

Manual

Excel de QC 7 tools

(Ver. 21.1)

[Excel for Microsoft 365]

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Introduction

1. Outline

This is [QC 7 tools] which is common for resolving Quality Control technique as "Excel template".

Seven methods of [*Pareto diagram*], [*Characteristic diagram*], [*Graph*], [*Check sheet*], [*Scatter diagram*], [*Histogram*], and [*Control chart*] into 24 kinds of sheets.

Setting "A4" size of paper, easy to submit and distribute the operation like input data, total and making graph.

Only input the data, you can make the practical document easily without special knowledge about QC.

Also, [Excel de QC 7tools] are made as a Excel-sheet. You don't need to learn difficult operation for handling like special software. You can proceed with the work while assuming the image which the document is completed with sample data.

Easy to handle daily data collection and QC circle activities with a personal computer, and you can use it as an immediate fighting strength in the field, as a teaching material for QC education, and as an aid to exam measures such as System-administrator and QC tests.

You can easily handle digitization of inspection data, remote work, management and storage of quality control records, etc.

2. Shareware

This program is " Shareware ".

Trial period is for 30 days and all functions are available.

While trial term, " Trial Edition " is written on the Menu and each technical sheet , also when you print them out. But after you registered as a user, these signs are cleared.

* If you want to continue using it after the trial period, please register as a user.

[User registration] get the license key from vector website page and register from [User Registration guide] screen.

* This shareware don't distribute for a third party.

3. Install

If you click "**e7qc211.zip**", the files are automatically decompressed and the below messages are displayed.

1) E7QC211.xlsm ----- main program

2) E7QCmanu211.pdf ----- manual

summary

* See the following pages for the related to start the software.

4. Disclaimer

The author is NOT RESPONSIBLE for any injury caused by using this program.

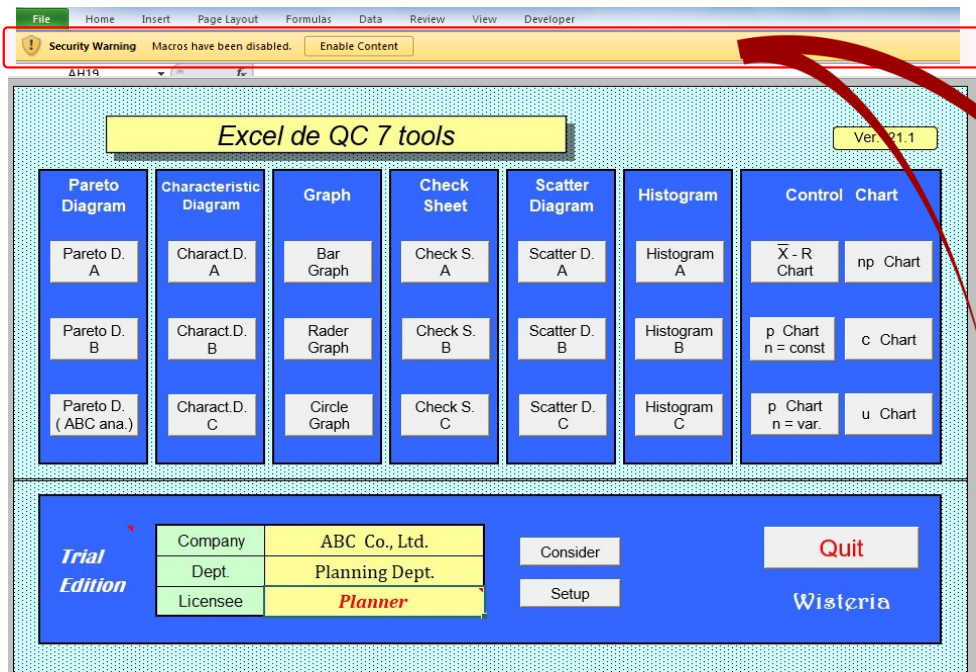
From Start software to Quit

5. From Start to Quit

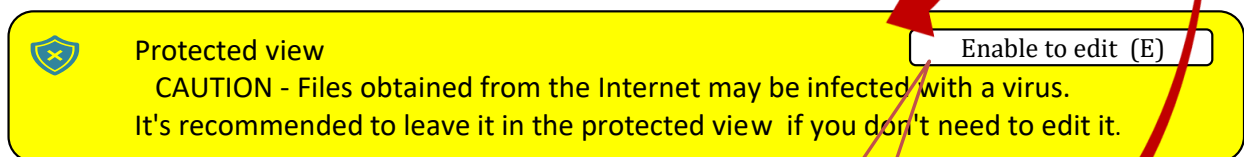
1) Start the program

Click "E7QC211.xlsm", Start [Excel de QC 7 tools]

- * This software is used Excel VBA to automate the operation. To allow to use Macro, operate the followings.
(Depend on Excel version, display may differ.)

