

## **PVC Casing Cutter, Twin Cutting Wheel (TCW) Brochure**



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Brook Engineering is a diversified and experienced engineering design and manufacturing company operating mainly in the field of Special Purpose Machines.

Brook Engineering is based in Adelaide, South Australia.

The PVC Casing Cutters included in this brochure are designed and manufactured at the above address in Adelaide.

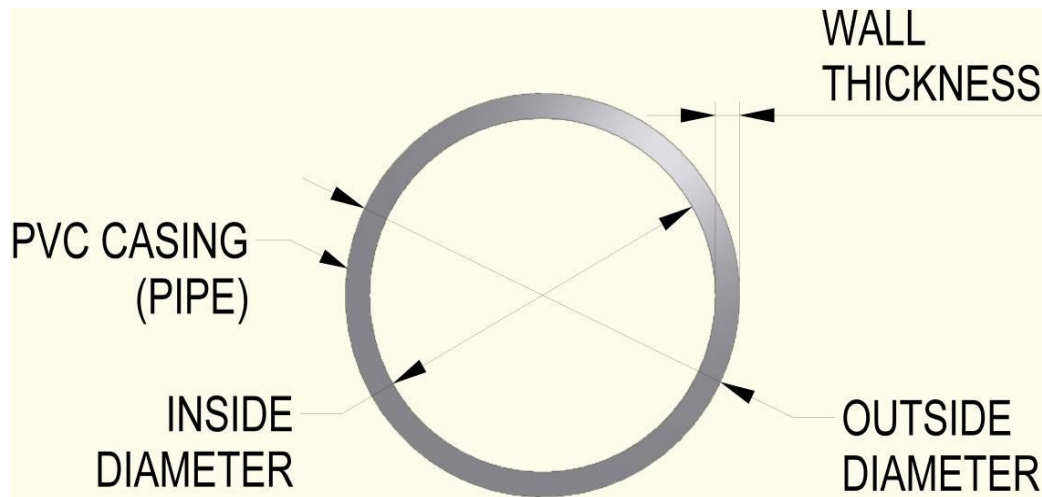
These PVC Casing Cutters can be purchased from mining supply companies in Australia.

# PVC Casing Cutter, Twin Cutting Wheel (TCW) Brochure

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**The sizes of PVC Casings which can be cut by the PVC Casing Cutter (TCW) versions are:**



Casing sizes and classes are stated in accordance with AS/NZS 1477 PVC Pipes & Fittings for Pressure Applications. See below for the physical dimensions of each of the above casings.

**Cutting Head Assembly, Size 125-150** will cut the following casings,

- Size 125, Class 9 (Outside Ø140.2 Inside Ø128.4 Wall Thickness 5.9)
- Size 125, Class 12 (Outside Ø140.2 Inside Ø124.9 Wall Thickness 7.65)
- Size 150, Class 9 (Outside Ø160.25 Inside Ø146.9 Wall Thickness 6.7)
- Size 150, Class 12 (Outside Ø160.25 Inside Ø142.7 Wall Thickness 8.8)
- The smallest Casing inside diameter the cutter will fit is Ø 124

