

# WHEEL BUILDING

There are different wheel building procedures and each one of them has different advantages.

As a result of our experience acquired in the field with our amateur and professional teams and our laboratory tests, we have collected a lot of information and selected what seems to be the most efficient wheel building procedure. As such, the following should be regarded as a **recommendation** and not the only procedure that could be used.

Since this document is intended for specialists, the procedure below will perhaps be familiar. Even if this is the case, we still hope to provide you with some tips.

This information concerns a "classic" wheel building procedure.

## SPOKES

### MATERIAL

We recommend the use of stainless steel.

### DIAMETER

We also recommend the use of double butted spokes with a central diameter of 1.8 mm and 2 mm at the ends.

### CROSS PATTERN

The 3 cross pattern is the most frequently used (and is consequently the most versatile). Depending on the drilling of the rim, other cross patterns are possible : 0 (radial wheel building), 1, 2 or 4 cross patterns.

### WHEEL BUILDING PROCEDURE

The following example is done on the basis of a Mavic 501 hub, a Mavic rim and 3 cross pattern.

*Particular features of the products :*

#### **501 hub :**

One out of two holes where the spokes pass are countersunk in an interior/exterior opposition. This is to allow the elbow of the spoke to have contact with the countersunk shape and not the sharp edge of the hole.

#### **Mavic rim :**

The holes where the spokes pass are offset (except on the CXP line). This is to orient the spoke nipple (and consequently the end of the spoke) according to the angle given to the spoke by the dishing of the wheel.

The profiled eyelet (Mavic patent) developed for the CXP line (except the CXP10) provides a platform for the nipple to prevent it from binding.

The sticker positioned on the Mavic rim (except on the CXP line) allows you to immediately locate the offset and therefore build a wheel without losing time.