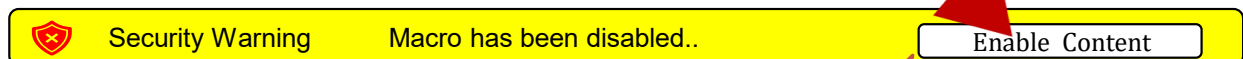


- ① Message bar is displayed on the top of the menu.



Click this bar

- ② Next, in the same place, the following will be displayed.



Click this bar

- ③ The message bar will be closed with these two click operations and [MENU] will be available.
Click the "Method selection button" to proceed to each method.

2) Quit the program

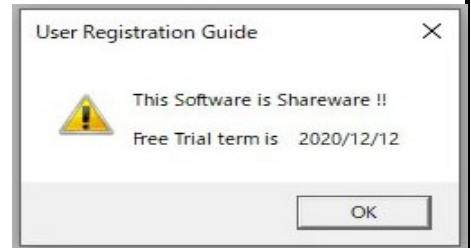
To prevent malfunction, be sure to click the [Quit] button on the Menu to quit

User registration

- 1) Start [Excel de QC 7 tools]

[User registration guide :]

" Free trial period is 20**/**/** " is displayed.
(Free trial period is for 30 days.)

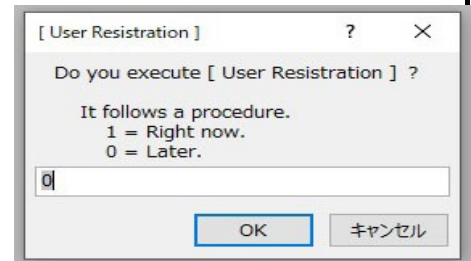


- 2) [User registration]

" Do you want to register as a user? " is displayed.

- 3) When starting / continuing the Trial :

Select [0: Later]

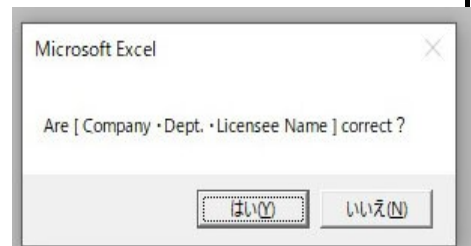


- 4) [Company, Dept. and Your name],

Input your company styles.

(Each input items are reflected on the item's columns of the each sheet.)

Company	ABC Co., Ltd.
Dept.	Planning Dept.
Licensee	<i>Planner</i>

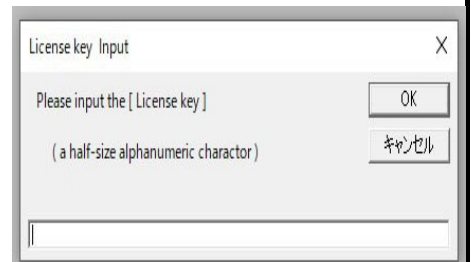


- 5) When you register as a user :

Select [1: Right Now]

[Licence key Input]

(1) Input the " License key"
(Half-width alphanumeric)



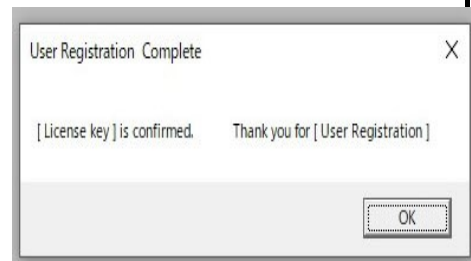
* Apply "License key" to the "Vector Inc" website in advance.

The license key will be e-mailed after completing the procedure.

(2) [User registration complete :]

" License key was confirmed " is displayed.

(This completes the registration process!)



(3) Start the software.

[Trial edition] is cleared.

Menu

Methods selection button:
jump to each methods

Excel de QC 7 tools Ver. 21.1

Pareto Diagram	Characteristic Diagram	Graph	Check Sheet	Scatter Diagram	Histogram	Control Chart	
Pareto D. A	Charact.D. A	Bar Graph	Check S. A	Scatter D. A	Histogram A	\bar{X} -R Chart	np Chart
Pareto D. B	Charact.D. B	Rader Graph	Check S. B	Scatter D. B	Histogram B	p Chart n = const	c Chart
Pareto D. (ABC ana.)	Charact.D. C	Circle Graph	Check S. C	Scatter D. C	Histogram C	p Chart n = var.	u Chart

Trial Edition	Company: ABC Co., Ltd.	Consider	Quit
	Dept.: Planning Dept.	Setup	
	Licensee: Planner		

Wistria

Quit:
Please be sure to quit with this button.

