

WELDING PROTECTION

Welding Helmets & Goggles	93
Welding Lenses	93
Welding Hoods & Protective Clothing	94-95
Welding Gloves	95
Welding Blankets, Screens & Curtains	

WELDING MACHINES

MIG Welders	98
TIG, Multi-Process Welders	98-100
Arc Welders	100
Welder Inverters	100
Engine Driven Welders & Generators	101
Plasma Cutters	101

WELDING CONSUMABLES & ACCESSORIES

Welding Wire	. 102-103
Welding Guns & Torches	103
Electrodes & Brazing Rods	.104-106
Electrode Heaters & Holders	. 106–107
Welding Leads, Clamp & Accessories	. 107-108
Arc Gouging	108

GAS WELDING, CUTTING & HEATING

Welding Gas Regulators & Flowmeters	.108-109
Welding & Heating Tips	110-111
Blowpipes & Cutting Attachments	112
Flashback Arrestors	112
Cutting & Gouging Tips	113-114
Welding Hose & Fittings	114-115
Blowtorch	115
Welding & Cutting Kits	115-116

SOLDERING & BRAZING

Soldering Irons		11	6
Solder & Soldering Fluids11	б-	11	7

WELDING TOOLS & ACCESSORIES

Anti-Spatter, Flints & Tip Cleaners	118
Chipping Hammers & Welding Pliers	118
Measuring & Aligning Tools	118

CUTTING & ABRASIVES

Cut-Off Discs	121
Grinding Discs & Wheels	
Mounted Points	123
Flap Wheels & Fibre Discs	123-124
Sanding Attachments	124-125
Flap Discs & Strip Discs	125
Wire Hand Brushes	126
Wire Wheel & Cup Brushes	126-127
Emery Cloth, Sandpaper & Sanding Belts	127-128
Wheel Dressers & Sanding Stones	128-129



SELECTING A WELDING HELMET

Passive or Auto-Darkening?

Passive, or traditional helmets, have a fixed shade lens, usually #10. When welding material is being positioned the helmet is worn above the head. Once the operator is ready to weld the helmet is pulled down to protect the face and eyes. This helmet type is economical and suited for novice or infrequent welders.

Auto-darkening helmets, as the name suggests, darken automatically once sensors on the helmet sense the arc start. This happens in a fraction of a second. This removes the need for it to be taken on and off for every weld, decreasing user fatigue or possible repetitive strain injury and better vision increases the quality of the weld. Auto-darkening helmets are ideal for everyday welders and industry professionals.

Auto-Darkening – Fixed or Variable Shade?

Auto-darkening helmets come in two varieties, fixed and variable shade.

Fixed shades auto-darken to a fixed #10 shade. This system combines economy with auto-darkening. These are suitable if your welding activities are repetitive with little differentiation.

Variable shade lenses typically adjust from shade #9 to shade #13 to allow the best possible view of the welding pool while still protecting your eyes. Premium models will allow adjustment of the sensitivity and delay controls to best suit your needs. This system is suitable if you engage in different welding processes (MIG, TIG, Stick), or vary in amperage frequently.

Sensor Sensitivity

Auto-darkening lenses use sensors to detect when the arc starts. For all helmets this happens in a fraction of a second, although if you spend the majority of your day welding, faster detection is beneficial and will reduce eye fatigue. Entry-level lenses are rated at approximately 1/3,600th of a second. Industrial grade helmets can be rated as high as 1/20,000th of a second. TIG sensor rating refers to the minimum amount of TIG amps required to activate the auto-darkening lens. If you weld under the minimum amp it is likely that the auto-darkening function will not work.

Viewing Area

Choosing a viewing area is a personal preference. Typically smaller viewing areas are most suited to light duties, whereas large screens are suited for industrial use.

Comfort & Fit

Be sure to try on your welding helmet, to ensure that it fits comfortably to your head. If you weld often, opt for a light-weight version that doesn't create pressure points on your head.



WELDING HELMETS, GOGGLES & LENSES

AUTO DARK WELDING HELMETS

- · Impact resistant auto-darkening lens
- · Made from high-impact polyamide nylon
- · Solar powered with replaceable 3V lithium storage batteries
- Darkens in 1/25,000 of a second from when you begin welding
- Fitted with ratcheting headband and padded interior
- Provides full view of your welding work area as well as complete UV protection
- · High/low light sensitivity adjustment
- Automatic power on/off with adjustable delay time

• Shades 8-13



Design	Bishops Code
Black	55020180
Blue Flames	55020182
Blue	55020185
Black Stealth	55020189

PROLITE MATRIX 1.0 AUTO-DARKENING WELDING HELMET

- · Quad 1 True Colour Lens with Blue Light Filter allows the operator to see truer colour at their work piece while reducing the operator's visual fatigue if concentrating on an arc all day
- · Complies to Australian Standards
- 4 sensor auto-darkening filter lens
- Variable shade: 9-13
- · High impact rating
- · Low amperage TIG welding rating
- · Magnification lens compatible
- Solar cells with battery back up
- 98 x 55mm viewing area
- Filter lens dimensions: 120 x 100 x 18mm
- Operating temperature: -5°C to 55°C
- AS/NZS 1337.1 & AS/NZS 1338.1

Item Code	Bishops Code
454344	55020187

FLIP UP ARC WELDING HELMET

- · Flip-front lens makes it easy to inspect work
- Protects upper chest and throat from sparks and spatter during welding
- · Comes with adjustable ratchet suspension
- · The curved top of the mask provides extra protection to the head
- Lens: 114 x 50mm
- AS/NZS 1337:1992 approved



Description	Bishops Code
Flip Up Arc Welding Helmet	
Helmet Suspension to Suit	55020195

HAND HELD WELDING MASK

- Made from moisture-proof polypropylene
- · Tough, curved shell design with fixed front
- · Provides full face protection from sparks
- Lens: 114 x 50mm



Item Code	Bishops Code
SE2735	55020130

OXY WELDING GOGGLES

- · Soft, flexible vinyl frame
- · Indirect ventilation
- · 50mm round polycarbonate flip lens
- Can switch from welding to chipping for easy inspection
- Green shade 5
- · Complies to standard CE EN175



EVERSAFE

ROUND WELDING LENS

• CE EN166 approved

CIGWELD

- · Impact and spatter resistant polycarbonate lens
- Provides UV protection
- · 50mm diameter



Colour	Bishops Code
Green	55015605
Clear	55015610

ARC WELDING LENSES

- Polycarbonate
- · Impact and spatter resistant
- UV protection
- ANSI Z 87.1



Colour	Size	Bishops Code
Shade 9 Green	101.6 x 50mm	55015620
Shade 10 Green	101.6 x 50mm	55015630
Shade 11 Green	101.6 x 50mm	55015640
Shade 12 Green	101.6 x 50mm	55015650
Shade 13 Green	101.6 x 50mm	55015660
Shade 14 Green	101.6 x 50mm	55015665
Clear	114 x 50mm	55015670

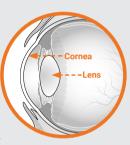


HARMFUL AND VISIBLE LIGHT Visible Light Visible Light Camma Rays X-Rays Violet Infrared Radar TV FM AM 0.0001nm 0.01nm 10nm 1000nm 0.01cm 1cm 1m 100m

The welding arc emits three types of light – ultraviolet, visible light and infrared. Each element presents risks if the welder is not properly protected with quality equipment.

Ultraviolet Light

Exposure to ultraviolet light can cause of the cornea and conjunctiva, which is known as 'arc eye'. 'Arc eye' is caused by light damaging the outermost protective of the cornea. Gradually these damaged cells die, exposing highly sensitive nerves in the underlying cornea to the 'rough' inner eyelid. This causes severe pain, likened to sand in the eye.



Visible Light

Intense wavelengths of visible light can irritate the cornea and the lens. Effects can differ depending on the duration, distance of the exposure and the individual's natural reflex action to close the eye. The irritation will not cause long-term effects, but may progressively reduce the ability to adapt to extreme light conditions.

Infrared Light

Infrared light is not visible, but is perceived by the body as heat. Continued exposure causes irreversible opacity of the lens leading to cataracts. While welding, any burning sensation on the skin surrounding the eyes may be caused by infrared light.



LEATHER WELDING HOOD

- · Durable leather
- Includes adjustable neck straps and a flip front lens holder
- · Suitable for arc welding jobs
- Protects chest, shoulders and head from sparks and splatter



Bishops Code 55020510

PYROMATE WELDERS HOOD

- · Breathable flame resistant cotton
- · Drawstring face closure for snug fit
- · Side gussets for comfortable fit
- Maroon



 Item Code
 Bishops Code

 PVHM
 55020512

PROMAX WELDERS HOOD

- Lightweight and cool flame resistant cottonHook and loop closure at front
- Drawstring face closure for snug fit
- Kevlar® heat resistant stitching to prevent seam failure
- Blue



 Item Code
 Bishops Code

 WC-01795
 55020514

LARGE CHROME LEATHER WELDERS JACKET

- Protects the wearer from sparks, spatter and radiant heat during welding
- Suitable for smelters, foundries and shipping engineering and mining applications
- Snap button closure down the front, with a shirt-style collar
- Chrome Leather
- · Length: 710mm



Bishops Code 55510010

CHROME LEATHER WELDING APRON

- · Made from heavy duty fire retardant chrome split leather
- · Excellent protection from welding splatter
- Adjustable heavy duty neck and waist straps with quick release buckles for easy fitting and removal
- · Length: 1,066mm



WISRA **WELDING GLOVES**

- · Full leather, reinforced double-palm
- Grey
- · Length: 254mm
- One size
- · Complies to standards EN388, EN420 and EN12477



Item Code

WACL

WELDING KNEE PADS

- Chrome leather, foam filled
- · Strap and buckle or Velcro® closure options





Description	Bishops Code
Leather Strap & Buckle Closure	55510060
Elastic/Velcro® Closure	55510050

WELD SERIES GLOVES

- Premium quality blue cow split leather with gold Kevlar stitching to withstand high temperatures over extended periods of time
- · Reinforced palm and thumb for added durability and
- Fully lined wear seams welted for extra strength
- · Provides protection from welding spatter and dross
- · Ideal for usage in welding and fabrication, metal castings, mining and construction
- · Length: 406mm
- One size



GET MORE AT BISHOPS



RED ARMOR WELDING GLOVES

- · Full leather
- · Reinforced thumb and double palm Kevlar
- Kevlar stitched in the optimum way to resist burning from sparks
- Suitable for all welding situations
- Red
- · Length: 460mm





BLUE BOMBERS WELDING GLOVES

- · Cow split leather with Kevlar
- Fully lined with all wear seams welted for additional protection
- Provides protection from welding spatter and dross heat
- Blue
- Length: 406mm







WELDING BLANKETS & SCREENS

LEATHER WELDING BLANKET

- · Heavy duty cowhide leather
- · Kevlar® stitching
- · Designed to protect against grinding sparks and light to medium welding spatter
- · Eyelets on each corner



Item Code	Bishops Code
8-LWB1818	55020525

WELDING SCREENS

- · Safely surrounds and defines hazardous welding areas and protects co-workers from accidental welding flash
- · Designed to absorb dangerous ultra-violet light during welding
- · Suitable for safe observation of welding situations during safety checks
- · All seams are welded for extra durability and strength
- · Fitted with 200mm eyelets on all four sides for attaching to frame
- 1,300(w) x 1,800(h)mm
- Certified to AS 3957/NZ 5852:2006
- · Frames not included



Colour	Luminance Factor	Bishops Code
Red	C3	55090210
Green	C5	55090215

WELDING SCREEN FRAME

- Light weight, portable, free standing, durable
- · Includes 4 castors, 6 cable ties and 2 joiners
- · Screens and curtains sold separately



Size	Bishops Code
1.8 x 1.8m	55090295

WELDING CURTAINS

- · Curtains include zip ties and rings, ready to install
- · Frames sold separately
- Size: 1.8 x 1.8m



Item Code	Colour	Bishops Code
7-1818G	Green	55090230
7-1818R	Red	55090235

WELDING SCREENS



Creating A Safer Workplace

Welding is an inherently dangerous process. The instruments used to join two pieces of metal together can generate intense amounts of heat and light in doing so. If the welding process is not managed carefully, welders and those close by can be subjected to eye damage, burns, overexposure to UV light and even electric shock.

Just a glimpse of an arc torch in action can be enough to cause harmful flash burns. This is commonly known as welder's flash or arc eye. Symptoms include very mild to severe pain, light sensitivity, bloodshot or watery eyes and a sensation similar to sand in your eye.

Flash burn is like a sunburn to the eye and if left untreated, can result in serious infection. If you think you have suffered a flash burn, stop work and seek urgent medical attention immediately.

Welding curtains and screens exist to help prevent these dangers to welders and those nearby. Given the importance of good ventilation in a welding set-up, creating a more rigid enclosure can actually hinder air movement and result in a dangerous work space.

Use welding curtains, screens or strips to create a semipermeable enclosure that will help prevent those nearby from being affected by flashes of welding light, stray sparks and toxic fumes. However, welding curtains do not represent a total safety fix - the usual respiratory and fire safety precautions must always be taken to ensure a safe workplace.

Welding screens come with a variety of options. Mobile frames on castors are well suited to the welder on the move – simply adjust the screen to follow as you work along the weld.

Bishops can also supply custom solutions to suit your working environment. Contact us today to discuss your individual situation.

GET MORE AT BISHOPS



Page 46

HOW TO SELECT A WELDING MACHINE

Unfortunately there is no one welding machine that is suitable for all welding applications. Each machine has its advantages and disadvantages.

Bishops is here to help you make an informed decision about your next welding machine. Got a question about one of the catalogued machines? Contact Bishops!

Welding Machine Power

Single or Three Phase Machine?

Welding machines come in single and three phase variations. Single phase machines require only one conductor, typical of domestic power points. A three phase machine requires three conductors, often only found at industrial work sites. Three conductors deliver significantly higher voltage, providing more 'grunt' to the machine and therefore making it more suitable for industrial use, as opposed to domestic or lighter applications.

Amps

The higher the current range the faster the weld, and the thicker the materials you will be able to work with.

Welding Processes:

Metal Inert Gas (MIG) welding is the process in which an electric arc forms between a consumable wire electrode and a metal work piece, which heats the metals causing them to melt and join. Shielding gas may feed through the welding gun along the electrode to shield the weld from any contaminants in the air. MIG welding is ideally used on steel, aluminium and other non-ferrous metals. Due to its versatility and speed the MIG weld process has become popular, however it tends to be more sensitive to external factors like wind, rain and dust.

Tungsten Inert Gas (TIG) welding is a welding process that uses a non-consumable tungsten electrode to produce a weld. The weld area is protected from oxidation by an inert shielding gas such as argon or helium. A TIG weld is commonly used to weld thin sections of stainless steel and non-ferrous metals such as aluminium, magnesium and copper alloys. This process creates stronger, higher quality welds, although it is more complex and difficult to master and significantly slower than alternative processes.

Arc welding uses electricity to create heat and bind metal with the aid of an electrode consumable. The weld region is protected from outside contaminates by a shielding gas. Arc welds are cost effective and versatile however they emit significant spatter and require cleaning upon completion.

Plasma cutting and welding uses ionised gases and electrodes that generate extremely hot plasma jets that are aimed at the welding area. The concentration of energy is good for narrow or deep welds, or increasing the speed of the welds.

Thermic Lancing is a process in which pure oxygen is supplied through a consumable steel pipe packed with steel wire. The resultant stream of liquid slag can rapidly cut through concrete and steel, making this an ideal process for demolition and emergency work.