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## Overview

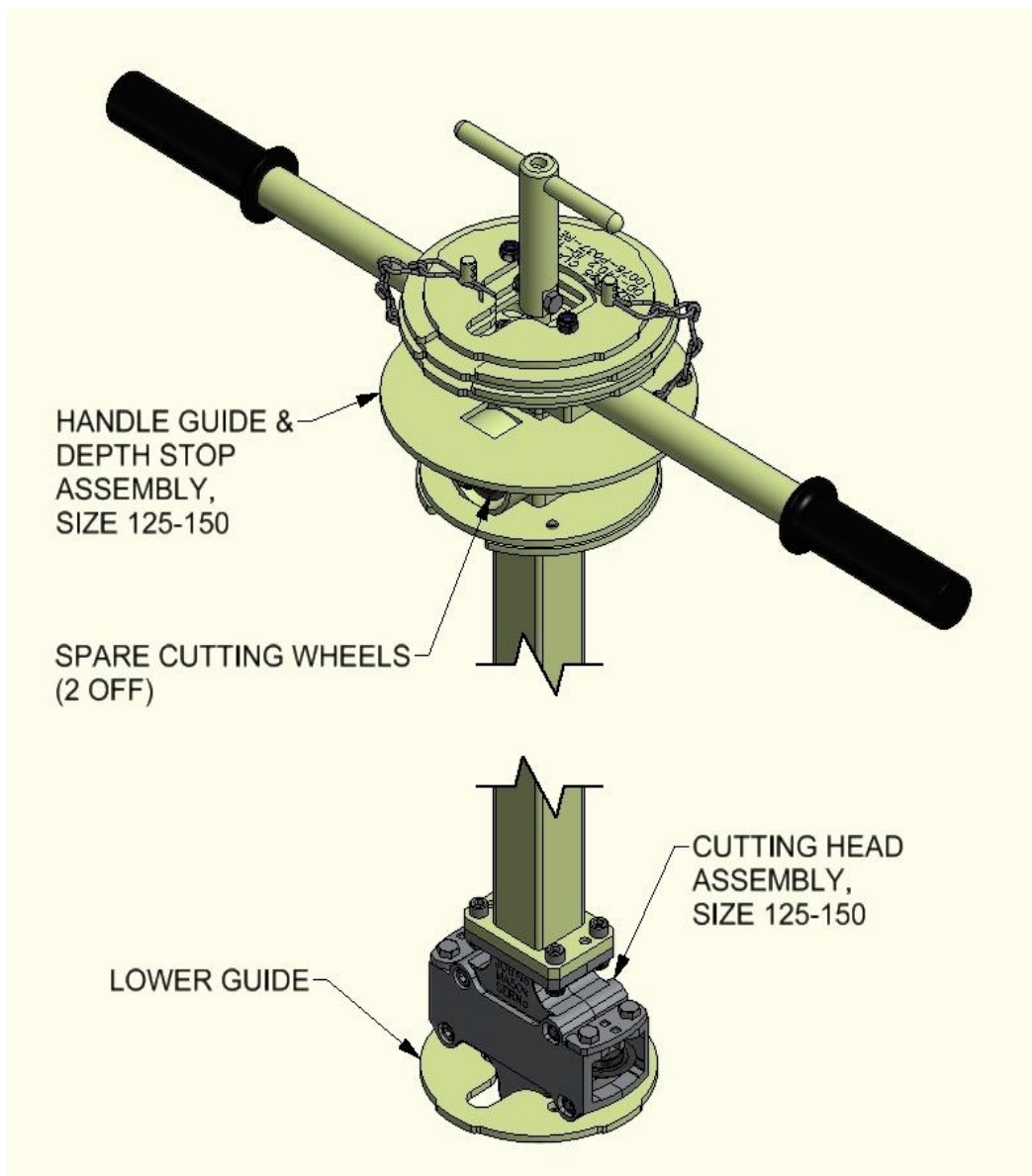
The PVC Casing Cutters (TCW) are manually operated devices for internally cutting PVC bore casings with wall thicknesses that are less than 9mm and to a depth up to 1.55m below the top level of the casing. Typically these devices are used in the rehabilitation of drilling sites where casings protruding above the ground are to be cut off below ground level before being plugged.

This Twin Cutting Wheel (TCW) version is designed for larger scale rehabilitation providing a more robust and durable design. The PVC Casing Cutters are supplied with a Carry Case for transport and storage as illustrated under Main Features.

The PVC Casing Cutters (TCW) are designed to internally cut the following range of casings which are used in exploration drilling:

