

The development of Curta I production quantities in the first few years

Hansjörg Nipp, June 2021

During the research for my book "Curta, Carena & Co. Geschichte der Contina in Mauren" I found out big differences in the actual production numbers of the Curta pocket calculator compared to the previously published figures.

There exist a list of serial numbers and quantities from the Curta service department. This list was compiled by a former employee of the company. There is no official logo of Contina AG on it. It is probably a private list and not an official list of the company itself. This According this list several thousand calculators should have been produced between 1947 and 1949. The list shows 2100 pieces in 1947, 3000 pieces in 1948, 3200 pieces in 1949, 3400 pieces in 1950. These figures from the first years cannot be correct, as will be shown below. In addition, the previous allocation of serial numbers to the year of production can not be correct.

Contina AG, which developed and produced the Curta calculating machines, was founded 1946 in Vaduz, Liechtenstein. The inventor of the Curta calculating machine, Curt Herzstark, was the technical director. The new factory building in Mauren was ready in May 1948. The development began 1947 in the test and development workshop in the hall of the Hirschen inn in Mauren. At the end of 1947 14 people were working there and only a few prototypes have been built that year. Major technical difficulties led to no machines being sold 1948. The designers reported that at best a hundred machines have been built for learning and demonstration purposes.

At the board of directors' meeting on 8 June 1948, Curt Herzstark reported that 100 sales prototypes were to be built and that mass-produced calculating machines could be delivered in the first quarter of 1949. This was probably wishful thinking, because according to the audit report of the Swiss Trust Company (Schweizerische Treuhandgesellschaft) of 26 July 1950, only 215 calculating machines were accounted for in 1949 and 54 machines with defects continued to be used for the company's own needs.



Building Contina AG, Mauren Liechtenstein, 1948/1949

In 1949, the production of measuring equipment (gauges) was also started. This bound a lot of capacity, first in design and toolmaking and then in productive personnel. According to Contina's interim balance sheet of 30 May 1950, just 500 machines had been sold by this date. 186 calculating machines were in stock.