Gas welding and cutting involves combining fuel gases with pure oxygen to increase the torch's heat to approximately 3,500°C, which is capable of melting steels. Also known as oxy/fuel welding, this technique was developed in 1903 making it one of the oldest processes. It is still used today in pipe and tube welding and cutting operations.

Soldering is used to form a permanent connection between electronic components. Two or more metals are joined together by melting and is therefore like a metallic 'glue' that holds parts together and forms a connection that allows for electrical current flow.



FAST FACT

Welding and cutting can release toxic fumes, including CO, CO₂, NO and NO₂. Make sure you've got the right respiratory protection for the job!

WELDSKILL 250 MIG WELDER

- · Excellent arc performance with solid and flux coated welding wires
- Suitable for use with CO₂, mixed gases or gasless operation
- · Fan cooled with over temperature cut out
- · Standard compliance
- · Optional WeldSkill 4R Wire Feeder available separately
- Wire size range: 0.6-1.2mm (hard), 0.8-1.2mm (soft/cored)
- Supply voltage: 240V ±10% (50Hz)
- Generator requirement: 13kVA
- Current range: 50-270A
- Duty cycle (with upgraded supply lead and plug): 250A @ 20%
- Accepts 5kg and 15kg spools
- Dimensions: 1,020(d) x 470(w) x 1,050(h)mm
- · Weight: 100kg
- · 12 month conditional warranty

Includes:

- MIG torch
- · Work lead
- · Regulator/flowmeter
- Shielding gas hose assembly and adaptor
- · Cylinder chain
- Spool adaptor
- Feed rollsTips





 Item Code
 Bishops Cod

 W1004500
 71050230

WELDSKILL 350 MIG WELDER

- Excellent arc performance with solid and flux coated welding wires
- Suitable for use with ${\rm CO}_2$, mixed gases or gasless operation
- Fan cooled with over-temperature cut out
- Standard compliance
- · Optional WeldSkill 4R Wire Feeder available separately
- Wire size range: 0.6–1.2mm (hard), 0.8–1.2mm (soft), 0.8-1.6mm (cored)
- Supply voltage: 415V ±10% (50Hz), 3 phase
- Current range: 35–380A
- Duty cycle: 350A @ 30%
- · Accepts 5kg and 15kg spools
- Dimensions: 1,050(h) x 470(w) x 1,020(d)mm
- Weight: 112kg
- 12 month conditional warranty

Includes:

- MIG torch
- Work lead
- · Regulator/flowmeter
- · Shielding gas hose assembly & adaptor
- Cylinder chain
- Spool adaptor
- Feed rolls
- Tips



Item Code	Bishops Code
W1004600	71030250

EASYWELD 160 POWER PACK

Includes:

CIGWELD

- · EasyWeld 160 QuickSet MIG
- MIG Consumables Kit BZL-15 LH Includes 8-Function MIG Pliers
- WeldSkill Essential Auto-Darkening Welding Helmet 9-13
- · Heavy Duty Welding Gloves Large
- · WeldSkill Gasless Wire 0.9mm 4.5kg Handispool



 Item Code
 Bishops Code

 PPE160A21
 71050212

TRANSMIG 175I+ MIG/TIG/ARC WELDER

- · Self-contained single phase welding inverter
- Multi-process capabilities MIG, Stick and Lift TIG
- · Built-in VRD (applicable in stick mode only)
- Digital voltage and amperage meters, integrated wire feed unit
- Wire size range: 0.6 0.9mm (hard), 0.8–1.0mm (soft), 0.8–1.2mm (cored)
- Supply voltage: 240V ±15%, 50/60Hz (15A plug)
- Current range: 10–185A (MIG), 10–175A (Stick), 10–175A (TIG)
- Duty cycle: 185A @ 20%, 23.3V (MIG) 175A @ 20%, 27.0V (Stick) 175A @ 25%, 17.0V (TIG)
- Accepts 1kg and 5kg spools
- Dimensions: 410(h) x 210(w) x 450(d)mm
- Weight: 14.6kg

Includes:

CIGWELD

 MIG torch, regulator/flowmeter, feed rolls, contact tips, twistlock electrode holder and work clamp with leads, shielding gas hose assembly and bag with shoulder strap



CIGWELD

 Item Code
 Bishops Code

 W1005185
 71030210

TIG WELDING TIPS

TIG requires a very clean surface to produce a clean arc and nice welds. Make sure you clean the work surface extremely well before you weld. For aluminium and stainless, use a dedicated stainless brush for each type of metal. The more time taken cleaning your work area before welding, the better the final results will be.

If you happen to touch your tungsten tip into the puddle, even for a split second, you have contaminated it and **you MUST regrind the tungsten electrode**. If you don't, the arc will start to wander badly and it will be difficult to keep a focused arc on the metal.

- TIG welding aluminium and steel requires shielding gas
- TIG welding steel is very easy, typically use DC polarity
- TIG welding aluminium weld with AC polarity
- TIG welding stainless steel welds almost like steel

CIGWELD

MULTI-PROCESS WELDING MACHINES

TRANSMIG 255i MIG/TIG/STICK **WELDER INVERTER**

- · 3-in-1 multi-process MIG, Stick and TIG
- Duty cycle: 255A @ 40% (upgraded supply lead and plug)
- Input power 230/240V, 1Ph, 15A/25A
- · Current range: 30-255A MIG
- · Digital amperage and voltage meters
- · 2 roll wire drive system
- · Voltage Reduction Device (VRD), Stick mode only
- · Optional spool gun available



Item Code W1005255

GET MORE AT BISHOPS WELDING **CLAMPS** Page 204

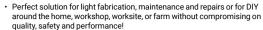
BLUE VENOM XF186 MULTI PROCESS WELDING INVERTER

- · MIG, Stick and Lift TIG DC.
- · Synergic 3-in-1 welding inverter with MIG plate thickness selection
- · Quick set, simple to set and weld
- Suitable for 100mm and 200mm diameter spools
- · MIG Gasless and MIG Gas Shielded
- · Blue LED meters for clear viewing
- Recommended MIG and TIG welding thickness range 0.6–10mm
- 10A plug
- 2 year conditional warranty



Item Code XF186

BLUE VENOM XF190 MIG/TIG/STICK WELDER



CIGWELD have introduced "Opti-Start", a feature that allows the user to customise their starting arc characteristics through Soft and Hard Start controls

Specifications:

CIGWELD

- . 10A 230V/240V
- MIG 185A @ 9% Max Range 190A
- · STICK 160A @ 10%
- TIG 190A @ 10%
- · Power Source Weight 9.5kg
- · 2 Year Warranty

Xtra Functions include:

- · 2 x Roll All-Driven (top & bottom) Wire Drive system
- · MIG Adjustable Wire Burnback & Inductance
- · MIG Adjustable Soft & Hard Start (Opti-Start)
- MIG Wire Inch & Gas Purge Buttons
- · MIG Anti de-spooling safety feature
- · MIG Spool Gun Compatible
- STICK with Voltage Reduction Device (VRD)
- · STICK Adjustable Hot Start & Arc Force
- STICK Anti-Stick
- TIG Foot Control and Dial Remote Torch Compatible

Includes:

- BlueVENOM XF190 Power Source
- CMGBZ15E3 MIG Gun 3m- Euro quick connector
- Work Clamp with 3m Lead
- Twist Lock Electrode Holder with 3m Lead
- · 2 x Feed Rolls: 0.8/0.9mm Gasless, 0.8/0.9mm Solid Wires (Fitted).
- 2m Argon Gas Hose and Gas Regulator
- Nylon Inlet Guide for use on Soft Alloy Wires



Item Code

CIGWELD

W1400190

SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT

WELDSKILL 200HF TIG/ARC WELDER

CIGWELD

- · Single phase welding machine
- · HF start (DC) TIG mode function
- · Ultimate portability for light TIG fabrication and stainless steel work Supply voltage: 240V ±10%, 50/60Hz (15A plug)
- Current range: 10–200A (TIG), 10–180A (Stick)
- Duty cycle: 180A @ 20% (Stick), 200A @ 30% (TIG)
- · User-friendly control panel
- Dimensions: 245(h) x 145(w) x 420(d)mm
- · Weight: 8.2kg



n Code	Bishops Code
008200	71050218

Item

W10

MULTI-PROCESS & ARC WELDING MACHINES & WELDER INVERTERS

CIGWELD

WELDSKILL 205 AC/DC TIG/STICK **PLANT WELDER**

- · Single phase AC/DC HF TIG, Stick
- Input power: 230/240V, 1Ph, 15A
- Current range: 10-205A (TIG), 10-160A (Stick)
- Duty cycle: 205A @ 20% (HF TIG), 160A @ 20% (Stick)
- · AC/DC, HF TIG and Pulse on both AC and DC TIG
- · High frequency start
- Adjustable pulse frequency, pulse width and wave balance
- Supplied TIG torch with 8m lead and remote control
- Digital meter
- Suitable for 2.0, 2.5, 3.2 and 4.0mm stick electrodes
- · Compact and lightweight
- · 3 year limited warranty

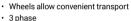
Complies With:

- · AS 60974.1
- IEC 60974-1



Item Code W1008205

ARC WELDERS



- Frequency: 50/60Hz







Rated Input Capacity	Output Range	Voltage	e Electrode Duty Cycle Dimensions Dia.		Weight	Bishops Code	
6.2kVA	50- 160A	240V	2.0- 3.2mm	400A @ 35% 305A @ 60% 236A @ 100%	510(l) x 370(w) x 680(h)mm	48kg	71010120
12.6kVA	70- 200A	240V	2.0- 4.0mm	200A @ 35%	690(l) x 400(w) x 560(h)mm	58kg	71110130
30.5kVA	70- 400A	380V	2.0- 7.0mm	400A @ 60% 310A @ 100%	610(l) x 442(w) x 870(h)mm	112kg	71110140

AC/DC IN WELDING

For many welders DC is preferred for its ability to weld steel with a more stable arc, easier starts and less spatter. DC has either a positive or negative polarity. Positive polarity provides high penetration into steel, whereas negative results in less penetration. AC polarity flicks between negative and positive polarity.

The default for most welders is DC. However, aluminium is welded primarily with AC, as the alternating polarity creates a cleaning action that results in a smoother, higher quality weld.

WELDSKILL MICROARC 140 WELDER INVERTER



CIGWELD

- · Extremely neat and compact welding inverter
- · Suitable for DIY and handyman work
- · Input power: 230/240V, 1Ph, 10A
- Current range: 10-140A (Stick and Lift TIG)
- Duty cycle: 140A @ 15% (Stick) and 140A @ 20% (Lift TIG)
- Dimensions: 100(w) x 185(h)mm
- · Weight: 3kg

Includes:

- 3m twist lock electrode holder
- Work lead



	511
Item Code	Bishops Code
W1008162	71050208

WELDSKILL 180 INVERTER

- Compact and lightweight single phase welding machine
- · User friendly control panel
- · Ideal for tradesmen, farmers and maintenance workers
- Supply voltage: 240V ±10%, 50/60Hz (15A plug)
- Current range: 10-180A
- Duty cycle: 180A @ 20% (Stick) and 180A @ 40% (TIG)
- Dimensions: 220(h) x 130(w) x 340(d)mm

Includes:

- · 4m electrode holder
- · Work leads
- · Case with handle and carry strap



Item Code	Bishops Code
W1008180	71050214

CIGWELD

CIGWELD

WELDING MACHINES, GENERATOR & PLASMA CUTTERS

MOBILE DIESEL ENGINE DRIVEN WELDERS

- DAS, auto engine protection shutdown system with warning lights in case of battery charger failure, high coolant temperature, low fuel level, low oil pressure
- · 12V built-in battery with electric start
- Voltmeter
- Fuel level gauge
- · Frequency: 50Hz
- · Earth leakage circuit breaker (ELCB) (except 71080080)
- Engine hourmeter (except 71080020)
- · Remote control socket (except 71080020)
- Central lifting eye (except 71080020)

Other Features for 71080020

- · Automatic idle device when no load is connected
- · Arc force control switch

- Other Features for 71080045
- · Emergency stop button
- · Low-high amps switch for a more accurate arc control selection (30A ÷ 200A/30A ÷ 400A)
- · Weld voltmeter and ammeter
- · Arc force control with changeover switch basic/celluloic welding rods
- · Lift start TIG facility
- · CC/CV control for MIG welding
- · Forklift pockets

Other Features for 71080080:

- Arc force control with changeover switch basic/cellulosic welding rods
 - · Central lifting eve
 - · Forklift pockets



Description	Welding Processes	Duty Cycle	Output Range	Engine	Power	Speed	Noise Level	Dimensions	Weight	Bishops Code
1 x 16A, 400V – 50Hz Three-Phase EEC Socket 1 x 16A, 230V – 50Hz Single-Phase EEC Socket Protected By Circuit Breaker 1 x 48V – 50Hz Single-Phase Outlet (Safety Low Voltage)	SMAW (Stick)	170A @ 35% 140A @ 60%	40-170A	Yanmar L100 AE	10hp	3,000rpm	74dB	920(l) x 460(w) x 570(h)mm	148kg	
1 x 32A, 400V – 50Hz Three-Phase EEC Socket 2 x 32A, 230V –50Hz Single-Phase EEC Sockets Protected by Circuit Breakers 1 x 48V – 50Hz Single-Phase Outlet (Safety Low Voltage)	SMAW (Stick)/TIG/ CAG	500A @ 60% 400A @ 100%	30-500A	Deutz F3L912	38hp	1,500rpm	78dB	590(l) x 800(w) x 1,150(h)mm	920kg	

PRACTICE SAFE WELDING



5KW DIESEL WELDER GENERATOR

- · Advanced air-cooled diesel engine, electric start
- · Single phase, four stroke engine
- · Large fuel tank
- · Stable welding current and waveform
- Dual function
- · AC output
- · Frequency: 60Hz
- · Engine: KD186FAE
- · Power: 8.6hp
- Output range: 50–180A, 2.2kVA
- · Voltage: 240V
- · Duty cycle: 180A @ 60%
- · Noise level: 74-79dB
- 775(I) x 485(w) x 580(h)mm
- · Weight: 154kg



Item Code	Bishops Code
5GF-MEW	74090050

CUTSKILL PLASMA CUTTERS



· Input air: 460kPa, 110lpm

 Comes with CutSkill 60A plasma torch, work cable and clamp, air filter wrench, 1/4" Nitto air line connector, shoulder strap and operating manual

Cutting capacity: 12-16mm (mild steel), 10mm (stainless), 8mm (aluminium)

- Supply plug: 10A
- Cutskill 45:
- Cutting capacity: 16-24mm (mild steel), 12mm (stainless), 10mm (aluminium)
- Supply plug: 15A

CutSkill 60:

- Cutting capacity: 20—28mm (mild steel), 14mm (stainless), 12mm (aluminium)
- Supply plug: 15A
- Upgrade to 4mm² lead and 20A plug to achieve 60A @ 30% Duty Cycle



Item Code	Description	Duty Cycle	Size	Weight	Bishops Code
1-1601-30	Cutskill 35	35A@35%	415(I) x 176(w) x 324(h)mm	11.8kg	
1-1601-40	Cutskill 45	45A @ 35%	415(I) x 176(w) x 324(h)mm	11.8kg	71040154
1-1601-60	CutSkill 60	60A @ 20%	347(I) x 176(w) x 324(h)mm	13.2kg	71040155

ESAB CUTMASTER+ PLASMA CUTTERS

Cutmaster 40+

- · Genuine Cutting & Piercing: 12mm
- · Regular Hand Cutting: 16mm
- · Max Severance Cut: 25mm
- Input Voltage: 230VAC +/- 10%, 50/60Hz, 1ph, 15A plug

