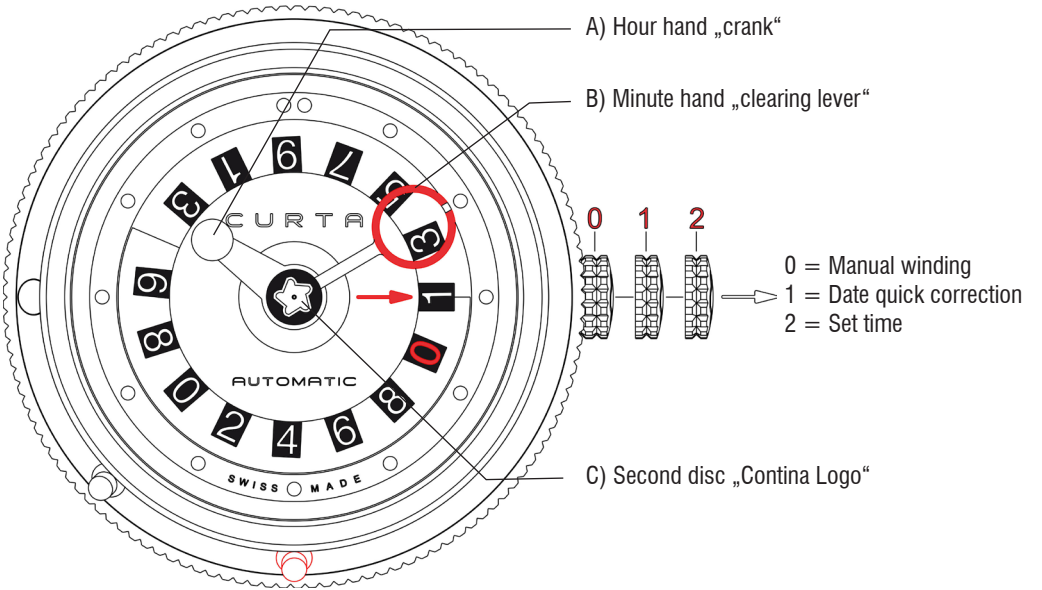
CURTA watch

The unique CURTA watch for the 75th anniversary of CURTA

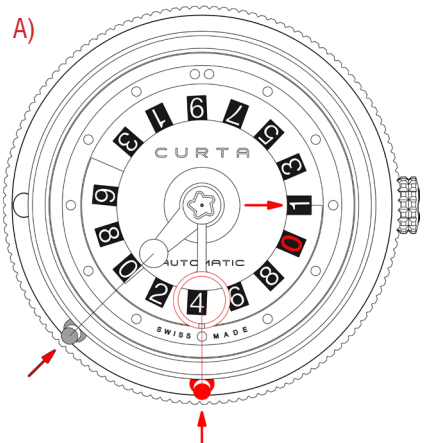
Operation manual

Basic settings of the Curta watch



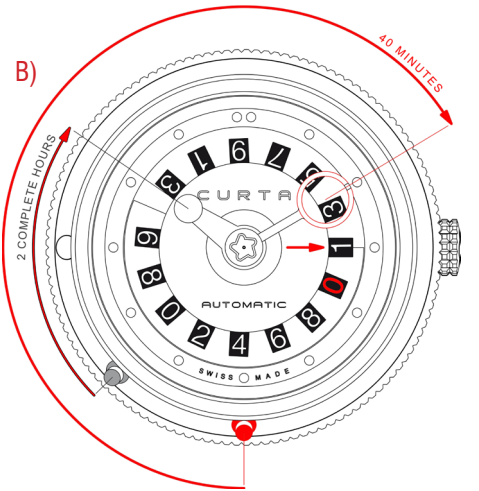
Movable comma buttons for 2nd timing

A)



A) Comma buttons are used to synchronize with the current hand position.

