

Knife Metals



Steel is the heart of the blade. The choice of blade materials is a huge component of knife performance. Heat treatment, blade geometry, edge grinding, and handle design also contribute to performance.

In deciding on the right knife, consider the following blade attributes:

- **Strength**—hardness/ability to take a load without permanently deforming
- **Wear Resistance**—ability to withstand surface abrasions
- **Edge Holding**—ability of a blade to hold an edge

Blades contain a variety of elements which contribute to the above attributes.

- **Carbon** – all steel contains carbon, which adds hardness to the blade. The more carbon, the harder the blade
- **Chromium** – adds hardness, but also allows the knife to hold an edge and contributes to rust-resistance
- **Vanadium**—allows a knife to retain an extra-sharp edge
- **Molybdenum**—contributes strength and wear-resistance
- **Manganese**—contributes strength and wear-resistance

| Brand | Strength | Wear Resistance | Edge Holding |
|-----------------------------|----------|-----------------|--------------|
| MX3 [®] | ★★★★★ | ★★★★★ | ★★★★★ |
| ZüM [®] | ★★★★ | ★★★★ | ★★★★ |
| Renaissance [®] | ★★★★ | ★★★★ | ★★★★ |
| Genesis [®] | ★★★★ | ★★★★ | ★★★★ |
| Asian | ★★★★ | ★★★★ | ★★★★ |
| Millennia [®] | ★★★ | ★★★ | ★★★ |
| Praxis [®] | ★★★ | ★★★ | ★★★ |
| Ultimate White [®] | ★★★ | ★★★ | ★★★ |