Cutmaster 50+

- · Genuine Cutting & Piercing: 16mm
- · Regular Hand Cutting: 25mm
- · Max Severance Cut: 32mm
- Input Voltage: 400AC +/- 15% 50/60Hz, 3ph

Cutmaster 70+

- Genuine Cutting & Piercing: 20mm
- Regular Hand Cutting: 30mm
- · Max Severance Cut: 38mm
- Input Voltage: 400AC +/- 15%, 50/60Hz, 3ph

Includes:

- · Cutmaster+ Power Source
- SL60 75° torch and 5m lead
- · 3m Work lead with ground clamp
- · Consumables kit
- · Air fitting 1/4" PT Nitto type
- Ouick Start Guide
- · Operating Manual

Item Code	Description	Power	Dimensions	Weight	Bishops Code
)559141006	Cutmaster 40+	40A @ 40%	465(I) x 200(w) x 315(h)mm	11.5kg	71040153
0559150006	Cutmaster 50+	50A @ 60%	465(I) x 200(w) x 315(h)mm	16kg	
0559170006	Cutmaster 70+	70A @ 50%	465(I) x 200(w) x 315(h)mm	16kg	*0559170006
* - SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT					

FLUX CORED WELDING WIRE

• Sold in 15kg spools

Verti-Cor Ultra:

- · General purpose, versatile rutile type flux cored wire
- Exclusively for CO₂ shielding gas
- · All positional capabilities
- · Low spatter and fume levels
- Verti-Cor 3XP:
- · Micro alloyed rutile type flux cored wire
- · Versatile all positional capabilities

Supre-Cor 5:

- · Second generation fully basic flux cored wire
- Improved low temperature impact toughness to -50°C
 Verti-Cor 3XP H4:
- · Versatile, copper coated seamless wire
- · All positional capabilities
- · Very low H4 class hydrogen levels
- Suits wide range of mild to medium strength steels
 Verti-Cor 81 Ni1
- · Higher strength, low alloy rutile type flux cored wire
- · Suits argon + 20-25% CO2 or equivalent shielding gas
- · Versatile all positional capabilities



CIGWELD

Item Code	Diameter	Bishops Code
VERTI-COR ULTRA		
720900	1.2mm	71870512
720902	1.6mm	71870516
VERTI-COR 3XP		
720919	1.2mm	71870508
720921	1.6mm	71870510
SUPRE-COR 5		
720982	1.2mm	71870315
VERTI-COR 3XP H4		
722919	1.2mm	71870507
VERTI-COR 81 NI1		
720391	1.6mm	71870518

CORESHIELD 8 FLUX CORED MILD STEEL WELDING WIRE



 Designed to weld critical structural applications while maintaining excellent arc characteristics and high welder appeal using DCEN polarity

- · All positional
- Diameter: 1.6mm
- 11.34kg spool



Item Code	Bishops Code
0242206399	71870504

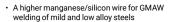
WELDSKILL GASLESS WELDING WIRE

- · Self-shielded flux cored wire
- For single and multiple pass applications
- Versatile, all positional capabilities
- Excellent tolerance to joint misalignment or poor joint fit-up
- Smooth rippled fillets with good edge wetting
- Ideal for welding thin section mild and galvanised steels
- 4.5kg handi spool



Item Code	Diameter	Bishops Code	
WG4509	0.9mm	71870204	
WG4512	1.2mm	*WG4512	
* - SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT			

AUTOCRAFT LW1-6 GAS SHIELDED WELDING WIRE



- Designed for use with CO₂ and argon based shielding gases
- Large range of other sizes available
- 15kg spool

Classifications:

AWS/ASME-SFA A5.18: ER70S-6



Item Code	Diameter	Bishops Code
720090	0.9mm	71870210
720096	1.2mm	71870214

AUTOCRAFT AL5356 GAS SHIELDED ALUMINIUM WELDING WIRE



CIGWELD

CIGWELD

- For the GMAW welding of wrought and cast aluminium alloys containing magnesium
- Patented lubrication process for superior wire feed ability



Item Code	Diameter	Spool Weight	Bishops Code
722226	0.9mm	7kg	71870409
723224	1.0mm	2kg	71870410
722224	1.0mm	7kg	71870411
722227	1.2mm	7kg	71870412

WELDSKILL SOLID MIG WELDING WIRE

- Copper coated steel wire for GMA welding
- Suitable for the positional Gas Metal Arc Welding (GMAW) of mild and low alloy steels used in general fabrication structural work
- 5kg spool

Classification:

- AS/NZS 2717.1: ES6-GC/M-W503AH
- AWS/ASME-SFA A5.18: ER70S-6



Item Code	Diameter	Bishops Code
WS5008	0.8mm	71870310
WS5009	0.9mm	*WS5009
* - SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT		

COMWELD TIG MILD STEEL FILLER WIRE CIGWELD

- Uncoated filler rod suitable for oxy-acetylene fillet and butt welding of carbon steel and wrought iron, gas or TIG welding
- 5kg



Item Code	Diameter	Length	Bishops Code
321334	1.6mm	1m	71880116
321337	2.4mm	75cm	71880125

COMWELD TIG WELDING WIRE

Comweld 316L:

- · Gold colour coded for easy identification
- · High quality low carbon rod for gas and TIG welding

Comweld LW1-6:

- Copper coated low carbon steel rod for TIG and oxy-acetylene welding Comweld AL5356:
- Premium quality aluminium-nominal 5% magnesium alloy rod
- · For gas or TIG welding

Classifications:

- AS/NZS 14341: B G 55A 3 C1/M21/M24 S4M31
- R G 57Δ 3 C1/M21/M24 S4M31
- AWS/ASME-SFA A5.28: ER80S-D2 / ER90S-D2



Item Code	Diameter	Pack Size	Bishops Code
COMWELD 316L			
321400	1.6mm	5kg	71875010
321401	2.4mm	5kg	71875012
COMWELD LW1-6			
321417	1.6mm	5kg	71875016
321418	2.4mm	5kg	71875018
COMWELD AL5356			
321640	1.6mm	2.5kg	71870620
321641	2.4mm	2.5kg	71870625

TIG TORCH 26F WITH FLEX HEAD

- 4m lead
- · Trigger switch and remote control
- 50mm² dinse plug
- Rated for 200A DC @ 30% and 300A DC @ 14%



CIGWELD

CIGWELD

Item Code	Bishops Code
W4014604	71280425

TWECO STYLE MIG WELDING GUN

- · Heavy duty design
- · High impact resistant handle and components
- Large range of consumables available
- Metal jacketed conductor tube
- Oval handle shape reduces operator fatigue
- · Heat resistant
- Tweco No. 5 3.6m



Item Code	Bishops Code
717211	71260442

CONTACT TIPS

- Suit TWE1 mini gun
- 10 pack



Item Code	Size	Bishops Code
TWT1109	0.9mm	71260090
TWT1110	1.0mm	71260091
TWT1112	1.2mm	71260092

HOW TO PREP A SURFACE FOR WELDING

A great weld starts with preparation. A poorly prepared metal surface can cause defects in the weld that make it weak. We've got all the tools you need for a strong weld – Find them at Bishops!

Find grinders in our **Power, Pneumatic & Engine Powered**



How to Prepare an Aluminium TIG Weld

Aluminium needs to be approached differently than steel prior to welding.

Use a stainless steel abrasive such as a stainless wire brush, stainless steel wool or an iron-free grinding disc to clean the surface thoroughly. Make sure this abrasive has not been used on any other metal to avoid contamination of the aluminium.

The more effort you put into your preparation, the cleaner and stronger the end result can be.

Bishops can supply specialist TIG cleaning products to get your welds shiny and clean. Call us for more information today!

GET MORE AT BISHOPS



SURFACE PREPARATION PRODUCTS

From Page 119

COBALARC WELDING ELECTRODES

Cobalarc 650:

 Basic electrode for the hard surfacing of steel components subjected to wet or dry hard particle abrasion and low to moderate impact loading

Cobalarc 750:

- Smooth running, rutile type electrode specifically designed for AC hard surfacing applications
- Resistant to hard particle abrasion

Cobalarc CR70:

- · Highly alloyed manual arc electrode
- Ideal for coarse abrasion and low to moderate impact loading



Item Code	Diameter	Pack Size	Bishops Code
COBALARC 650			
611463N	3.2mm	5.0kg	71860014
611464N	4.0mm	5.0kg	71860018
COBALARC 750			
611473	3.2mm	5.0kg	71860022
611474	4.0mm	5.0kg	71860024
COBALARC CR70			
613494	4.0mm	5.0kg	71860030

WELDING ROD - E6013

- · High speed
- · A fill-freeze mild steel electrode
- Suitable for AC or DC output welding



Diameter	Pack	Bishops Code
2.5mm	2.5kg	71800026
2.5mm	5kg	71810026
3.2mm	5kg	71810032
4.0mm	5kg	71810040

STAINLESS ELECTRODES

Satincrome 309Mo - 17:

· Smooth running rutile type stainless steel electrode

 All position (except vertical down) fillet and butt welding of 24Cr/13Ni type stainless steel

Satincrome 316L - 17:

- Smooth running rutile type stainless steel electrode
- All position (except vertical down) fillet and butt welding of 19Cr/10Ni type stainless steel

Weldall:

- · Highly alloyed stainless steel
- Deposits a strong and ductile duplex Austenitic-ferrite weld
- · Extremely resistant to cracking
- Suitable for all types of steel



CIGWELD

Item Code	Diameter	Pack Size	Bishops Code		
SATINCROME 30	SATINCROME 309MO - 17				
611692N	2.5mm	1.7kg	71830458		
611693N	3.2mm	1.9kg	71830460		
611693N	4.0mm	4.4kg	71830462		
SATINCROME 316	6L — 17				
611661N	2.0mm	1.6kg	71830450		
611662N	2.5mm	1.7kg	71830452		
611663N	3.2mm	2.0kg	71830454		
611664N	4.0mm	4.3kg	71830456		
WELDALL	WELDALL				
610702	2.5mm	1.0kg	71830005		
611702N	2.5mm	1.6kg	71830012		
611703N	3.2mm	1.8kg	71830014		

FERROUS ELECTRODES

Satincraft 13:

CIGWELD

- · General purpose, rutile type electrode
- · All positional capabilities
- Smooth mitre fillet welds with low spatter

• Blue flux

ESAB SPEZIAL OK53.16:

 Double coated electrode combining the running characteristics of a rutile electrode with the mechanical properties of a basic electrode CIGWELD

- · Small pack sizes reduce waste and cost
- Vacuum sealed to reduce moisture absorption and electrode damage
- Smooth running on AC and DC with low spatter

Ferrocraft 21:

- Versatile rutile type, medium powder iron electrode
- · All positional capabilities
- · Easy striking hot or cold
- · Ideal for vertical down fillet welding

Ferrocraft 22:

- · Rutile type, high powder iron electrode
- High productivity fillet and butt welding in all downhand positions

Self-releasing slag

Ferrocraft 61:

- Basic coated, hydrogen controlled E4818/E7018 type electrode
- Superb AC/DC operator appeal
- Excellent out of position welding
 Reliable impact properties to -30°C

Smoothcraft E6013

- · General purpose, rutile-Ilmenite type electrode
- Outstanding operator appeal, versatile all positional capabilities, smooth mitre fillet welds with low spatter

Item Code	Diameter	Pack Size	Bishops Code
SATINCRAFT 13			
611182	2.5mm	5.0kg	71810070
611183	3.2mm	5.0kg	71810072
611184	4.0mm	5.0kg	71810074
ESAB SPEZIAL OKS	53.16		
53162534G1	2.5mm	1.8kg	*53162534G1
53163234G0	3.2mm	1.6kg	71810232
53164044G0	4.0mm	2.2kg	*53164044G0
FERROCRAFT 21			
611242	2.5mm	5.0kg	71810220
611243	3.2mm	5.0kg	71810222
611244	4.0mm	5.0kg	71810224
611245	5.0mm	5.0kg	71810226
FERROCRAFT 22			
611253N	3.2mm	5.8kg	71820344
611254N	4.0mm	5.3kg	71820346
FERROCRAFT 61			
611342	2.5mm	5.0kg	71810240
611343	3.2mm	5.0kg	71810242
611344	4.0mm	5.0kg	71810244
SMOOTHCRAFT E	5013		
611042	2.5mm	5.0kg	71810060
611043	3.2mm	5.0kg	71810063
611044	4.0mm	5.0kg	71810064
* - SPECIAL C	ORDER: PLEASE QUOTE I	TEM CODE UPON ORDERIN	IG THIS PRODUCT

SHAPING TUNGSTEN ELECTRODES



Rounded or tapered ball end electrodes are typically used for welding nonferrous metals like aluminium and magnesium



Pointed tips are typically used for welding ferrous metals like steel

10 TIPS TO A SAFER WELDING WORKPLACE



Read the manual

Every piece of equipment is different. As such, many manufacturers provide an operating manual with their equipment to help you remain safe in the workplace. Make sure to become familiar with the contents of the manual and remember, if it gets lost, check online or contact the manufacturer.

Cover up

Ensure that none of your skin is exposed during the job. The rays and sparks that emit from the welder can be harmful to your skin. To help prevent any damage, make sure to always zip up, button up and cover up!

Dress to impress

Even the smallest jobs require the proper gear, this includes a helmet, gloves and the right clothing. Find flame resistant clothing in this catalogue from page 75 and welding protective clothing from page 92. Many modern clothing options are lightweight and offer fire resistance, so there's no excuses!

Wear the right footwear

Always wear enclosed shoes during the job. Hightop boots offer the best protection. Always make sure that your pants go over your boots to prevent sparks getting inside your footwear.

Air is a gift

Make sure that the workplace is well ventilated. Many fumes that are emitted during the welding process can be very hazardous to your health. It is recommended to use an exhaust hood to remove all of the fumes from the area. In certain welding applications you will need a respirator, purified or supplied fresh air to protect yourself.

Don't look into the light

Whilst arc rays are harmful to your skin, they are even more harmful to your eyes. Exposure to welding arcs may cause an arc flash which can cause burns that may not be noticeable straight away. Make sure to use a helmet with proper lens shading for the job. Welding screens should also be installed to protect those around you from exposure.

Auto-darkening helmets

Many modern day helmets have auto-darkening features. This allows the lens to darken in a fraction of a second after exposure to welding rays. Newer helmets also have different modes, allowing for the same helmet to be used for different jobs. Be cautious in cold weather as auto-darkening reaction times may be delayed.

No stress, no mess

Use of traditional fixed shade helmets can often lead to fatigue from snapping your neck to lower the lens. Auto-darkening helmets remove the need to do so and can reduce the neck fatigue that you experience.

Keep it clear

Working in a cluttered workplace can be dangerous and provides many tripping hazards. Keep your workplace clear of unnecessary clutter and cables, only the tools and equipment that you are using should be around.