**Size 125 and 150 classes 9 and 12.**

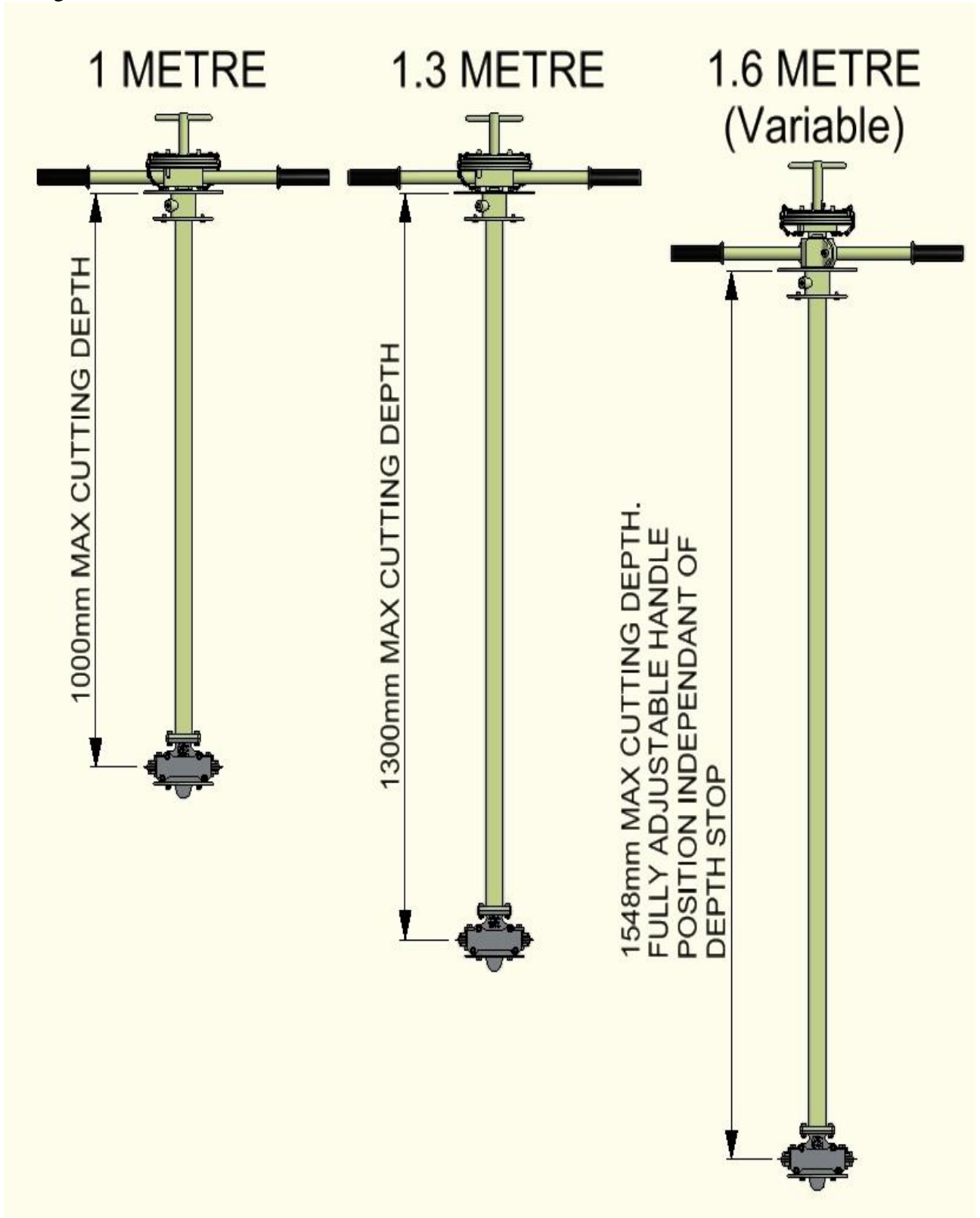
## PVC Casing Cutter (TCW)



