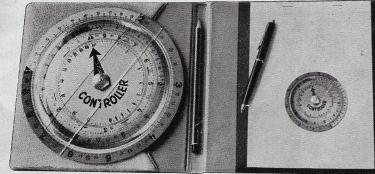
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Introduction

We all know that instruction books are always too long! However, if you are to have real joy and success with your Controller do not fear the minor trouble of once reading these few pages from beginning to end. The Controller will repay it later with an astonishing performance and versatility. For:

- 1. The Controller is the first and the only really capable calculating device which you can always carry with you. It will fit into the smallest pocket.
- 2. Despite its small and handy shape the Controller has an circumference of 9 inches and its graduation is "infinite" because of its circular form. With one single adjustment it will always show you all the desired results automatically and simultaneously as plainly as a table.
- 3. In order to achieve utmost precision, the graduation is photographically projected in three colours to each single metal disc by a special procedure, thus rendering the device absolutely wear- and climate-resisting. Your Controller is not only an extremely practical, but also a very valuable precision instrument.

The Controller calculates by itself; we are just to know how to read the results. The most important thing, therefore, is:

A precise knowledge of the graduation!

The Controller consists of two metal discs and a plastic pointer. By turning the smaller disc against the larger disc the calculations are performed.

There are several scales on the Controller, but in the beginning, we are calculating exclusively on the main scale. It is projected onto both discs in three colours. If you shift the number \blacktriangle of the small disc under the number \blacktriangledown of the large disc, you will find that the two scales correspond with each other. This is called the **basic position**.

In this basic position you will note the big numbers, beginning from 1 and up to 9, following each other along the circumference of the scale in ever decreasing distances.

The marks corresponding to these numbers divide the whole main scale into ten parts of different length.

Now you will note that every such part is subdivided into ten parts, again of different length but equal value. Each of them has the value one tenth.

Every such part is further subdivided, and, quite naturally, this gives the values of the hundredths. **But:** according to the restricted space it is not possible to give every such hundredth its proper mark along the whole circumference of the scale.

Between the numbers 1 and 2 every hundredth has its own mark. Therefore, each of them has the value one hundredth (colour white).

Between the numbers 4 and 1 every fifth hundredth has its own mark.

Therefore, each of them has the value two hundredths (colour yellow).

Between the numbers 4 and Ψ every fifth hundredth has its own mark.

Therefore, each of them has the value five hundredths (colour blue).

This is not very difficult, is it? Let us try it out. Let us look up the value 1.26.

Put the Controller in its basic position. Shift the number $\mathbf{\Lambda}$ of the small disc under the number \mathbf{V} of the large disc. This represents the value **one** (or 1.00).

Now turn the small disc slightly clockwise (to the right) until the number \triangle of the small disc points to the value one and one tenth of the large disc, marked by the smaller number 11. This represents the value 1.10.

Continue to turn the small disc until it points to the value one and two tenths, again marked by a small number 12.

This represents the value 1.20. Add another 6 hundredths, and there you are at the value 1.26!

Important

The multiplication

If you shift number Λ of the small disc (with arrow) under any number of the large disc, you have multiplied this number automatically and simultaneously by all numbers of the small disc, the results being shown correspondingly above these numbers on the large disc, and you can with the arrow pointing to 5, for instance, make the following readings: (to the left) $5 \times 8 = 40$, $5 \times 7 = 35$, $5 \times 6 = 30$ and so on (to the right) $5 \times 12 = 60$, $5 \times 14 = 70$, $5 \times 19 = 95$, and so on.

On the disc you will find the following picture:

$$\frac{3(0)}{6}$$
 $\frac{35}{7}$ $\frac{4(0)}{8}$ $\left(\begin{array}{c}5\\ A\end{array}\right)$ $\frac{6(0)}{12}$ $\frac{7(0)}{14}$ $\frac{95}{19}$

Practical advice

May we give you a practical piece of advice:

Forget about the usual terms of "one hundred and twentysix", or "twelve-thousand six-hundred". Think of one-two-six instead, just as you do it with your telephone numbers.

