

Knives



Quality knives by ZWILLING J.A. HENCKELS

ZWILLING J.A. HENCKELS is one of the world's leading manufacturers of high-quality knives. The knowledge and experience of many generations, inventive minds, technological expertise and the teamwork of countless individuals are the driving force behind this status.

There are considerable differences in the quality of knives, starting with the grade of steel. The method of processing raw material is very important as well because it determines the ultimate characteristics of a knife.

It is a challenge to be able to offer a suitable and well functioning knife for every purpose. ZWILLING J.A. HENCKELS has the experience and competence of more than 270 years of manufacturing knives of outstanding quality.

Everything that needs to be known about knives has been summed up on the following pages. Why knives by ZWILLING J.A. HENCKELS are of good quality, where differences in quality come from and what consequences they have.

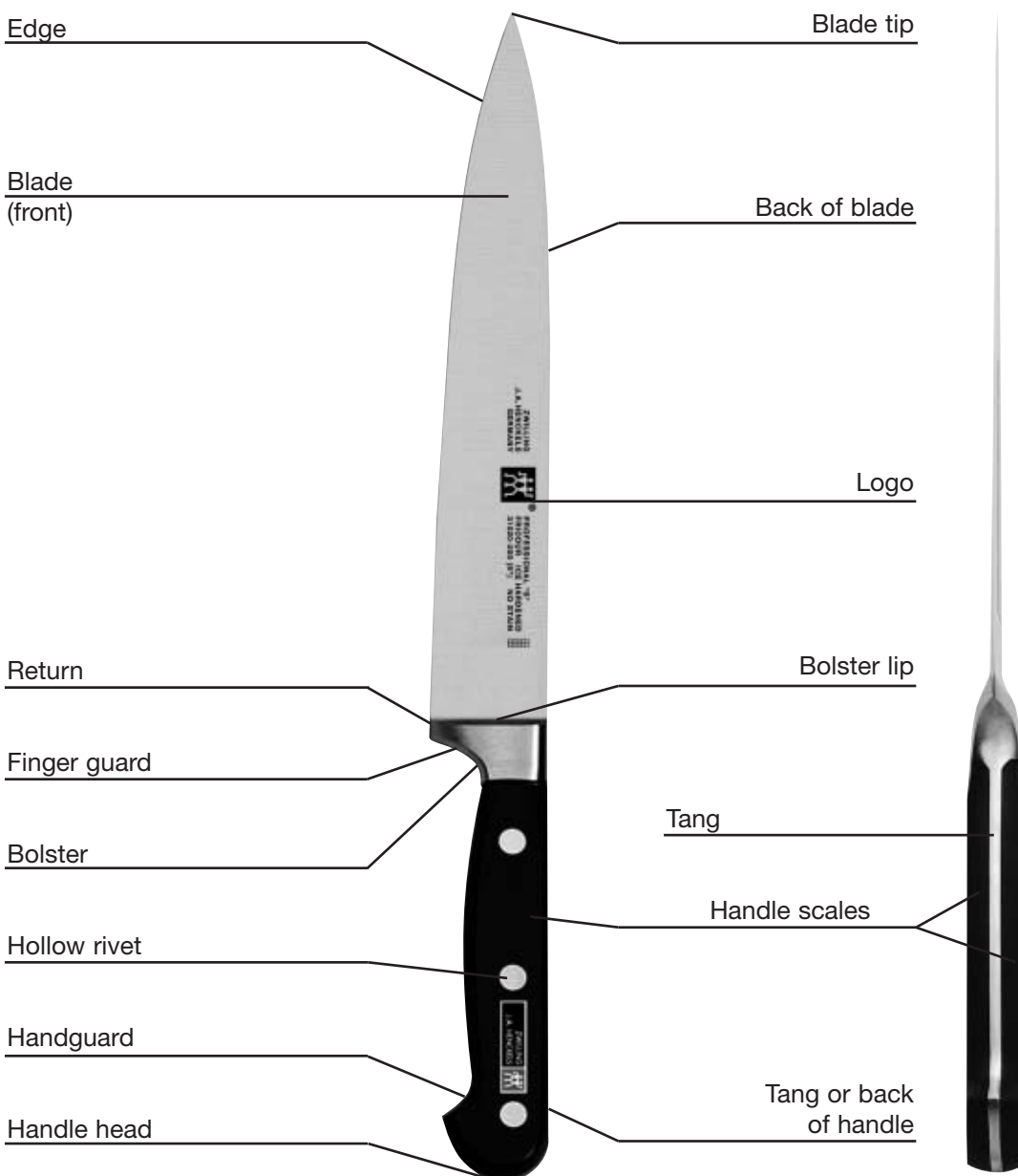
Knives

Knives: Terminology

The parts of a knife

The individual parts of a knife have names which you need to know in order

1. to understand the following information
2. to give your customers sound advice.