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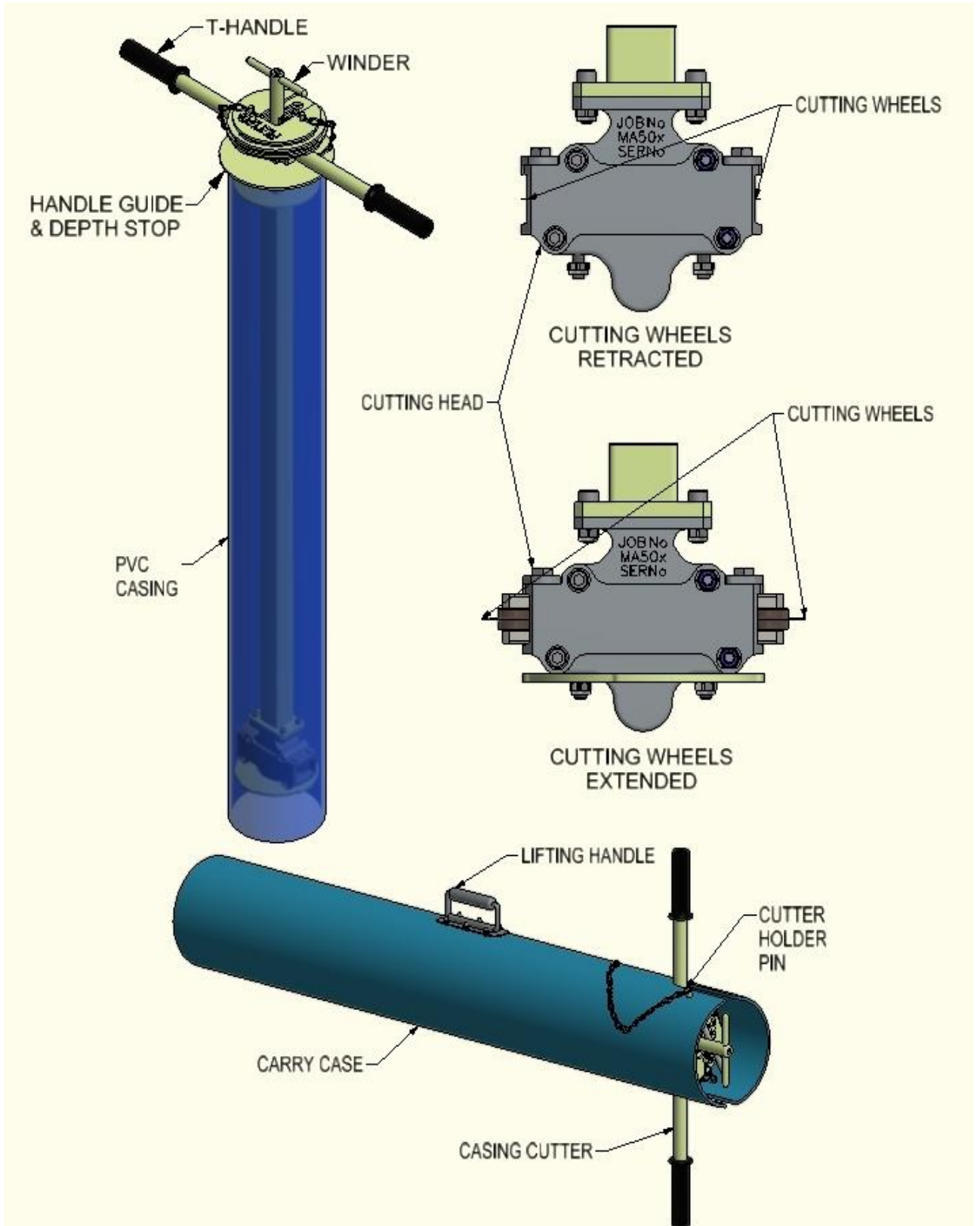
## Available Lengths

There are 2 fixed lengths available, 1 metre, and 1.3 metres and a 1.6m version which has an adjustable handle position over the full range. Actual maximum cut off depths from the top of the casing are as shown below.



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## PVC Casing Cutters Main Features



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<b>Available Products</b>		
Item	Part Number	Description
<b>Casing Cutter Configurations</b>		
010	10076 MA50 10076 SA20	PVCCC <b>125-150-TCW (1 Metre)</b> # * Carry Case TCW 125-150
011	10076 MA51 10076 SA21	PVCCC <b>125-150-TCW 1.6m Adjustable Handle</b> # * Carry Case TCW 125-150 1.6m
012	10076 MA52 10076 SA22	PVCCC <b>125-150-TCW 1.3m</b> # * Carry Case TCW 125-150 1.3m
<b>Consumables</b>		
310	10076 P201	PVC Cutting Wheel for 6mm Wall * (Wall thicknesses less than 7mm)
311	10076 P210	PVC Cutting Wheel for 8mm Wall * (Wall thicknesses less than 9mm)
312	10076 P011	Bearing Pin (2 off per cutter)

# Includes Qty 4 off PVC Cutting Wheels, two for 6mm & two for 8mm wall thickness casings.

\* We recommend additional spare PVC Cutting Wheels should be purchased when ordering the first PVC Casing Cutter.