Perform your calculation and determine the decimal point afterwards. You may add as many zeros before or after this given sequence of numbers as will be necessary in your special case.

So, let us sum it up:

With the Controller we calculate without decimal points and, so far, without zeros.

We do not calculate with numbers but with sequences of ciphers, in practical use consisting of not more than three or four ciphers.

If there is a zero in between the sequence, this is treated like any other cipher and is a fixed part of the given sequence. The value one-two-zero-six is different to one-two-six, and quite naturally, the setting of the Controller must be done accordingly.

Exchange rates

We are already in the know how to do a series of practical examples:

Let us suppose we want to change Dollars into Marks. The exchange rate is 1 \$ = 4.20 DM.

We turn the small disc until its number \triangle covers the mark 4.20 (four and two tenths) of the large disc (colour blue). With this single adjustment of the Controller you can convert any value of one currency into the corresponding value of the other. The values on the small disc represent the amount in Dollars, the values on the large disc represent the corresponding amount in Marks, and vice versa.

Tables

For instance:

1.00	(small disc)	4.20 DM	(large disc)
2.00		8.40	(8-4)
23.80		100.00	
2.50		10.50	(1-0-5) (one, no tenth,
			5 hundredths)
600.00		2,520.00	(2-5-2)
1,000.00		4,200.00	(4—2) and so on.

Countervalue

The counter exchange rate is especially important with the arbitrage. It is found with the same adjustment! 100.00 DM (large disc) 23.80 \$ (small disc)

The division

Important

The division is the reversed procedure of the multiplication. All numbers of the large disc are divided automatically and simultaneously by the number which is exactly underneath on the small disc (the same position as when written as a fraction). The result is shown by the number \spadesuit of the small disc (with arrow). For instance, we adjust

$$\frac{6 \text{ large disc (blue)}}{3 \text{ small disc (yellow)}}$$
Thereby, the numbers
$$\frac{3}{1.5}$$

$$\frac{3.5}{1.75}$$
and so on,

are automatically below each other and are therefore divided simultaneously by each other.

The result in each case is 2 to be read above the number A with arrow.

Currency quotations

Some practical examples:

Zürich quotes: Austrian Shillings 16.30; German Marks 94.50. What is the quotation of DM 1,—at Vienna?

Look up large disc 9-4-5 and put small disc 1-6-3 underneath. The number \triangle of the small disc shows you the result: 5-8. The quotation for **one German Mark** at **Vienna** is Austrian Shillings **5.80**.

But the same adjustment of the Controller shows you the quotation of the Austrian Shilling at Frankfurt, too. The number \triangle of the large disc gives you the countervalue 1-7-2-5. The quotation at Frankfurt is DM 17.25 for 100 Austrian Shillings.

Costs of merchandise

One gross of merchandise (12 dozens = 144 units) is to be purchased for 131. How much is one unit?

Look up large disc 1–3–1 and put small disc 1–4–4 underneath. The number \triangle of the small disc shows 9–1. One unit costs 0.91. Accordingly: 100 units = 91.—; 72 units = 65.50 and so on. On the other hand: for 70.— (large disc) you get 77 units small disc).

Table:
$$\frac{\text{price } 655}{\text{units } 72} \frac{70}{77} = \frac{91}{144} \frac{\text{large disc}}{\text{small disc}}$$

Fuel-consumption

Your car has covered 230 miles with 7.5 gallons of fuel. What is its fuel consumption?

Look up large disc 2-3 and put small disc 7-5 underneath. The number \triangle of the small disc shows the result. Your fuel consumption was 30.7 m.n.g.

With this given fuel consumption (i.e. the same adjustment of the Controller) you are able to determine the necessary quantity of fuel for any desired distance. The distances are represented by the values on the large disc, the according quantities of fuel by the corresponding values on the small disc.