Knives: Terminology

1. The knife edge

The cutting part of the blade is called edge.

Since knives are required to perform a variety of tasks, blades have been developed with varying types of edge.

Fine-edge blade

Fine-edged blades produce a smooth, clean cut without causing the product to disintegrate. They are suitable for cutting hard and soft materials such as vegetables, meat, fruit. A fine-edged blade is also needed for peeling.



Serrated edge blade

This edge is useful for cutting and slicing soft products with a tough skin, e.g. tomatoes. The serration penetrates more easily than a fine edge. However, when slicing meat, fruit and vegetables of a fibrous texture, the cut of a fine blade is gentler.



Scalloped edge blade

This is a special serration that is basically used for the same jobs as the serrated edge. It is particularly suitable for cutting bread (penetrating hard crusts and slicing the soft interior).



Knives: Terminology

Hollow-ground edge blade

The name derives from the hollows positioned alternately on each side of the blade, giving the knife a particularly fine cutting edge. When used for cutting, air pockets develop in the hollows with the result that the product separates easily from the blade. Thus very fine slices (e.g. ham) can be cut effortlessly. Even short-crust pastry and flan bases can easily be sliced into thin and even layers.



Razor edge blade

Following intensive research ZWILLING J.A. HENCKELS has developed an innovating honing technique that guarantees an extremely high initial cutting performance. After grinding, the blade gets a fine-polish treatment to remove even the tiniest burrs. This technique is mainly used for the Asian-style knives (e.g. Santoku knife).



Knives: Terminology

2. Knife tips: shapes with functions

Three shapes can be distinguished:

High tip

The back of the blade is straight while the cutting edge is curved, e.g. on a utility knife. This shape permits the blade to be raised from the cutting board with a rolling action.



Centre tip

Both the back of the blade and the cutting edge are gently curved, terminating in a point. With a pronounced tip like this (e.g. on a chef's paring knife) the blade can easily be used to lard a roast with bacon or herbs.



Low tip

The back of the blade is curved while the cutting edge runs straight up to the point. This shape permits smooth, straight cutting on a cutting board without any chopping action (e.g. with the vegetable knife).



Knives: Terminology

3. Blade profile

The initial sharpness essentially depends on the profile of the blade and the shape of the cutting edge. The durability depends on the composition of the steel and its heat treatment.

Durability stands for the effective cutting life of the blade.

There are two types of profiles with differing characteristics.

a) The evenly tapered profile

This shape is ideal because

- the cutting edge is stabilised and
- it is easily re-sharpened.

This shape is therefore being used for knives by ZWILLING J.A. HENCKELS.



b) The hollow-ground profile

This shape is unsatisfactory because the edge

- has insufficiently stability and
- is therefore easily damaged.



Knives



Knives: Terminology

4. The tang

The tang is the part of the blade which extends into to handle. There are two different types: the concealed tang (e.g. Four Star series) and the exposed tang (Professional “S” series). Concerning the latter a distinction is made between a full, half and quarter tang, depending on its length.

The concealed tang is cast into the plastic handle and additionally safely secured with synthetic resin. The exposed tang’s rivets have the purpose of connecting the handle or scales with the tang.

Knives: Ergonomics

Outstanding design combined with perfect functionality

The shape of the handle determines whether a knife feels comfortable and is easy to use. To a large extent an ergonomically shaped handle fits the natural shape of the hand.

When you pick up a knife you can quickly tell whether it suits you.

ZWILLING J.A. HENCKELS pays particular attention to combine outstanding design with ergonomic principles.

The balance of a knife or the proper distribution of weight between the handle and the blade plays an important role. To be able to use the knife for a prolonged period of time without causing discomfort or strain, the handle must be well shaped and neatly finished.

A well designed handle has a distinct finger guard to give the hand a secure grip.

The finger guard is either integrated into the handle or, in the case of top quality knives, designed as a steel part (bolster).

Following the improvements in properties of plastic compound over the years - particularly under hygienic aspects - polypropylene handles have increasingly replaced wooden handles.

Polypropylene handles have a number of advantages:

- impact and shock resistance
- best possible hygiene due to the smooth and pore-free surface
- dishwasher-safe.