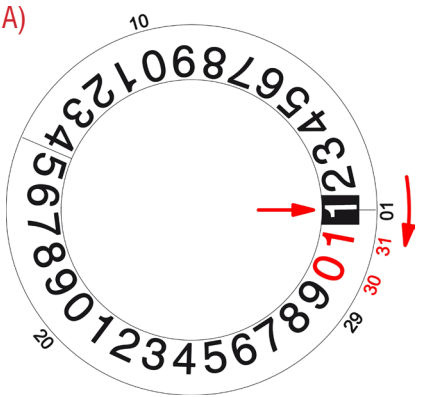
B)



B) The hour hand shows in the example that 2 complete hours have passed. The minute hand indicates that 40 minutes have passed. As a result, 2 hours and 40 minutes have passed since the start of synchronization. Maximum possible measurement duration: 12 hours.

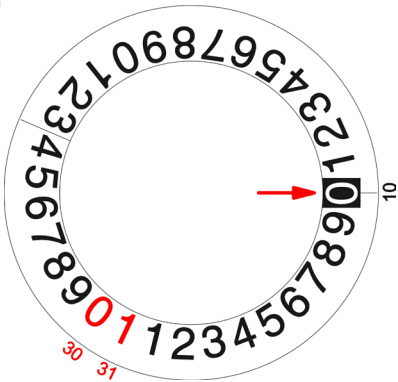
Explanation of the special date guide

A)



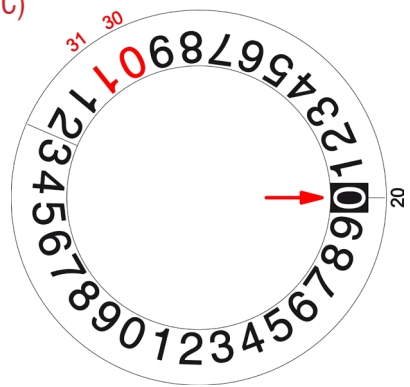
A) If the red 1 or 0 is in the 15 minutes to 35 minutes sector, the number in the date window shows a calendar day between 1 and 9.

B)



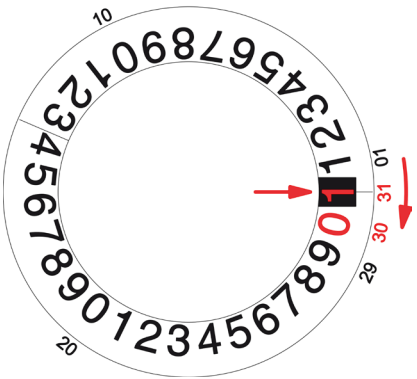
B) If the red 1 or 0 is in the sector 35 minutes to 50 minutes, the number in the date window shows a calendar day between 10 and 19.

C)



C If the red 1 or 0 is in the sector 50 minutes to 10 minutes, the number in the date window shows a calendar day between 20 and 29.

D)



D If the red 1 or 0 is in the date window, then it shows the 30th or 31st calendar day.