A safe workplace is a happy one

Safety should be embedded into the daily habits of your workplace. Most safe workplaces use a combination of incentives and punishments to help encourage the use of safety gear. Find the perfect balance that works in your workplace.

www.bishopbros.com.pg



ELECTRODES, HEATERS & HOLDERS

CASTCRAFT 100 ELECTRODES

- · Maintenance welding of cast irons
- · Lime gluorspar/graphite coating
- · Soft, ductile nickel deposit
- Easy starting and stable running on portable 240V welding machines
- Ideal for repair and maintenance jobs
- · Smoother weld deposit surface finish
- Classification: AWS/ASME-SFA A5.15: ENi-CI



CIGWELD

Item Code	Diameter	Pack Size	Bishops Code
611732N	2.5mm	2.0kg	71840313
611733N	3.2mm	2.0kg	71840314
611734N	4.0mm	2.0kg	71840315

COPPER ALLOY WELDING RODS

- Equivalent standards AWS RBCuZn-C
- · Chemical composition: Sn0.9, Si0.1, Fe 0.8
- · Low fuming bronze to gas weld or carbon arc weld bronze copper
- · Can braze weld copper, steel or cast iron as well
- · Melts at approximately 860°C
- · For modern, high-speed



Description	Description	Size	Pack Size	Bishops Code
322021	Flux Coated	3.0mm	2.5kg	71865050

COMWELD COMCOAT BRAZING RODS

- Self-fluxing rods suitable for a wide range of braze welding applications
- · Comcoat C Manganese Bronze Filler Rod Suitable for braze welding of steel, cast and malleable irons
- Comcoat T Tobin Bronze Filler Rod Suitable for braze welding of certain brass and bronze surfaces, and low-strength brazing of steels. Not suitable for cast irons
- Comcoat N Nickel Bronze Filler Rod Suitable for high strength braze welding of steels, cast or malleable irons, and fusion welding of copper-based alloys
- AS/NZS 1167.1, AS/NZS 1167.2
- AWS/ASME-SFA A5.8/A5.7



Item Code	Size	Flux Colour	Approx. Melting Point	Weight	Bishops Code
COMCOAT C					
321191	2.4mm	Blue	890°C	2.5kg Pack	71880324
322206	2.4mm	Blue	890°C	5 Rod Blister Pack	71880330
COMCOAT T					
322207	2.4mm	White	900°C	5 Rod Blister Pack	71880335
COMCOAT N					
322208	2.4mm	Pink	910°C	3 Rod Blister Pack	71880340



ELECTRODE HEATER

- · Electrode stabilising in-shop oven
- Modular design with recessed controls for protection
- Removable shelves
- · Compact and fully insulated
- · Features nesting feet and sockets for easy stacking
- Fitted with thermostat control and pilot light
- · Capacity: 159kg
- Electrode size: Up to 457mm long
- · Voltage: 115V or 220V, AC only
- Temperature range: 37.8°C-287.8°C
- Outer dimensions: 559 x 559 x 622mm
- Inner dimensions: 356 x 405 x 482mm
- Weight: 50kg



Item Code	Bishops Code
GUL350220	71255020

ELECTRODE HEATER

- · Portable electrode oven
- Fitted with thermostat control and a pilot light
- · Not suitable for stacking
- · Oven opens from the top with a lift-up lid
- · Line cord: 2,428mm • Element: 125W
- · Capacity: 9kg

CIGWELD

- · Electrode size: Up to 457mm long
- · Voltage: 115V or 220V, AC only
- Temperature range: 38°C-148°C · Outer dimensions: 178(dia.) x 585(h)mm
- Inner dimensions: 76(dia.) x 483(h)mm
- · Weight: 75kg



Item Code	Bishops Code
6-FC7510	71255009

TWIST-LOCK ELECTRODE HOLDERS

· Heavy duty twist-lock welding electrode holders



CIGWELD



Item Code	Duty Cycle	Electrode Capacity	Bishops Code
646165	250A	5mm	71240690
CEH400TL	400A	5mm	71240695
646343	600A	8mm	71240699

CIGWELD

HOLDERS, WELDING CABLES, CLAMPS & ACCESSORIES

TWIST-LOCK ELECTRODE HOLDERS

Twist type



Description	Bishops Code	Description	Bishops Code
400A	71240600	600A	71240650
500A	71240640	800A	71240680

TONG STYLE ELECTRODE HOLDERS

· Clamp type



Description	Bishops Code
300A	71240100
500A	71240300
600A	71240500

WELDING LEAD SETS

- 400A
- · Comes with 50mm dinse





Item Code	Length	Bishops Code
646757	5m	71230917
646325	8m	71230919

WELDING LEADS

- · 300A
- Length: 5m



Description	Bishops Code
Lead With Electrode Holder & Connector	71230900
Lead With Earth Clamp & Connector	71230910

WELDING WORK CLAMPS

- Heavy duty spring loaded jaw style clamps
- · Copper jaws with copper braided shunt
- · Zinc plate steel construction



Item Code	Duty Cycle	Jaw Opening	Suits Cable	Bishops Code
646348	200A @ 60%	63(d) x 38(h)mm	25mm²	71235270
646349	400A @ 60%	76(d) x 63(h)mm	70mm²	71235275
646350	600A@60%	76(d) x 76(h)mm	95mm²	71235280

WELDING EARTH CLAMPS

Spring type clamps



Description	Bishops Code
300A - Large	71235020
300A - Small	71235040
500A - Large	71235220
500A - Small	71235240
600A	71235260

G-STYLE WELDING EARTH CLAMP

- All brass construction with steel fixing screw
- Compact and durable clamp
- Suits 95mm² welding cable
- Duty cycle: 500A @ 60%Jaw opening: 40(d) x 42(h)mm



Item Code	Bishops Code
646351	71235300

WELDING CABLE

- Finely-stranded copper conductor
- Operating temperature: -25°C-+90°C
- 100V
- Sold per metre
- AS/NZS 1125, AS/NZS 1995 and AS/NZS 5000.1 approved
- Flame retardant to standard AS/NZS 1660.5.6



Item Code	Size	Max. Current	Bishops Code
7901220	16mm²	225A @ 30%	71230016
7901221	25mm²	300A@30%	71230025
7901222	35mm²	375A @ 30%	71230035
7901223	50mm ²	475A @ 30%	71230050
7901273	70mm²	590A @ 30%	71230070
7901225	95mm²	715A @ 30%	71230095



ARC GOUGING & PRESSURE REGULATORS

CABLE CONNECTORS

- · MechConnector Style
- · Compatible with Lincoln, Cigweld and more
- · Joiner male and female set
- Suit cable size: ≤70mm²



Item Code	Bishops Code
WC-01499	71230250

DINSE SOCKETS & PLUGS

Sockets

- · Allows maximum current carrying capacity, minimising wear and increasing cost-effectiveness
- 50mm

Plugs

- · Designed to fit welding cables to welding machines
- · Male connection
- 50mm



71230555

MORRIS

CIGWELD

Item Code	Description	Bishops Code
704460	Socket	71230555
704461	Plug	71230550

ARC GOUGING TORCH

- For gouging, cutting, bevelling, piercing and flushing metal
- · Uses the Air Carbon-Arc cutting process to remove any kind of metal
- · 2 flair with 2.1m swivel cable
- · Fitted with rubber guard over connector piece
- · Max. DC current: 600A
- · Max. AC current: 450A



Item Code	Bishops Code
K3	71480180

POINTED DC GOUGING CARBONS

- · Fast, clean, smooth, hassle free gouging
- · Used to remove metal from a wide range of common ferrous and non-ferrous metals
- · Designed for DC operation
- · Superior arc stability
- · Air pressure: 550-690kPa
- · Length: 305mm
- 50 per pack



Item Code	Diameter	Current Range	Bishops Code
22043003	6.5mm	300-400A	71890060
22053003	8.0mm	350-450A	71890080
22063003	9.5mm	450-600A	71890090

CUTSKILL REGULATORS

- · Excellent performance
- · For use with most light to medium cutting and welding applications
- . Based on CIGWELD's COMET™ design
- · Strong, robust construction combined with renowned CIGWELD quality
- Fail safe against over pressure and diaphragm protected against flashback
- · Factory set to deliver maximum pressure
- Captive control knob prevents loss and tampering
- · Colour coded for easy identification
- · Connection outlet: 5/8"-18 UNF

Rated Air

Flow

Complies With: · AS4267

Code



Gauge Range Inlet	Gauge Range Outlet	Connection Inlet Outlet	Bishops Cod

Ext

ΙН

LPG - MAX. OUTLET PRESSURE: 400KPA						
201003	230L/min	_	600kPa	AS2473 Type 21 (0.880" – 14 NGO I H Ext)	LH Ext	

OXYGEN - MAX. OUTLET PRE				
210222 310L/min 30.000kPa	1.600kPa	AS2473 Type 10	RH	71460041

(5/8" BSP RH Ext)

(5/8" BSP LH Ext)

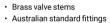
ACETYLENE - MAX. OUTLET PRESSURE: 150KPA

210223	1501 /min	4.000kPa	300kPa	AS2473 Type 20

REGUI	LATORS	



CIGWELD







Description	Max. Inlet Pressure	Includes	Bishops Code
Acetylene Regulator	2,000kPA @ 15°C	2 x Dial Indicators	71460020
Oxygen Regulator	20,000kPA@15°C	2 x Dial Indicators	71460040
LPG/Propane Regulator	400kPA@15°C	1 x Safety Gauge Dial	71460090

OXYGEN PRESSURE GAUGES

· Low and high pressure options





Description	Max. Pressure	Bishops Code
Low Pressure	1,000kPa	71468000
Low Pressure	1,400kPa	71468040
High Pressure	28,000kPa	71468100

PRESSURE REGULATORS & FLOWMETERS

ACETYLENE PRESSURE GAUGES

· Low and high pressure options



Description	Max. Pressure	Bishops Code
Low Pressure	200kPa	
High Pressure	2,800kPa	71468580

COMET™ EDGE OXY/ACETYLENE REGULATORS

 Regulators incorporating advanced design, proven performance, and unsurpassed safety

· Engineered for professional applications

· Suitable for the majority of cutting, welding and heating applications

· Gas guard nipple ensures total gas shut off in the event that the inlet connection is broken

- · Colour coded for easy identification
- · Vertical inlet



CIGWELD

Item Code	Description	Max. Outlet Pressure	Bishops Code
310532	ESV4 Acetylene Regulator	150kPa	71460022
310637	ESV4 Oxygen Regulator	1,000kPa	71460042

MIG & TIG SHIELDING GAS REGULATORS

 Argon and Argon/CO₂ mixture regulators are designed for use with MIG and TIG welding processes

Outlet Connection: 5/8"-18 UNF RH Ext





Item Code	Description	Rated Air Flow	Max. Outlet Pressure	Inlet Connection	Bishops Code
201031	Argon	30L/min	345kPa	⁵ /8" BSP −18 Type 10 Side	71464100
301526	Argon, Ar/CO ₂	40L/min	400kPa	AS 2473 Type 10 (5/8" BSP RH Ext)	71464102

COMET™ NITROGEN HIGH PRESSURE WELDING REGULATOR

- · Specifically designed for high pressure applications
- · Designed for cylinder fill pressures up to 31,500kPa
- Encapsulated seat with protective sintered filter
- · Tube outlet connectors designed to prevent accidental connection of low pressure equipment
- · Individually tested and set to a maximum delivery pressure
- · Connection outlet: 1/4" tube fitting
- · Max. outlet pressure: 20,000kPa
- · Rated air flow: 2,000L/min
- · Gauge range: 50,000kPa (inlet), 30,000 kPa(outlet)
- · Connection inlet: AS2473 Type 11 (%" BSP RH Ext)



CIGWELD

Item Code	Bishops Code
301565	71460048

ARGON FLOWMETER REGULATOR

- Brass fittings
- Max. inlet pressure: 25,000kPA @ 15°C
- Includes 2 x dial indicators for pressure and flow



Item Code 201-50LM-AR

FAST FACTS -**GAS HEATING**



For light duty heating & burning applications a LPG only set up will suffice.

For heavy duty applications, mixed gas equipment can be employed. Oxy/LPG and Oxy/Acetylene will both produce a much higher flame temperature than LPG alone.

- Oxy/LPG is an ideal combination in high heat applications, as LPG creates a higher heat in the secondary flame.
- Oxy/Acetylene releases the majority of its heat in the primary flame, giving it a more concentrated heat output.

CO2 REGULATOR & FLOWMETER

- Suitable for MIG/TIG applications
- · Single stage construction
- · Forged brass body for maximum strength
- · Chrome bonnet
- · Neoprene diaphragms
- · Sintered metal inlet filter to trap impurities
- · Accurate gas flow regulator
- · Safety relief valve is set for all gases
- · No soldered joints, for easy maintenance Flowmeter with easy-to-read tube and
- transparent polycarbonate outer cover for impact resistant
- Side entry
- Flow rate: 25L/min
- · Max. working pressure: 315bar



Item Code	Bishops Code
101-25FL-CD	71464110

No. 12

3.2-4mm





No. 32

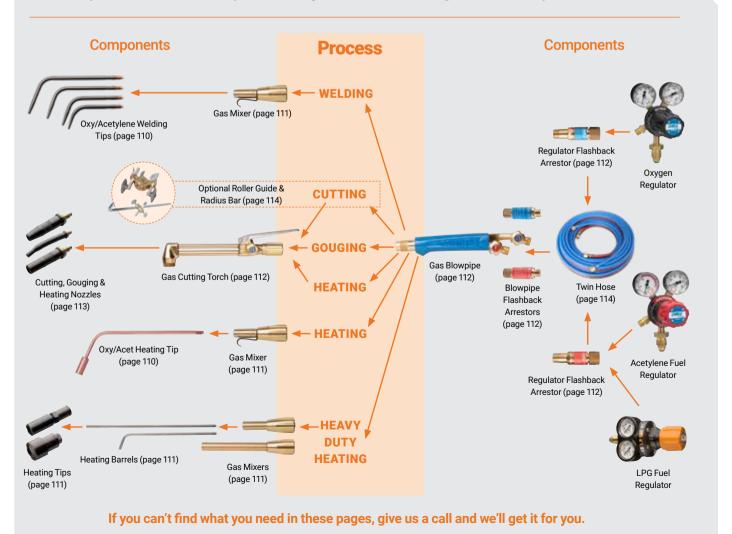
ACETYLENE HEATING NOZZLE • MG-H Series • Suits MG-243 mixer

GAS EQUIPMENT CONFIGURATION GUIDE

25mm

Whether you're welding, cutting, gouging or heating, you'll need to configure your gas set up carefully. Each set up will need different components, and you can find them all right here at Bishops.

