

The Quiet Revolution

From dream to reality

In 1977, a young engineer in SEIKO's facility in Suwa, high in the mountains of central Japan, had a dream. He dreamed of an everlasting timepiece, more accurate and more reliable than any other.

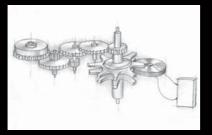
To realize his dream, SEIKO had to make advances in every aspect of the watchmaker's art and expertise. It took nearly 30 years, with over 600 movement samples produced. Today, the dream is a reality. The quiet revolution is underway.

1997 the announcement of technology 1998 the first presentation to the world

2007

the global launch of automatic-wind Spring Drive

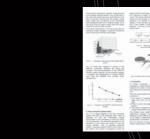
Yoshikazu Akahane, the engineer who dreamed



The early sketches



The prototype samples that proved the dream was realizable



The technology announced in 1997



1999 the introduction of manual-wind version

The working sample shown at 1998 Basel Fair



The quiet revolution, 2005

The quiet revolution gathers pace

2005

2006

2007

The first international collection, with small second hand 5R64 and center second hand 5R65.

Two new calibers enrich the collection, the GMT 5R66 and the Moon Phase 5R67.

The new pinnacle of Spring Drive's development, the chronograph.







5R65

5R67

5R86









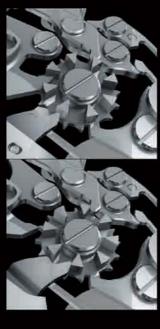
Spring Drive Chronograph

Spring Drive is the perfect platform for a precision chronograph.
As the chronograph second hand moves in glide motion,
it records elapsed time smoothly and precisely without a 'tick',
capturing the exact period of elapsed time to 1-second-a-day accuracy.



The chronograph second hand moves in glide motion and measures up to twelve hours.

The chronograph mechanism uses a column wheel for maximum stability when the button is pressed.



The glide wheel rotates exactly eight times per second, regulating the precision of the chronograph.

This is the only chronograph in the world to measure the true motion of time.



Vertical clutch delivers high precision in the chronograph operation.

The case and bracelet are crafted from high-intensity titanium

– as hard as stainless steel but almost half the weight.













Spring Drive GMT

SPRING DRIVE







The genius of Spring Drive

The precision, reliability and durability of Spring Drive were made possible by advances in four key areas of luxury watchmaking.

The new generation mainspring delivers more power, more smoothly and for longer. Spring Drive has a power reserve of 72 hours.

The new 'Magic Lever' system delivers more efficient transmission of power. Spring Drive's winding is 30% more efficient than traditional systems.

The 'Tri-synchro Regulator' controls and releases the mechanical, electrical and electro-magnetic energy generated by the mainspring. It replaces the escapement and, with its one-way motion, it is inherently more stable and precise. Spring Drive is accurate to 1 second per day.

As Spring Drive movement has no escapement, all the motion within it is in one direction, allowing the hands to move with the unique glide motion. This is the only watch in the world to express the continuous motion of time.



Rotor

Rotor Bridge



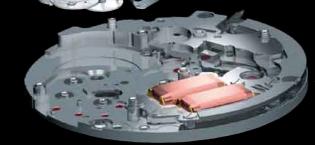
Magic Lever Unit

Train Wheel Bridge



Mainspring Barrel / Gear Train Components

Power Reserve Unit



Tri-synchro Regulator

Spring Drive Chronograph	Spring Drive Moon Phase	Spring Drive GMT with metal bracelet	Spring Drive GMT with leather strap	Spring Drive with center second hand	Spring Drive with small second hand
Caliber 5R86	Caliber 5R67	Caliber 5R66	Caliber 5R66	Caliber 5R65	Caliber 5R64
Self-winding Spring Drive Drive movement	Self-winding Spring Drive movement	Self-winding Spring Drive movement	Self-winding Spring Drive movement	Self-winding Spring Drive movement	Self-winding Spring Drive movement
Accuracy: Equivalent to ± 1 sec/day	Accuracy: Equivalent to ± 1 sec/day	Accuracy: Equivalent to ± 1 sec/day	Accuracy: Equivalent to ± 1 sec/day	Accuracy: Equivalent to ± 1 sec/day	Accuracy: Equivalent to ± 1 sec/day
Power reserve: 72 hours	Power reserve: 72 hours	Power reserve: 72 hours	Power reserve: 72 hours	Power reserve: 72 hour	Power reserve: 72 hour
Chronograph measurement: up to 12 hours					
Diameter: 30.0mm	Diameter: 30.0mm	Diameter: 30.0mm	Diameter: 30.0mm	Diameter: 30.0mm	Diameter: 30.0mm
Thickness: 7.6mm	Thickness: 6.0mm	Thickness: 5.8mm	Thickness: 5.8mm	Thickness: 5.1mm	Thickness: 5.1mm
416 components	288 components	296 components	296 components	276 components	280 components
50 Jewels	30 Jewels	30 Jewels	30 Jewels	30 Jewels	32 Jewels
Power reserve indicator	Power reserve indicator	Power reserve indicator	Power reserve indicator	Power reserve indicator	Power reserve indicator
Hour, minute and small second hands	Hour, minute and second hands	Hour, minute and second hands	Hour, minute and second hands	Hour, minute and second hands	Hour, minute and small second hands
24 hour hand for AM/PM or	Moon phase indicator	24 hour hand for AM/PM or	24 hour hand for AM/PM or	Date calendar	Date calendar
dual time (GMT) indication		dual time (GMT) indication	dual time (GMT) indication		
Date calendar		Date calendar	Date calendar		
Hour, minute and second chronograph hands					
SPS001	SNR011	SNR007, SNR009	SNR013, SNR015	SNR001, SNR003, SNR005	SNS001, SNS003, SNS005
Limited edition of 300	Limited edition of 200				
Case: High-intensity titanium	Case: Stainless steel	Case: Stainless steel	Case: Stainless steel	Case: Stainless steel	Case: Stainless steel
See-through case back with sapphire crystal	See-through case back with sapphire crystal	See-through case back with sapphire crystal	See-through case back with sapphire crystal	See-through case back with sapphire crystal	See-through case back with sapphire crystal
Glass: Sapphire crystal	Glass: Sapphire crystal	Glass: Sapphire crystal	Glass: Sapphire crystal	Glass: Sapphire crystal	Glass: Sapphire crystal
with anti-reflective coating	with anti-reflective coating	with anti-reflective coating	with anti-reflective coating	with anti-reflective coating	with anti-reflective coating
Water resistance: 10 bar	Water resistance: 10 bar	Water resistance: 10 bar	Water resistance: 10 bar	Water resistance: 10 bar	Water resistance: 10 bar
Bracelet: High-intensity titanium with deploy-	Strap: Crocodile with stainless steel buckle	Bracelet: Stainless steel with deployment	Strap: Crocodile with stainless steel buckle	Bracelet: Stainless steel with deployment	Strap: Crocodile with stainless steel buckle
ment clasp and push button release		clasp and push button release		clasp and push button release	

SEIKO WATCH CORPORATION seikospringdrive.com