CURTA
CURTA
AUTOMATIC
SWISS MADE

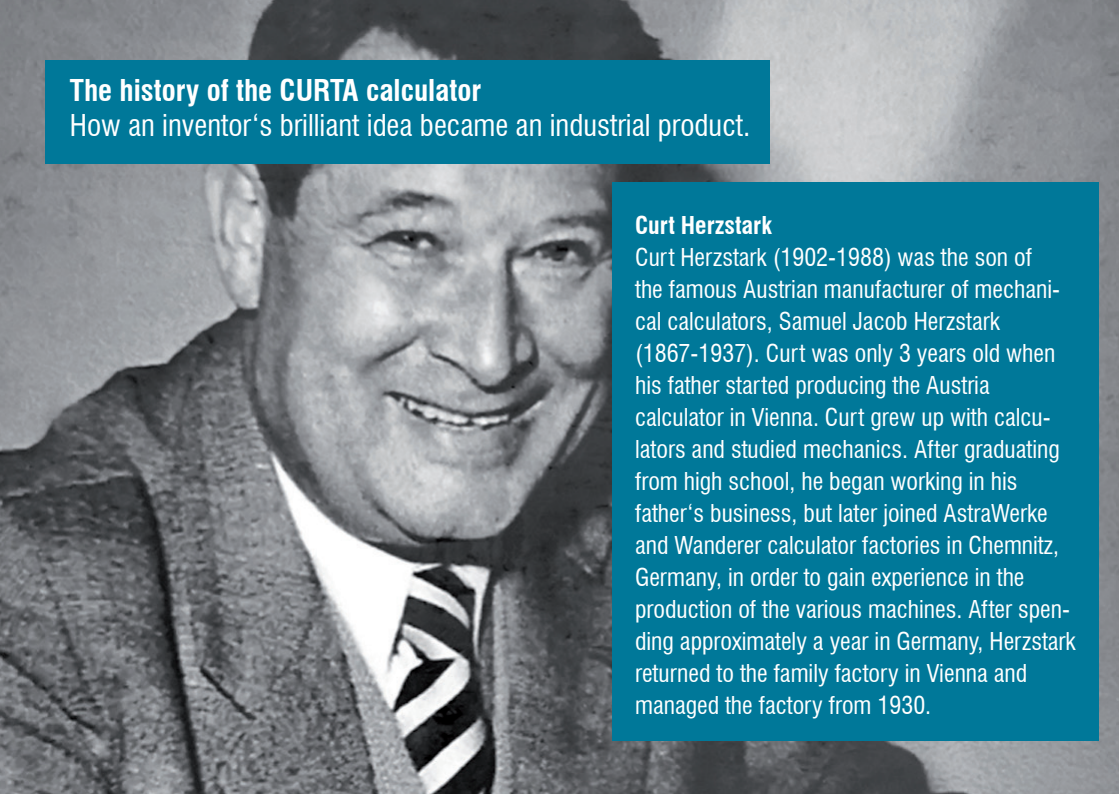
The CURTA watch - special limited edition for the 75th anniversary of CURTA

There are only 75 units of this limited anniversary initial edition available. Each watch has your serial number engraved on the bottom plate.

- Swiss automatic movement Ronda R150, ø 11½ lines, 25 rubies, 28‘800 A/h (4 Hz), 40 hrs. power reserve
- Diameter: 42 mm (without crown)
- Dial: black and silver, multi-layer construction of the dial with a special single-digit calendar, to recreate the style of the CURTA calculator. The 30th and 31st days are displayed as a red „0“ and „1“ for guidance.
- Hands: CURTA special hour and minute hands displaying the clearing lever and the crank, the indication of the seconds by the rotating gear wheel in the center
- Case material: Aluminum, black anodized, with the CURTA engraving
- Bezel: Aluminum, black anodized, knurled, with two original CURTA comma sliders
- Bottom plate with anniversary engraving and serial number
- Buckle: knurled, black anodized, CURTA engraving
- Crown: knurled, black anodized, gear wheel engraving
- Hardened mineral glass
- Bracelet: High-quality calfskin strap, black, with white stitching (made in Austria)
- Water-protected
- Original CURTA aluminum can, blue CURTA packaging, operating instruction, warranty card with serial number

The watch is only water-protected and not suitable for swimming and diving.

INTERNATIONAL WARRANTY *This watch is warranted for 2 years from date of purchase. It covers manufacturing defects only. If this watch is repaired by an unauthorized watchmaker, the guarantee will be void.*



The history of the CURTA calculator

How an inventor‘s brilliant idea became an industrial product.

Curt Herzstark

Curt Herzstark (1902-1988) was the son of the famous Austrian manufacturer of mechanical calculators, Samuel Jacob Herzstark (1867-1937). Curt was only 3 years old when his father started producing the Austria calculator in Vienna. Curt grew up with calculators and studied mechanics. After graduating from high school, he began working in his father‘s business, but later joined AstraWerke and Wanderer calculator factories in Chemnitz, Germany, in order to gain experience in the production of the various machines. After spending approximately a year in Germany, Herzstark returned to the family factory in Vienna and managed the factory from 1930.