Pareto diagram A

Issue No.	AAA-0502-123	Approve.	Check	Plan
Dept.	Manufacture.			Planner
Date				

Part Name : Shaft A Part No. : 12345-67890

Process : Ext. Dia. Lot No. :

Case	Number	Component %	Cumulative %	Unit	Mem
1 a	700	40.2	40.2		
2 b	450	25.9	66.1		
3 c	200	11.5	77.6		
4 d	140	8.0	85.6		
5 e	90	5.2	90.8		
6 f	50	2.9	93.7		
7 g	30	1.7	95.4		
8 h	20	1.1	96.5		
9 i	10	0.6	97.1		
10 etc.	50	2.9	100.0		
Total	1,740	100.0	*		

Comment :

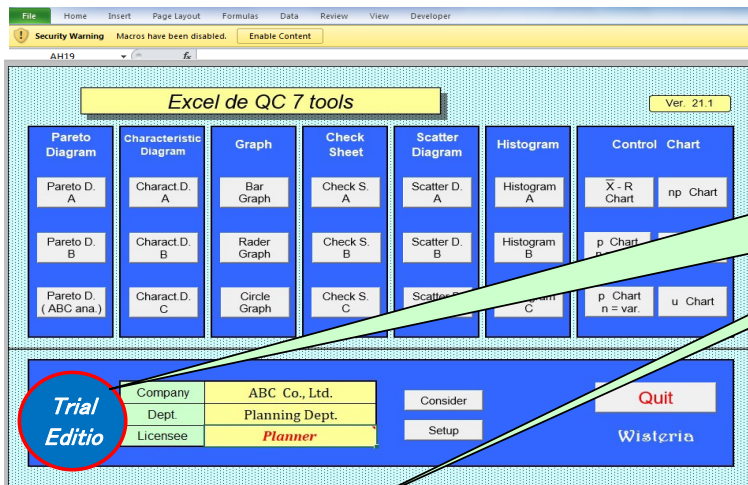
Trial Edition **Company** **Dept.**

Your company, dept., and Licensee name is saved when registration is completed.

You can also fill in the licensee name directly. But "the link paste function" will be cancelled.

Trial Edition

[Trial Edition] is displayed when you aren't register as a user.
 But after you registered as a user, these signs are cleared.



[Trial Edition] is displayed.
 After you registered as a user,
 these signs are cleared.

Pareto diagram (ABC Analysis)

AAA-0502-12345 Dept. Manufact Date April 1, 2012 Measure April 1, 2012

Part name : Part No. : 12345-6789 Customer : Process : Lot No. :

Case	Number	Component %	Cumulative %	Rank	Memo
1 a	700	40.2	40.2	A	
2 b	450	25.9	66.1	A	
3 c	200	11.5	77.6	A	
4 d	140	8.0	85.6	B	
5 e	90	5.2	90.8	B	
6 f	50	2.9	93.7	B	
7 g	30	1.7	95.4	C	
8 h	20	1.1	96.6	C	
9 i	10	0.6	97.1	C	
10 etc.	50	2.9	100.0	C	
Total	1740	100.0	*	*	

Rank	%
A	80
B	95
C	100

Comment :

ABC Co., Ltd. Planning Dept. Up

If you want to continue using this software after the trial period, please [Register as a user].
 [User registration] Get the license key from Vector Inc. website page and please set

Function button

Operation automation by function button

1) data input~calculation~Graph drawing

[Data clear] delete (sample) data with this [Data clear] button. the i/p data can be saved.

*when clear the value of the cell, use [Delete] key. (Space-key is error)

[Item name] (Light blue area) change to your company's specifications if necessary.

[Graph] is automatically drawn according to the input data.

change the scale and set the standard line with "autosshape function" if necessary.

* the column of the caluculation cannot be changed because of secured.

The number of displayed digits can be also changed for protected cells.

2) [Gaph drawing] button

Click after input data. The graph is drawn again depending on the number of data.

For other sheets, the graph is automatically drawn each time data is entered.

3) [print] button (You can also print from the Excel tool bar)

The preview screen is displayed first, and printing with the "A4" size setting.

* "User registration guide" is displayed when you aren't registered as a user.