# PVC Casing Cutter, Twin Cutting Wheel (TCW) Brochure

## Cutting Head Assembly

### Cutting Head Assembly, Description

The Twin Cutting Wheel design uses two cutting wheels and a centering guide plate. The features of the new Twin Cutting Wheel design include the following:

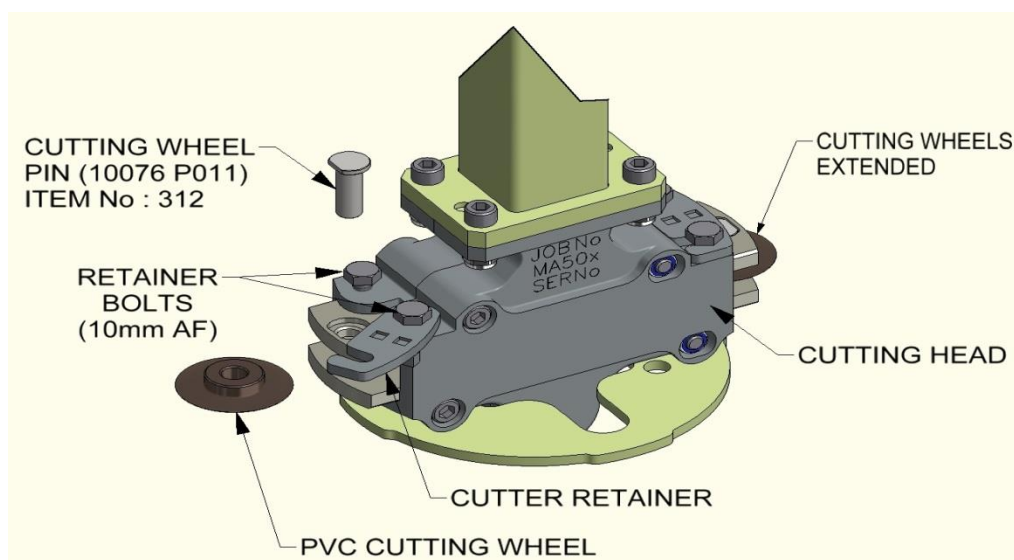
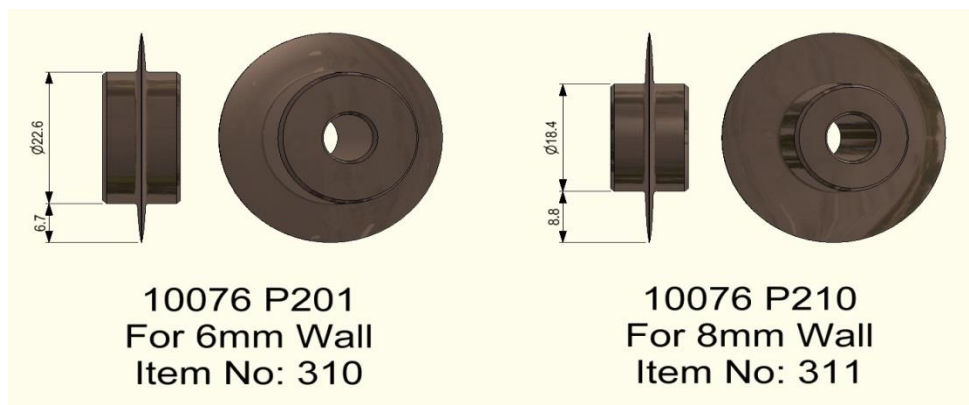
- Limited affect by dirt and contaminants in the PVC casing.
- Shouldered cutting wheel edges are much less prone to damage when breaking through the PVC casing because the penetration is limited.
- Precision machined enclosed mechanisms reduce exposure of mechanisms to dirt etc.
- Durability.
- Faster Cutting with the Twin Cutting Wheels.

### Cutting Wheels, Description

The Casing Cutters (TCW) are supplied with two 6mm (for up to 7mm wall thickness) and two 8mm (for up to 9mm wall thickness) Cutting Wheels unless otherwise requested at the time of ordering i.e. it could be four of one size.

The two 6mm Cutting Wheels are fitted, and two 8mm Cutting Wheels are supplied as spares, unless otherwise requested i.e. 8mm fitted and 6mm as spares.

It is desirable to use the 6mm Cutting Wheel for thinner casings up to 7mm wall thickness as it has greater strength than the 8mm Cutting Wheel.



