igus®

CASE STUDY

OLYMPIC-MEDAL-WINNING MOUNTAIN BIKE

Derailleur for high-tech mountain bikes uses plastic bushings

The derailleur of a world-class mountain bike guides and positions the bicycle chain accurately on the different gears. It uses iglide® G300 plastic bushings from igus® for this mechanism.

Cycling through water, mud, sand, and oil

The derailleur is subject to several harsh environmental agents, such as water, mud, sand and oil. Additional demanding factors include the mechanical stressing involved during jumps, for instance, and cleaning the bike afterwards with a steam blaster. Two iglide® G300 plastic bushings are seated in each of the four points of articulation on the derailleur. These enable a long service life fulfilling the demands of professional mountain bikers battling for medals.

The potential weight saving involved with plastic bearings is also an important factor for high-tech mountain bikes. Aluminum or brass bushings feature high friction and wear and low accuracy, whereas iglide® G300 bearings operate extremely precisely and are almost indestructible. The long service life offered by iglide® G300 is also highly favorable and can be

calculated online using our Expert System.

Expert System

More product information

iglide® overview

iglide® G300

More interesting application examples from different industries

Plastic bearings - applications overview