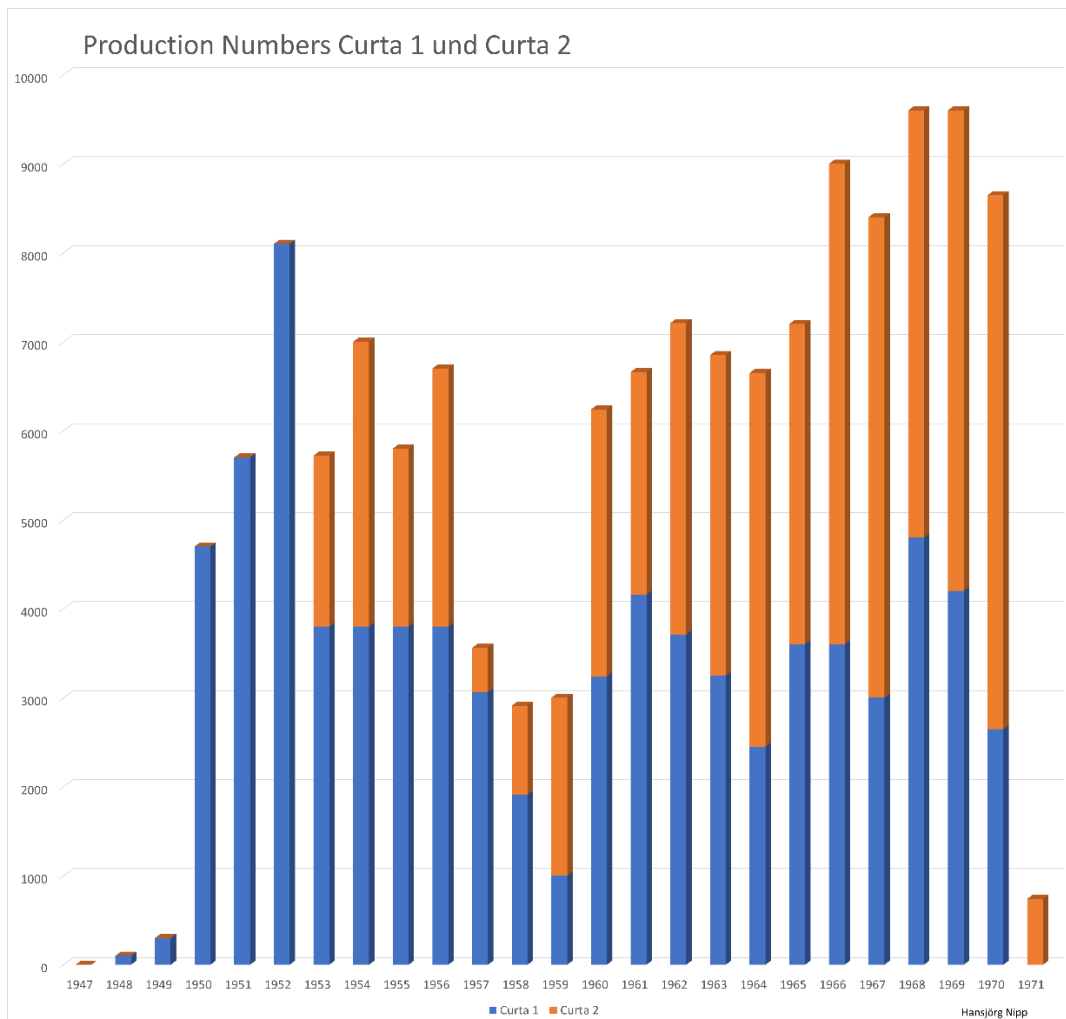
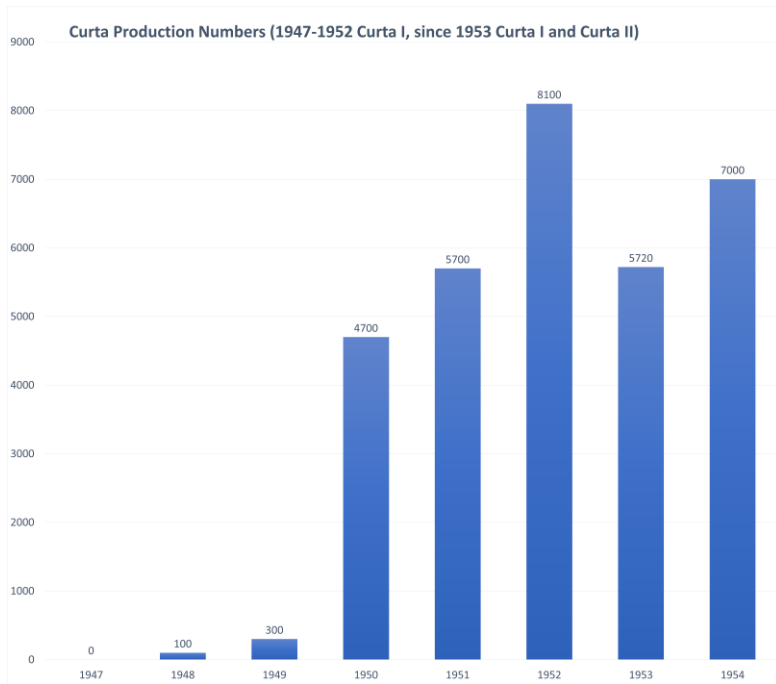
The technical problems in getting the calculating machines ready for serial production were much greater than planned. Thus, production could only be ramped up in the second half of 1950. Curt Herzstark wrote to a friend in January 1951 that over 5000 machines were in use worldwide. Assuming 5100 units at the end of 1950, it can be said that 100 units were produced in 1948, 300 in 1949, about 700 in the first half of 1950 and about 4000 in the second half of 1950. From 1948 to the end of 1950, a total of 5100 machines probably left the factory.

The rapid increase in production in the second half of 1950 can be explained by the fact that individual parts were continuously manufactured and purchased, additional production rooms were set up in Eschen and the measures to increase productivity from the general meeting of June 1950 were implemented. Additional staff were taken on. In 1951, the premises in the factory in Mauren were converted. The construction departments moved to Eschen. The residential building next to the factory was converted into an office building. The assembly of the Curta calculating machine was set up in the new, larger premises on the upper floor of the factory building. With all these measures, an increase in production figures was achieved in 1951.

On the basis of the parts list of the calculating machines, which Curt Herzstark received in January 1952 as a down payment for his patent compensation, it is known that at this time they had reached the serial number "12'500".

But this does not mean that so many machines had been produced by then. In the early years there were jumps in the serial numbers. According to what we know so far, about 100 machines were produced up to serial number 1000 and from 1000 to 2000. Therefore, in the serial number range up to 2000, only 200 machines were produced in series. It could also be that parts of the 900 serial number became 1900 serial numbers by prefixing a 1. During this time, the name of the calculating machine was changed from „Contina“ to „Curta“. The name had to be changed for the trade fair in Basel in May 1949. To distinguish it, the serial number could have been extended with a 1. Thus about 10'800 machines were produced until the end of 1951, 5100 of them until the end of 1950. Thus about 5700 Curta must have been produced in 1951.

