

To fit a core, follow the instructions supplied with your machine.

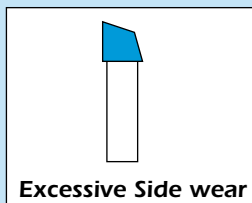
If you have hired the machine from HSS, contact your local HSS Hire Shop if you have any problems.

In any case, **never force a core onto the machine's spindle and never over-tighten.**

TROUBLE SHOOTING

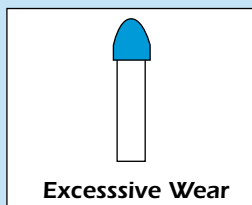
Damage to and uneven wear on the core and its tips is caused by a variety of faults either because of machine or user/operator errors. The following diagrams will give you a rough idea of what has or may go wrong.

Types of Damage and Wear



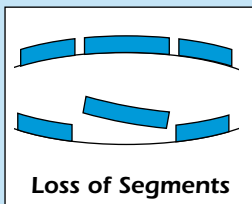
Excessive side wear to segment.

1. Machine is out of alignment.
2. Lack of or insufficient supply of water to the worn side.



Excessive wear to the segment.

1. Material being cut is very abrasive and the segment is for use on hard materials.
2. Lack of or insufficient supply of water or dust extraction.
3. Rotation speed either too slow or too fast.



Loss of Segment

1. The core has twisted or jammed in the cut.
2. Lack of or insufficient supply of water or dust extraction.

USING CORES

Make sure the workpiece is firmly and safely secured.

If using a portable machine, adopt a comfortable, balanced stance that lets you support and control the machine, keeps the whole of your body clear of the core, and lets you see clearly what you are doing.

Make sure too, that the work area is free from trip hazards and that the ground offers a secure footing.

When drilling, work in a straight line, taking care not to trap or pinch the core in the hole.

Never try to force the core through the workpiece.

Regularly check the core's condition and replace if worn out or damaged.

When you have finished using a portable machine, wait for the core to stop turning and put the machine down gently; taking care not to knock the core. Ideally, rest the machine, clear of the ground, on a suitable cradle.

Always let the core come to halt naturally. Never apply pressure to the core in order to slow it down.



...any comments?

If you have any suggestions to enable us to improve the information within this guide please fax your comments or write to the Product Manager at the address below

Fax: 0181-687 5001

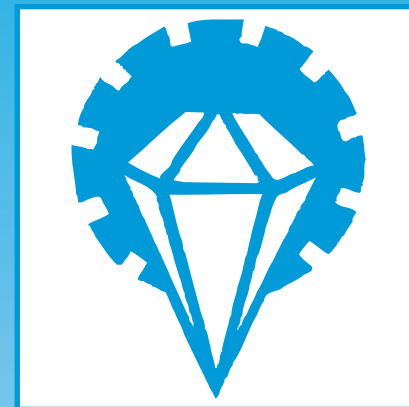
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Web Site: <http://www.hss.co.uk>

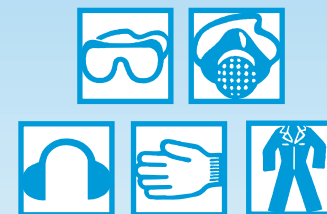
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HSS Hire Shops



Diamond Core Bits

Diamond products which give a cleaner finish and prolonged life over a conventional TCT core.



Resale

GENERAL SAFETY

For advice on the safety and suitability of this equipment **contact your local HSS Hire Shop.**

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area.



Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.



Safety Goggles MUST be worn by everyone in the work area.



Some materials when cut contain substances which, when inhaled, can be harmful to health. A suitable mask must be worn when using Diamond Wheels.



Diamond drilling equipment generates potentially harmful noise levels. To comply with health and safety at work regulations, **ear defenders must be worn by everyone in the vicinity.**



Wear gloves, protective clothing and footwear that covers all exposed skin.

Avoid loose garments and jewellery that could catch in moving parts, tie back long hair.

Keep your hands and feet clear of the diamond core at all times. Don't be fooled, the segments may look smooth but they will still cut you!

