



OPERATION MANUAL

Tigkleen 100

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TIGKLEEN 100 OPERATION MANUAL

Thank you for purchasing a TIGKLEEN 100 stainless steel weld cleaner . After unpacking all equipment , inspect for any shipping damage . Should any item appear to be damaged or missing , please contact your supplier .

The TIGKLEEN 100 cleaner is supplied as a kit , with the following items :

- 1 x TIGKLEEN 100 cleaner
- 1 x 1 litre bottle of cleaning solution
- 1 x Cleaning Probe (fitted to cleaner)
- 10 x cleaning tips

Before using the TIGKLEEN 100 cleaner , please read the following instructions for proper operation .

Power Supply

The TIGKLEEN 100 cleaner is designed to operate from a 110/240 VAC supply . The unit is supplied with a standard 3 pin plug and lead for connection to a standard outlet .

An ON/OFF is located on the rear of the unit . The cleaner is protected with a 5 amp 3AG type fuse (F1) located adjacent to the power lead entry at the rear . A second fuse (F2) rated at 20 amps located on the rear of the unit protects the cleaning probe circuit .

Leads

The TIGKLEEN 100 cleaner is supplied with two leads . The black lead fitted with a clamp , is to be connected to the workpiece .

The red lead is fitted with the cleaning probe , which is used to apply the cleaning solution to the weld area .

"Power Level %"

The Power Level display indicates the power setting for the cleaning tip . The higher the value , the more current passing through the cleaning tip , and therefore the higher the temperature at the cleaner tip . The power level is adjustable using the up/down pushbuttons .

"Power On"

The "Power On" LED should be on when the power is turned on .

"Fuse F2"

The "Fuse F2" LED indicates the status of the cleaning probe fuse protection . The LED should be off when the fuse is OK .

"Clean Tip"

The "Clean Tip" LED indicates that excessive cleaning solution is running down the cleaning probe , and requires wiping off .

"Short Circuit"

The "Short Circuit" LED indicates that the cleaning probe has broken through the cleaning tip , and is in contact with the workpiece . This requires the cleaning tip to be replaced .

PRINCIPLE OF OPERATION

The TIGKLEEN 100 is designed to remove the discolouration from stainless steel after the welding process . Primarily designed for TIG type welding , the system can be used with stainless fusion or filler rod welding .

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The process involves the removal of the discolouration from the stainless steel surface using a mild acid solution as an electrolyte . The cleaning probe acts to heat the electrolyte , increasing it's effectiveness .

OPERATION- TIG WELDS

The following is a summary of the operation of the TIGKLEEN 100 .

1. Place cleaning unit adjacent to job .
2. Attach earth clamp to workpiece .
3. Place cleaning tip over end of probe .
4. In a small open container , place a small amount of cleaning solution .
5. Turn the cleaning unit "ON" .
6. Dip the whole cleaning tip into the solution .
7. Adjust the power level to the appropriate setting for the thickness of stainless steel material . The approximate values are as follows :

6 mm	:	100 %
4 mm	:	75 %
3 mm	:	50 %
1.6 mm	:	30 %

The actual setting is not critical , and thin materials can be used on high settings without damage .

8. Gently wipe the the cleaning tip over the work area , and continually dip the cleaning

tip into the cleaning solution . **Do not allow the cleaning tip to dry out .**

NOTE : The cleaning tip is designed to allow the wiping of the solution over the work area . Do not apply excessive pressure to the cleaning tip , which will result in premature failure of the tip material .

9. The discolouration in the stainless steel will start to react and be drawn to the surface. Wipe off the dirty solution with a damp cloth .

- 10 Continue along the the weld , continually dipping the cleaning tip in the solution .

11. If the cleaning tip is broken and the probe comes in contact with the workpiece , an arcing between the two will take place , the "Short Circuit" LED will come on , and an audible "beep" can be heard . If this occurs replace the cleaning tip .

12. When all work has been finished , turn the cleaner "OFF" , remove the cleaning tip from the probe , and replace any remaining cleaning solution back into it's bottle . The used cleaning tip should be left soaking in water until it's required again .