МН-Н



LPG/GAS HEATING TIPS

- Suit HE-505
- Designed with flame release slots to prevent forced flash back of oxygen/fuel gas
- Use with 2393 stainless steel heating tube
- · Assemble with F-43 mixer and 43-2 torch handle







71/25030

Description	Tip Size	Oxygen Pressure	Oxygen Flow	Propane Pressure	Propane Flow	Heat Output	Bishops Code
2290-2H	1.1 x 25mm	2-3kg/cm ²	5.9-12.8L/min	0.5kg/cm ²	1.5-3.2L/min	33.5 x 106-71.4 x 106cal/hr	71425510
2290-3H	1.3 x 25mm	3-4kg/cm ²	8.5-22.9L/min	1kg/cm ²	2.2-5.7L/min	49 x 106-127.1 x 106cal/hr	71425512
2290-4H	1.1 x 33mm	4-5kg/cm ²	14.2-28.4L/min	1kg/cm ²	3.6-7.1L/min	80.3 x 106-158 x 106cal/hr	71425514
2290-5H	1.3 x 33mm	5-6kg/cm ²	17-39.7L/min	1-2kg/cm ²	4.3-10L/min	96 x 106-223 x 106cal/hr	71425516

ACETYLENE HEATING TIPS

Suit 2290A05C





Description	Tip Size	Oxygen Pressure	Oxygen Flow	Acetylene Pressure	Acetylene Flow	Heat Output	Bishops Code
Acetylene 8 x 12	2290-1HA	150kPa	45-58L/min	100kPA	41-55L/min	180MJ/hr	71425050
Acetylene 12 x 12	2290-2HA	200kPa	74L/min	100kPA	65L/min	215MJ/hr	71425060

LPG HEATING TORCH KIT

- HE-505 heating torch with 4 tips
- Standard lengths: 650mm/750mm/1,050mm/1,250mm
- · Oxy pressure: 3.5-5.0kg/cm2
- Propane pressure: 0.4kg/cm2
- Oxy consumption: 9,000-16,000L/hr
- Propane consumption: 2,200-4,000L/hr
- · Range: 5-50mm
- Tip sizes: 1.1 x 25, 1.3 x 25, 1.1 x 33 and 1.3 x 33



Item Code	Bishops Code
HE-505-BI	71480130



WELDING & HEATING MIXER

- Suits Morris Blowpipe Hand Piece (MG-241) type 550
- · Acetylene gas mixer
- Hose connection: 3/8"-26N
- · Length: 10mm



Item Code	Bishops Code
MG-243	71480340

HEATING MIXER

- Suits Morris Blowpipe Hand Piece (MG-241) type 570
- · Fitted with securing clip
- · Length: 13mm

Item Code MG-343





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GET MORE AT BISHOPS SAFETY & EMERGENCY WARNING ASSEMBLY **SIGNS** POINT Page 54



Bishops Code
71480345



BLOWPIPES & FLASHBACK ARRESTORS

BLOWPIPE HAND PIECE

- · Medium duty handle
- · Hose connection: 5/8"-18N
- · Cuts up to 150mm and welds up to 9mm
- Lightweight and comfortable aluminium coated handle
- Comes with two high quality brass and stainless steel needle valves with internal springs
- Locking teeth allow the handle to lock into position tightly



Item Code	Bishops Code
MG-241	71480320

COMET™ 3 HEAVY DUTY BLOWPIPE & CUTTING ATTACHMENT

COMET™ 3 Blowpipe:

 Suitable for fusion and braze welding, brazing, soldering, heating, hand cutting, sheet metal cutting, rivet cutting, powder facing and flame cleaning

COMET™ Cutting Attachment:

- Attaches quickly and easily to the COMET™ 3 blowpipe by hand
- · Suits oxy/acetylene, oxy/LP gas or oxy/natural gas
- · For use with Type 41 and 44 nozzles



71480322

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Item Code	Description	Bishops Code
304001	Blowpipe	71480322
304005	Cutting Attachment	71480362

CUTTING ATTACHMENT

- Type 41 nozzle
- Cuts up to 150mm/6
- · Stainless steel needle valve provides fast and accurate flame adjustment
- · Locking teeth allow the handle to lock into position tightly
- The double 0-ring seal forms a gas-tight seal
- · Fitted with a press lever for easy cutting use
- · Special design twin tubes with mixer
- · Suits Morris Blowpipe Hand Piece (MG-241) hand piece
- · Length: 285mm



Item Code	Bishops Code
MG-242	71480360

HAND CUTTING TORCH

- · Heavy duty cutting torch
- · Stainless steel lever and needle valves
- · 90° angle head
- · Comes with adaptors
- · Cutting capacity: 3-300mm
- · Length: 500mm



Item Code	Bishops Code
1601A	71480140

WELDING FLASHBACK

Avoid A Nasty Flashback!

Always use fit-for-purpose flashback arrestors with all common gas fuel systems. If flashback arrestors are not used, possible flashbacks will not be stopped and have the potential to cause major property damage and injury.

For hoses 3 metres or less, flashback arrestors should be fitted to each gas line at the regulator outlet. For hoses over 3 metres, two flashback arrestors should be fitted to each gas line, one at the blowpipe connection and one at the regulator outlet.

All flashback arrestors must comply with Australian Standard AS4603 to be sold on the Australian market. Flashback arrestors need to be tested at least every 12 months to make sure that they are still working effectively.

FLASHBACK ARRESTORS

- Single piece type arrestors with non-return valve, flame arrestor and dust filter
- Suitable for small flow rate applications
- EN 730-1:2002
- Max. working pressure: 15bar (oxy/compressed air), 1.5bar (acetylene), 3.5bar (hydrogen), 5bar (fuel/gas)
- Length: 51.5mm
- · Diameter: 21mm









71435100

71435400

CIGWELD

MORRIS

Description	Bishops Code
To Suit Oxygen Torch	71435100
To Suit Gas Torch	71435200
To Suit Oxygen Regulator	71435300
To Suit Gas Regulator	71435400

COMET™ FLASHBACK ARRESTORS

- Provides protection against flashbacks, backfires and sustained backfires
- · NV Non-Return Valve prevents reverse flow of gases
- · FA Stainless Steel Flame Arrestor extinguishes any returning flame
- TV Gas flow will be shut-off if arrestor becomes overheated
- DF Dust Filter protects the gas non-return valve against
- Standards compliant to AS4603; ISO 5175-1; UL 1357







Regulator Mount

Item Code	Description	Mount	Bishops Code
208516	FBA COMET – Oxygen	Regulator	71435302
208517	FBA COMET - Fuel	Regulator	71435402
208514	FBA COMET – Oxygen	Torch	71435102
208515	FBA COMET – Fuel	Torch	71435202

FAST FACTS – CYLINDER FALL PROTECTION

Snap Safe & Gas Guard are safety features designed to reduce the risks and hazards that can occur if a welding gas cylinder topples over due to incorrect storage, placement or handling.

If the gas regulator on top of a cylinder breaks off during a fall, potentially explosive gas under high pressure can escape rapidly, turning your cylinder into an unguided missile. These features ensure gas shut off if the inlet connection is broken.

Always properly secure and regularly inspect your gas cylinders!

LPG CUTTING TIPS

• Type 44 BOC style



Item Code	Cutting Capacity	Bishops Code
44-8	5–10mm	
44-12	20-50mm	71420712
44-15	50-80mm	71420715

OXY/ACETYLENE GAS CUTTING MACHINE NOZZLES

 Divergent type nozzles with stainless steel insert screwed into tip end of the cutting oxygen port

 Maintains a constant high quality cutting performance that also improves nozzle life



Size	Plate Thickness	Bishops Code
1	10-15mm	71270700
2	15-30mm	71270702
3	30-40mm	71270704

40-50mm

CUTSKILL GAS CUTTING NOZZLES

- Type 41 oxy/acetylene
- Economical alternative to the COMET[™] range
- Two seat designed nozzles for use with COMET™ 3, multi-purpose and sabre cutting torches
- · Manufactured from copper for better heat resistance



Item Code	Size	Cutting Thickness	Fuel/Gas Flow Rate @ 100kPa	Oxy Flow Rate	Bishops Code
206047	8	6-10mm	3.5L/min	20L/min @ 200kpa	71420258
206048	12	12-20mm	4.0L/min	38L/min @ 200kpa	71420260
206049	15	25-75mm	7.0L/min	75L/min @ 350kpa	71420270
206050	20	100-125mm	9.0L/min	134L/min @ 400kpa	71420275

COMET™ TYPE 41 OXY/ACETYLENE CUTTING NOZZLES



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- Type 41 nozzles
- Wider seating areas ensure gas tight seals with less tightening
- · Protective flange to safeguard tapered seat from damage
- · Consistent high quality performance and long nozzle life
- · Less slag adhesion
- Individual flame testing of COMET™ nozzles guarantees consistent high quality performance



Item Code	Size	Cutting Thickness	Fuel/Gas Flow Rate @ 100kPa	Oxy Flow Rate	Bishops Code
306051	24	150-200mm	20L/min	420L/min @ 600kPa	71420280

TYPE 41 ACETYLENE CUTTING TIPS

- For 1600B and MG-242 cutting torch and cutting attachment
- One piece

CIGWELD

• Length: 72mm



Tip Size	Cutting/Plate Thickness	Oxygen Pressure	Acetylene Pressure	Bishops Code
No. 6	1.0-5mm	1.5bar	0.5bar	71420060
No. 8	5.0-10mm	1.5bar	0.5bar	71420080
No. 12	20-50mm	2.5bar	1.0bar	71420120
No. 15	50-80mm	2.5bar	1.0bar	71420150
No. 20	80-100mm	3.0bar	1.5bar	71420200
No. 32	150-200mm	4.0bar	1.5bar	71420250

GET MORE AT BISHOPS



Page 320







CUTTING & GOUGING TIPS, GUIDES, WELDING HOSES & ACCESSORIES

MORRIS

CIGWELD

CIGWELD

CUTSKILL CUTTING & GOUGING TIPS

- Suits Cutskill Plasma
- · Pack of 5



71270000

Item Code	Size	Amperage	Bishops Code
CUTTING TIPS			
CSP337001	0.8mm	35A	71270000
CSP337002	0.9mm	45A	71270001
CSP337095	1.1mm	60A	71270002
GOUGING TIPS			
CSP337096	1.1mm	60A	71270005

TYPE 41 BENT GOUGING TIPS

- · Oxy-Acetylene gouging tips
- For MG-242 and 1600B cutting torches
- · One piece
- · 7 holes medium preheat
- · For gouging and weld removal
- · Length: 100mm



Tip Size	Cutting/Plate Thickness	Oxygen Pressure	Acetylene Pressure	Bishops Code
MG-32GB	8mm	5.0bar	1.0bar	
MG-48GB	11mm	5.5bar	1.0bar	71432110
MG-64GB	13mm	6.0bar	1.0bar	71432130

CUTSKILL PLASMA ACCESSORIES

Suitable for:

- · 35/45A Plasma
- 60A Plasma Torch







712

Item Code	Description	Bishops Code
CSP337005	Shield Cup	71280431
CSP337004	Stand-Off Guide	71280432

ROLLER GUIDES

- Combination Roller/Circle Guide For COMET Torches
- Can be fitted to COMET™ torches to allow accurate control whilst cutting straight lines and circles



Item Code	Bishops Code
308354	71470140

TWIN WELDING RUBBER HOSES

- · Highly resistant to abrasion and flame
- Black/blue hose for oxygen, and red hose for fuel gas
- · Includes fittings



Gas Type	Colour	Length	Nominal Bore Diameter	Bishops Code
Oxy/Acetylene	Black & Red	4.5m	1/4"	71450520
Oxy/Acetylene	Black & Red	6m	1/4"	71450530
Oxy/Acetylene	Black & Red	10m	1/4"	71450540
Oxy/Acetylene	Blue & Red	20m	1/4"	71450546

OXY/ACETYLENE WELDING HOSE

- Oxygen/acetylene
- · Resistant to abrasion and flame
- · Blue and red colour coding
- Normal bore diameter: 5mm
- Sold per metre



Bishops Code	
71450580	

COMET SINGLE INERT RUBBER ARGON WELDING HOSE

- 5mm diameter
- Sold per metre
- Black
- · Compliant to AS1335



Item Code	Bishops Code
7904520	71450590

ACETYLENE COUPLING

- LP240
- Left hand coupling
- Brass



Item Code	Bishops Code
18-LP240	71450090

HOSE ACCESSORIES & WELDING & CUTTING KITS

NUT & TAIL CONNECTORS

- GA5 type
- · Left hand and right hand options



Item Code Description		Bishops Code
GCWA45	Left Hand	71450040
960-R	Right Hand	71450050

OXY/ACETYLENE HOSE CONNECTOR KIT CIGWELD

- Screw type
- 5mm



Item Code	Bishops Code
LP265	71450020

HOSE JOINERS

- 5mm
- 5/8-18 UNF
- Male both ends



Item Code	Description	Bishops Code
WB34	RH	71450010
WB35	LH	71450020

BUTANE GAS TORCH KIT

- Butane gas canister with burner handle
- Adjustable flame
- Manual ignition



Description	Bishops Code
Butane Torch Kit	71450592
200g Butane Gas Refill	71450595

15 PIECE OXY/ACETYLENE WELDING & CUTTING KIT



CIGWELD

- Contains tools that can cut up to 150mm/6" and weld up to 9mm/3/6" steel
- Suitable for welding, brazing, soldering, hard facing, heat treating, priming, deseaming, scarfing, gouging, flame cleaning, rivet washing and cutting

Includes:

- Torch handle, cutting attachment and mixer
- #6, #8, #10, #12, #15, #20, #26 and #32 welding tips
- 8, 12, 15 and 20 type 41 cutting tps
- %"-18N hose nut
- · Twin wheel circle guide
- Supplied in a durable blowmold tool case



Item Code	Bishops Code
GCW-30P	71410040

CUTSKILL TRADESMAN PLUS OXY/ACETYLENE WELDING KIT



- Everything you need for oxy/acetylene gas cutting or welding Includes:
- · CutSkill oxygen regulator
- · CutSkill acetylene regulator
- · CutSkill blowpipe
- CutSkill cutting attachment
- CutSkill mixer
- · 2 x flashback arrestors F2R & F6
- 3 x cutting nozzles 8, 12 & 15
- 3 x welding tips 8, 12 & 15
 Heating tip 8 x 12HT
- Gas welding goggles
- Twin gas hose 10m
- · Roller guide and radius bar
- Tip cleaners
- Flint lighter

CIGWELD



Item Code	Bishops Code
208007	71410031

COMET™ EDGE PROFESSIONAL PLUS OXY/ACETYLENE WELDING KIT



CIGWELD

- Designed for professional gas cutting, welding and heating applications
- Gas Guard safety feature fitted to the regulators as standard
 Gas Guard safety feature fitted to the regulators as standard
- Components comply with the relevant clauses of AS 4839 $\,$

Includes:

- COMET™ Edge ESV4 oxygen regulator
- COMET™ Edge ESV4 acetylene regulator
- COMET™ 3 blowpipe
- COMET™ 3 cutting attachment
- COMET™ 3 mixer assembly
- + 4 x cutting nozzles size 6, 8, 12 & 15
- + 5×4 x welding tips size 8, 10, 12, 15 & 20
- Heating tip size 8 x 12HT
- Tip cleaners
- Twin gas hose 5m
- F6 blowpipe flashback arrestor
- F2R regulator flashback arrestor
- Roller guide
- Flint lighter
- · Combination spanner
- · Gas welding goggles
- Stainless steel toolbox



Item Code	Bishops Code
308313	71410032



WELDING & CUTTING KITS & SOLDERING PRODUCTS

MORRIS

WELDING & CUTTING KITS

- Applications include precise welding, brazing, soldering, hard facing, heating/treating and priming, straightening, deseaming and scarfing, gouging, flame cleaning, rivet washing and cutting
- · Cuts up to 150mm, welding up to 9mm steel
- Torch handle has two needle valves for fast, accurate flame adjustment and resists backfire
- · Special design locking teeth enables reposition and locking strength
- · Two separate gas tubes for safety
- · Aluminium coated makes handle lighter and more comfortable
- · Cutting attachment has double O-rings seal for quick, hand tight connection and leak free
- · Press lever for easy cutting use
- Swaged copper welding tips for best flame characteristics

Includes:

- Torch handle, cutting attachment, mixer, oxygen and acetylene regulators, as well as welding, heating and cutting tips
- Complete accessory package including hose, sparklighter, goggles, tip cleaner and replacement O-rings and seals
- · Supplied in a steel tool box



Item Code	Description	Bishops Code	
GCW24-TB	Oxygen/Acetylene Kit	71410030	
GCW24-TB-BIA	Oxygen/Propane Kit	71410050	

FAST FACTS – WELDING & CUTTING GASES

Different Welding Gases

Oxy/Acetylene

The combination of oxygen and acetylene gives a concentrated heat output for quick piercing and cutting of materials. It is versatile and able to be used in most welding jobs. In comparison to alternatives, oxy/acetylene can be expensive and unstable.

Oxy/LPG

Oxygen and LPG is ideal for high heat applications, as the secondary flame creates a higher heat. Overall, this gas combo is easy to source, relatively inexpensive and stable. Although it creates a hotter flame, the heat is not as focused making piercing slower.