Ensure the work area is well lit and ventilated, if in doubt, ask about dust extraction and ventilation equipment at your local HSS Hire Shop.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. **Keep combustible materials at a safe distance** – at least 5m.

If working above ground-level, work from a suitable, stable platform – an access tower for example. Never work from ladders or steps.

Take special care when cutting into anything that may contain pipework or electrical cables. If in doubt, hire a metal locator from your local HSS Hire Shop, to determine the exact position of such hazards.

Make sure you know how to switch the machine OFF before you switch it ON in case you get into difficulty.

Check the condition of the diamond core before use

MACHINE SAFETY

Make sure you know how to operate your particular machine safely and correctly.

If using an HSS MACHINE...

Read the Operating & Safety Guide supplied with it. If you have any queries, contact your local HSS Hire Shop for advice.

If using your OWN MACHINE have it **professionally serviced regularly.** In particular, check that any built-in speed control governor is working correctly.

Have its spindle speed checked regularly. Always have the speed checked if the machine has just been serviced or repaired.

WHATEVER you are using...

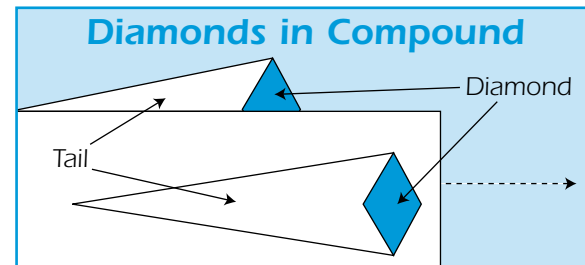
Check the machine's general condition before use. If it shows signs of damage or excessive wear, do not use it! If you have any doubts about the condition of an HSS machine, return it to local HSS Hire Shop.

HOW THEY WORK

Diamond core bits come in various sizes, types and hardness. Each type is designed for cutting different types of material.

HSS cores have been selected to give a good performance in as wide range of materials as possible. Ask your local HSS Hire Shop for advice on selecting the best core for your particular task.

All diamond cores consist of a metal tube with segments containing industrial diamonds either brazed or laser welded to the edge. **All HSS cores are laser welded for safety, reliability and ease of use.**



Laser Welded Diamond Cores can be used wet or dry, however, it is recommended that they are used wet where possible.

Only use them dry with electrically powered, hand held equipment where advised and where possible **always use a dust extraction system** (available for hire at your local HSS Hire Shop).

The use of water or a dust extraction system will not only keep the dust level to a minimum and give greater user

comfort, but will increase the speed of the cut. It will also prolong the life of the core by moving debris away from the cutting edge.

Different areas of the country have building materials with differing hardnesses, compounds and aggregates and **this must be taken into consideration when selecting the type of core.**

A common occurrence with diamond cores is that the core stops cutting and the user thinks the core is blunt. The fact is that the material being cut is not abrasive enough and the diamonds fragment before the compound is worn away enough to reveal new diamonds.

A dull or blunt core can be re-faced by running the core through a soft material such as a breeze block.

Another common problem is when a core tip wears away very quickly. This is caused by cutting a soft abrasive material, with a core designed for hard material. The debris wears the compound and so releases the diamond before it is worn or has had a chance to work properly.

CORE SAFETY

Use the right core for your machine. In particular, check that the machine's spindle speed does not exceed the maximum at which the core can safely run (see the core's label).

Use the right type core for the job. If in doubt, contact your local HSS Hire Shop for advice.

Handle Diamond cores with care. They are easily damaged if knocked or dropped. **Damaged cores are potentially dangerous.**

Always check the cores for damage before use. Brush off any dust and tap gently with a non metallic object. If the core emits a dull thud instead of a clear ring, assume it is cracked.

Never fit or use a core you think may be damaged.

CORE STORAGE

Stack Diamond cores on a flat, level, steel base-plate.

Never store diamond cores where they will be exposed to extreme temperatures or damp. Improper storage damages the cores.

CORE FITTING

Diamond cores should be fitted only by authorised, trained personnel.

Before fitting a core, switch OFF the machine and unplug it.

Use the proper tools to change/fit cores. These are supplied with machines hired from HSS. If using your own machine, consult the manufacturer's instructions.