4) [Menu] button

Click "Menu" button on the top of the right when you back to menu

Trial Edition				
Scatter diagram	Issue No.	AAA-0502-12345	Approve.	Check
B	Dept.	Manufacture.		Plan
	Date			Planner
Part Name :	Part No. :	12345-6789	Measure	
Process :	Lot No. :		Customer :	

	Part A		Part B		Unit :	Memo
	A - Y-axis	A - Y-axis	B - Y-axis	B - Y-axis		
1	3,140	1,030	3,060	1,110		
2	3,070	970	3,160	1,120		
3	3,020	940	2,900	1,070		
4	3,300	1,000	3,340	1,120		
5	3,190	920	3,040	1,010		
6	2,940	990	2,720	1,020		
7	2,900	880	3,330	1,150		
8	2,940	1,050	2,950	1,020		
9	2,940	810	2,800	1,100		
10	2,900	950	3,130	1,180		
11	3,150	1,190	2,560	990		
12	3,250	1,070	3,200	1,150		
13	3,400	1,020	3,110	1,080		
14	3,140	990	2,920	1,130		
15	3,080	1,010	2,940	1,110		
16	3,350	1,040	3,140	1,060		
17	2,980	910	3,400	1,150		
18	2,940	860	3,380	1,190		
19	3,200	1,040	2,840	1,040		
20	3,460	1,080	2,700	1,050		
21	3,040	820	2,500	1,050		
22	2,860	860	2,400	1,020		
23	3,180	970	2,990	1,060		
24	3,240	1,020	2,870	1,190		
25	2,750	870	3,240	1,120		
Average	3105	97.2	2985	1092		
Max.	3460	1190	3400	1190		
Min.	2750	810	2400	990		
Range	710	380	1000	200		
S. D.	180.8	90.4	272.1	58.9		Standard deviation

Return to Menu

Menu

Clear all (sample) data

Data Clear

Yellow Clear

Clear yellow colored

It is colored yellow to clarify the data input part. ---> Return this part to white.

Sample Data

Sample data

sample data is displayed in the initial state.

Graph

Print

Drew graph

The graph is drawn depending on the number of

UP

Page top

go to page top quickly.

Setting

Trial Edition

Set up

Please set up approval area name, on your company specification.

Approval Name Area

Approve. Check Plan

Writing

Please choice Cursor move direction.

Cursor Move Direction

Cell Right

Down

Memo

Trial Edition ABC Co., Ltd. Planning Dept.

Up

After apprval area name input, Click [Writing] button.

You can change [Approval name area] of All sheets.

You can change [Cursor Move Direction] of All sheets.

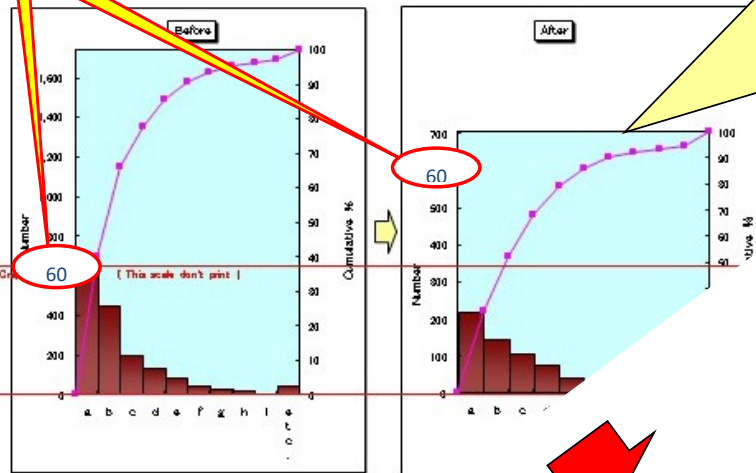
Pareto diagram

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

Pareto diagram		Issue No.	AAA-0502-12345	Approva.	Check	Plan
		Dept.	Manufacture.			Wis
		Date	!			
Part Name :	Shaft B	Part No. :	12345-9876	Measur	2	
Process :	Ext. Dia	Lot No. :		Custome		

[Before]					[After]				
Case	Number	Compo. %	Cumulative %	Memo	Case	Number	Compo. %	Cumulative %	Memo
1	a	700	40.2	40.2	a	220	31.2	31.2	
2	b	450	25.9	66.1	b	150	21.3	52.5	
3	c	200	11.5	77.6	c	110	15.6	68.1	
4	d	140	8.0	85.6	d	80	11.3	79.4	
5	e	90	5.2	90.8	e	45	6.4	85.8	
6	f	50	2.9	93.7	f	30	4.3	90.1	
7	g	30	1.7	95.4	g	15	2.1	92.2	
8	h	20	1.1	96.5	h	10	1.4	93.6	
9	i	10	0.6	97.1	i	5	0.7	94.3	
10	etc.	50	2.9	100.0	etc.	40	5.7	100.0	
	Total	1,740	100.0	*	Total	705	100.0	*	