SOLDERING IRONS

- · Pre-tinned tip is ready for use
- · No tip preparation required
- · Good thermal conductivity heats quickly
- Electroplated copper tip for extended life
- · Rugged Iong-life element
- Stainless steel components provide corrosion resistance and extended life
- Stay cool handle provides user comfort even after long periods of use
- Cushion Comfort Grip on models 15W, 25W, 40W and 80W
- Temperature range: 400°C



Item Code	Description	Voltage	Output Power	Hertz	Length	Bishops Code
SP25DAU	Light Home & Hobby Work	240V	25W	50Hz	210mm	75095025
SP40DAU	General Home Soldering, Electrical Wiring & Connections	240V	40W	50Hz	210mm	75095040
SP80DAU	Electrical Soldering, Light Alloy or Metal Soldering	240V	80W	50Hz	238mm	75095080
SP120DAU	Medium Duty, Heavy Electrical Connections, Light Sheetmetal Work	240V	120W	50Hz	289mm	75095120
SP200DAU	Heavy Duty, Heavy Sheetmetal Assembly Includes Stand	240V	250W	50Hz	350mm	75095250

SOLDERING IRON

- 3.3V
- 20-100W
- Low voltage safety
- · Automatic switch off
- PSU transformer sold separately



Item Code	Bishops Code
SS	

RESIN CORE SOLDER

- 500g spool
- Multi-purpose solder
- Recommended for working with electrical wiring, copper and tin



Description	Diameter	Bishops Code
Grade C 40/60	2.3mm	72030123
Grade C 40/60	3.2mm	72030132
Grade F 50/50	1.6mm	72030316
Grade F 50/50	2.3mm	72030323
Grade F 50/50	3.2mm	72030332
Grade KP 60/40	0.71mm	72030407
Grade KP 60/40	1.2mm	72030412
Grade KP 60/40	1.6mm	72030416
Grade KP 60/40	2.3mm	72030425
Grade KP 60/40	3.25mm	72030432

CIGWELD

SOLDER & SOLDERING FLUID & PASTE

COMWELD 40/60 SOLDER

- Comweld 40/60 Solder is a low cost general purpose solder
- Suitable for general sheet metal work, plumbing such as gutters and flashings and automotive radiator repairs
- Flux cored
- 15g



Item Code	Bishops Code
322220	71880355

PLUMBERS SOLDER BARS

- Tin-lead allov
- · An ideal electrical grade solder
- 250g per stick



Description	Bishops Code	Description	Bishops Code
Grade H 35/65	72010035	Grade F 50/50	72010050
Grade C 40/60		Grade KP 60/40	72010060

FINE RADIATOR SOLDER

- 38/2/60
- 12 sticks per kilogram



Item Code	Bishops Code
174350	72020038

SOLDERING FLUIDS & PASTE

Soldering Fluid:

 General purpose flux for soldering, copper, brass, tin plate, tinned metal and clean steel sheet

Soldering Paste:

 For when a fluid is not practical in soldering copper, brass, small tinned parts and for electrical work



Description	Size	Bishops Code	Description	Size	Bishops Code
Soldering Fluid	250ml	71205040	Soldering Paste	150g	71205510
Soldering Fluid	500ml		Soldering Paste	400g	71205520
Soldering Fluid	1L	71205080	-	_	-

SOLDERING FLUID

- Highly active, universal brazing flux for soldering difficult metals such as stainless steel, monel, nickel and more
- 250ml

CIGWELD



Item Code	Bishops Code
90240647	71215040

COMWELD FLUX

Comweld 965

 When used in conjunction with Comweld Soft Solders, enables excellent joints to be made on almost all metals and combinations of metals

Comweld Aluminium

- · All purpose flux for fusion welding sheet and cast aluminium
- Eliminates the need for a number of different types of aluminium welding alloys

Comweld General Purpose SBA Silver

- Recommended for use with Cadmium beating and Cadmium free brazing allows with a low to medium silver content
- Excellent flux for medium to high temperature brazing
- For silver brazing of carbon steel, stainless steels and dissimilar metals

Comweld SBA No. 2

- High silver content, produce excellent joints on carbon steel, stainless steel, nickel alloys and copper and brass
- · Used in a paste form

Comweld Copper & Brass

 Specially developed for the braze welding of copper, brass, and bronze and the brazing of copper and steel



71210060

CIGWELD

Item Code	Description	Size	Bishops Code
321890	Comweld 965	125ml Bottle	71880360
321740	Comweld Aluminium	250g	71880372
321850	Comweld GP SBA Silver	200g	71880375
321840	Comweld SBA No. 2	200g	71880365
321822	Comweld Copper & Brass	250g	71210060

CHROMEBRIGHT PICKLING PASTE

• 2.5kg bucket



Item Code	Bishops Code
321918	71895130



ABRASIVES

Š

WELDING

ANTI-SPATTER & WELDING ACCESSORIES

ANTI-SPATTER NOZZLE DIP

- Nozzle Dip is a non-toxic gel used to help prevent welding spatter adhering to sensitive torch components such as nozzles, contact tips etc.
- · Simply dip the hot nozzle 1cm into the nozzle dip as required



Item Code	Bishops Code
707958	71895120

SINGLE FLINT GUN LIGHTER

- Produces a spark that easily ignites any flame source but quickly extinguishes, in order to ensure a safe, controlled flame
- · A compact and economical alternative to matches and butane lighters
- · Single flint cup type lighter



Description	Bishops Code
Flint Gun Lighter	71440020
Replacement Flints – 10 Pack	71440075

OXY/ACETYLENE BOTTLE KEY

- Spanner-style key for use on oxy/acetylene bottles
- · Easily fits into any tool box
- · Comes with a hole in the end for easy storage on a hook or key ring



ishops Code	
71440320	

TIP CLEANER SET

- Foldable tip cleaner
- · 201 Stainless steel



Item Code	Bishops Code
IO-TC13G	71440520

WELDER'S CHIPPING HAMMER

Spring grip

CIGWELD

 Used for the removal of slag and spatter around welds



MUMME

WELDER'S CHIPPING HAMMERS

- · Used for chipping off slag and spatter around welds, especially in holes and difficult corners
- Head forged from first grade high carbon spring steel
- · Sharp, finely pointed ends are heat treated for longevity
- · Head is properly balanced on the handle and is comfortable to work with
- Rubber grip handle for comfort and insulation from radiant heat whilst welding

o Spring grip handle to lessen st loop to attach a lanyard or Handle size: 260mm	nock, with a	5WHSP	5WHRG
Item Code	Description	Weight	
5WHRG	Rubber Grip	3.2kg	
5WHSP	Spring Grip	4.5kg	
SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT			

MIG PLIERS

- · High quality MIG welding pliers
- Specifically designed for MIG welding applications
- Overall length: 210mm





Item Code	Bishops Code
WSPLIER	71270663

WRAP A ROUND CURV-O-MARK

- Inexpensive tool for marking straight lines around pipe or for use as a straight edge
- · Flexible gasket material construction with good resistance to heat and cold
- · Imprinted with inches and millimeters



Size	Width	Length	Fit Pipe Size	Bishops Code
Medium	100mm/3.88"	914mm/3'	3"-6"/80-150mmNB	60080922
Large	100mm/3.88"	1,830mm/6'	3"-10"/80-250mmNB	60080924
X-Large	127mm/5"	2,134mm/7'	4"-12"/100-300mmNB	60080926
X-Large	127mm/5"	2,743mm/9'	6"-16"/150-400mmNB	60080928

THE COMPLETE ABRASIVES CHEAT SHEET

Don't let abrasives grind you down. Glide through them without any friction using this handy cheat sheet.

Specification Breakdown

All abrasive discs are manufactured with a specification that allows you to quickly identify features about the disc. The following diagram, based on EN 12413, will make it easy for you to find the abrasives you need to get the job done. Remember, each manufacturer may do things differently, so be sure to check out their guides!

41	Α	46	R	BF	60
Shape/Profile	Abrasive Type	Grit Size	Hardness Grade	Bond Type	Max. Operating Speed
41 – Flat 42 – Depressed Centre 27 – Depressed Centre (Grinding)	A – Aluminium Oxide C – Silicon Carbide ZA – Zirconium Alumina CO – Ceramic Oxide	Fine – 80–100 Medium – 30–60 Coarse – 16–24	A - Z Classified using the alphabet from softest to hardest (A to Z). Check supplier specs for more details.	B – Fibre reinforced resinoid bond with cloth BF – Resinoid bond & other duroplastic organic bonds	Maximum operating speed of disc (rpm). Do not exceed this speed.

Put It To Practice

Abrasive Type

Aluminium Oxide

Silicon Carbide

Most common abrasive. Good for grinding carbon steel, alloy steel, high speed steel, annealed malleable iron, wrought iron and bronzes.

Used for grinding grey iron, chilled iron, brass, soft bronze and aluminium as well as stone, rubber and other non-ferrous materials. Zirconium Alumina Tough and durable for rough applications such as cut-off operations on a broad range of steels and steel alloys.

Ceramic Oxide

High purity, fractures at a controlled rate at the sub-micron level, hard and strong. Used for demanding applications on steel and alloys.

Grit Size

Abrasive Grade

Grit size simply refers to the abrasive grade of a product. In general, the higher the grade, the smaller in size the abrasive grain is and the smoother the finish will be.

Hardness Grade

Soft Grade

Designed to release new grains guickly, will remove the maximum stock while creating the least amount of heat in the base material

Hard Grade

Slowly sheds its dull grains making it durable. Removes less stock than its soft grade counterpart but increases the amount of heat in the base material.

Bond Type

Vitrified Resinoid Rigid, strong and porous. Not affected by water, acid, oil or variations in temperature. Synthetic resin, suitable for applications that require rapid stock removal and where a cleaner finish is required. Designed to operate at high speeds.

Rubber

Offers smooth grinding action, suitable for applications that require a smooth finish.

CUT & GRIND A LOT?

Ask Bishops how BUY BULK & SAVE can help you save money in the workplace.

GET MORE AT BISHOPS

ELECTRIC ANGLE GRINDERS

Page 138





CUT-OFF & GRINDING DISCS SAFETY





Dos

Handle and store discs carefully. If possible, keep discs in their original packaging

Inspect your discs for any damage before mounting. If damaged, dispose of the disc

Use a safety guard that is correctly positioned and secured

Always ensure your equipment is switched 'off' and unplugged from the socket before changing the disc

Ensure the speed of your equipment does not exceed the maximum operating speed printed on the disc

Let newly mounted discs run at operating speed for a reasonable time before any cutting or grinding

Always wear appropriate personal protective equipment such as safety glasses or goggles, dust mask, gloves, ear plugs and safety shoes

Ensure work piece is firmly secured while it is being cut or grinded

Keep your working area clutter-free around any cutting or grinding operations



Don't store discs in any situation in which they may become damaged, such as damp atmospheres or extreme temperatures

Don't use or mount a damaged disc

Don't exceed the maximum operating speed printed on the disc

Don't force discs onto your equipment

Don't use discs without proper ventilation

Don't apply extreme pressure to the disc so that the driving motor decelerates

Don't stop the disc by applying pressure to the edge or face. Instead switch off equipment and allow disc to stop revolving

Don't let disc become trapped or pinched in the cut

Don't use a machine that is in poor mechanical condition

Don't forget to wear appropriate personal protective equipment such as safety glasses or goggles, dust mask, gloves, ear plugs and safety shoes

For more information or any safety related questions, contact your Industrial Safety Experts today! Call your local Bishops branch or visit www.bishopbros.com.pg

ULTRA-THIN CUT-OFF WHEELS

- · Ultra-thin for fast, precise cutting
- · Iron-free
- Complies with Australian Standard AS1788.1-1987 and EN12413
- · Specifications: 41 A54 P BF
- Abrasive type: Aluminium oxide
- Disc type: Pressed flat
- Grade: Medium
- Suitable for most metals particularly steel and INOX (stainless steel)



Diameter	Thickness	Bore	Max. Speed	Bishops Code
100mm	1.0mm	16mm	15,300rpm	65021020
115mm	1.0mm	22mm	13,300rpm	65021045
125mm	1.0mm	22mm	12,250rpm	65021060

ULTRA-THIN TRADIES CUT-OFF DISCS

- Available in in ultra thin 1.00mm thickness for quick burn free cutting to 2.5mm for more durable applications
- All wheels are reinforced for the demanding nature of cutting-off metals or masonry with right angle grinders
- Ultra thin fast cut reinforced straight wheel for fast cutting off where minimal material loss is desired
- For stainless steel, metal, aluminium, copper, non ferrous metals, masonry, concrete, tiles, PVC, rubber and timber
- Durable resin bond designed for fast cut while retaining excellent wheel life
- C60T Premium grade Silicon carbide grain



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Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66253370634	C60T-BF41	100 x 1.0 x 16mm	15,300rpm	65011250
66253370635	C60T-BF41	115 x 1.0 x 22mm	13,300rpm	65011255
66253370636	C60T-BF41	125 x 1.0 x 22mm	12,250rpm	65011260

METAL CUT-OFF WHEELS

- Suitable for steel, structural steel and cast iron
- Complies with ANSI B7.1 and O.S.H.A. regulations





Description	Diameter	Thickness	Bore	Max. Speed	Bishops Code
A36TB	100mm	2.5mm	16mm	15,300rpm	65010020
A24R	115mm	2.5mm	22mm	13,300rpm	65010040
A36TBF	125mm	2.5mm	22mm	12,200rpm	65010060
A24RBF	180mm	3.0mm	22mm	8,500rpm	65010080
A24RBF	230mm	3.0mm	22mm	6,600rpm	65010100
A24RBF	250mm	3.2mm	25mm	6,100rpm	65010140
A24RBF	305mm	3.2mm	25mm	5,100rpm	65010160
A24HS	305mm	3.8mm	22mm	5,100rpm	65010180
A24RBF	350mm	3.2mm	25mm	4,300rpm	65010200
A24RBF	355mm	3.8mm	25mm	4,300rpm	65010210
A24RBF	405mm	3.2mm	25mm	3,800rpm	65010220
BR054968	400mm	4.5mm	25mm	3,800rpm	65010240

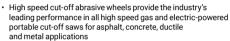
FLAT CUT-OFF DISCS

- Right angle cut-off wheel line consists of Type 01 straight and Type 27 depressed centre cut-off wheels from 100mm to 230mm diameters
- All wheels are reinforced for the demanding nature of cutting-off metals or masonry with right angle grinders
- · Fast cut reinforced straight wheel for cutting off
- For steel and hard ferrous metals
- Durable resin bond designed for fast cut while retaining excellent wheel life
- A36S Aluminium oxide grain



Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841558	FH38-A36S-BF41	100 x 2.5 x 16mm	15,300rpm	65011020
66252841560	FH38-A36S-BF41	115 x 2.5 x 22mm	13,330rpm	65011040
66252841561	FH38-A36S-BF41	125 x 2.5 x 22mm	12,250rpm	65011060
66252841566	FH38-A36S-BF41	180 x 2.5 x 22mm	8,500rpm	65011080
66252841574	FH38-A36S-BF41	230 x 2.5 x 22mm	6,650rpm	65011100
66252841576	FH38-A36S-BF41	230 x 2.5 x 25.4mm	6,650rpm	65011120

HI-SPEED EASY CUTTING CUT-OFF DISCS



- · Easy cut reinforced straight wheel for cutting off
- · For structural steel bar and hard ferrous metals
- Durable resin bond designed for fast cut while retaining excellent wheel life
- · A30Q Aluminium oxide medium grit medium hardness



