø backing pad	mm-in	150 - 6"
Ø orbit	mm-in	21 - 13/16"
Power	Watt	500
R.P.M.		2000-4200
Weight	kg-lbs	2,6 - 5,73
Speed regulation		•
Backing pad thread		M8





# LHR 15ES

**The Ø 15 mm orbit and the RUPES Ø 125 mm backing pad** make the random orbital polisher particularly suitable for curved surfaces. The 15mm orbit of the LHR 15ES, shorter than that of its big brother the LHR 21ES, is coupled with a higher rpm level than that of the LHR 21ES. This higher speed gives the LHR 15ES equivalent cutting power to the LHR 21ES, in spite of the smaller orbit. Its Ø 130/150 mm BigFoot polishing foam pads, perfect balance and vibration-free operation make the LHR 15ES a real gem and a must for the tool kit of every detailer.



#### **ERGONOMICALLY PERFECT**

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gripping positions while the tool is operating.



#### DESIGN

The attention to detail is not limited to just the innovative and attractive design: the modern lines and exceptional technical quality are combined with a number of details that are the result of meticulous research aimed at achieving maximum operator comfort.

Ø backing pad	mm-in	125 - 5"
Ø orbit	mm-in	15 - 19/32"
Power	Watt	500
R.P.M.		2000-5000
Weight	kg-lbs	2,6 - 5,73
Speed regulation		•
Backing pad thread	ł	M8





## **LHR 12E DUETTO**

This simple, intuitive and exceptionally comfortable tool allows any operator to tackle even the most challenging polishing operation. The LHR 12E is perfect for deep correction operations and anti-hologram passes. The 12 mm orbit allows the operator exceptional control in difficult applications such as edge and profile work, making "perfect detailing" an easy operation for novices and professionals alike.



#### DUAL FUNCTION: SANDING AND POLISHING

The LHR 12E and its 12 mm orbit can be used with fine grit abrasives to speed up deep correction operations. The tool can then use foams and compounds to refine the abrasive scratches and restore a lustrous finish.



#### ERGONOMICALLY PERFECT

With its nonslip rubber inserts in the front cover, the LHR 12E is perfect for all polishing operations in difficult to reach zones. The operator can work in comfort to produce the best results possible.



#### ANTISPINNING SHROUD

The dual function antispinning shroud is designed to **protect the operator against the moving parts and act as a clutch for the backing pad**, preventing further stress on the foam polishing pad when it is not in direct contact with the surface.



#### DESIGN

The attention to detail is not limited to just the **innovative and attractive design**. The modern lines and exceptional technical quality are combined with a number of details that are the result of meticulous research aimed at achieving maximum operator comfort. The non-slip rubber inserts are numerous and have many functions. In particular, the insert on the machine body is used to support the polisher when placed on a surface.



#### ELECTRONIC SPEED CONTROL MODULE

The speed controller is both practical and easy to use. **The speed of the polisher can also be easily adjusted without interrupting the work.** 

Ø backing pad	mm-in	125 - 5"
Ø orbit	mm-in	12 - 1/2"
Power	Watt	400
R.P.M.		4000-5500
Weight	kg-lbs	2,6 - 5,73
Speed regulation		•
Backing pad thread		M8





## LHR 75E MINI

**Details: the LHR 75E is the polisher for difficult shapes and for spot repair operations.** The LHR 75E is a must for any detailer wishing to obtain perfect results, even in the most difficult areas. The 12 mm orbit, combined with RUPES accessories and consumables, achieves quick results on areas such as mudgards, front panels, etc.



#### **ERGONOMICALLY PERFECT**

With its nonslip rubber inserts on the front cover, the LHR 75E is perfect for all polishing operations in difficult to reach areas. The operator can work in perfect comfort to produce the best possible results.



#### **ON-OFF SWITCH LOCK**

Lined in non-slip rubber, the on/off lever of the BigFoot polisher ensures a controlled soft start, giving the operator full control over the tool.



#### DESIGN

The attention to detail is not limited to just the **innovative and attractive design**. The modern lines and exceptional technical quality are combined with a number of details that are the result of meticulous research aimed at achieving maximum operator comfort. The non-slip rubber inserts are numerous and have many functions. In particular, the insert on the machine body is used to support the polisher when placed on a surface.



#### MAXIMUM FLEXIBILITY

Thanks to the backing pad with small diameter, the LHR 75E is perfect in polishing applications on small and intricate areas. The small machine dimensions and the 12 mm orbit allow a comfortable handling and accuracy in detail polishing.



#### ELECTRONIC SPEED CONTROL MODULE

The speed controller is both practical and easy to use. **The speed of the polisher can also be easily adjusted without interrupting the work.** 

Ø backing pad	mm-in	75 - 3"
Ø orbit	mm-in	12 - 1/2"
Power	Watt	400
R.P.M.		4000-5500
Weight	kg-lbs	2,3 - 5,07
Speed regulation		•
Backing pad thread		M6





## **LHR 75**

The small pneumatic random orbital polisher has a  $\emptyset$  15 mm orbit and a Ø 75 mm backing pad, allowing the tool to work in awkward and difficult to reach areas.