In 1952, the production processes were optimised by a consulting company. The number of pieces increased to about 8100 in 1952 (difference between serial number 20'600 at the beginning of 1953 and 12'500 at the beginning of 1952). The large increases in the number of units in 1952 were achieved not least through the introduction of piece-work. This was abolished again in autumn 1953. In a telephone conversation between Mr. Beck of the Labour Office in Vaduz and the Federal Office for Industry, Trade and Labour in Bern, it is mentioned that 40 machines were produced per day. Helmut Frick of the Administration Office spoke of 1000 machines per month. The Curta II calculating machine was introduced to the market 1953. From this year on, the list of Curta machines written by the Curta Service can be used as a reference for the development of the number of units. This can be assumed on the basis of an invoice from the sale of a Curta I in August 1953 in Vaduz. The serial number of the machines is listed on this invoice. In 1953, 3800 Curta I and 2200 Curta II were produced, in the following year 3800 Curta I and 2920 Curta II.



tempt to allocate the serial numbers of the CURTA I to the production year

Based on the numbers of units per year determined above, based on Contina AG annual reports, the correspondence from Curt Herzstark and the serial numbers of the Curtas Herzstark got from Contina AG as compensation , one can attempt to assign the serial numbers to the year of production.

Assumptions: So far, only machines with the numbers 9XX or 19XX are known in the serial number range 1-1999. Probably only 100 machines were produced/sold in this range, i.e. 200 in total. If other serial numbers outside the range of 9XX and 19XX appear in the serial number range 1-1999, the numbers would have to be adjusted. It is also quite possible that individual pre-production samples, especially those owned by former employees, exist with low serial numbers.

Year	Production numbers	Serial numbers	
1947	0		First Prototypes LILIPUT lettering Round setting knobs, round crank
1948	100	900 – 999	“CONTINA“ lettering Round setting knobs, round crank
1949	300	1900 to about 2200	“CURTA“ lettering since April 1949 Round setting knobs, round crank
1950	4700	about 2200 to about 6900	“CURTA“ lettering Round setting knobs, round crank
1951	5700	about 6900 to about 12600	Different versions: “CURTA“ lettering with round setting knobs, round crank CURTA (round A, without “”) lettering with individual round, but mainly rectangular setting knobs, round crank
1952	8100	about 12600 to about 20700	CURTA lettering, upper part of „A“ round Rectangular setting knobs, round crank
1953	3800	about 20700 to about 24500	CURTA lettering, , upper part of „A“ round Rectangular setting knobs, round crank

A more precise assignment is not possible. On the internet one can also find tables and programmes that make a monthly allocation. This is impossible, as the above explanations show. Moreover, production was not always continuous throughout the year.

An indication of the year of production is also the designation on the front of the machine. The calculating machine had 1947 the name „LILIPUT“, 1948 "CONTINA", and from April 1949 "CURTA". In the course of 1951, the designation was changed to CURTA with a round „A“ and without apostrophes.

According to the service manual, all machines with serial numbers 1-7178 and 9321-9620 have round setting knobs. The rest have rectangular ones.

CURTA 1 Date by serial number

Year	Serial number	pieces produced
1947		0
1948	900 - 999	100 max
1949	1900 – about 2200	300
1950	about 2200 – about 6900	4,700
1951	about 6900 – about 12,600	5,700
1952	about 12,601 – about 20,700	8,100
1953	about 20,701 – about 24,400	3,800
1954	24,401 - 28,200	3,800
1955	28,201 - 32,000	3,800
1956	32,001 - 35,800	3,800
1957	35,801 - 38,860	3,060
1958	38,861 - 40,770	1,910
1959	40,771 - 41,770	1,000
1960	41,771 - 45,010	3,240
1961	45,011 - 49,170	4,160
1962	49,171 - 52,880	3,710
1963	52,881 - 56,130	3,250
1964	56,131 - 58,580	2,450
1965	58,581 - 62,180	3,600
1966	62,181 - 65,780	3,600
1967	65,781 - 68,780	3,000
1968	68,781 - 73,580	4,800
1969	72,581 - 77,780	4,200
1970	77,781 - 80,427	2,647
	total production	about 78,727

Sometimes wrong serial numbers appear. Wrong means there are different serial numbers inside the machine and on the bottom plate or there is only a serial number at the bottom plate and no one inside the machine. Machines manufactured at Contina company had always a serial number inside the body and the same serial number on the bottom plate. There are also machines on which the lettering of the serial number is a different one than the original one from the factory. These machines were probably manipulated later by collectors and/or sellers or parts were exchanged later. Some machines can be recognised by the fact that they have suspicious (non-serial) combinations of case lettering, crank, adjustment handles and cover.

Of course, after production ended in 1971, machines were also assembled from spare parts outside the Contina company. However, these machines should not receive an official serial number. It should be declared that this Curta did not come from serial production.

For a deeper analysis it would be very helpful if collectors and owners of Curtas would exchange their different machines and experiences with each other by means of descriptions, photos and origin and enter them into a central database.

Literature

Nipp, Hansjörg: Curta, Carena & Co., Geschichte der Contina in Mauren Alpenlandverlag AG, Schaan

ISBN: 978-3-905437-42-3

Content of these book is the history of the Contina company and its products (Curta calculators, movie cameras and more products).