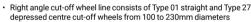
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Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252919916	1HU700QR	406 x 4.0 x 25.4mm	4,800rpm	65011200

FLAT HIGH PERFORMANCE CUT-OFF DISCS



- These wheels come in ultra thin 1.00mm thickness for quick burn free cutting to 2.5mm for more durable applications
- All wheels are reinforced for the demanding nature of
- cutting-off metals or masonry with right angle grinders

 Ultra thin fast cut reinforced straight wheel for fast cutting
- off where minimal material loss is desired

 For stainless steel, alloy steels & hard ferrous metals
- Durable resin bond designed for fast cut while retaining excellent wheel life
- A46T Mega Inox using premium grade Aluminium oxide grain



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Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841585	A46T-BF41 M/INOX	100 x 1.0 x 16mm	15,300rpm	65021025
66252919966	A46T-BF41 M/INOX	115 x 1.0 x 22mm	13,300rpm	65021040
66252919991	A46T-BF41 M/INOX	125 x 1.0 x 22mm	12,250rpm	65021065
66252920062	A46T-BF41 M/INOX	230 x 2.0 x 22mm	6,650rpm	65021100

MASONRY CUT-OFF WHEELS

- All wheels are reinforced for the demanding nature of cutting-off metals or masonry with right angle grinders
- Fast cut reinforced straight wheel for cutting off
 For dry cutting of brick, concrete, ceramic and stone
- Durable resin bond designed for fast cut while
- retaining excellent wheel life

 C30T Silicon carbide grain



Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841642	FH64 C30T-BF41	100 x 3.2 x 16mm	15,300rpm	65016020
66252841644	FH64 C30T-BF41	125 x 3.2 x 22.2mm	12,250rpm	65016025
66252841649	FH64 C30T-BF41	180 x 3.2 x 22.2mm	8,500rpm	65016040
66252841655	FH64 C30T-BF41	230 x 3.2 x 22.2mm	6,650rpm	65016060



GRINDING & CHOP SAW DISCS & WHEELS

METAL GRINDING DISCS

- · For use on cast iron and steels
- Thickness: 6mmGrit: A24
- Complies with ANSI B7.1 and O.S.H.A. regulations



Diameter	Bore	Max. Speed	Bishops Code
100mm	16mm	15,300rpm	65014020
115mm	22mm	13,300rpm	65014040
125mm	22mm	12,200rpm	65014060
180mm	22mm	8,500rpm	65014080
230mm	22mm	6,600rpm	65014100

DEPRESSED CENTRE GRINDING DISCS flex vit

- The depressed centre design allows the flange/lock nut to recess within the wheel so that it can be used for various grinding and cutting applications
- Depressed centre wheels are designed to handle the most severe right angle grinding applications from heavy stock removal to rough blending
- Excellent performance for fast stock removal
- · For steel and hard ferrous metals
- Durable resin bond designed for grinding while retaining excellent wheel life
- A24S Aluminium oxide grain



Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841705	A30S-BF27	100 x 6.0 x 16mm	15,300rpm	65015020
66252841709	A30S-BF27	115 x 6.0 x 22mm	13,300rpm	65015040
66252841682	A24/30T-BF27	125 x 6.8 x 22mm	12,250rpm	65015060
66252841689	A24/30T-BF27	180 x 6.8 x 22mm	8,500rpm	65015080
66252841695	A24/30T-BF27	230 x 6.8 x 22mm	6,650rpm	65015100

DEPRESSED CENTRE GRINDING DISCS flex vit

- Depressed centre wheels are designed to handle the most severe right angle grinding applications from heavy stock removal to rough blending
- Excellent performance for fast stock removal
- For stainless steel and hard ferrous metals
- Durable resin bond designed for grinding while retaining excellent wheel life
- A30S Aluminium oxide medium grit medium grade



Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841739	A30S-BF27 I/F	100 x 6.0 x 16mm	15,300rpm	65023020
66252841742	A30S-BF27 I/F	115 x 6.0 x 22mm	13,300rpm	65023040
66252841744	A24/30T-BF27 I/F	125 x 6.8 x 22mm	12,250rpm	65023060

FLAT CHOP SAW DISCS

- Chop saw cut-off wheels are designed with finer grit, softer grades, and reinforcement layers that match the application
- · Fast cut reinforced straight wheel for cutting off
- For stainless steel, ferrous metals, bar and tubing
- Durable resin bond designed for fast cut while retaining excellent wheel life
- A36SB Aluminium oxide grain



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Item Code	Specification	Dia. x Thick x Bore	Max. Speed	Bishops Code
66252841615	A36S-BF41	305 x 3.8 x 25.4mm	5,100rpm	65011210
66252841617	A36S-BF41	356 x 3.0 x 25.4mm	4,400rpm	65011220
66252841618	A36S-BF41	406 x 3.0 x 25.4mm	3.850rpm	65011225

GRINDING WHEELS

- · Suitable for drills and tool steel
- · Aluminium oxide
- White



Diameter	Thickness	Bore	Max. Speed	Grit	Bishops Code
125mm	40mm	31.75mm	3,820rpm	WA60 K V	65032010
150mm	13mm	31.75mm	3,820rpm	WA60 K V	65032060
205mm	25mm	31.75mm	3,820rpm	WA46 K V	65026120
205mm	25mm	31.75mm	3,820rpm	WA60 K V	65026140

GRINDING WHEELS

- · General purpose
- Grey



Diameter	Thickness	Bore	Max. Speed	Grit	Bishops Code
152mm	20mm	25.4mm	4,460rpm	A46 Medium	
152mm	25mm	25.4mm	4,460rpm	A46 Medium	65024060
200mm	25mm	25.4mm	3,340rpm	A46 Medium	65024120
250mm	25mm	25.4mm	3,340rpm	A36M Medium	65024210
200mm	40mm	38.1mm	3,340rpm	A36 Coarse	65024150
152mm	20mm	25.4mm	4,460rpm	A60 Fine	65024030
200mm	25mm	25.4mm	3,340rpm	A60 Fine	65024130

ALUMINIUM OXIDE GRINDING WHEELS

- General purpose suitable for grinding most types of steel and soft iron
- Comes with a multiple bush to assist with mounting
- Grey colour with vitrified bond



NORTON

Item Code	Grade	Dia x Thick x Bore	Max. Speed	Bishops Code
66253130865	A46MVBE	150 x 20 x 25.4mm	4,140rpm	65024005
66253130583	A60MVBE	150 x 20 x 31.75mm	4,200rpm	65024006
66253130539	A36PVBE	152 x 20 x 25.4mm	4,460rpm	65024010
66253130429	A36PVBE	200 x 25 x 25.4mm	3,340rpm	65024110

SILICON CARBIDE GRINDING WHEEL

- Suitable for tungsten carbide
- 35m/s
- Diameter: 200mm
 Thickness: 25mm
- Thickness: 25mm • Bore: 25.4mm
- Max. speed: 3,340rpm
- Grit: 80
- Green



Diameter	Bishops Code
200mm	65026540

GRINDING WHEELS, MOUNTED POINTS & FLAP WHEELS

GREEN SILICON CARBIDE GRINDING WHEELS

- · Sharp, green silicon carbide performance applications on carbide tooling and non-ferrous materials
- · Vitrified bonded for superb shape holding and resistance to wear
- Speed rated for standard RPM bench and pedestal grinders
- For tungsten carbide
- Type 1



SAINT-GOBAIN

Item Code	Specification	Size	Max. Speed	Bishops Code
69083141538	39C60JVK	150 x 20.0 x 31.75mm	4,200rpm	65026510
66243545476	39C60KVKPL	200 x 25.0 x 25.4mm	3,150rpm	65026520

MOUNTED POINTS NORTON

- Primarily suited to foundry, steel mill, general engineering and stone industry applications
- · Designed for rapid stock removal
- Recommended speed range: 30-50m/sec
- · Shank size: 6.35mm



Shape	Grit	Bond	Bishops Code	Shape	Grit	Bond	Bishops Code
A22	60	Resinoid	65038060	A37	60	Resinoid	65038110
A23	60	Resinoid	65038065	-	-	-	-

GET MORE AT BISHOPS



BENCH RINDERS

Page 139

NORTON

SAINT-GOBAIN

VITRIFIED MOUNTED POINTS

- Primarily suited to foundry, steel mill, general engineering and stone industry applications
- · Designed for rapid stock removal
- · Recommended speed range: 25-50m/sec
- · Shank size: 6.35mm



Item Code	Shape	Grit	Bishops Code	Item Code	Shape	Grit	Bishops Code
61463624375	A1	60	65038005	66253183099	A21	60	65038055
66253183154	A2	46	65038010	66253183100	A24	60	65038070
61463624378	АЗ	60	65038015	66253183101	A25	60	65038075
66253183094	A4	46	65038020	66253183102	A26	60	65038080
66253183095	A5	46	65038025	66253183103	A31	60	65038085
61463624385	A11	60	65038030	66253183105	A36	60	65038105
66253183096	A12	60	65038035	66253183106	A38	60	65038115
66253183097	A13	60	65038040	66253183107	A39	60	65038120
66253291536	A14	60	65038045	61463624544	W200	60	65038722
66253183098	A15	60	65038050	66253183139	W252	60	65038740

5 PIECE MOUNTED POINT SETS

- Grinder stone sets suitable for die grinders
- · Chrome Corundum heads
- · Suitable for light to medium grinding





Item Code	Description	Bishops Code
QB-9211	¼" Shank Mounted Point Set – Cylindrical Heads	65038800
QB-9213	1/4" Shank Mounted Point Set – Assorted Heads	65038805

FLAP WHEELS

- An abrasive mop that can be attached to hand-held machines
- Suitable for profiled workpieces, inner surfaces, bottlenecks and hard to reach areas





Shaft	Size	Grit	Bishops Code
1/8"	40 x 10mm	60 Medium	65570020
1/8"	40 x 10mm	120 Fine	65570040
1/4"	60 x 15mm	80 Medium-Fine	65570130
1/4"	60 x 30mm	60 Medium	65570220
1/4"	60 x 30mm	80 Medium-Fine	65570230
1/4"	60 x 30mm	120 Fine	65570240
1/4"	60 x 30mm	240 Fine	65570250
1/4"	60 x 50mm	60 Medium	65570320
1/4"	60 x 50mm	80 Medium-Fine	65570330
1/4"	80 x 30mm	60 Medium	65570420
1/4"	80 x 30mm	80 Medium-Fine	65570430
1/4"	80 x 30mm	120 Fine	65570440
1/4"	80 x 50mm	60 Medium	65570520
1/4"	80 x 50mm	80 Medium-Fine	65570530
1/4"	80 x 50mm	120 Fine	65570540
1/4"	80 x 50mm	320 Extra Fine	65570560



FIBRE DISC BREAKDOWN

Fibre backed discs are circular discs made of fibre with one resin and abrasive coated side. These discs are made for grinding on a variety of different materials. All fibre backed discs require a backing pad to operate, so be sure to see what fits before you buy.

Much like other abrasives, different coating materials are best suited for different jobs. Let's recap how each abrasive performs.

Aluminium Oxide is best suited for grinding carbon steel, alloy steel, high speed steel, annealed malleable iron, wrought iron and bronzes.

Ceramic Oxide fractures at a controlled rate at the submicron level and is best suited for demanding applications on steel and alloys.

Zirconia Alumina is tough and durable, best suited for a broad range of steels and steel alloys.

Quick Mounting

Some fibre discs feature mounting points which allow for much faster disc changes, allowing improved productivity in grinding applications. These discs however are not universal and will only be able to be mounted on the accompanying backing pad, so be sure to check manufacturer specifications before using them.



RUBBER BACKING PADS

· For fibre discs



Diameter	Thread	Bishops Code
100mm	M10 x 1.25mm	76005010
100mm	M10 x 1.5mm	76005020
115mm	M14 x 2.0mm	76005040
125mm	M14 x 2.0mm	76005060

FIBRE DISCS

- Sanding disc suitable for use on metal surfaces
- 25 per pack





Diameter	Bore	Grit	Bishops Code
100mm	16mm	AA16	65510010
100mm	16mm	AA24	65510020
100mm	16mm	AA36	65510030
100mm	16mm	AA60	65510050
100mm	16mm	AA100	65510070
100mm	16mm	AA120	65510080
125mm	22mm	AA16	65510310
125mm	22mm	AA24	65510320
125mm	22mm	AA36	65510330
125mm	22mm	AA60	65510350
125mm	22mm	AA100	65510370
125mm	22mm	AA120	65510380
178mm	22mm	AA16	65510510
178mm	22mm	AA24	65510520
178mm	22mm	AA36	65510530
178mm	22mm	AA60	65510550
178mm	22mm	AA100	65510570
178mm	22mm	AA120	65510580

EXPERT C470 DELTA SANDPAPER

- Fast sanding of paint and wood
- 6 hole perforation
- Sheet dimensions: 93 x 93mm
- · Suits Delta sanders



Item Code	Description	Grit	Pack Qty
2608900832	Delta Sandpaper Set	60/120/240	6
2608900825	Delta Sandpaper	80	5
2608900827	Delta Sandpaper	120	5
2608900829	Delta Sandpaper	240	5
SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT			

EXPERT C470 DELTA SANDING PAPER 📵 BOSCH

- Delta style sanding paper
- 11 hole perforation
- Sheet dimensions: 100 x 140mm
- 10 per pack



Item Code	Grit
2608608330	120
2608608331	240
2608608329	80
2608608328	40

SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT

EXPERT AVZ 32 RT10 SANDING FINGER

BOSCH

- · Effectively sands in tight gaps
- · Bosch Carbide Technology for durability
- · Easy to clean and maintain
- Starlock mount for optimum power transfer and convenient blade change



Item Code	Working Width	Working Depth
2608900039	32mm	50mm

SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT

EXPERT AVZ 90 SANDING PLATES

- · Bosch Carbide Technology for durability and long life
- · Delta shape reaches into corners
- Starlock mount for optimum power transfer and convenient blade change



2608900049

Item Code	Description	Diameter	Grit
2608900045	AVZ 90 RT2	90mm	20
2608900047	AVZ 90 RT4	90mm	40
2608900049	AVZ 90 RT6	90mm	60
2608900043	AVZ 90 RT10	90mm	100

SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT

EXPERT 3 MAX AVZ 70 RT4 GROUTING PLATE

- · Versatile multipurpose accessory
- Reaches into corners with its pointed tip
- Starlock mount for optimum power transfer and convenient blade change



BOSCH

Item Code	Diameter	Cutting Width
2608900041	70mm	2.5m

SPECIAL ORDER: PLEASE QUOTE ITEM CODE UPON ORDERING THIS PRODUCT

GRINDING DISC OR FLAP DISC?

When choosing between a grinding disc or a flap disc, it is important to first decide what is most important to you; time, finish or money?

Flap Discs, typically made from Zirconia, are generally gentler on surfaces, leaving a much smoother finish. This reduces the time needed to prepare the surface for finish or paint. However, these discs typically come at a higher cost.

Grinding Discs/Wheels are economical and good for removing material, but do not leave a smooth finish.

