

UHRENBASATZ



Mechanica M1 | M3 | M4 | M5

**Build your
personal time-
piece**

A RENDEZVOUS WITH THE FASCINATING TECH- NOLOGY OF CLASSICAL CLOCK MAKING

A mechanical clock never fails to fascinate and intrigue in every aspect. The charming appearance reveals its heritage, the steady ticking creates an air of calm and harmony and the inner workings impress with their technical precision. By winding the weight back up, the cycle starts all over again, driving the time forwards in a fascinating manner. With our Mechanica clock kits, you can experience the secrets of these elegant timepieces since you will be building them yourself. The detailed and fully illustrated assembly instructions mean that you do not need any previous knowledge of clock-making to easily assemble your very own clock in a short space of time.

Regardless of how you rate your technical knowledge – the mechanics of the gear train with its ratios and bearings will inspire you just as much as the knowledge you will gain of the laws of the pendulum and how the escapement works. Last but by no means least, the clock will impress you with its unmistakable aesthetics which, when combined with its fascinating technology, come together during assembly to become a perfect ensemble. Your Mechanica comes with full assembly instructions which will also provide you with a great deal of information about the development of and technology behind the mechanical clock.



AN ACHIEVEMENT TO BE PROUD OF

Upon request, we can provide you with a unique metal plate engraved with your name which will show its admirers that you made the Mechanica yourself.

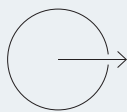
Everything starts with the **case**

The assembling of the dust-proof body of the Mechanica is done in a few steps: You can give the natural and untreated wooden case its final silky sheen using the nourishing oil contained in the kit provided. The top, base and sides of the solid case are then positioned and screwed together – without needing to drill or glue them. To finish, the seal is adhered to the case. Then the movement is assembled.



A SAFE HIDING PLACE

You can store your clock's accessories in a hidden compartment in the base of the case.



For pictures of the various wood versions please refer to pages 14, 22, 30 and 38



Surface treatment of the natural wood case with care oil based on natural ingredients



Easy assembly of the case parts with Allen screws



Fitting the seal to protect the movement from dust



THE MECHANICA BLENDS IN WITH EVERY INTERIOR STYLE AS YOU CAN CHOOSE FROM CHERRY, WALNUT OR BLACK VARNISH FOR THE ELEGANT CASE.

The Mechanica movement

Both an aesthetic and a
technical masterpiece



The movement of the Mechanica will inspire horological connoisseurs. Its traditional heritage, top-quality components and precision workings are the features which really make this seconds pendulum clock. The equipment in the basic assembly kit is of particularly high quality and follows the tradition of old clocks.

The component parts are equipped with ball bearings also facilitate the assembly by non-clock-makers without any difficulties. All needed tools are included in the clock kit. More about development and technique of mechanical clocks in our “Clock Book” that is included in every kit.





More Information
about the clock kit at
www.uhrenbausatz.de



EQUIPMENT INCLUDED IN THE BASIC ASSEMBLY KIT

- Gold-plated brass gear wheels
- Hardened steel pinions
- All wheels are fitted in stainless-steel miniature ball bearings
- High-strength aluminium plates with long-lasting surface protection provided by a layer of extra-hard anodised aluminium
- Anodised aluminium dial
- Blued steel hands

The clock kit

Erwin Sattler has more than 60 years experience in building precision clocks and in that time has manufactured more than 10.000 clock-movements. The company wants to foster the skills and values of classic clockmaking. In addition, it wants to further develop traditional craftsmanship making use of the new technology available today.

The movement of the Mechanica has about 90 parts and although it has the same technical quality as a Sattler Precision clock, it is designed so that even inexperienced clock enthusiasts can assemble it without difficulty. Those who want to read more about the principles of pendulum clocks may refer to the second chapter of this book.