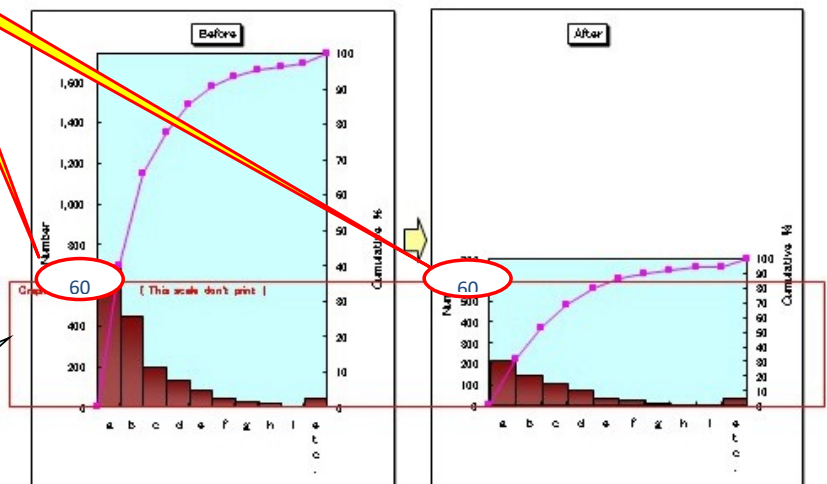
Edit "Right graph" height :

1) After graph drawing.
 2) Mouse Right-click on the "Right graph (Plot area)", then [You can Edit Graph Height/Position] displayed .

3) Edit "Right graph" height, compare with "Left graph" height, use [Graph height adjust scale].

(Ex.) In this case, the number of defects 600 .

Comment :



Graph Height adjust scale :
 This scale frame don't

ABC analysis

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

2) Input item name.

Item number < 10 :
Delete this line cell.

Pareto diagram (ABC Analysis)

Issue No.	AAA-09	6	Approve.	Check	Plan
Dept.	Me				
Date					

Part name : Part No. : -8789 Measure
 Process : Lot No. : Customer

Case	Number	Component %	Relative %	Rank	Memo
1 a	700	40.2	40.2	A	
2 b	450	25.7	66.1	A	
3 c	200	11.5	77.6	A	
4 d	140	8.0	85.6	B	
5 e	90	5.2	90.8	B	
6 f	50	2.9	93.7	B	
7 g	30	1.7	95.4	C	
8 h	20	1.1	96.6	C	
9 i	10	0.6	97.1	C	
10 etc.	50	2.9	100.0	C	
Total	1740	100.0	*	*	

Rank	%
A	80
B	95
C	100

Input % value of A,B,C - rank .

Accordingly ABC rank, coloring display.

Graph

After Data input, click [Graph] button.

Comment :