Table:
$$\frac{184}{6}$$
 $\left(\frac{23}{75}\right)$ $\frac{307}{4}$ miles qallons

Speeds

Combining division and multiplication

You have covered with your car the flying kilometre in 31 seconds. What was your speed? Look up large disc Ψ (1 km or 1000 metres) and put 3–1 of small disc underneath. This single adjustment enables you to make the following readings:

Small disc A shows large disc 3-2-2.

-

In one second you have covered

32.20 metres

Small disc 6 shows large disc 1-9-3,

1930.00 metres

In one minute (60 seconds)
Small disc 3–6 shows large disc 1–1–6.

In one hour (3600 seconds)

116,000.00 metres

Your speed was 116 km p.h.

Table: $\left(\frac{\mathbf{V}}{31}\right) = \frac{116}{36} = \frac{193}{6} = \frac{322}{\mathbf{A}}$

But let us suppose you don't like kilometres, you are used to miles. What was your speed in m.p.h.?

To perform this you just have to shift number \triangle (i.e. 1 mile) of the small disc under (1-6-1) (1.61 km = 1 mile) of the large disc.

Immediately you can make out for all km-values on the large disc the corresponding values in miles on the small disc. (Note: the value 1.61 km for 1 mile is written on the back of your Controller).

For this case: you will find the following picture:

		many procure,			
V = 100 km	116	(161 = km)	29	large disc	
62	72	A = mile	18	small disc	

Commercial calculations

Percentages

We wish to know different percentages of a given sum, say 185. Look up large disc 1-8-5 and put number ▲ of the small disc underneath. Whatever percentage you may look up on the small disc, the corresponding result is given on the large disc.

2 0/-		5 =====================================	given of	i the re	arge disc.	
$\frac{2}{2} \frac{0}{0}$		185	37	5	555	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5.00	A	2	27	30	

Interests

You have borrowed a sum of 4,500.00 Dollars for $9^{0}/_{0}$ a year. How much is this per year, per month, per day?

Look up large disc 4-5 and put number \triangle of the small disc underneath. Small disc big number 9 shows 4-0-5. (multiplication)

The money costs you 405 Dollars a year. $\frac{405}{9(^{9}/_{0})} \left(\frac{45}{\mathbf{A}}\right)$

Fix this result with the centre line of the pointer and turn small disc 1-2 underneath.

Number A of the small disc shows 3-3-8

The money costs you 33.80 Dollars per month. $\frac{338}{4}$ $\left(\frac{405}{12}\right)$

Leave the pointer in its position and turn small disc 3-6-5 under its centre line. Number \triangle of the small disc shows 1-1-1.

The money costs you 1 Dollar 11 cents per day. $\frac{111}{4}$ (405)

Calculations

A quick calculation is very important to the merchant. Here, the Controller is especially suitable.

27 units of a certain merchandise are offered for 1,350.00. The merchant must know at once the following:

- 1. The price of 1 unit.
- 2. The retail price, including his margin (f.i. 40%).
- 3. The amount of this margin.

All these questions are answered by the Controller with one single adjustment!

Look up large disc 1–3–5 and put small disc 2–7 underneath. Number \triangle of the small disc shows 5, i.e.

1. The price of 1 units is	50.00
2. Small disc 1–4 (140% or 100% plus 40%) shows 7 The retail price, including the margin, is therefore	70.00
3. Small disc cipher 4 (40%) shows 2	20.00

Let us suppose the retail price of 70.—would not be considered convenient but a retail price of 64.50 should be desirable instead. The Controller gives you a clear picture of the situation without further adjustment.

Look up large disc 6-4-5. The corresponding value on the small disc is 1-2-9 (or $129^{0/6}$). By introducing a retail price of 64.50 your margin would accordingly be reduced to $29^{0/6}$. Look up small disc 2-9 ($29^{0/6}$), it shows large disc 1-4-5. The amount of your margin would be reduced to 14.50.