The reduced size and high cutting capacity, combined with the RUPES BigFoot Ø 80/100 mm polishing foam pads, make the LHR 75 the ideal polisher for spot repairs, polishing contoured areas and parts such as mirrors and pillars.



#### **ERGONOMICALLY PERFECT**

The ergonomic hand grip also allows full control of the polisher using just one hand. The hand grip is lined with a composite material, extremely resistant to impact and mechanical stresses, designed to isolate the hand from the air ducts and guarantee greater comfort. The rubber cover quarantees maximum grip and precision in the movement of the tool when both hands are used.



#### SPEED CONTROL

The speed controller on the handle is both practical and easy to use. The speed of the polisher can also be regulated during use, thus avoiding any interruption of the polishing operation.



#### DESIGN

The attention to detail is not limited to just the innovative and attractive design. The modern lines and exceptional technical quality are combined with a number of details that are the result of meticulous research aimed at achieving maximum operator comfort. The perfectly balanced machine body, the practical handgrip, the silent operation and minimum vibration are just some of the characteristics that help make BigFoot the most versatile and sought-after polishing



#### **EXTREMELY LIGHTWEIGHT**

The pneumatic tool weighs a mere 0.65 kg. Thanks to its light weight, polishing and Spot Repairs become fast and easy.



#### ADJUSTABLE AIR OUTLET

In addition to being an air outlet, the device also acts as a silencer. Mounted on the base near the air connection, the small silencer is an extremely effective way of deadening the noise generated by the flow of compressed air.



Ø backing pad	mm-in	75 - 3"
Ø orbit	mm-in	15 - 19/32"
Working pressure	bar-PSIG	6,2-90
Air consumption max	l/min	320
R.P.M.		0-11000
Weight	kg-lbs	0,65 - 1,43
Speed regulation		•
Backing pad thread		M6



# **POLISHING PAD**

The three critical system components are designed to work in combination to guarantee low vibration levels and the best possible polishing result.

The BigFoot random orbital polishing system is designed for maximum efficiency, ease of use and operator comfort. Using BigFoot with RUPES original backing pads and RUPES original polishing pads results in a technical system that guarantees the best possible polishing result and ensures that the tool has perfect balance and a substantially reduced vibration level. The use of backing pads or compound carriers other than members of the BigFoot family of products can lead to a reduction in performance and can further affect the technical and mechanical characteristics of the tool, changing its balance and increasing vibration. Increased vibration not only affects the comfort and overall safety of the operator, but also results in significantly diminished tool life.



RUPES





# **GREY** BACKING PAD FOR FOAM POLISHING PADS

The RUPES backing pad is essential for the stability of the BigFoot System. Manufactured from expanded polyurethane, it is particularly resistant to mechanical stresses and together with the BigFoot foam polishing pad reduces vibration to a minimum.

The special perforations in the pad are designed to create an air flow that helps to dissipate any heat generated by the polishing action. The material used for the manufacture of the velcro provides an effective anchor for the foam polishing pad.



# **BLACK** BACKING PAD FOR MICROFIBER POLISHING PADS

The BigFoot system offers the lowest vibration levels in the industry due to the precise balance relationship between the motor's counterbalance system and the accessory items used during the polishing process (see page 20).

As the microfiber polishing pads are heavier than the normal foam polishing pads, RUPES has designed a special backing plate for use with the microfiber pads. The new backing plate is lighter and has a respositioned center of gravity to assure perfect balance of BigFoot with the new microfiber pads.

The ventilation characteristics of the new backing pad combined with the slots in the microfiber polishing pads effectively dissipate heat and maintain the work surface temperature at an acceptable level.





# **RUPES**°

# **BIGFOOT FOAM POLISHING PADS**

RUPES' expanded resin foam polishing pads are specially designed for the random orbital polishing system. They produce excellent results with substantial time saving and reduced compound consumption. BigFoot's random orbital movement creates high mechanical stresses on the foam polishing pads, generating an increase in internal temperature. The innovative "open cell" structure of the BigFoot foam polishing pads prevents the build-up of heat generated during the polishing process. In addition, this particular structure guarantees maximum efficiency in the polishing process with minimum downward vertical pressure from the operator. The center hole creates superior ventilation and heat dispersion through special channels in the backing pad. The innovative design of the truncated cone shape optimizes the performance of the large diameter orbit, and at the same time protects against accidental contact between the backing pad and the work surface.



#### COARSE

The large dimension of the cells dissipates any heat build-up, allowing the compounds to work at optimum levels. The oscillating movement of the BigFoot systems is a perfect partner for the porous structure. The abrasive compound is not retained inside the sponge but is continuously applied to the work surface, providing a constant layer of lubricated abrasive between the surface and the foam polishing pad.

The use of Zephir abrasive compound is recommended.



#### MEDIUM

The oscillating movement of the BigFoot systems is a perfect partner for the porous structure. The abrasive compound is not retained inside the sponge but is continuously applied to the work surface, providing a constant layer of lubricated abrasive between the surface and the foam polishing pad.