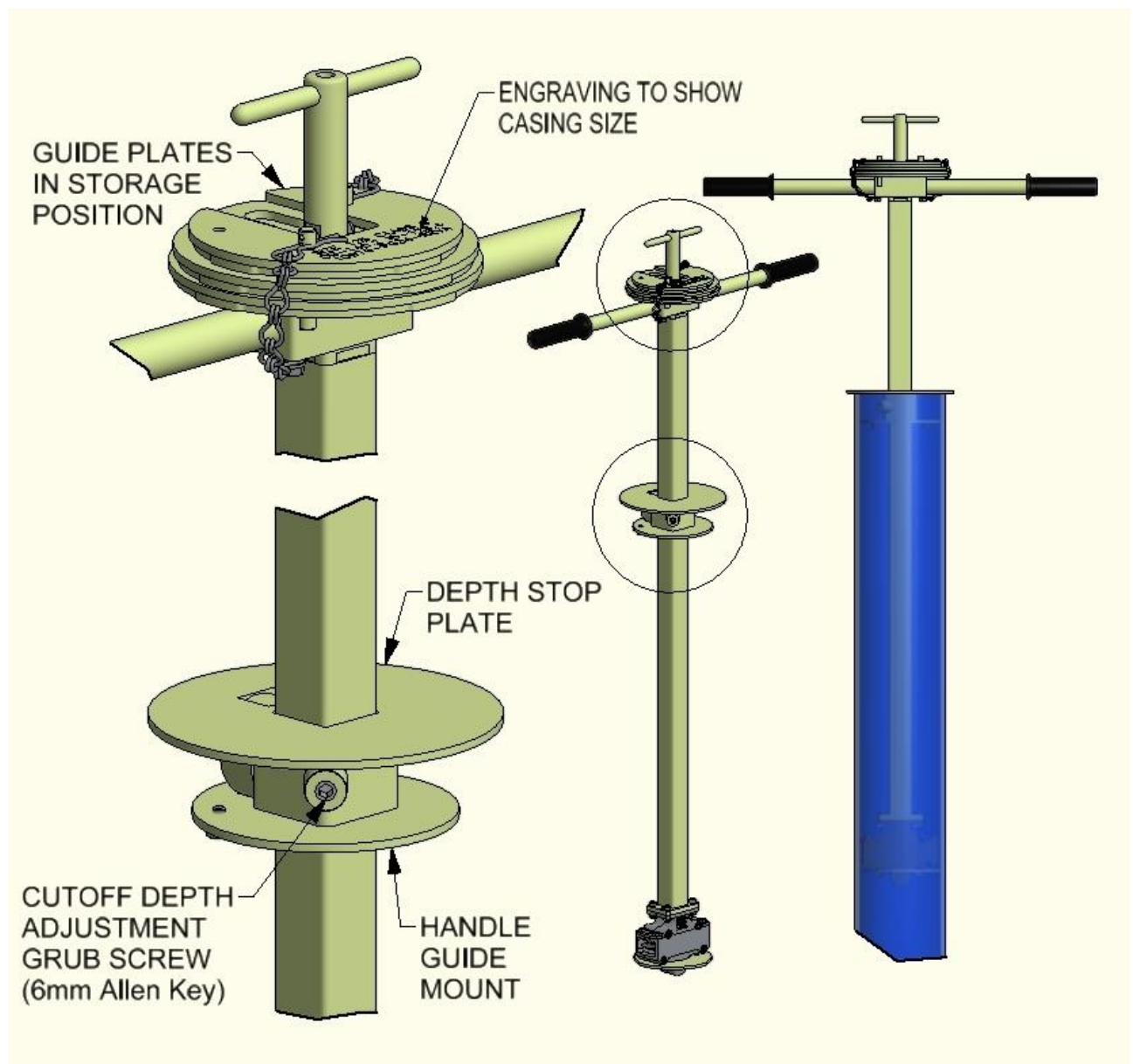


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## Handle Guide & Depth Stop Assembly, Description

The Handle Guide and Depth Stop Assembly consists of a series of interchangeable engraved Handle Guide Plates designed to suit the specific PVC casing size being cut and a Depth Stop Plate. The Handle Guide Plate aligns the T Handle when the Cutting Wheels are first engaging the casing and keeps the T Handle parallel to the casing during cutting to avoid side forces on the Cutting Wheels.

