

# 1970-1990

ROSSIGNOL SUCCESSFULLY  
DIVERSIFIES

100  
years

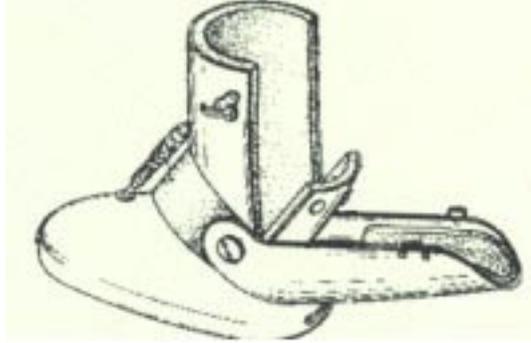


## 1970 - 1990

Rossignol successfully diversifies

### 1970 . The rear entry ski boot

In 1969 the Italian company Garmont patented a ski boot "designed to enable the foot to enter via the rear of the boot". In late 1970 the Japanese company Hope offered a ski boot with a shell, a front cuff and a rear cuff hinged on the shell on a single axis located at ankle bone level, giving the rear cuff a very wide opening. The rear entry principle was defined. And would see many refinements.



### 1970-1971 . The mass produced ski

International demand was growing, but ski ranges available were largely based on a logic of innovation and know-how. In 1970, as part of its commercial strategy of adapting the offer to the demand, Rossignol decided to set up a production facility in Spain using a technique derived from the Strato, but with a total industrial based "rethink" focusing on excellent cost / quality conditions. The objective was to conquer principally the Japanese and North American markets through high level competitiveness. Constantly in the process of being refined, this technique currently accounts for production of around 500,000 pairs



of skis a year and offers still more very significant developmental possibilities for the future. In particular, the excellent adaptation of production to meet female Japanese demand gave Rossignol sales of a million pairs of skis in Japan over fifteen years with one model – MISS R – which is a first!

### The Roc 550

In the early 70s Rossignol innovated yet again by substituting the ski's wood core with a core made of low density cellular foam: polyurethane. Combined with zical (an aluminum alloy), this technique optimised the ski's rigidity under torsion and made its high performance qualities accessible to a greater number of people. A world cup winner in 1970, the Roc 550 was on the podiums again in the 1976 Winter Olympics at Innsbruck.



### 1972 . Skis Rossignol becomes the world number one

In the Sapporo Winter Olympics Rossignol was classed the premier world ski brand based on the results, with 7 medals out of 18 awarded, of which 4 were gold. One model stood out with 3 gold medals: the Swiss Team and Fiberglass technology comprising a hollow core, in fiber layers. Created by Gaston Haldemann and the Swiss subsidiary, this ski was especially associated with victories by Bernard Russi, Roland Colombin and Marie-Thérèse Nadig.



A certain Bill Koch (US) invented the skating step, a technique made possible by Rossignol's research into bases without wax.

# 1970 - 1990

Rossignol se diversifie avec succès

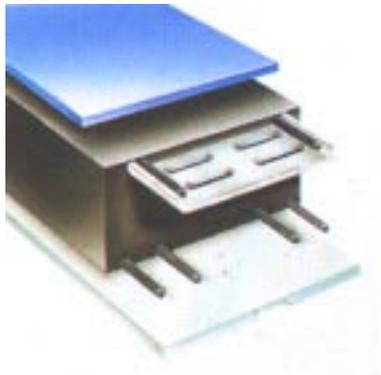
## 1972 . The plastic core ski

The search for higher performing mass production techniques urged manufacturers to take wood out of their skis. In 1970 Kneissl (Austria) and Rossignol innovated by substituting the ski's wood core with a core made of low density cellular foam: polyurethane. Less expensive than traditional wood, polyurethane also had the benefit of improved comfort. One of the first ski manufacturers to equip itself with facilities for industrially processing polyurethane components, Rossignol was also one of the precursors of the technology commonly known as "in situ", where the elements making up the ski are assembled, in a closed mold, using expansion of polyurethane foam. The plastic core ski very quickly made its mark in competitions (ROC and ST models) thanks to Frenchman Patrick Russel for example. In 1976 the plastic core ski triumphed at the Innsbruck Winter Olympics: 6 medals, 2 of them gold for Italian Piero GROS and Canadian Katty KREINER.



