



# **The New Piranha III Features:**

- Sliding dust shield for 100% dust containment
- Integrated receptacle area for ease of handling electrodes
- Recessed handle for better form & function
- On/off switch with LED light for improved display of unit operation
- · Lightened chassis for reduced weight
- Signature blue powdercoat

#### Safet

Enclosed grinding area captures Tungsten dust for easy disposal.

# **Weld Quality**

20 Ra surface finish improves Tungsten life, arc starting, arc stability and produces consistent weld penetration.

# **Productivity**

Correctly and consistently Diamond grind Tungsten Electrodes longitudinally, in less than 30 seconds.

#### Value

The PIRANHA III Diamond grinds, flats and notches your Tungsten economically.



"The Tungsten Electrode Experts"



# Features

- Easy set up, optimal consistency and near-perfect repeatability.
- Compact, durable and solid design with no vibration.
- Longitudinal 20 RA grinding for maximum arc starting, arc stability, electrode life and weld penetration.
- Universal collet arm for 6 electrode sizes 040" (1.0mm), 1/16" (1.6mm), 3/32" (2.4mm), 1/8" (3.2mm), 5/32" (4.0mm) & 3/16" (4.8mm) – with no equipment changes.
- Included angle scale for angles from 10° 60°
- Precision tip flat gauge & depth adjustment stop ensures exact Tungsten points every time – enabling consistent, repeatable arc performance and welding output.
- Dust Shield & Containment Baffle to keep 100% of dust inside the grinder housing, for safety and easy disposal.
- Tip flat block for square end grinding and removing bad tips.
- Electrode notching station for simple cut-off.
- Detailed Manual with valuable engineering data and welding recommendations.
- Port Ready for Vacuum Upgrade.
- Integrated receptacle for electrode storage/access
- Recessed carry handle for better form & function.





# Additional Products

DGP-KIT-PIlls Piranha III Collet Upgrade Kit Get the performance of the new Piranha tungsten grinders without having to buy a new grinder! Our new Piranha III collet upgrade kit can be used on your older model Piranha tungsten grinder to enable you to grind tungsten as short as .75" (19.05mm). The process and directions are simple.



#### **Full feature Precision Tungsten Grinders:**

These high precision, heavy duty grinders provide additional features for improved grinding accuracy and can precisely cut electrodes to length. CNC Pre-Ground Electrodes: Eliminates operator grinding variables. The quality and consistency of CNC Pre-Ground Electrodes improve arc starting and arc stability. They offer consistent weld penetration and longer electrode life. Tungsten shedding and associated weld inclusions have been virtually eliminated.

- Piranha II Compact/Precision Tungsten grinder .040" - 3/32" (1.0 - 2.4mm)
- DGP-2 Full feature Tungsten grinder that grinds, flats and cuts Tungsten.
- Pre Ground Electrodes CNC manufactured, high tolerance electrodes for Orbital and Automatic Tig and Plasma welding.
- Premium Tungsten Thoriated, Lanthanated, Ceriated, Zirconiated, Tri-Mix<sup>™</sup>-WS2, Cryo-T, Pure & specialty materials.

# **Specifications**

Range of Included Angle: 10° - 60°

Electrode Diameters: .040 (1.0mm), 1/16" (1.6mm),

3/32" (2.4mm), 1/8" (3.2mm), 5/32" (4.0mm) & 3/16" (4.8mm)

Minimum Electrode Length: 1.75" (44.5mm)

Voltage: 115/230 VAC, 50/60Hz, 220v

Power Consumption: 500 Watts

Motor: 1/3 hp, 1,400 rpm, 5.0 amps

 Length:
 12" (304.8 mm)

 Width:
 7.5" (190.5 mm)

 Height:
 7.5" (190.5 mm)

 Weight:
 31 lbs (14.06 kg)

# Benefits

- Safety: Enclosed grinding area captures Tungsten dust for easy disposal.
- Weld Quality: 20 Ra surface finish improves Tungsten life, arc starting, arc stability and produces consistent weld penetration.
- **Productivity:** Longitudinally Diamond grind your Tungsten electrode in less than 30 seconds correctly and consistently.
- Value: The PIRANHA III Diamond grinds, flats and notches your Tungsten economically.