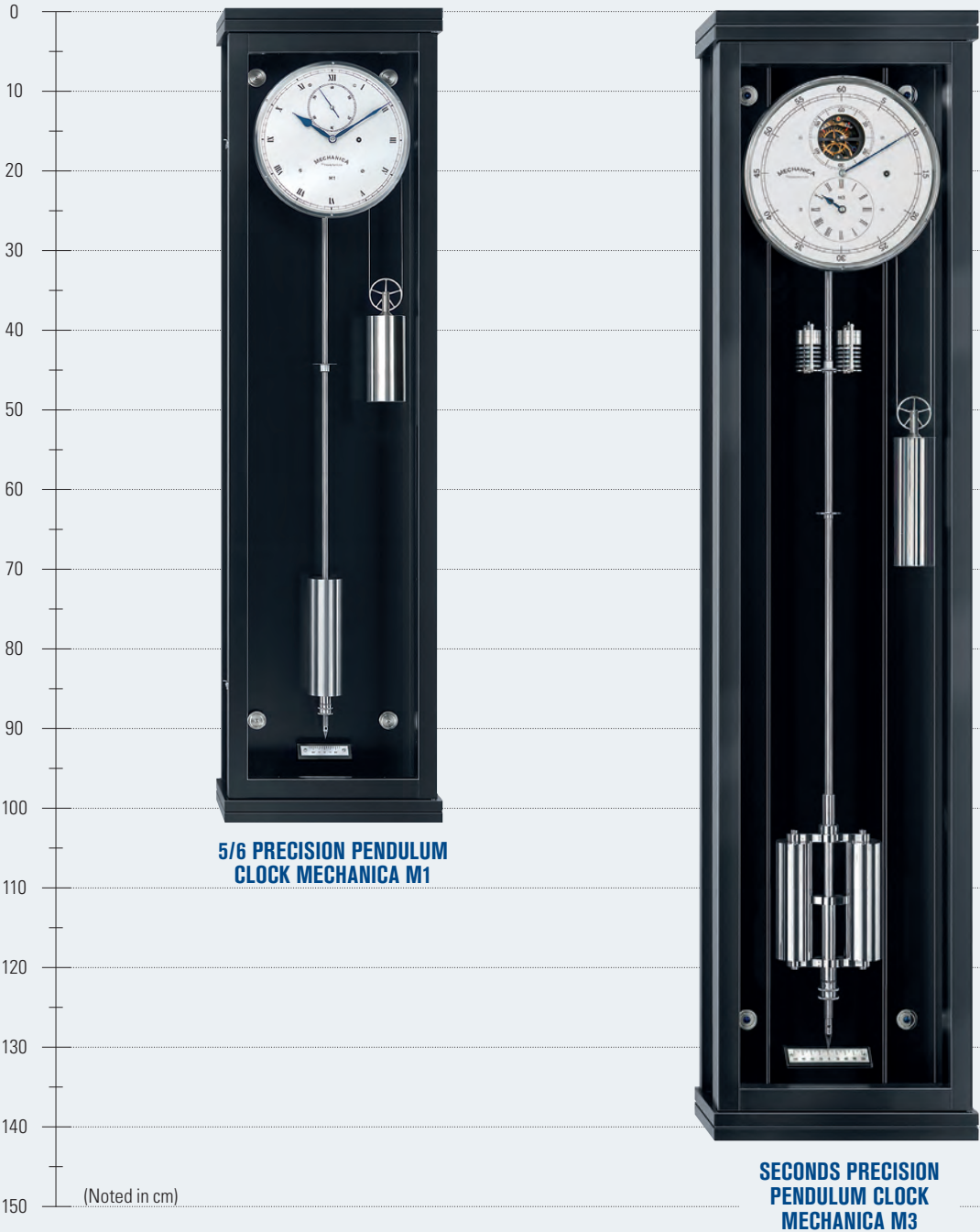


Using the detailed, easy-to-understand assembly instructions, you will turn the clearly arranged individual components into a clock-making masterpiece.



The clock kit

Models





5/7 PRECISION PENDULUM
CLOCK MECHANICA M4



TABLE CLOCK
MECHANICA M5

(Noted in cm)

MECHANICA M1

The Mechanica M1 is constructed with the experience of more than 60 years in precision-clockmaking. This innovative product allows you to build your personal timepiece.