Erteilt auf Grund der Verordnung vom 12. Mai 1943 (RGBl. II S. 150)

AUSGEGEBEN AM 6. SEPTEMBER 1944

DEUTSCHES REICH

REICHSPATENTAMT

PATENTSCHRIFT

№ 747 073

KLASSE 42m GRUPPE 12

H 156849 IX b/42 m

Curt Herzstark in Wien ist als Erfinder genannt worden

Curt Herzstark in Wien

Rechenmaschine mit einer einzigen von Einstellrädchen umgebenen Staffelwalze

Patentiert im Deutschen Reich vom 19. August 1938 an

Patenterteilung bekanntgemacht am 27. Januar 1944

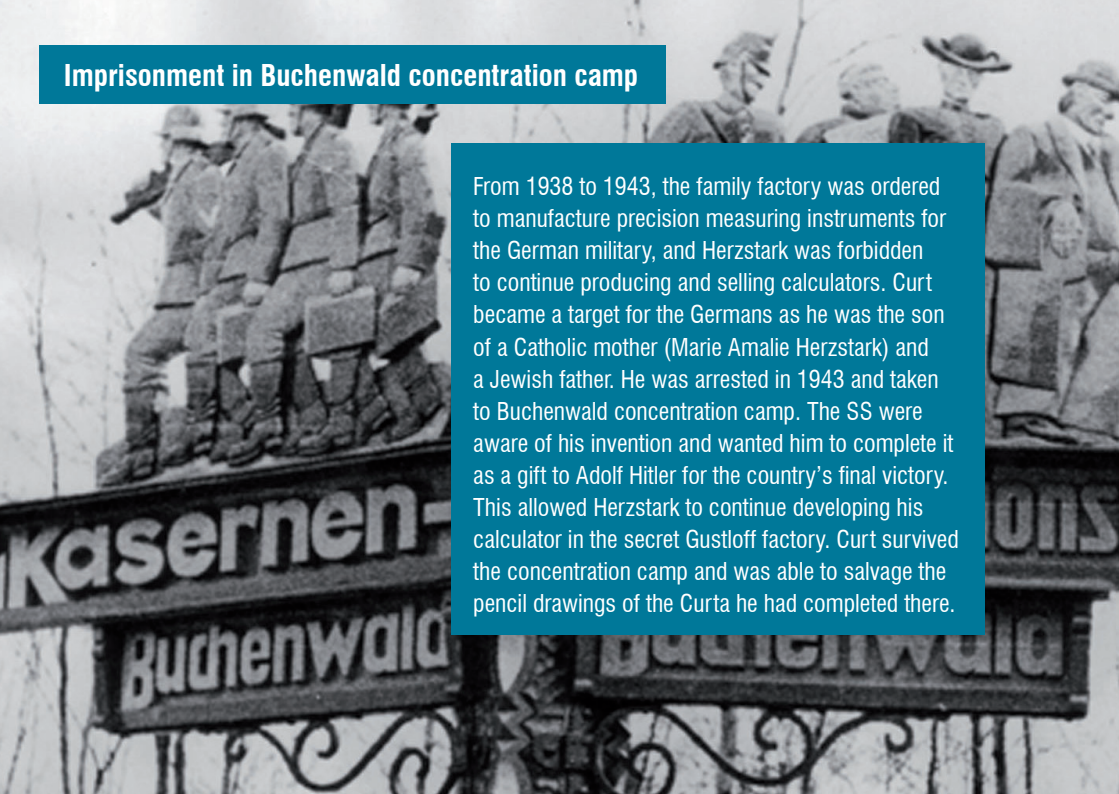
Die Erfindung betrifft eine Rechenmaschine mit einer einzigen von Einstellrädchen umgebenen Staffelwalze und einer Einrichtung zur Ausführung von Subtraktionen ohne Drehrichtungsänderung der Staffelwalze. Bei den bekannten Rechenmaschinen, bei welchen negative Rechnungen ohne Änderung der Drehrichtung der Kurbel ausgeführt werden, besteht das Antriebselement für die Schaltwerksglieder aus einer drehbaren Scheibe oder Trommel, die mit einer festen und zwei beweglichen Zahngruppen bzw. beweglichen Zähnen versehen ist, die bei Umstellung der Maschine auf eine andere Rechnungsoperation abwechselnd von Hand aus in die Arbeitsstellung gebracht werden. Die Anordnung ein- und ausrückbarer Zahngruppen an der Scheibe hat den Nachteil, daß zum Aus- und Einrücken ein Schaltknopf unabhängig von der Antriebskurbel des Antriebselementes zu betätigen ist und daß dieser Schaltknopf durch Schaltglieder mit der beweglichen Zahngruppe in Verbindung steht, welche sowohl im Gehäuse wie auch im Antriebselement beweglich gelagert sein müssen und nur in einer bestimmten Stellung des Antriebselementes miteinander in Eingriff gebracht werden können. Noch verwickelter ist die Konstruktion, wenn nach dem bekannten Vorschlag das Antriebselement eine Staffelwalze bildet. In diesem Falle sind die Zähne auf Wellen angeordnet, die auf der Trommel drehbar gelagert und durch einen besonderen Antrieb verdreht werden müssen, damit die verschiedenen Zahnreihen in die Arbeitsstellung kommen. Solche Rechenmaschinen sind insbesondere für rasches Arbeiten infolge ihrer umständlichen Bedienung und der äußerst empfindlichen, eine ständige Störungsquelle bildenden beweglichen Zahngruppen des Antriebselementes ungeeignet.

