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stress on the hip-joint articular surface; 16 Sensor plates designed for measuring forces between ski and binding-a developmental summary; 17 Different possibilities of measuring force transmission between ski and binding; 18 Ground-reaction forces in alpine skiing, cross-country skiing and ski jumping
19 Constraint forces may influence the measurement of vertical ground reaction forces during slalom skiing
20 Structural dynamic analysis of alpine skis during turns; Part Two: Fitness Testing and Training in Skiing; 21 Evaluation and planning of conditioning training for alpine skiers; 22 Kinematic and kinetic analysis of slalom turns as a basis for the development of specific training methods to improve strength and endurance; 23 Types of muscle action of leg and hip extensor muscles in slalom; 24 Predicting skiing performance in 14-18 year old competitive alpine skiers
25 Validity of sport-specific field tests for elite and developing alpine ski racers
26 Relationship of anaerobic performance tests to competitive alpine skiing events; 27 Aspects of technique-specific strength training in ski-jumping; 28 Programme for the objectivization of sportspecific performance preconditions, in the long-term development of performance of cross-country skiers; Part Three: Movement Control and Psychology in Skiing; 29 Movement regulation in alpine skiing; 30 The technique of gliding in alpine ski racing-safety and performance
31 A profile of sensorimotor balance of alpine skiers

Sommario/riassunto

The first International Congress on Science and Skiing was held in Austria in January 1996. The main aim of the conference was to bring together original key research in this area and provide an essential update for those in the field. The link between theory and practice was also addressed, making the research more applicable for both researchers and coaches. This book is divided into five parts, each containing a group of papers that are related by theme or disciplinary approach. They are as follows: Biomechanics of Skiing; Fitness testing and Training in Skiing; Movement Control and P