Structure from the ROC

ROC 550 and ST 650



## 1973-1980 . The rear entry ski boot takes off

Very influenced by the standard design of leather ski boots, the market gave only a lukewarm reception to the first all plastic rear entry boots (Scott and Olin models). But the way was open. Hanson developed it further.

And in 1973 Salomon decided to diversify its production and looked at manufacturing this type of ski boot. In 1977 the Ancey based company brought out the first model. In the 80s Salomon would gain a worldwide reputation for its ski boots.



Hanson and Salomon boots



Scott and Olin boots

## 1975 . The tennis racket

The decision was made to manufacture and market a new Rossignol product: a range of tennis rackets.

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### The compact ski

Rossignol introduced a new type of ski to Europe that was already very popular in the States: the Compact. Their success with this type of ski led Rossignol to expand the range further for the 1976-77 season, with the Lagos and Argos models.

### 1976 . ST Competition

This slalom ski had a unique braided fiberglass construction encasing the central strip of a polyurethane core giving it exceptional grip on hard snow and great aggression. The ST carried several medal winners in the Innsbruck 1976 Winter Olympics, among them Pierre Gros, Claudia Giordani (Italy) and Willy Frommelt (Lichstenstein).



### 1976-77 . A record year

The Rossignol Group was the first ski manufacturer in history to sell over a million pairs of skis in one year.

### 1979 . SM Competition

With its fiber/plastic/metal sandwich construction, this giant slalom ski, exhibiting excellent rigidity under torsion and great for turns as well as maneuvers in deep snow, delighted skiers across the world. It was highly successful in competitions, in particular with Christa Kinshofer (Germany), Cindy Nelson (US), Peter Luescher, Peter Muller (Switzerland) and Perrine Pelen (France).



### 1980 . Vibration absorption

Skiiing had become an increasingly demanding sport in terms of physical effort. Skiers went faster and their movements were extremely precise. Plus, the snow on the competition slopes was more "prepared", smoother and harder, to avoid deterioration.

Skis are subject to extreme stresses. For skis to remain maneuverable, efficient and fast, it is vital to eliminate extraneous vibrations. The vibration absorption problem is not new. As early as 1956 Rossignol's EASYFLEX model featured a rubber sheet inserted between two of the ski's components.

In 1981, on its «FIRST» sport model and the FP and SM competition models, Rossignol incorporated a device combining steel wire with viscoelastic materials into the ski's internal construction. They called it VAS (Vibration Absorbing System). Absorption became very sought after. VAS retained all the ski's performance capabilities but eliminated vibrations that could spoil its behavior and the skier's comfort.

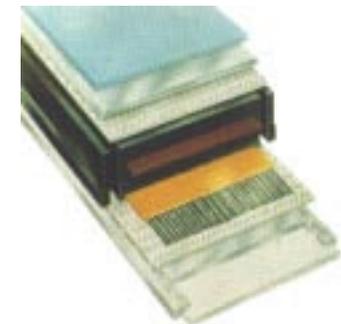
#### Perrine Peen

Ongoing technological development

«Throughout my entire career I have had the impression of considerable continuity in terms of ski equipment developments. Each new stage brought improvements but without a total breakaway from previous skis. And with their absorption systems Rossignol gave skiers even more comfort and facility. The skis I remember as being the best performers were the ones with which I had my best results, Rossignol FPs and SMs".



Christelle Guignard and Perrine Pelen



Structure from FIRST ski

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## The 1980s

The Company and its subsidiaries continued to expand in the sports equipment line, with an increasingly wide range of products such as cross-country ski kit and ski poles plus tennis gear and accessories.

## The new glide

In the early 80s the monoski opened the way to a new state of "glide". It met with some success, more especially in Europe, with a certain set looking for new sensations. However, the monoski was seen to be too close to the traditional alpine ski and the new glide enthusiasts soon began to favor the snowboard which appeared in its current form just a few years later. In the all-terrain freestyle arena the snowboard embodied a new culture based on specific techniques, gestures and kit. Rossignol was one of the first large manufacturers to take an interest in this discipline and offered a wide collection of snowboards. Unlike with the monoski, snowboarders successfully created specialist competition events that consolidated the image and practice of snowboarding in the public eye.

