



CATRA i-100 Commercial Knife Sharpener

for **MOST HANDHELD KNIVES**

Designed and manufactured by
Cutlery & Allied Trades Research Association

Produces the Sharpest Knives, Thousands of Times Over



The i-100 operates using the Spiral Interlock Grinding Wheel system known throughout the world of knife manufacturing and sharpening, and one that CATRA has been using for over 40 years. By coupling this system with the high-tech abrasive Cubic Boron Nitride (CBN), it provides CATRA knife sharpeners with many advantages.

- Less than 10 seconds per knife.
- No skill or lengthy training required.
- Consistent edge angles on every knife, for every user.
- Safe and comfortable to use.
- Does not need water, since our CBN abrasive wheels gives a cool grind.
- Compact, with a folding side-handle for ease of transport.
- No adjustment necessary.
- Low consumable cost, as grinding wheels can be recoated, typically £0.01 per blade sharpened (<\$0.02).



- Stainless steel covers and water-resistant electrical equipment.
- Sharpening angles of between 30° and 60° are available.
- Operates from 240V or 110V electrical supply, or a generator or 12V inverter.
- Available with range of abrasive grit sizes, for different knife uses.
- Ideal for abattoirs, fish and food processors, knife sharpening services, small knife manufacturers and other related industries.
- Suitable for sharpening up to 1000 knives per day.
- Magnetic dust entrapment system prevents contamination of food process areas.
- Capable of sharpening both single and double bevel blades.

By selecting a particular sharpening angle, typically 30°, you will consistently produce high levels of sharpness, as the edge angle is controlled by the grinding wheel diameter. This diameter does not change during the life of the CBN abrasive.

Each pair of interlocking wheels can sharpen a blade at least 20,000 times and much more if a knife blade edge thinning system is operated. When the time eventually comes around, wheels can be returned to our Sheffield workshop for abrasive recoating, thereby keeping consumable costs low.

Different grades of abrasive are available, which allow knives to be sharpened for different applications.

CBN 76 - Very smooth	Fish and meat filleting
CBN 107 - Smooth	General fish and meat processing
CBN 126 - Medium	Vegetable and general kitchen use
CBN 151 - Coarse	High-speed sharpening and non-food industrial use

Extensive sharpness testing on the ISO 8442.5 tester reveals that levels of sharpness produced on the CATRA model i-100 are the highest consistently produced by any system. The edge life for a given knife blade steel are also amongst the best achieved for commercial use knives.

For the majority of uses, we recommend a sharpened angle of 30°, which gives a good sharpness coupled with excellent life. Decreasing to 20° improves the sharpness but increases the risk of damage to the edge and, therefore, premature loss of sharpness.

The machine is suitable for sharpening virtually all types of handheld knife including:

- Vegetable
- Steak / Scimitar
- DIY / Craft
- Filleters
- Slicers
- Folding / Pocket / Hunting
- Kitchen / Table
- Cooks / Chefs
- Carvers

- Sporting / Collectors
- Fruit / Flower

Although the CBN abrasive wheels are very fast and efficient, knives do not become overheated during sharpening, so a coolant is not required. CATRA's system provide knives with a 50% increase in edge life over a blade sharpened on an abrasive wheel or belt with conventional abrasives, which tend to overheat the first few microns of the cutting edge.

The heavy-duty design of the i-100 makes it suitable for all food processing environments and other high humidity areas; the machine has stainless steel covers and has water resistant electric motor and switches.

This small machine is easily transportable and is ideal for in-house or mobile applications. When fitted into a service van, the equipment runs from either a petrol generator or a 12V inverter connected to the vehicle battery.

Sharpened Angle	30°, 40°, 50° or 60° (special sizes and profiles to order)
Grinding Wheel Diameter	100mm
Motor	240V or 110V, 375W, 1380 rpm. Fan-cooled, IP 54 rated (spray-proof)
Noise Level	< 83 dBA
Size	300mm x 300mm x 250mm
Weight	19kg