The innovative Mechanica clockwork follows the tradition of old clock manufactories, as e.g. Strasser & Rhode, which has already delivered single unit parts for precision clocks to clockmakers at the end of the 19th century. Today the component parts equipped with ball bearings also facilitate the assembly by non-clockmakers without any difficulties. All needed tools are included in the clock kit.



**BASE CLOCK KIT MECHANICA M1**

In Cherry, Walnut or Black varnish with bronze or nickel finish

Dimensions: 102 x 27 x 14.5 cm (H x W x D)

Power reserve 30 days

5.500,— Euro

(Cherry or Walnut)

6.050,— Euro

(Black varnish)

MECHANICA M1



(Noted in cm)



BLACK VARNISH
WITH UPGRADES



CHERRY
BASE CLOCK KIT

M1 BLACK VARNISH

Upgraded with a regulator dial, domed hands, pulley with ball bearings, barometric instrument and pendulum lense

M1 CHERRY

Base clock kit

Price _____ 10.020,— Euro

Price _____ 5.500,— Euro



WALNUT
WITH UPGRADES



NICKEL-BEZEL
BASE CLOCK KIT DIAL



BRONZE-BEZEL
BASE CLOCK KIT DIAL

M1 WALNUT

Upgraded with regulator dial, domed hands, pulley with ball bearings and pendulum lense

Price _____ 7.750,— Euro

M1 READY MOUNTED

Optionally an experienced clockmaker from Erwin Sattler assembles the clock kit for you.

Price _____ 660,— Euro

MECHANICA M1

Upgrades

Allowing you to upgrade your Mechanica M1 visually and mechanically was a key factor in our design philosophy. The following upgrades are available to enhance the look, beauty, accuracy and longevity of your Mechanica M1.

Naturally contains “The clock book” detailed installation instructions for each upgrade kit.



UPGRADE KIT
ESCAPEMENT LEVER WITH AGATE PALLETS AND ESCAPEMENT WHEEL

To reduce friction in the escapement, an option is to upgrade your clock with an escapement lever with agate pallets and matching escapement wheel.

Price _____ 770,— Euro
Reduced Price _____ 630.— Euro*



UPGRADE KIT
RUBIES FOR THE ESCAPEMENT LEVER BEARINGS

The longevity of the M1 can be enhanced with a set of rubies for the escapement lever bearings. The standard brass bushings will be replaced with non-wearing ruby bearings.

Price _____ 200,— Euro

* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
HAND-DOMED AND POLISHED HANDS

The domed, polished and blued hands are completely hand crafted. They will give your Mechanica a more elegant “face”.

Price _____ 620,— Euro
Reduced Price _____ 580,— Euro*



UPGRADE KIT
BEVELLED GLASSES

All three panes of glass have polished bevelled edges that lend the case even more elegance.

Price _____ 450,— Euro

UPGRADE KIT
BAROMETRIC INSTRUMENT

To compensate the negative influence of changing air pressure a barometric instrument with aneroids can be delivered. This upgrade is a must to increase the accuracy of your Mechanica.

Price _____ 860,— Euro



UPGRADE KIT
PULLEY WITH BALL BEARINGS

The ball-bearing rope pulley offers not only visual appeal but also two technical advantages: Its ball bearings do not wear and they keep frictional losses to a minimum, which improves the accuracy of the clock.

Price _____ 370,— Euro
Reduced Price _____ 330,— Euro*

* with the return of the original part, or when ordered with the clock kit



CERTIFICATED WEIGHTS FOR FINE REGULATION

With the certificated set of twelve weights an even more exact fine regulation is possible.

Price without wooden case _____ 190,- Euro

Elegant wooden case with magnetic closure _____ 100,- Euro



UPGRADE KIT

ADJUSTABLE PENDULUM SCALE

A horizontally adjustable pendulum scale. The kit allows to adjust the pendulum tip precisely to zero.

