



## Mountaineering

Mountaineering, understood as ascending a complete mountain, uses a variety of skills: ice climbing (shown here), some rock climbing, survival, navigation, endurance etc. ... It is never risk-free. Mountains are known to be treacherous and claim lives every year. At high altitudes the breathing is more difficult, the weather more dangerous, and more equipment must be carried in the backpack. The equipment has to be perfectly reliable in any weather and weigh as little as possible.

High strength/weight ratio is therefore an important consideration in choosing the equipment (metal components involve fasteners, anchors, ropes, carabiners, descenders, ice axes, etc. ...).

As technical equipment is expensive, it has to be lasting, i.e. not subjected to corrosion that can impair its reliability. In addition, aesthetics and finishes are valued because these products are expected to be attractive to the eye and to feel good when grasped.

Stainless steel offers reliability in any weather, high strength, and good aesthetics. It is used often in combination with Aluminium and/or Titanium alloys.



*Ice axe for mountaineering and ice climbing, with a forged stainless steel spike. Spikes are designed to be sharpened like cutting tools. They insure an excellent grip on rock and an efficient penetration into ice. Picture courtesy of Petzl SARL.*



*Made of stainless steel for a design that won't rust, crampons are lighter weight and durable. Stainless steel resists snow balling. Picture courtesy of Blackdiamond equipment.*