Counter-offer

But the Controller enables you to submit immediately a counter-offer!

Let us suppose your calculation must be based on a margin of 40% but you wish to maintain a retail price of 64.50. Turn the small disc slightly anti-clockwise to the left until large disc 6-4-5 (64.50) is covered by small disc 1-4 (140%). This adjustment shows you the **new situation**.

- Number ▲ of the small disc shows onto 4-6.
 The counter offer for 1 unit would be
- 2. Small disc 2-7 (27 units) shows 1-2-4-5.

 The counter offer for the whole lot would be
- 3. Small disc 4 (40%) shows 1-8-4.

 The amount of the margin in this case would be 18.40.

$$\frac{46}{4}$$
 $\left(\frac{615}{14}\right)$ $\frac{1245}{27}$ $\frac{184}{4}$

A Trick

A trick with multiplications:

In order to determine the last cipher of the sequence exactly we just multiply the last cipher of each number by heart.

e.g.
$$32 \boxed{7} \times 1 \boxed{4} \qquad 7 \times 4 = 2 \boxed{8}$$
 i.e. $\boxed{8}$ is the **last cipher** of the **result** = 457 $\boxed{8}$

46 00

Multiplication in series.

Calculation factor (adding)

To the purchasing prices of several items have to be added: $5^{0/0}$ freight, on top of this $10^{0/0}$ administrative expenses, and finally $35^{0/0}$ profit on top of this.

- 1. Put the Controller in its basic position and shift the pointer until its centre line covers 1-0-5 (105%, or 100% plus 5% freight) and turn number \triangle of the small disc under the centre line of the pointer

 large disc \checkmark (105)

 small disc \triangle
- 2. Then shift the plastic pointer until its centre line covers small disc 1-1 (110%), or the above value plus 10% administration expenses) and turn number of the small disc under the centre line of the pointer.

 105 (1158)

 11
- 3. Then shift the plastic pointer until its centre line covers small disc 1-3-5 (135%, or the above value plus 35% profit) and turn number \triangle of the small disc under the centre line of the pointer.

 1158 (156)

 135

With this adjustment the Controller gives you a complete table of purchasing and selling prices. The **purchasing prices** are represented by the values on the **small disc**, the **selling prices** by the corresponding values on the **large disc**.

(The non-merchant will note that $56^{\circ}/_{\circ}$ is more than the arithmetical sum of 5 plus 10 plus $35^{\circ}/_{\circ}$.)

In case you buy in a foreign country, the procedure is the same but start with the exchange rate instead of the basic position.

The offer is submitted in Pounds Sterling, you want the retail prices in USA, including $7^{0/6}$ freight, $12^{0/6}$ duty and $25^{0/6}$ profit.

The exchange rate is 1£strl. = 2.80 \$. Look up large disc 2-8 and put number \triangle of the small disc underneath.

$$28 = \$$$

$$\blacktriangle = \pounds$$

From there on the procedure is exactly the same as before.

- 1. Move pointer to small disc 1-0-7 and follow with small disc.
- 2. Move pointer to small disc 1-1-2 and follow with small disc.
- 3. Move pointer to small disc 1–2–5 and follow with small disc.

Number ▲ of the small disc shows 4–2–0. The retail price is 4.20 \$ for every Pound Sterling purchasing price. The adjustment of the Controller gives a **complete table** of all corresponding values.

Compound interests

Compound interests are calculated in the same way as the calculation factor. How much is $5^{0/6}$ compound interest in four years?

Begin with the basic position and repeat four times the multiplication with 1-0-5 ($105^{0}/_{0}$). At the end number \triangle of the small disc will show 1-2-1-5. The factor is 1.215 (or every Dollar will be \$ 1.215 after four years). The adjustment of the Controller gives a **complete table** of the initial capitals (small disc) and their corresponding values at the end of four years (large disc).