Price _____ 320,- Euro



UPGRADE KIT

PENDULUM LENSE

A solid pendulum lense can be ordered as an optional extra for the pendulum. The fact that there is less air resistance means that the amplitude of oscillation, and consequently the rate, remain steadier. The lenses are numbered in sequence and can be fitted with the engraving either at the front or at the back. The lense is available in bronze or nickel finish.

Price _____ 840,- Euro

Reduced Price _____ 770,- Euro*



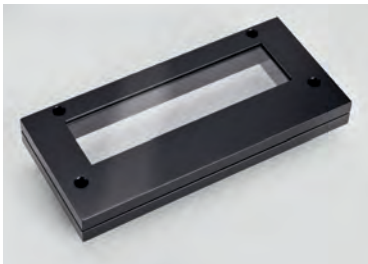
UPGRADE KIT

POLISHED CASE-HOLDING SCREWS

A further detail to add an elegant appearance to your M1, are the four case fitting screws with polished and blued center and two polished movement fixing screws.

Price _____ 290,- Euro

Reduced Price _____ 270,- Euro*



UPGRADE KIT

GLASS WINDOW IN THE TOP OF THE CASE

Incorporating a pane of mineral glass into the top allows a spotlight to illuminate the movement.

Price _____ 460,- Euro

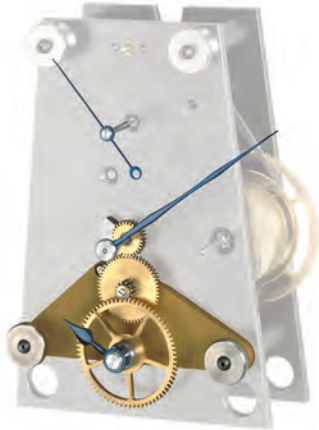
* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
SET OF FINE-POLISHED SCREWS

The look of the movement can be further enhanced using these 4 gold-plated washers and the 24 fine-polished/fine-turned stainless-steel screws.

Price _____ 300,— Euro
Reduced Price _____ 290,— Euro*



UPGRADE KIT
REGULATOR DIAL

The design is similar to the classic precision clocks from the last century and comes very close to the actual Model Classica Secunda 1985 by Erwin Sattler. The kit includes the dial, an intermediate plate, three additional wheels with a new counterweight for the minute hand, a new hour, minute and a new second hand (the domed hands in the picture are another upgrade).

Price _____ 680,— Euro
Reduced Price _____ 570,— Euro*



UPGRADE KIT
CUTAWAY IN THE NORMAL OR REGULATOR DIAL

The upgrade kit “cutaway in the regulator dial” can only be ordered in combination with the upgrade kit “regulator dial”. The cutaway in the seconds subdial in conjunction with a milling in the top plate of the movement makes it possible to see the gold-plated gear wheels and the Graham escapement. The modified set contains the dial with cutaway as well as the top plate with its special milling.

Price _____ 990,— Euro
Reduced Price _____ 860,— Euro*

* with the return of the original part, or when ordered with the clock kit

MECHANICA M3

The Mechanica M3 mechanical seconds pendulum clock is the first of its kind to be available as a clock assembly kit. It is equipped with all the technical quality features of the great clock on which it is modelled – the Erwin Sattler Classica Secunda 1985. Make your own personal piece of history and experience precision you have created yourself – day after day, hour after hour.

The effortless assembly process makes building the new M3 a real experience. The individual components mounted on ball bearings facilitate the assembly of the complex movement, making joining the parts together a pleasure for any clock enthusiast. All the tools you need are included in your Mechanica M3 assembly kit.