Trial Edition ABC C

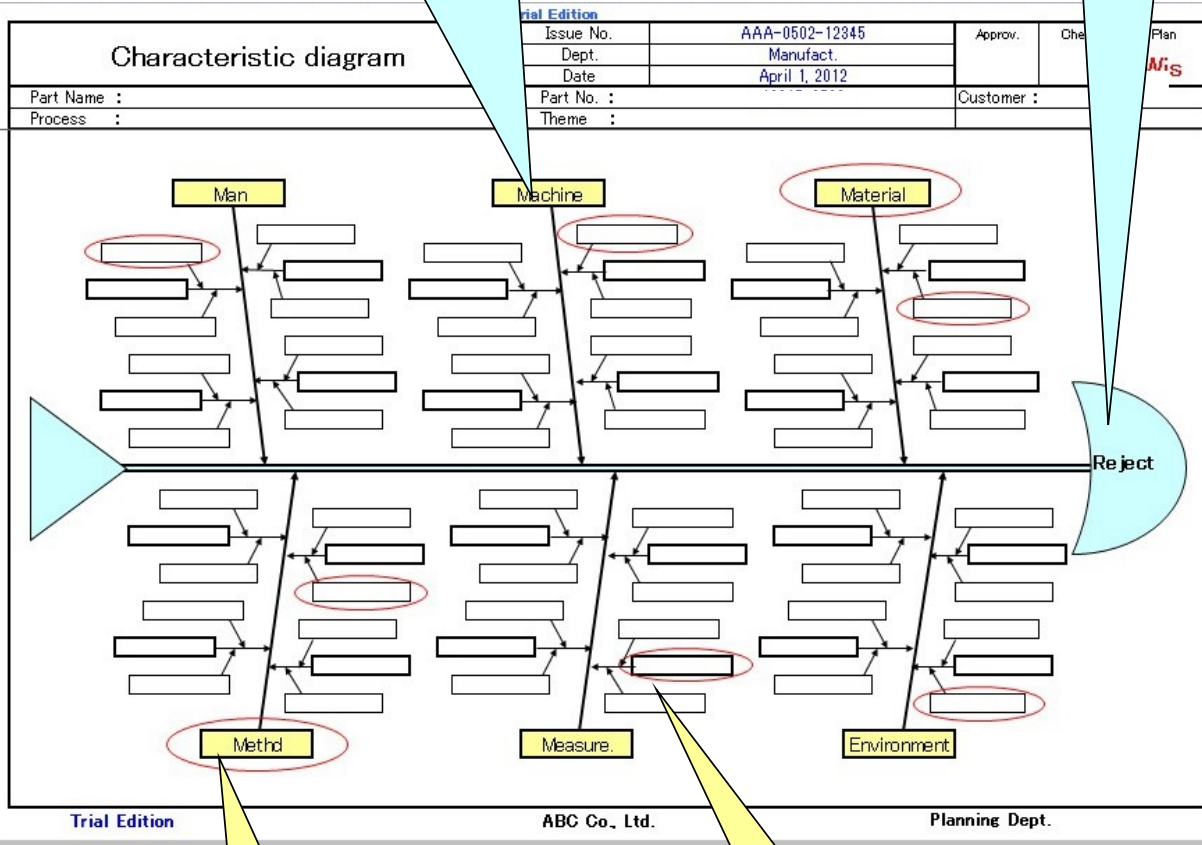
Pareto diagram :
Ex. : 10 items ----->5 items

Characteristic diagram

1) Input factor name. (yellow area)

Large bone is 5M (Man, Machine, Material, Method, Measurement), Environment and etc.

Specific problem name.



Circle especially important point.
(Auto shape func.)

Input Large, Middle, Small
bone.

Bar / Line graph

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

You can change Title name.

You can change Item name.

Graph	Issue No.	AAA-0502-12345		Approve.	Check
	Dept.	Manufact.			
	Date				
Theme: Defective money amounted			Custome		

	Result		Budget (Ceiling)		Memo
	Amount of money	Result Cumulative total	Budget Monthly	Budget Cumulative total	
1	65	65	60	60	
2	80	145	60	120	
3	46	191	60	180	
4	91	282	60	240	
5	75	357	60	300	
6	49	406	60	360	
7	79	485	60	420	
8	34	519	60	480	
9	44	563	60	540	
10	35	598	60	600	
11	75	673	60	660	
12	57	730	60	720	
Total	730.0	-	720.0	-	
Average	60.8	-	60.0	-	
Max.	91.0	-	60.0	-	
Min.	34.0	-	60.0	-	
Range	57.0	-	0.0	-	

The calculation cell is protected.
 (You can not input.)
 But, You can change figure, on protected

Monthly actual result in total
 (Blue line)

Monthly planned in total.
 (Red line)

This month

Menu

Print

Up

Rader graph

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

Ex.. Item name
 1 = Now
 2 = Kaizen 1
 3 = Kaizen 2

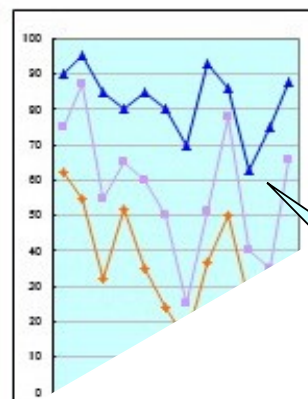
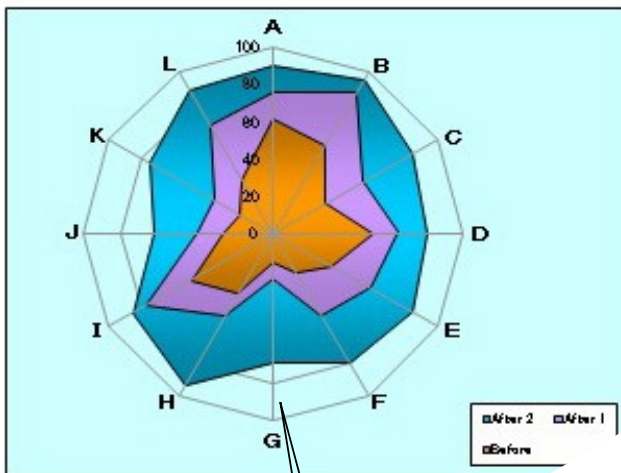
Trial Edition					
Rader Graph	Issue No.	AAA-0502-12345	Approv.	Check	Plan
	Dept.	Manufact.			
	Date				
Part Name :	Part No. :	12345-6789	Meas		
Process :	Lot No. :		Customer		
	Unit :				
Case	Before	After 1	After 2	Memo	
A	62	75	90		
B	55	87	95		
C	32	55	85		
D	52	65	80		
E	35	60	85		
F	24	50	80		
G	15	25	70		
H	37	51	93		
I	50	78	86		
J	26	40	63		
K	20	35	75		
L	33	66	88		
Total	441	687	990		
Average	36.8	57.3	82.5		