1.
$$(105)$$
 105
 $5^{0}/_{0}$ \uparrow

$$2.\frac{105 \qquad (1103)}{4 \qquad 105}$$

$$5^{0/0} \uparrow$$

$$3.\frac{1103}{4} \quad \begin{array}{r} (1158) \\ 105 \\ \hline 50/0 \quad \uparrow \end{array}$$

Calculation factor (subtracting)

Reductions on offers are treated the same way. A supplier delivers his merchandise to dealers with $5^{0}/_{0}$ reduction, $20^{0}/_{0}$ rebate and $3^{0}/_{0}$ discount. What is to be paid?

Begin with the basic position. Shift index to 9–5 $(100^{\circ}/_{\circ} \text{ minus } 5^{\circ}/_{\circ})$ and follow with small disc. Move index to small disc 8 $(100^{\circ}/_{\circ} \text{ minus } 20^{\circ}/_{\circ})$ and follow with small disc. Move index to small disc 9–7 $(100^{\circ}/_{\circ} \text{ minus } 3^{\circ}/_{\circ})$ and follow with small disc.

Number \triangle of the small disc shows 7-3-5. The factor is 0.735 and the adjustment of the Controller gives a **complete table** of the factory prices (small disc) and the delivery prices (large disc).

3.
$$\frac{735}{97}$$

2.
$$\frac{(76)}{8}$$
 $\stackrel{95}{\uparrow}$ $20^{0/0}$

1.
$$\frac{(95)}{95}$$

Margins

As could be seen, different percentages can be added in this way (to the right) or subtracted (to the left) to or from any given value. On the other hand, the percentages between two values can be deduced.

The purchasing price of a merchandise is 5.75, the retail price 7.60. What is the margin?

Look up large disc 5-7-5 and put number \triangle of the small disc underneath. Below large disc 7-6 you find small disc 1-3-2 (100% plus 32%). The margin is 32%.

With the same adjustment above small disc 3-2 ($32^{9/9}$) (yellow) shows large disc 1-8-4. The amount of the margin is 1.84.

$$\binom{575}{A}$$
 76 184 132 (= plus 32 $\frac{0}{0}$) 32 $\frac{0}{0}$

The same thing from top. Look up large disc 7–6 and put number \triangle of the small disc underneath. Below large disc 5–7–5 you find small disc 7–5–8 (100% minus 24.2% counting backwards = 75.8). The margin is 24.2% from top.

With the same adjustment, small disc 2-4-2 (yellow) shows large disc 1-8-4. This is the same amount of the margin as before 1.84. In other words 32% from bottom are 24.2% from top.

$$\frac{575}{758}$$
 $\left(\frac{76}{4}\right)$ $\frac{184}{242}$ $\left(-\frac{24}{2}\right)^{20/6}$

Expenses

A wide range of application is given when dividing up expenses or a turnover into the different accounts. Look up the value of the total expenses or the turnover on the large disc and put number \mathbf{A} (100%) of the small disc underneath. Percentages and their amounts may be read directly, in most cases with this single adjustment.

Technical calculations.

British-metric

In many cases measurements in inches are given in fractions. What are the corresponding decimals?

How much is 3 inch.? Look up large disc 3 and put small disc 8 underneath. Number $\frac{1}{8}$ shows

3-7-5. It is 0.375 inch. But the same adjustment shows you also the corresponding value in centimetres. Above small disc 2-5-4 (1 inch. = 2.54 cm, see back of the Controller) we read on the large disc 9-5-5. $\frac{3}{8}$ of an inch. are 0.955 cm. $\frac{3}{8}$ $\frac{375}{4}$ $\frac{955}{4}$ = 0.955 cm

The circle

 π has its own mark at 3,14159. The diameter of a circle multiplied by this value gives the circumference of the circle.

Look up large disc π and put number \blacktriangle of the small disc underneath. This adjustment of the Controller is a **complete table** of the **diameters** (small disc) and the corresponding **circumferences** (large disc).