**BASE CLOCK KIT MECHANICA M3**

In Cherry, Walnut or Black varnish with bronze or nickel finish

Dimensions: 142 x 32.5 x 15 cm (H x W x D)

Power reserve 30 days

9.300,— Euro

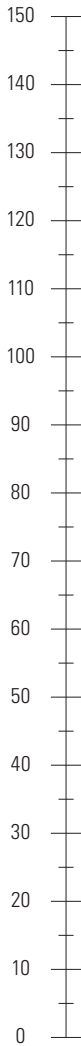
(Cherry or Walnut)

9.900,— Euro

(Black varnish)

Fig. with upgrades which are not included in the basic price

MECHANICA M3



(Noted in cm)



BLACK VARNISH
WITH UPGRADES



CHERRY
WITH UPGRADES

M3 BLACK VARNISH

Upgraded with a dial with cutaway, hand-domed hands, twin barometer, pendulum lense and polished case-holding screws

Price _____ 13.980,— Euro

M3 CHERRY

Upgraded with a dial with cutaway, hand-domed hands, twin barometer, ball-bearing rope pulley and polished case-holding screws

Price _____ 12.670,— Euro



WALNUT
BASE CLOCK KIT



NICKEL-BEZEL
BASE CLOCK KIT DIAL



BRONZE-BEZEL
BASE CLOCK KIT DIAL

M3 WALNUT
Base clock kit

Price _____ 9.300,— Euro

M3 READY MOUNTED
Optionally an experienced clockmaker from Erwin Sattler
assembles the clock kit for you.

Price _____ 770,— Euro

MECHANICA M3

Upgrades

Even the basic assembly kit for the M3 creates a top-quality clock with luxurious features. However, horological connoisseurs also have the option of upgrading their Mechanica M3. The following optional extras give you the opportunity to customise your clock in terms of durability, accuracy and appearance.

Naturally contains “The clock book” detailed installation instructions for each upgrade kit.



UPGRADE KIT

TWIN BAROMETER

To compensate for the negative impact of the air pressure fluctuations on the accuracy of the clock, a barometer with aneroid capsules is available.

Price _____ 1.160,— Euro



UPGRADE KIT

PULLEY WITH BALL BEARINGS

The ball-bearing rope pulley offers not only visual appeal but also two technical advantages: Its ball bearings do not wear and they keep frictional losses to a minimum, which improves the accuracy of the clock.

Price _____ 370,— Euro
Reduced Price _____ 330,— Euro*

* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
HAND-DOMED AND POLISHED HANDS

The hands have been painstakingly “domed”, polished and blued by hand to lend the dial even greater elegance.

Price _____ 620,— Euro
Reduced Price _____ 580,— Euro*



UPGRADE KIT
BEVELLED GLASSES

All three panes of glass have polished bevelled edges that lend the case even more elegance.

Price _____ 450,— Euro



UPGRADE KIT
DIAL WITH CUTAWAY

The cutaway in the seconds dial and the recess in the front plate of the movement allow a view of the gold-plated gear wheels and the Graham escapement.
The upgrade set contains the dial with cutaway and the recessed front plate with cutaway.

Price _____ 1.160,— Euro
Reduced Price _____ 1.030,— Euro*

* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
PENDULUM LENSE

A solid pendulum lense can be ordered as an optional extra for the pendulum. The fact that there is less air resistance means that the amplitude of oscillation, and consequently the rate, remain steadier. The lenses are numbered in sequence and can be fitted with the engraving either at the front or at the back. The lense is available in bronze or nickel finish.

Price _____ 1.100,— Euro
Reduced Price _____ 1.040,— Euro*



CERTIFICATED WEIGHTS FOR FINE REGULATION

With the certificated set of twelve weights an even more exact fine regulation is possible.

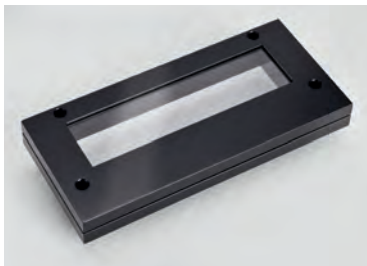
Price without wooden case _____ 190,— Euro
Elegant wooden case with magnetic closure _____ 100,— Euro



UPGRADE KIT
POLISHED CASE-HOLDING SCREWS

A further detail to add an elegant appearance to your M3, are the four case fitting screws with polished and blued center and two polished movement fixing screws.

Price _____ 290,— Euro
Reduced Price _____ 270,— Euro*



UPGRADE KIT
GLASS WINDOW IN THE TOP OF THE CASE

Incorporating a pane of mineral glass into the top allows a spotlight to illuminate the movement.