Zur Beseitigung dieses Übelstandes und zur Schaffung einer insbesondere für rasches, auch maschinelles Arbeiten geeigneten Rechenmaschine wurde das Antriebselement gemäß

The initial tests and the patent

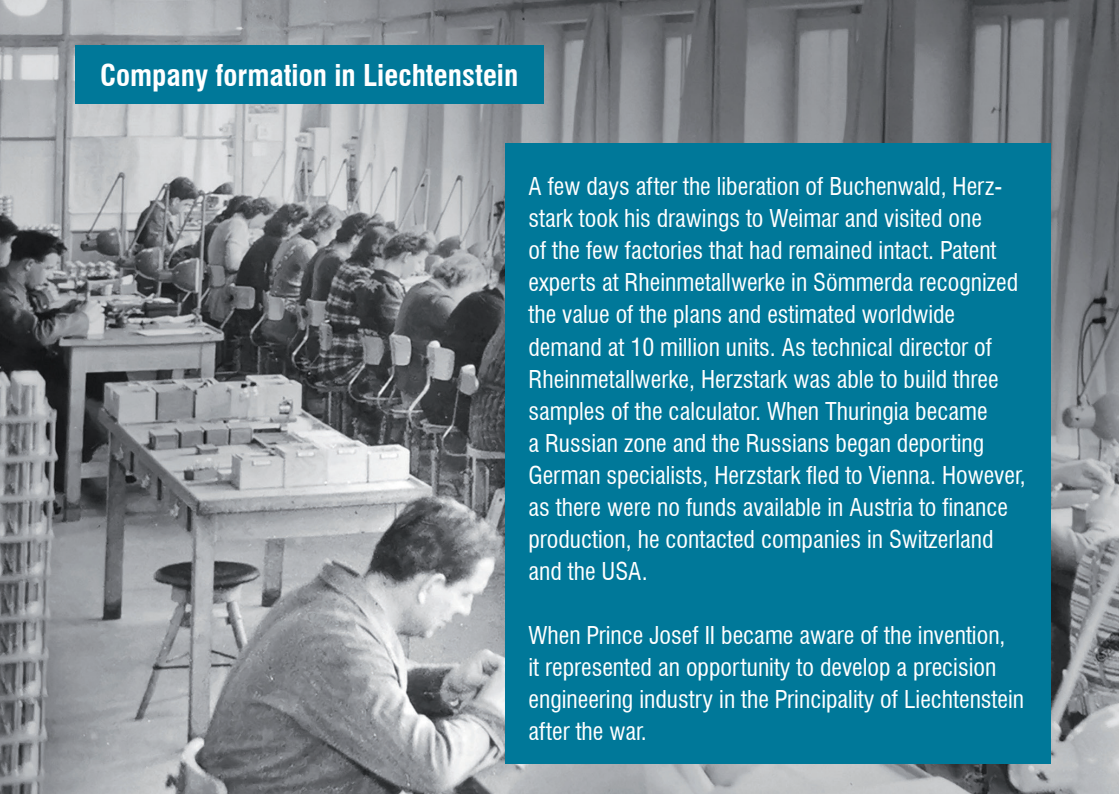
In the mid-1930s, he developed plans for a miniature circular calculator with a central stepped drum and applied for a key patent in 1938 (German Imperial Patent no. 747073). In 1937, Herzstark completed the design of his universal calculator for the four basic arithmetic operations. The good times for the Herzstark family and company lasted until the end of 1937. In October, Samuel Herzstark died, and only a few months later (in March 1938), Hitler‘s troops invaded Austria.