Medial section

The ancient Greeks built their famous buildings according to the medial section. The formula to this is a:b=b:(a+b), or equal to 4:6.5.

Look up large disc 4 and put small disc 6-5 underneath. This adjustment of the Controller gives a **complete table** of the long sides (small disc) and the short sides (large disc) of a rectangle in accordance with the medial section.

RECIPROCAL SCALE

Our new models "R" have been equipped with a reciprocal scale.

Moreover, the graduation on the three-colour scale of all models – including the pocket-size model – has been increased to 640 lines.

Our small pocket-size calculator Model 75 R, which measures less than 3 inches in diameter, does now correspond to a slide-rule 25 inches long a regards graduation, performance and accuracy. Our calculator Model 75 R is, by the way, the smallest calculator of such high efficiency in the world.

The function of the reciprocal scale

The reciprocal scale- the **red scale** under the three-colour scale of the smaller disc-is used in combination with the three-colour scale. As distinguished from the three-colour scale, the reciprocal scale reads counter-clockwise. Compared with the three-colour scale, the reciprocal scale is reversed. The term "reversed" characterizes and defines the function of the reciprocal scale best (reciprocal value = reversed value) because the reciprocal scale, as distinguished from the three-colour scale, furnishes "reversed" results. In other words: when doing a division with the three-colour scale, the same process produces a multiplication on the reciprocal scale and vice versa. A division on the reciprocal scale will therefore logically result in a multiplication on the three-colour scale. With the reciprocal scale, a division table has been added to the Controller. We can now, when placing the \triangle of the three-colour scale under any one of the numbers on the large disc, multiply simultaneously all numbers by this particular number without re-adjusting the Controller, and what is more, we can with the scales left in the same position, divide on the reciprocal scale this particular number by all numbers we may think of (division table).

What help does the reciprocal scale provide in practice?

The reciprocal scale enables us to use the Controller with even greater advantage when doing commercial or technical calculations. Among the multitude of instances we have chosen the following examples:

We can, for instance, with only one setting, read immediately the equivalent in all foreign currencies of any DM amount. We simply place the figure Δ under the DM amount on the large disc and fix on the reciprocal scale the rate of exchange of the currency we are interested in by means of the pointer. The index-line will simultaneously and automatically indicate the equivalent value on the large disc.

e.g. how much are 21 DM in

currency	rate of exchange	result
Dollar	1: 4.20 DM	\$ 5.00
in Austr. Shill.	100 : 16.70 DM	A.Sh. 126.00
in Lire	100: 0.69 DM	Li. 3040.00

DM	€	A.Sh.	Ľ	
21	5	126	304	large disc
A	(238) 42	(⁶) 167		small disc reciprocal scale

Another interesting example:

When you calculate on the three-colour scale percentages to be charged to the prime cost, you can under these results — on the reciprocal scale — count by means of the pointer the difference to hundred, i.e. to what percentage is amounting your reduction from the selling-price.

The reciprocal scale offers a great many other advantages and simplifications, for instance when doing progressive multiplications or divisions.

We just shift the index-line of the pointer to 5.60 on the large disc and shift the red figure 4.30 of the reciprocal scale so that it is covered exactly by the index-line. Herewith the results of all three multiplications can already be read. A points to 24 (i.e. square measure), multiplicated by 3.50 gives 3.40 c.m.

On the disc you will find the following picture:

56	24	84	large disc	
(234)	A	35	small disc	
43	A		reciprocal scale	

Special scales.

Squares scale

Below the coloured main scale there are two more scales, the squares and the reciprocal scale. Put the centre line of the pointer on any value of the small disc (but only the small disc). The index-line shows you directly the square of this value on the lowest scale.