Price _____ 460,— Euro

* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
DOUBLE CYLINDER PENDULUM
According to Ludwig Strasser.

BICOLOR OR NICKEL-PLATED

Price _____ 1.160,— Euro
Reduced Price _____ 1.090,— Euro*



UPGRADE KIT
SET OF FINE-POLISHED SCREWS

The look of the movement can be further enhanced using these 4 gold-plated washers and the 24 fine-polished/fine-turned stainless-steel screws.

Price _____ 300,— Euro
Reduced Price _____ 290,— Euro*

* with the return of the original part, or when ordered with the clock kit

MECHANICA

M4

The Mechanica M4 is a precision pendulum clock that comes with all the hallmarks of quality that characterise its great predecessors. Some of the characteristic elements include a temperature-compensated Invar pendulum, hardened steel pinions and milled gold-plated gear wheels. Thanks to the use of stainless steel ball bearings and premium-quality materials, combined with the special design details, the Mechanica M4 can be assembled without any need for previous clockmaking experience or additional tools. Detailed assembly instructions can be found in the “Clock Book”; this manual not only provides a step-by-step guide to ensure that the clock assembly experience is both unique and successful, but also introduces the customer to the technical aspects of their Mechanica M4's inner workings.

Customisation can be achieved with various upgrade kits: These allow the customer to transform the face of their Mechanica M4 into a regulator dial and further enhance it if they wish by adding hand-domed and polished hands. The upgrade kits on offer also include a ball-bearing rope pulley, polished screws and a double cylinder pendulum.



**BASE CLOCK KIT MECHANICA M4**

In Cherry, Walnut or Black varnish with bronze or nickel finish

Dimensions: 76 x 23 x 14 cm (H x W x D)

Power reserve 14 days

5.300,— Euro

(Cherry or Walnut)

5.830,— Euro

(Black varnish)

Fig. with upgrades which are not included in the basic price

MECHANICA M4



(Noted in cm)



BLACK VARNISH
WITH UPGRADES



CHERRY
BASE CLOCK KIT

M4 BLACK VARNISH

Upgraded with a pulley with ball bearings, double cylinder pendulum, hand-domed hands, finepolished screws and polished case-holding screws

Price _____ 8.190,— Euro

M4 CHERRY

Base clock kit

Price _____ 5.300,— Euro



WALNUT
BASE CLOCK KIT



NORMAL MODERN REGULATOR



NORMAL MODERN REGULATOR

M4 WALNUT
Base clock kit

Price _____ 5.300,— Euro

M4 READY MOUNTED
Optionally an experienced clockmaker from Erwin Sattler assembles the clock kit for you.

Price _____ 660,— Euro

MECHANICA M4

Upgrades

Allowing you to upgrade your Mechanica M4 visually and mechanically was a key factor in our design philosophy. The following upgrades are available to enhance the look, beauty, accuracy and longevity of your Mechanica M4.

Naturally contains “The clock book” detailed installation instructions for each upgrade kit.



UPGRADE KIT
RUBIES FOR THE ESCAPEMENT LEVER BEARINGS

The longevity of the M4 can be enhanced with a set of rubies for the escapement lever bearings. The standard brass bushings replaced through non-wearing ruby perforated bricks.

Price _____ 200,— Euro



UPGRADE KIT
PULLEY WITH BALL BEARINGS

The ball-bearing rope pulley offers not only visual appeal but also two technical advantages: Its ball bearings do not wear and they keep frictional losses to a minimum, which improves the accuracy of the clock.

Price _____ 370,— Euro

Reduced Price _____ 330,— Euro*

* with the return of the original part, or when ordered with the clock kit

**UPGRADE KIT****HAND-DOMED AND POLISHED HANDS**

The hands have been painstakingly “domed”, polished and blued by hand to lend the dial even greater elegance.

Price _____ 620,— Euro

Reduced Price _____ 580,— Euro*

**UPGRADE KIT****SET OF FINE-POLISHED SCREWS**

The look of the movement can be further enhanced using these 8 gold-plated washers and the 30 fine-polished/fine-turned stainless-steel screws.