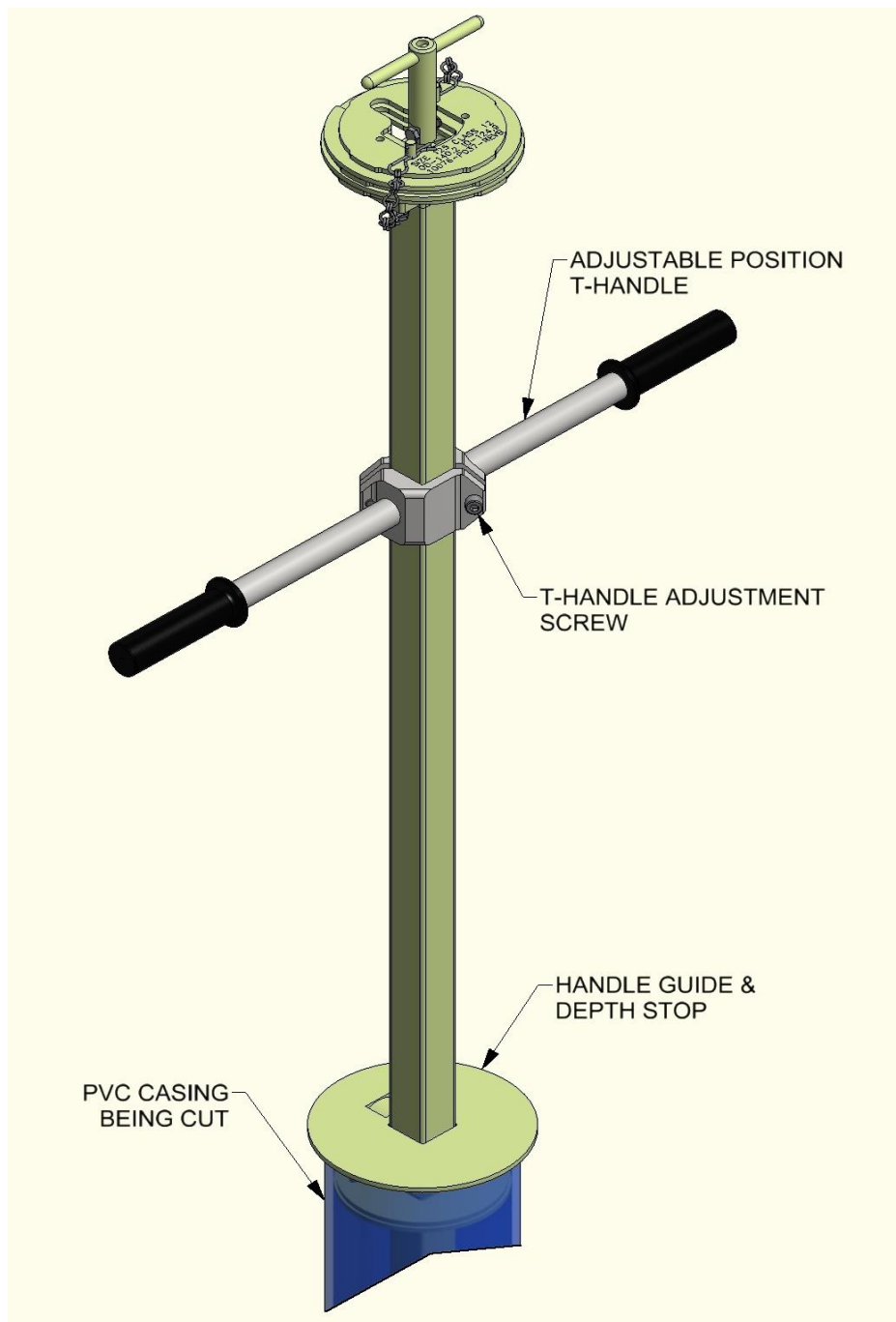
The Depth Stop Plate sets the depth of the Cutting Wheels from the top of the casing and holds this depth precisely during initial engagement of the Cutting Wheels and subsequent cutting. The position of the Handle Guide & Depth Stop can be adjusted to give the required depth of cut down the casing. The Handle Guide & Depth Stop position is held in place with a grub screw, which is tightened with a 6mm Allen Key.





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## Adjustable Handle (1.6m Version)



The 1.6m PVC Casing Cutter features an adjustable T-Handle which can be positioned to suit the operator, depth of cut and orientation of the PVC casing to be cut. This enables the 1.6m PVC casing cutter to be used relatively comfortably when used for shallower cuts as well as deep cuts.

The T-Handle has two Adjustment Screws. These are loosened with a 6mm Allen Key, and when loosened allow the handle to be adjusted and positioned anywhere above the current set height for the Handle Guide and Depth Stop. The Adjustment Screws must be re-tightened before the Casing cutter is used to cut a casing. The position is simply set to the operator's preference for that particular cutting situation.