[Delete] the cell value of this row when the number of data items is less than 12.

Graph

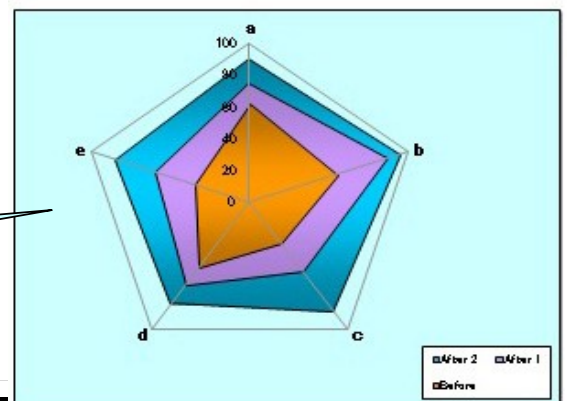
After Data input, click [**Graph**] key.

Draw line graph.



Comment :

Depending on the number of the data, a graph is drew.
 Ex. : 12-gon ----> pentagon



Check sheet

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key is error.)

Trial Edition

Check Sheet	Issue No.	AAA-0502-12345	Approv.	Check	PL
	Dept.	Manufact			Wis
	Date				
Part Name :	Part No.	12345-5789	Part No. :		
Process :	Lot No. :		Customer :		

[2012]

facto	Waggle	Band	Twist	Tilt	Sag	Rust	Spot	etc	Total
1 /4	5	10	1	3	6	1	8	12	46
2 5	2	8	0	2	3	3	4	10	32
3 6	3	11	2	4	6	2	7	9	44
4 7	2	6	1	5	3	3	6	10	36
5 8	6	7	1	3	5	6	8	13	49
6 9	7	5	3	6	8	6	5	8	48
7 10	8	4	7	7	4	5	7	7	47
8 11	6	6	2	7	4	3	9	11	48
9 12	8	7	1	2	3	2	7	10	40
10 1	5	9	1	4	5	4	8	9	45
11 2	5	6	2	6	5	3	7	8	42
12 3	4	7	2	5	7	4	6	11	46
Total	58	90	20	54	52	41	80	118	523
Average	4.8	7.5	1.7	4.5	5.2	3.4	6.7	9.8	43.6
Max	8.0	11.0	4.0	7.0	8.0	6.0	9.0	13.0	49.0
Min	2.0	5.0	0.0	2.0	3.0	1.0	4.0	7.0	32.0
Range	6.0	6.0	4.0	5.0	5.0	5.0	5.0	6.0	17.0

Transition graph of monthly (Horizontal total)

Graph

After Data input, click [Graph] Button

Transition graph of Item total. (Vertical total)

Legend display, According to Item.

- Waggle
- Band
- Twist
- Tilt
- Sag
- Rust
- Spot
- etc

Comment :

Trial Edition AB Planning Dept.

Input factor name.

Delete unnecessary Data & Item by [Delete] key.

Transition graph of monthly (Horizontal total)

Graph

After Data input, click [Graph] Button

Legend display, According to Item.

Transition graph of Item total. (Vertical total)

Scatter diagram

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
([Space] key error.)