Following are recommended compound/medium foam pad combinations:

- Quarz abrasive compound for optimum results on any type of surface;
- Zephir abrasive compound to decrease correction time and still produce a good finish;
- Keramik abrasive compound for one-step applications.



#### FINE

This most versatile of BigFoot pads adapts to the type of compound used. Its fine cell structure has a medium/hard consistency. Produced from superior grade resins, the fine pad heightens the "gloss level" of the compounds while offering excellent speed of correction.

Following are recommended compound/medium foam pad combinations:

- Quarz abrasive compound for an excellent finish in one-step applications;
- Keramik abrasive compound for excellent results on difficult surfaces/this combination will easily remove light swirls and holograms;
- Diamond abrasive compound to obtain extremely high levels of gloss on hard surfaces.



#### EXTRAFINE

Manufactured from a high-density resin that results in a particularly soft consistency with a very fine cell structure, this foam pad adapts itself beautifully to convex surfaces and irregular shapes typically found on sports cars and vintage vehicles. Its unique soft density makes it ideal for attaining an ultragloss surface finish. The use of Diamond abrasive compound is recommended for a "show car" finish.



# **BIGFOOT MICROFIBER POLISHING PADS**

The innovative RUPES PATENTED microfiber polishing pads are manufactured using a polyurethane resin directly injected into the structure between the velcro interface and the microfiber fabric. The resin adheres directly to both materials to provide a stable and secure bond without the use of adhesives. Due to the unique moulding technique, RUPES is able to offer a pad with an beveled, allowing easy conformabiliity to convex shapes during the polishing process. In addition to helping dissipate heat, the centre hole also helps to correctly fit the microfiber polishing pad onto the backing plate.

#### **CUTTING AND FINISHING**

The microfiber fabric is manufactured in two versions, blue for the correction step to enhance the cutting capacity of the abrasive, and yellow for light action to promote the gloss level.

#### MAIN ADVANTAGES

- Quick defect correction on high solids or ceramic clears coat
- High efficiency on clear coat and one stage surfaces
- Greatly reduced polishing cycle times
- Less dust on the surface during polishing process
- Comfortable and easy to use



#### **BLUE CUTTING PAD**

The Blue Microfiber Cutting Pads are designed for removing heavy swirl marks, scratches and oxidation from any color paintwork. The cutting version features a short and dense microfiber and is perfect for use with heavy cutting BigFoot polishing compound. The special microfiber allows for the true correction power of the product used and for maximum product coverage to achieve the highest quality results on ceramic laquer.



#### YELLOW FINISHING PAD

The Yellow Microfiber Finishing Pads are designed to restore the depth and clarity to your vehicle's paintwork. The long and soft microfiber is perfect for removing light swirl marks, holograms using fine and ultra fine BigFoot polishing compounds. The Yellow Microfiber Finishing Pads eliminate light imperfections delivering a perfect optical grade finish.



## **SPIRAL SLOTS, A REAL INNOVATION**

The innovative spiral slots represent an important technical improvement with an unique design. Developed for use with BigFoot random orbital polishers, the new spiral slots guarantee:

- · Heat dissipation
- Lighter weight for a better balance of the machine
- Controlled and measured spreading of the polishing compounds on the surface





# **BIGFOOT ABRASIVE COMPOUNDS**

BigFoot abrasive compounds are the result of in-depth studies and research and consist of high quality abrasive mixes, all silicone free. **The compounds are specifically designed for random orbital polishing.** Random orbital polishing compounds require a unique formula to assure that the product has the perfect combination of viscosity and aggressiveness. **These unique compositions result in a product whose consistency delivers the best possible solution for uniform distribution on the foam polishing pad.** Four different types of compounds are available, each satisfying a particular polishing need.



#### COARSE

ZEPHIR GLOSS is a high-performance compound recommended for first step polishing. Its grain is the most "aggressive" of the BigFoot abrasives and is used for the rapid removal of marks and scratches. At the same time Zephir is highly effective in restoring paints and creating a high degree of gloss.



#### MEDIUM

QUARZ GLOSS is a medium grain abrasive compound that easily repairs minor surface scratches and minor scoring from sources such as car wash brushes. Quarz can be used with full confidence that it will not leave halos or holograms.



#### FINE

KERAMIK GLOSS is the ideal composition for perfect finishes on particularly hard clear coats. This fine water-soluble abrasive compound is ideal for totally eliminating paint defects and for a hologram-free final step of spot repair, following the microabrasive nib removal process.



#### EXTRAFINE

DIAMOND is specifically formulated for the final finishing pass and its ultra-fine abrasive generates a deep lustre and color depth. The product is water soluble, allowing for easy removal of any residue. The extreme lustre and gloss that all professionals have sought for years are finally easily within reach!



# **BIGFOOT MICROFIBER CLOTHS**

The BigFoot microfiber cloth is ideal for car care, from drying to the removal of excess polishing compound. Thanks to its structure, the cloth can remove dust without scratching the treated surfaces. It can be washed and re-used.