OPERATION - ROD WELDING

The TIGKLEEN 100 can remove the discolouration from around heavy rod welds , however the following should be noted :

1. The TIGKLEEN 100 is not designed to remove any residual slag from the weld . We suggest that all slag be thouroughly removed using a wire brush .

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2. The Power Level should be set at 100 % .
3. The discolouration will take longer to remove than on TIG welds .

The operation is the same as per TIG welds

SHIPPING DIMENSIONS

Packed Unit Weighs 11.5kg
Dimensions (cm) 44 x 31 x 28

MAINTENANCE

The TIGKLEEN 100 requires little maintenance , however the following should be noted :

1. After work has been finished , wipe off any excess cleaning solution from the cleaning probe .
2. Remove cleaning tip after use and leave soaking in water .
3. Roll up leads and check for cuts or damage.

CONSUMABLES

Spare tips and cleaning solution can be ordered from your supplier and can be ordered with the following part numbers :

Solution (1 litre) : P/No SS-100-06-00
(1.5kg)

Cleaning Tips (10) : P/No SS-100-07-00
:

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PHOSPHORIC ACID

PHONE (07) 3841 2844 or (02) 9757 2296
EMERGENCY AFTER HOURS NUMBER NOT AVAILABLE

OTHER NAME: ORTHOPHOSPHORIC ACID

UN NUMBER: 1805

SECTION 1 IDENTIFICATION

USE: PRODUCT HAS A DIVERSE RANGE OF USES INCLUDING FOOD MANUFACTURE AND CORRECTION OF pH IN SOLUTIONS.

HAZCHEM CODE 2 R
DANGEROUS GOODS CLASS: 8
POISONS SCHEDULE: 6

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE: THICK TRANSPARENT LIQUID
BOILING POINT (°C): APPROX 260 C
VAPOUR PRESSURE (0.028) :
SPECIFIC GRAVITY: 1.6 to 1.7

FLASHPOINT (°C): N/A
FLAMMABILITY LIMITS (%): N/A
SOLUBILITY IN WATER: COMPLETE

INGREDIENTS

CHEMICAL ENTITY	CAS NO.	PROPORTION
PHOSPHORIC ACID	7664-38-2	50%

HEALTH HAZARD INFORMATION

H
EA

LTH EFFECTS

ACUTE

SWALLOWED: BECAUSE OF ITS CORROSIVE NATURE PRODUCT IS HARMFUL IF SWALLOWED.

EYE: COULD CAUSE PERMANENT DAMAGE TO THE EYES.

SKIN: WILL IRRITATE SKIN AND MAY CAUSE ACID BURNS

INHALED: FUMES WILL IRRITATE MUCOUS MEMBRANES

CHRONIC: NO CHRONIC EFFECTS ARE KNOWN

N/A = NOT APPLICABLE

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SPILLS AND DISPOSAL SPILLS SHOULD BE EITHER DILUTED WITH COPIOUS QUANTITIES OF WATER OR ABSORBED ON AN APPROPRIATE INERT MATERIAL.

SAFE HANDLING INFORMATION (Cont)

DO NOT USE SAWDUST OR OTHER ORGANIC ABSORBANT. SMALL QUANTITIES OF DILUTED MATERIAL IS SAFE TO DISPOSE OF IN STORM WATER DRAINS OR SEWERS. ABSORBANT SHOULD BE PLACED IN A SEALED CONTAINER AND DISPOSED AT AN APPROVED LAND FILL SITE.

FIRE/EXPLOSION HAZARD PRODUCT IS NOT FLAMMABLE

NOTICE: Information for this product is believed to be reliable, however buyer and user assume all risk of use, handling and storage whether in accordance with directions or not. Web-Tech Australia Pty Ltd, its agents and distributors give no guarantee or warranty of any kind express or implied concerning whether in contract or tort for any loss including consequential loss arising out of the use of this product or caused by this product.

N/A = NOT APPLICABLE