Imprisonment in Buchenwald concentration camp



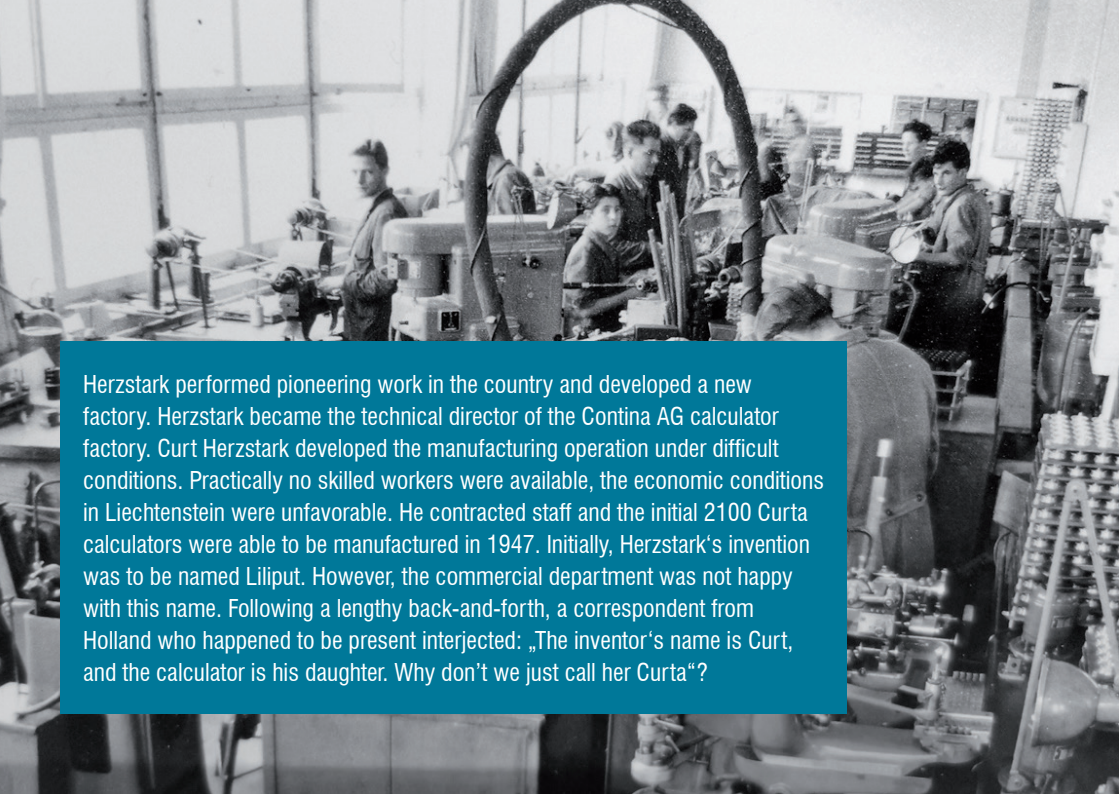
From 1938 to 1943, the family factory was ordered to manufacture precision measuring instruments for the German military, and Herzstark was forbidden to continue producing and selling calculators. Curt became a target for the Germans as he was the son of a Catholic mother (Marie Amalie Herzstark) and a Jewish father. He was arrested in 1943 and taken to Buchenwald concentration camp. The SS were aware of his invention and wanted him to complete it as a gift to Adolf Hitler for the country's final victory. This allowed Herzstark to continue developing his calculator in the secret Gustloff factory. Curt survived the concentration camp and was able to salvage the pencil drawings of the Curta he had completed there.