Price _____ 320,— Euro

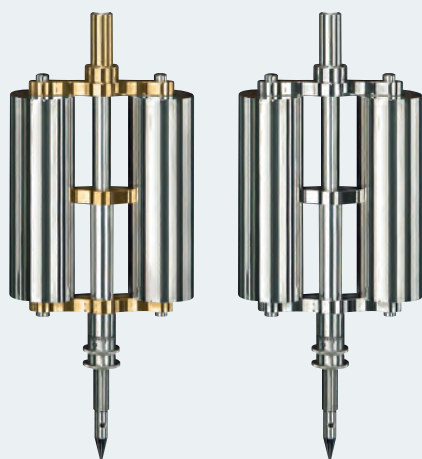
Reduced Price _____ 310,— Euro*

**UPGRADE KIT****POLISHED CASE-HOLDING SCREWS**

A further detail to add an elegant appearance to your M4, are the four case fitting screws with polished and blued center and two polished movement fixing screws.

Price _____ 290,— Euro

Reduced Price _____ 270,— Euro*

**UPGRADE KIT****DOUBLE CYLINDER PENDULUM**

According to Ludwig Strasser.

BICOLOR OR NICKEL-PLATED

Price _____ 920,— Euro

Reduced Price _____ 860,— Euro*



UPGRADE KIT
BEVELLED GLASSES

All three panes of glass have polished bevelled edges that lend the case even more elegance.

Price _____ 450,— Euro

UPGRADE KIT
BAROMETRIC INSTRUMENT

To compensate the negative influence of changing air pressure a barometric instrument with aneroids can be delivered. This upgrade is a must to increase the accuracy of your Mechanica.

Price _____ 860,— Euro



UPGRADE KIT
ADJUSTABLE PENDULUM SCALE

A horizontally adjustable pendulum scale. The kit allows to adjust the pendulum tip precisely to zero.

Price _____ 320,— Euro



UPGRADE KIT
SATTLER VARNISH

Possibility to equip the case of the Mechanica M4 with a more exclusive surface.

Price _____ 830,— Euro



UPGRADE KIT
CUTAWAY IN THE NORMAL OR REGULATOR DIAL

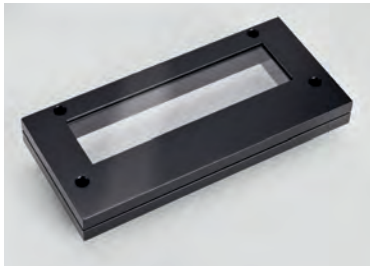
The cutaway in the seconds subdial in conjunction with a milling in the top plate of the movement makes it possible to see the gold-plated gear wheels and the Graham escapement. The modified set contains the dial with cutaway and serial number as well as the top plate with its special milling.

Price _____ 990,- Euro
Reduced Price _____ 860,- Euro*



CERTIFICATED WEIGHTS FOR FINE REGULATION
With the certificated set of twelve weights an even more exact fine regulation is possible.

Price without wooden case _____ 190,- Euro
Elegant wooden case with magnetic closure _____ 100,- Euro



UPGRADE KIT
GLASS WINDOW IN THE TOP OF THE CASE

Incorporating a pane of mineral glass into the top allows a spotlight to illuminate the movement.

Price _____ 460,- Euro

* with the return of the original part, or when ordered with the clock kit

MECHANICA M5

The innovative Mechanica M5 clockwork follows the tradition of the Erwin Sattler clock manufactory. Because of the in house production the highest precision of each part is guaranteed. The gears equipped with ball bearings also facilitate the assembly by non-clockmakers without any difficulties. All needed tools are included in the clock kit.

Regardless of how you grade your own technical understanding – the mechanics of the gears with its ratio and bearing will fascinate you.