For instance: 1 inch = 2.54 cm

1 sq. inch. = 6.45 cm^2 Roots are found the other way round: $\frac{2}{V_{6.45}} = 2.54$

Areas

The superficies of a circle can be calculated with the formula $\underline{d^2}$. π . With the Controller this

is much simpler. Put the index-line of the pointer on the value of the diameter on the main scale of the small disc. The left edge of the pointer automatically indicates the result on the

squares scale, the distance of the pointer's left edge from its middle line representing the value π .

4

π mark

For instance: diameter 2 = area 3.1 diameter 8 = area 50 diameter 15 = area 178

Volumes

By multiplying the area by the length (height) of a body we find its volume.

The trunk of a tree has a two-ft, diameter and is 25 ft.long. Put the index-line of the pointer on the number 2 of the **small disc's main scale**. The left edge shows on the squares scale the area: 3.14 sq. ft. — Continue with a simple multiplication:

3.14 multiplied by 25 gives 78.5 cu. ft. 314 785

Now try it yourself:

Examples

100 litres = 22 gallons. How many litres make 3.3 gallons? Find the correct adjustment of the Controller yourself. The result is: 15.0 litres. 5 litres are 1.1 gallons, a.s.o. Table.

- 1. 15 pounds = 6.8 kilos. How many pounds to the kilo, how much of a kilo to the pound?
- 2. 7.60 kilos cost 3.80. Find the correct table for prices and weights.
- 3. All prices of a shop shall be reduced by $6^{0}/_{0}$. Find the correct table.
- 4. 30 labourers work 180 days. How many days for 12 labourers and the same work?
- 5. With a margin of 12.5% a merchant gains 850.—. What was his turnover?
- 6. How many centimetres are 11 of an inch?

16

Results

The results are:

1. 1 lb. 0.454 kg, 1 kg 2.2 lbs.
$$\frac{\Psi}{454} \left(\frac{15}{68}\right)$$
 22 lbs kg

- 2. Large disc 3-8 (prices), small disc 7-6 (kilos) underneath. Table.
- 3. Large disc 9-4, number **\(\Lambda \)** of small disc underneath. Table.

$$\frac{705}{75} \left(\frac{94}{\mathbf{\Lambda}}\right) \frac{\mathbf{V}}{1065} \frac{11 \text{ reduced}}{117 \text{ original}} \text{ prices}$$

- 4. $450 \text{ days} (30 \times 180 = 5400 : 12 = 450)$
- 5. 6,800 $\frac{68}{4}$ $\left(\frac{85}{125}\right)$
- 6. 1.745 cm. $\frac{686}{\blacktriangle} \left(\frac{11}{16}\right) = \frac{1745 = \text{cm}}{254 = 1 \text{ inch.}}$

Enlargement or reduction:

Clichés, draughts, drawings and plans. Table! For instance: An original is 5.2 by 2.1 cm. Look up large disc 52 and put 21 of the small disc underneath. Read all wanted measures. Table.

248	47	(52)	62	99	
A	19	$\left(\frac{1}{21}\right)$	25	4	

What's the weight of 1000 sheets 46×59 cm, if 1 m² weighs 85 g? Continued multiplications 46×59 (= 27.1; don't read!) \times 85 = 23 kg.

23	271	(46)	large disc
85	A	(17)	small disc
		59	reciprocal scale

Important:

The dirt, which will accumulate under the pointer's index-line, can be easily removed by means of a piece of paper (cardboard) by pushing it **under** the slightly raised pointer and by pulling it out on the opposite side while exercising a light pressure with the thumb on the pointer.

Conclusion

With these few examples we hope to have shown you the extraordinary versatility and performance of the Controller.

Our present time demands quick decisions. The Controller in your waistcoat pocket is always a ready assistant and your individual consultant. With its aid you can examine, compared, judge. The most convenient solution is easily found to your advantage. As the Controller always shows a multitude of results with the same adjustment, you have always a clear picture of the situation, without being disturbed in your negotiations by impeding calculations.

After long and hard development work, we take pride and pleasure in delivering you this extremely practical and valuable instrument, and we wish you much success and delight.

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