## 1983 . A new tip

Comfort, performance and safety are key words in the ski market. As early as 1978, in its quest for easier handling, Dynastar covered the tip of its Omesoft and Dynasoft skis with a flexible plastic add-on. Also looking for a more maneuverable ski that would be lighter at the front, Rossignol gave the "Opens" a synthetic tip. This technical device caused a fundamental shift in ski esthetics. This major innovation, widespread throughout the world, opened the way to much more significant developments relating to ski shape and graphic décor.



Open XPLS - XPK - XPS

Open XP 11

## 1984 . External absorption

Elimination of vibrations adversely affecting performance was the subject of more refinements from Rossignol who designed a new external absorption device to complement the internal VAS effects (Vibration Absorbing System) devised in 1980. This new device, the VAS M (standing for multidirectional) comprised a separate light alloy stress plate joined to the surface of the ski by a viscoelastic material with optimum absorption at normal skiing temperatures. Proven in numerous competition successes, this technical concept, a feature of the celebrated 4 S, has since been subject to continually ongoing refinements.



VAS Rossignol 7G



Rossignol 7 G and 7 S

## New sensations

For Adrien Duvillard the 4 S was one of the most interesting developments. A lot of research and numerous vibration absorption tests were put into making this ski a real market icon. A slalom ski, but nevertheless very versatile and useable by everyone, the Rossignol 4 S was a star of its era, and through it a lot of skiers experienced maximum sensations.

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## 1987 . 4S KEVLAR

The 4S Kevlar slalom ski was the Rossignol flagship brand for more than a decade, recognized both for its performance and ease of control. Over a million pairs were sold worldwide. It combined the internal and external VAS absorption systems with use of Kevlar for optimum weight. It was efficient, stable and comfortable to use. This ski was a winner in the 1988 Calgary Winter Olympics, with Alberto Tomba (Italy), Erika Hess, Vreni Schneider (Switzerland) and Rok Petrovic (Croatia).



## 1987-1988

Calgary Winter Olympics: Rossignol had kitted out the most medalwinners, with 6 golds out of 10 awarded for alpine skiing. Rossignol and Dynastar brands in total represented 13 medals of which 7 were gold.

## 1987-1989 . A new ski boot concept: the mid

The arrival of rear entry boots split the ski world into two. There were those who supported traditional buckle boots, hi-tech and with good performance, used by most competitors. Then there were the rear entry enthusiasts. This type was more comfortable and greatly appreciated by the general public because it was easy to put on. In 1987 Lange wanted to combine the good features of the two boot types. He gave the buckle boot a cuff that tilted towards the rear while the boot was being put on and included a forward position locking system during use. A single lever provided either a walking position, or locked the cuff in the forward position. Also launched under the Rossignol brand, the "Mid" concept was an immediate commercial success with great long term potential. Certain other brands, especially Technica, also looked at this option. Others like Nordica and Salomon developed hybrids.



MID Rossignol M 9 boot

## 1989 –1990

1989 was the year of the ski boot with the international launch of the Rossignol branded boot and Lange joining Rossignol in July 1989. A range of Rossignol branded ski boots, including its "star" model the R 900, was launched worldwide.

The Group also marketed a full range of tennis rackets under the Rossignol brand. In 1989 Rossignol launched a new range of rackets based on a unique technology, entirely designed and produced by the Group. Sales results were very favorable right from the first few months.

The Group now had a presence in the ski-wear line too with the Killy and Anoralp brands, both hi-tech brands based on expert knowledge in the field.

Sales of ski poles under Rossignol and Kerma brand names meant that the Rossignol Group now ranked second in the world.

Key event in the winter sports arena : Skis Rossignol was made official partner of the World Ski Championships at Saalbach in Austria.

In the 89-90 season the Rossignol Group strengthened its position as the world's number one ski manufacturer with its two Rossignol and Dynastar brands and anticipated further progression.