**BASE CLOCK KIT MECHANICA M5**

Cherry, walnut or black varnish

Dimensions: 26 x 20,5 x 12,5 cm (H x W x D)

Power reserve 8 days

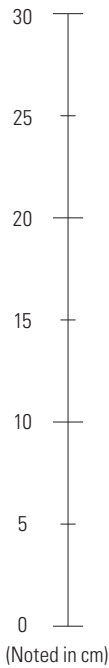
3.600,— Euro

(Cherry or Walnut)

4.100,— Euro

(Black varnish)

MECHANICA M5



CHERRY
WITH UPGRADES



BLACK VARNISH
WITH UPGRADES

M5 CHERRY
Upgraded with the moonphase indication.

M5 BLACK VARNISH
Upgraded with the date indication.

Price _____ 4.430,— Euro Price _____ 4.930,— Euro



WALNUT
BASE CLOCK KIT

M5 WALNUT
Base clock kit

Price _____ 3.600,— Euro

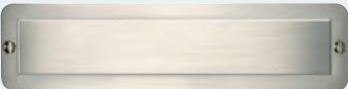
M5 READY MOUNTED
Optionally an experienced clockmaker from Erwin Sattler
assembles the clock kit for you.

Price _____ 500,— Euro

MECHANICA M5

Upgrades

Allowing you to upgrade your Mechanica M5 visually and mechanically was a key factor in our design philosophy. The following upgrades are available to enhance the look, beauty, accuracy and longevity of your Mechanica M5. Naturally contains “The clock book” detailed installation instructions for each upgrade kit.



ENGRAVING PLATE

The engraving plate cannot be retrofitted to the table clock M5. Please request the free engraving plate with your personal engraving when you order the clock.



UPGRADE KIT DATE INDICATION

The date on the dial adds a useful complication to the basic clock kit version.

Price _____ 880,— Euro
Reduced Price _____ 830,— Euro*



UPGRADE KIT MOONPHASE INDICATION

A hand painted moon passes behind a cutout in the dial within 29,5 days.

Price _____ 880,— Euro
Reduced Price _____ 830,— Euro*

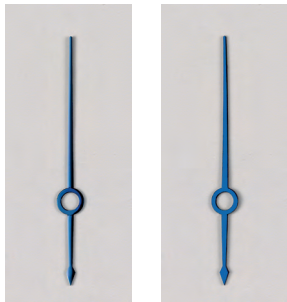
* with the return of the original part, or when ordered with the clock kit



UPGRADE KIT
HAND-DOMED AND POLISHED hour, minute and second hands

The domed, polished and blued hands are completely hand crafted.

Price _____ 620,— Euro
Reduced Price _____ 580,— Euro*



UPGRADE KIT
HAND-DOMED AND POLISHED DATE HAND

The domed, polished and blued hand for the date is completely hand crafted.

Price _____ 150,— Euro
Reduced Price _____ 140,— Euro*



UPGRADE KIT
ANTI-REFLECTIVE MINERAL GLASSES

Allows a glare-free view of the clockwork.

Cannot be retrofitted!

Price _____ 470,— Euro



UPGRADE KIT
SET OF FINE-POLISHED SCREWS

The look of the movement can be further enhanced using these 4 gold-plated washers and the 20 fine-polished/stainless-steel screws.

Price _____ 290,— Euro
Reduced Price _____ 280,— Euro*

* with the return of the original part, or when ordered with the clock kit



CLASSICA SECUNDA 1985 M

Where the high point of traditional clock-making meets timeless design. The classic among precision clocks is an example of exclusive wall art for any room.

The refined version of the precision pendulum clock 1935 model, manufactured over 600 times, is the perfect embellishment for an office, foyer or living room. Its classic design combined with the technical expertise of the Erwin Sattler clock-making manufacture turns the Classica Secunda 1985 M into a versatile lifestyle accessory.

www.erwinsattler.de





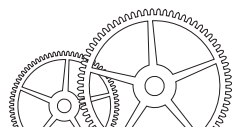
MÜLLER & SATTLER UHRENBASATZ GMBH

Lohenstraße 6 · D - 82166 Gräfelfing

Phone.: +49 (0)89 89 55 806-20

info@uhrenbausatz.de

www.uhrenbausatz.de



UHRENBASATZ