GET MORE AT BISHOPS



HALF-FACE RESPIRATORS

Page 21

flex()vit

ZIRCONIA FLAP DISCS

- Flexovit Megaline Blue HD R860 flap discs offer a high-end zirconia solution designed to reduce process costs through more aggressive cutting, improved quality, longer life and higher material removal
- · Aggressive zirconia grain for high initial cut
- Strong polyester cloth and reinforced fibreglass backing for excellent product life and more material removal per disc
 - Lower disc wear allows longer grinding time without loss of cut throughout disc life
- Fewer disc changes saves the end user time and money, reduces waste and reduces CO2 emissions in transportation



Item Code	Dia. x Bore	Grit	Max. Speed	Bishops Code
78072761187	100 x 16mm	C40	15,300rpm	65575020
78072761188	100 x 16mm	C60	15,300rpm	65575030
78072761192	100 x 16mm	C80	15,300rpm	65575040
78072761274	100 x 16mm	C120	15,300rpm	65575050
78072761220	125 x 22.2mm	C40	12,250rpm	65575320
78072761221	125 x 22.2mm	C60	12,250rpm	65575340
78072761222	125 x 22.2mm	C80	12,250rpm	65575341
78072761277	125 x 22.2mm	C120	12,250rpm	65575342

BLAZE RAPID CERAMIC STRIP DISCS

- Norton Blaze RapidStrip is ideal for fast stripping and cleaning without gouging or causing excessive stock removal on metal
- Depressed centre and Quick-Change discs are available and can withstand heavy applications such as stripping rust encrusted metal, without shedding
- Not only tough, Blaze RapidStrip discs are also extremely versatile, by using a lighter pressure Blaze RapidStrip can also be used as a surface finishing disc
- Heavy coating of Norton SG Blaze ceramic alumina grain delivering up to twice the life of equivalent products|Does not shed on rustencrusted pieces or load on soft material
- Lighter pressure will deliver a finish similar to that of a medium grit surface conditioning disc and additional pressure will remove material, strip and clean



NORTON

NORTON

SAINT-GOBAIN

Item Code	Dia. x Bore	Max. Speed	Bishops Code
63642509505	100 x 16mm	15,000rpm	65575650
66623303783	115 x 22mm	12,000rpm	65575655
66623303916	125 x 22mm	12,000rpm	65575660
66623303920	180 x 22mm	8,000rpm	65575665

VORTEX RAPID FINISHING DISC

- Designed to dramatically reduce process times
- With its high density 3D microstructure, aggregate grain, Vortex Rapid Blend can do the job of a flap disc, surface conditioning disc and polishing disc in just one step on light welds
- High performance engineered grain for aggressive, fast stock removal, reduced cycle times and increased part quality
- Thick nylon web enables longer life and more parts per disc, resists loading
- No need to change power tools, ideal for TIG weld removal can be used in place of, or in sequence with, fibre and flap discs for improved part quality



Item Code	Dia. x Bore	Bishops Code
66254429268	115 x 22mm	65575600

4 ROW WIRE HAND BRUSH

- Plastic handle is impervious to most oils, thinners and brake fluids
- · Ideal for use in mechanical workshops





WIRE HAND BRUSHES

- · Ideal for cleaning and preparing surfaces where a manual application is needed



Description	Bishops Code
Hi-Tensile Steel Bristles	76060060
Stainless Steel Bristles	76060080

CRIMPED WIRE WHEEL BRUSHES

- · Brass wire construction for carbon-free brushing
- · Heavy duty
- · Suitable for most bench and pedestal grinders
- · Rust and light paint removal
- 30gge



Diameter	Width	Bore	Max. Speed	Bishops Code
100mm	12.7mm	1/2"	4,500rpm	76065020
125mm	20mm	5/8"-1/2"	6,000rpm	76065040
150mm	20mm	5/8"-1/2"	6,000rpm	76065050
200mm	22mm	1"-5%"	4,500rpm	76065070
250mm	28mm	1"-5%"	3,000rpm	76065090
300mm	30mm	1"-5%"	3,000rpm	76065094

3 PIECE CRIMPED WIRE WHEEL BRUSH SET

· Brass wire construction for carbon free brushing

Includes:

- 1 x 50mm cup brush



WHAT TO USE TWIST **KNOT OR CRIMPED WIRE?**

In order to choose the right wire brush for the job, you must look at how rough the surface is and how aggressive the action must be to get the job done.

Crimped Wire Brushes feature loose hanging wires that allow for a lighter action compared to twist knot cup brushes. These brushes are most suited for light duty cleaning applications.

Twist Knot Brushes feature braided metal wires that produce a much more aggressive action compared to crimped wire cup brushes. These brushes are most suited for heavy duty jobs.

STAINLESS STEEL TWIST KNOT **BEVEL WIRE BRUSHES**

- · Designed for use on stainless steel and aluminium
- · Suitable for rust and paint removal
- · Cleaning and deburring
- Surface preparation and conditioning
- Single row
- Wire size: 0.50mm



Diameter	No. of Knots	Gauge	Bore	Max. Speed	Bishops Code
100mm	18	25gge	10 x 1.5mm	12,500rpm	76070450
125mm	20	25gge	14 x 2mm	10,000rpm	76070860

CRIMPED WIRE CUP BRUSHES

- · Ideal for cleaning and polishing
- · Removal of flash, rust and paint
- · Pipe, carbon and weld cleaning
- Deburring
- Wire size: 0.30mm



Diameter	Gauge	Bore	Max. Speed	Bishops Code
75mm	30gge	10 x 1.25mm	12,500rpm	76070020
75mm	30gge	10 x 1.5mm	12,500rpm	76070030
75mm	30gge	14 x 2mm	12,500rpm	76070040
100mm	30gge	14 x 2mm	8,500rpm	76070080
125mm	30gge	14 x 2mm	6,000rpm	76070100

WIRE CUP BRUSHES & SANDPAPER

STAINLESS STEEL CRIMPED WIRE CUP BRUSHES

- Designed for use on stainless steel and aluminium
- · Ideal for polishing and cleaning
- · Removal of flash, rust and paint
- Pipe, carbon and weld cleaning
- Deburring



Diameter	Gauge	Bore	Max. Speed	Bishops Code
75mm	30gge	10 x 1.25mm	12,500rpm	76070210
75mm	30gge	10 x 1.5mm	12,500rpm	76070214

TWIST KNOT WIRE CUP BRUSHES

- Suitable for cleaning large surfaces, rust removal and deburring
- · Can be used with power tools
- · Wire size: 0.50mm



Diameter	No. of Rows	Gauge	Bore	Max. Speed	Bishops Code
75mm	1	25gge	10 x 1.25mm	11,000rpm	76070320
75mm	1	25gge	10 x 1.5mm	11,000rpm	76070330
75mm	1	25gge	14 x 2mm	11,000rpm	76070340
100mm	1	25gge	14 x 2mm	8,500rpm	76070360
100mm	2 with Skirt	25gge	14 x 2mm	6,000rpm	76070370
125mm	1	25gge	14 x 2mm	9,000rpm	76070380

STAINLESS STEEL TWIST KNOT WIRE CUP BRUSHES

- Designed for use on stainless steel and aluminium
- Ideal for cleaning welds and removal of paint
- Wire size: 0.50mm



Diameter	No. of Rows	Gauge	Bore	Max. Speed	Bishops Code
75mm	1	25gge	10 x 1.25mm	11,000rpm	76070410
75mm	1	25gge	10 x 1.5mm	11,000rpm	76070414
125mm	1	25gge	14 x 2mm	6,500rpm	76070430

EMERY CLOTH SHEET

Suitable for hand grinding of all types of materials
 Shoot pize: 230 x 290 mm.







Grit	Bishops Code	Grit	Bishops Code
80g	65530030	180g	65530070
120g		240g	

WATERPROOF SANDING PAPER

- Waterproof abrasive paper
- Non-loading
- Aluminium oxide
- Sheet size: 230 x 280mm
- · Sold per sheet



Grit	Bishops Code	Grit	Bishops Code
60g		180g	
80g	65520030	240g	65520090
100g		400g	

SILICON CARBIDE WET & DRY SHEET

- Suitable for wet and dry sanding of metal or painted surfaces
- Sheet size: 230 x 280mm
- · Sold per sheet



Grit	Bishops Code	Grit	Bishops Code
60g	65525020	320g	
80g	65525030	360g	65525120
100g	65525040	400g	
120g	65525050	500g	65525140
150g	65525060	600g	65525150
180g	65525070	800g	65525160
220g	65525080	1,000g	65525170
240g	65525090	1,200g	65525180
280g	65525100	-	

METALITE EMERY CLOTH ROLLS

- Cloth rolls are typically used for polishing lathe turnings, rolls and cylinders, light deburring, blending machine tool marks, removing rust and scale, and fine sanding and polishing
- P-graded aluminum oxide abrasive grain for fast cut rate and consistent finish on metals
- Flexible J-wt. backing for superior conformability to complex surfaces and better finishes
- Cloth rolls are packaged in a protective, convenient dispenser which eliminates costly waste and permits neat, easy storage



NORTON

SAINT-GOBAIN

25MM X 50M			50MM X 50M		
Item Code	Grit	Bishops Code	Item Code	Grit	Bishops Code
66623320795	P60	65550020	66623320796	P60	65550520
66623320801	P80	65550030	66623320802	P80	65550530
66623320811	P120	65550050	66623320805	P100	65550540
66623320821	P180	65550070	66623320809	P120	65550550
66623320818	P240	65550090	66623320819	P180	65550570
66623320815	P320	65550110	66623320817	P240	65550590
_	-		66623320813	P320	65550600



SANDING ROLLS, BELTS & ACCESSORIES & WHEEL DRESSERS

FLOOR PAPER ROLL

- Width: 300mm
- 50m roll





Grit	Bishops Code
40g	
60g	65560140
100g	65560180

SANDING BELTS

· Abrasive cloth suitable for wood working and metal applications





Size	Grit	Bishops Code	Size	Grit	Bishops Code
75 x 533mm	40g	65540020	75 x 1,180mm	80g	65540180
75 x 533mm	60g	65540030	75 x 1,180mm	120g	65540190
75 x 533mm	80g	65540040	75 x 2,000mm	60g	65540200
75 x 533mm	120g	65540060	75 x 2,000mm	80g	65540210
75 x 610mm	40g	65540120	100 x 560mm	80g	65540240
75 x 610mm	60g	65540130	100 x 560mm	100g	65540250
75 x 610mm	80g	65540140	150 x 2,000mm	40g	65540870
75 x 610mm	120g	65540160	150 x 2,000mm	60g	65540872
75 x 610mm	150g	65540165	150 x 2,000mm	80g	65540874
75 x 1,180mm	60g	65540170	150 x 2,000mm	120g	65540876

KNOW YOUR GRADES

Not all belts are defined by their grit, some are better explained with their grade. To give you a better idea of what each grade means, this is how they are defined by ISO 6344.

Extra Coarse grades include 12, 16, 20, 24, 30 & 36 grit.

Coarse grades include 40 & 50 grit.

Medium grades include 60 & 80 grit.

Fine grades include 100 & 120 grit.

Very Fine grades include 150, 180, 220, 240, 280, 320 & 360 grit.

Super Fine grades include 800, 1,000 & 1,200 grit.

SANDING BELTS

- Advanced full resin bond system for exceptional grain adhesion and longer life
- Applications include weld removal and the finishing of ferrous and nonferrous materials
- Strong cloth backing provides a multi-purpose product ideal for sanding wood and grinding metal



NORTON SAINT-GOBAIN

50 X 915MM			100 X 610MM		
Item Code	Grit	Bishops Code	Item Code	Grit	Bishops Code
66623321297	40g	65540720	66623381797	40g	65540320
66623321298	60g	65540740	66623381807	60g	65540330
66623321299	80g	65540760	66623381818	80g	65540340
66623321184	120g	65540780	66623381824	100g	65540350
_	-	-	66623381835	120g	65540360

HAWK 900 SANDING BLOCK



Item Code	Bishops Code
000-3008	65599990

WHEEL DRESSERS

- Accurately and easily reconditions grinding wheels to their original shape
- Rugged cast handle
- · Corrugated high quality hardened steel cutters
- Spare wheels readily available





GROZ

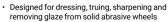


WHEEL DRESSERS Item Code Description

Item Code	Description	Weight	Bishops Code
62204	Wheel Dresser No. 0	800g	65094520
62205	Wheel Dresser No. 1	1.2kg	65094540
SPARES			

Item Code	Description	Size	Bishops Code
67188	Spare Wheel No. 0	6.7(ID) x 30.7(OD)mm	65094570
67189	Spare Wheel No. 1	13(ID) x 38.5(OD)mm	65094580

WHEEL DRESSER & STAR CUTTERS



Powder coated finish on body

- Cast iron handle is ergonomically designed for comfortable grip
- The cutters have star shaped teeth that expose new grains and provide a fresh unloaded surface on wheels
- Dresser wheel range: 500mm
- Dresser length: 255mm
- Cutter diameter: 32mm





Item Code	Description	Bishops Code
WD/00	Wheel Dresser - Size 0	65094020
WDC/00	Replacement Star Cutters – Size 0	65094040

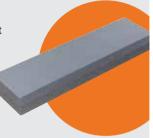
HOW TO CHOOSE A SHARPENING STONE

Aluminium Oxide

Aluminium oxide stones are durable and smooth cutting. They create a fine edge on blades and tools. Orange or brown in colour, aluminium oxide must be used with a lubricant.

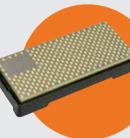
Silicon Carbide

Silicon carbide stones sharpen faster but with less fineness. Dark grey in colour, they are a good option for time critical sharpening. Silicon carbide must be used with a lubricant.



Diamond Stone

Diamond stones are high quality sharpening utensils, delivering fast blade sharpening. Unlike other sharpening stones they can be used with or without a lubricant. Even though diamond stones are the most expensive, they are long lasting and in the long term may be cost comparable.



Oil Filled or Non-Oil

Aluminium oxide and silicon carbide sharpening stones can be purchased oil filled or without oil. Oil filled stones have been treated with lubricant in factory, making them ready for use. Non oil stones have not undergone this treatment and need to be lubricant soaked before use. For best practice, always re-lubricate your stone before use no matter the type.

SHARPENING BENCH STONE

- · Combination stone with coarse finish on one side and a fine finish on the other side
- 200(l) x 50(w) x 25(h)mm



Item Code	Bishops Code
5760314	65036060

CHOOSING YOUR SANDBLASTING MEDIUM

When it comes to sandblasting, a wide variety of different bead sizes and materials are available for use. In order to help you decide, Bishops has created this easy reference guide for you to compare sizes of grit.

Abrasive Size Conversion Chart

Grit Size	(Microns)			Microns
Minimum	Maximum	Grit Equivalent		
1,400	2,300	10		841
660	1,350	20		
360	815	30		
240	560	45		595
165	400	60		
100	300	80		400
60	200	100		
50	165	120		297
40	140	150		
25	115	180		250
20	100	220		210
25	85	240		177
9	70	280	•	
14	60	320	•	149
11	45	400	•	• 125
9	35	600	•	• 105
2	23	1,000	•	• 88
			*Not to scale	*Not to scale

Bead Hardness

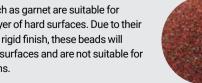
Whilst grit makes a big difference in sandblasting applications, so does the material you choose. Different materials will give you different finishes and some can even speed up the time taken to remove the surface of your working material.

Soft Abrasives such as walnut and plastic have little ability to indent the underlying surface of your sandblasting material. These abrasives are mostly used for removing the surface of soft materials where you do not want to damage the underlying surface.

Medium Abrasives such as glass and sand are suitable for removing the top layer of a surface and often leave a smooth finish behind. These abrasives are used for general purpose sandblasting and will suit most applications.

Hard Abrasives such as garnet are suitable for removing the top layer of hard surfaces. Due to their hardness and often rigid finish, these beads will heavily mark softer surfaces and are not suitable for finishing applications.





Can't find what you're looking for? Bishops is able to supply all the little things you need, even sandblasting abrasives, so give us a call and we'll help you out!