Company formation in Liechtenstein



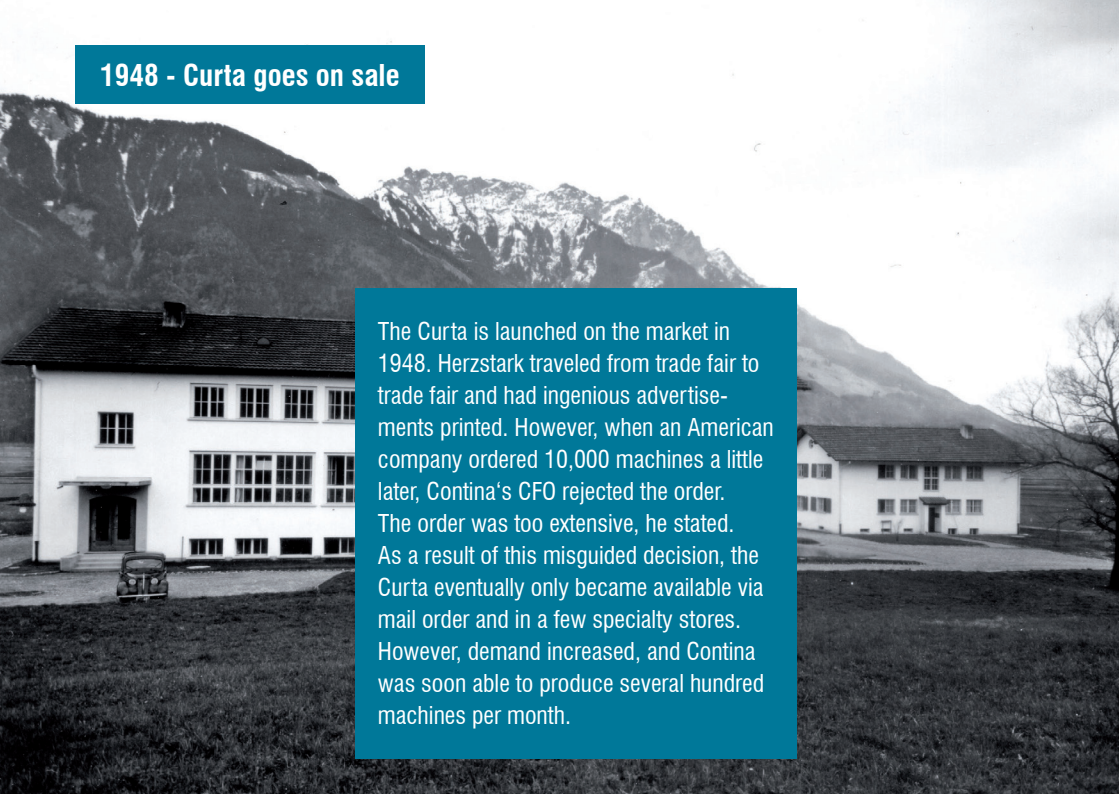
A few days after the liberation of Buchenwald, Herzstark took his drawings to Weimar and visited one of the few factories that had remained intact. Patent experts at Rheinmetallwerke in Sömmerda recognized the value of the plans and estimated worldwide demand at 10 million units. As technical director of Rheinmetallwerke, Herzstark was able to build three samples of the calculator. When Thuringia became a Russian zone and the Russians began deporting German specialists, Herzstark fled to Vienna. However, as there were no funds available in Austria to finance production, he contacted companies in Switzerland and the USA.

When Prince Josef II became aware of the invention, it represented an opportunity to develop a precision engineering industry in the Principality of Liechtenstein after the war.