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# Introducing...

# The Quickest and Easiest Way To Prepare Tungsten Electrodes

- Quick & easy setup and operation saves time, eliminates hassles
- · Consistently & properly ground electrodes provide optimum, repeatable welding results
- Manufactured in U.S.A. Expert service and spare parts are available immediately
- Proper diamond cutting eliminates risk of electrode splintering & weld rejections

STEP 1 - Diamond Ground Flat





Produces a diamond ground flat surface at the tip of the electrode.





Diamond Ground Taper

Diamond Ground Flat

**STEP 2 - Diamond Ground Taper** 



Produces a longitudinally ground taper with a 20RMS finish and a +/- 1/2° angle tolerance.

STEP 3 - Diamond Cut-to-Length



Produces smooth diamond cut electrodes on a selectable length scale.

www.diamondground.com

DIAMOND GROUND PRODUCTS, INC.

### DGP-1



- Our most economical grinder
- Accomplishes process steps 1 & 2: Flat and Taper grinding
- For welders who regrind but don't cut, this
  product provides an all-purpose wheel on the
  left instead of the cutting apparatus.

#### DGP-2



- A complete system that includes diamond grinding and cutting wheels to accomplish all electrode preperation steps.
- Cutting apparatus includes adjustable stop & scale to allow users to cut as short as .200" (3mm).

#### DGP-3



- A complete system that includes diamond grinding and cutting wheels to accomplish all electrode preperation steps.
- Cutting apparatus includes built-in micrometer indexer for quick and very accurate cuts of different lengths as short as .200" (3mm).

# **ACCESSORIES**

- Vacuum system in insulated cabinet for dust collection
- · Short collets for grinding short electrodes
- Flexible spotlight
- Pre-wired and integrated 220v step down transformer (If required)

# **FEATURES**

- No tools required for setup or collet changes
- Flat, grind and cut most electrodes in 60 seconds or less
- Long life, high-quality diamond wheels that are perfect for grinding tungsten
- Fine, longitudinal finish on taper grinding to improve arc stability, starting and consistency
- Taper angle adjustable from 6°-120° with a tolerance of +/- .5°
- Collets available to grind electrodes for .020" to 3/16" (.5mm-4.8mm) diameter

# **APPLICATIONS**

Mechanized / Automatic TIG & Plasma Welding Manual TIG & Plasma Welding Orbital Tube & Pipe Welding

# **SPECIFICATIONS**

# **DGP Grinders**

Dimensions: 21.5"(L) x 12"(D) x 12"(H) 564mm x 305mm x 305mm

Weight: 27.2 lbs. / 12.3 kg

Voltage: 115 VAC, 60 Hz, or 220 VAC, 50 Hz option

Amperage: 5.0 Amps

# **DGP Grinders with Vacuum Cabinet**

Dimensions: 26"(L) x 20"(D) x 44"(H) 660mm x 508mm x 1,118mm

Weight: 102 lbs. / 46.4 kg

Voltage: 115 VAC, 60 Hz, or 220 VAC, 50 Hz option

Amperage: 13.5 Amps

### Piranha II

• Compact/precision tungsten grinder .040"-3/32" (1.0-2.4mm).

#### Piranha III

 Heavy duty dedicated tungsten grinder designed for continuous grinding of .040"-3-16" (1.0mm-4.8mm).

# **Pre Ground Electrodes**

 CNC manufactured high tolerance electrodes for orbital and automatic TIG and plasma welding.

# **Premium Tungsten**

 Thoriated, Lanthanated, Ceriated, Zirconiated, Tri-mix®, Cryo-T®, Pure and specialty materials.



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