Herzstark performed pioneering work in the country and developed a new factory. Herzstark became the technical director of the Contina AG calculator factory. Curt Herzstark developed the manufacturing operation under difficult conditions. Practically no skilled workers were available, the economic conditions in Liechtenstein were unfavorable. He contracted staff and the initial 2100 Curta calculators were able to be manufactured in 1947. Initially, Herzstark‘s invention was to be named Liliput. However, the commercial department was not happy with this name. Following a lengthy back-and-forth, a correspondent from Holland who happened to be present interjected: „The inventor‘s name is Curt, and the calculator is his daughter. Why don’t we just call her Curta“?

1948 - Curta goes on sale

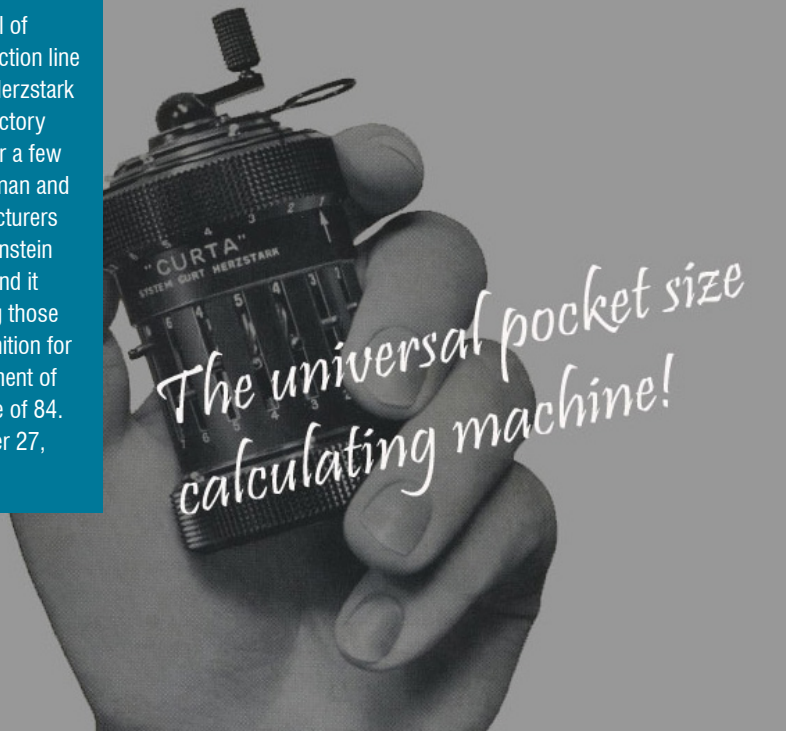


The Curta is launched on the market in 1948. Herzstark traveled from trade fair to trade fair and had ingenious advertisements printed. However, when an American company ordered 10,000 machines a little later, Contina's CFO rejected the order. The order was too extensive, he stated. As a result of this misguided decision, the Curta eventually only became available via mail order and in a few specialty stores. However, demand increased, and Contina was soon able to produce several hundred machines per month.

Curta II

Just like Edison, Tesla and many other inventors, Curt Herzstark would also be cheated out of his own invention. The financial backers of Contina Werke refused to grant him the promised share package. However, since they refrained from rewriting the patents when founding the company, they were all still in Curt Herzstark's name, and they were thus no longer entitled to any rights over the successful calculator. Consequently, at least during the 1950s and 1960s, the Curta actually started making money for its inventor, and following this success, he was able to develop a second model with 15 digits instead of 11. From that point on, however, nothing much changed - apart from a few details. The machine was perfect from the start and enjoyed steady demand for two decades. „A powerful, solid, pocket-sized general-purpose calculator." The Curta was used to create balance sheets, survey maps and calculate satellite orbits.

During 1971, the last of a total of 141,187 Curtas left the production line at the plant in Liechtenstein. Herzstark had already left the Contina factory in the early 1950s, working for a few years as a consultant for German and Italian office machine manufacturers and living in a modest Liechtenstein apartment. Even geniuses found it difficult to earn millions during those days. He only received recognition for his services from the government of his adopted country at the age of 84. Curt Herzstark died on October 27, 1988, at the age of 86.



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