Data A
(Ex. : before)

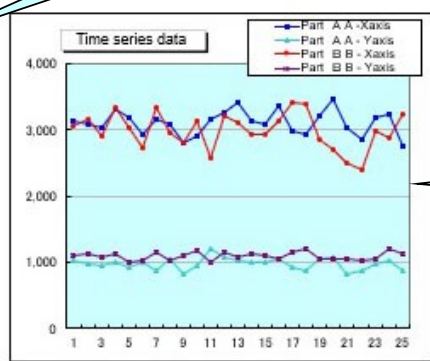
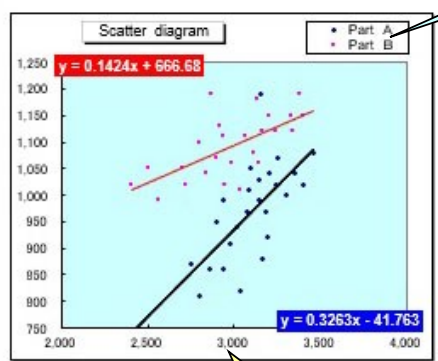
Data B
(Ex. : after)

Part A		Part B		Memo
A - X-axis	A - Y-axis	B - X-axis	B - Y-axis	
1	3,140	1,030	3,060	1,110
2	3,070	970	3,160	1,120
3	3,020	940	2,900	1,070
4	3,300	1,000	3,340	1,120
5	3,190	920	3,040	1,010
6	2,940	990	2,720	1,020
7	3,160	880	3,330	1,150
8	3,090	1,050	2,950	1,020
9	2,800	810	2,800	1,100
10	2,900	950	3,130	1,180
11	3,150	1,190	2,560	990
12	3,250	1,070	3,200	1,150
13	3,400	1,020	3,110	1,080
14	3,140	990	2,920	1,130
15	3,080	1,010	2,940	1,110
16	3,350	1,040	3,140	1,060
17	2,980	910	3,400	1,150
18	2,940	860	3,380	1,190
19	3,200	1,040	2,840	1,040
20	3,460	1,080	2,700	1,050
21	3,040	820	2,500	1,050
22	2,860	860	2,400	1,020
23	3,180	970	2,990	1,060
24	3,240	1,020	2,870	1,190
25	2,750	870	3,240	1,120
Average	3105	972	2985	1092
Max.	3460	1190	3400	1190
Min.	2750	810	2400	990
Range	710	380	1000	200
S. D.	180.8	90.4	272.1	59

Input part name, factor name, etc.

- Data Clear
- Yellow Clear
- Sample Data

Scatter diagram of two kind of data.
It can show the numerical formula.



Time series graph.

Set the point to make easy to see X-axis, Y-axis.

Histogram

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

Histogram A

Issue No. AAA-0502-12345		Approve.
Dept. Manufacture.		
Date		
Part Name:	Part No. :	Measure :
Process :	Lot No. :	Customer :

Data (n = 100)									
1	68	21	56	41	51	81	51	81	53
2	46	22	57	42	57	62	46	82	45
3	43	23	53	43	54	63	46	83	44
4	54	24	46	44	50	64	53	84	43
5	54	25	61	45	54	65	52	85	51
6	54	26	50	46	53	66	49	86	54
7	54	27	45	47	58	67	62	87	53
8	48	28	49	48	47	68	63	88	54
9	51	29	60	49	51	69	46	89	53
10	53	30	48	50	54	70	54	90	60
11	52	31	54	51	52	71	50	91	61
12	51	32	55	52	54	72	56	92	52
13	50	33	53	53	60	73	60	93	57
14	52	34	54	54	59	74	48	94	51
15	51	35	48	55	50	75	58	95	39
16	63	36	65	56	58	76	50	96	44
17	64	37	49	57	46	77	53	97	49
18	49	38	58	58	50	78	49	98	46
19	45	39	57	59	49	79	52	99	59
20	58	40	47	60	47	80	53	100	58

No.	Interval	Central value	Frequency
1	74.50 - 78.50	76.50	0
2	70.50 - 74.50	72.50	0

n	100
Average	52.52
Max.	68.00
Min.	39.00
Range	29.00
S.D.	5.20

* S.D = Standard Deviation

When the bottom value is set on standard, data value displays it with **Red** in the case of a standard loser.

You can choice two kinds of "Sample data".

You can set Max. and Min. to let you display it by Histogram and Time series graph.
 (The case without the numerical value is set automatically.)

Graph Setting
 Max. 75
 Min. 35

Graph

After Data input, click [Graph] button.

Set average line, an upper and bottom limit line by "Automatic shape function".

Time series graph.

\bar{x} - R Chart

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key.
 ([Space] key error.)

Input Item name, etc.

Trial Edition											
\bar{x} - R Chart		Issue No.	AAA-0502-1234			Approve.	Check	Plan	ner		
		Dept.	Manufacture.								
		Date									
Part Name :		Part No. :		12345-6789			Measure				
Process :		Lot No. :		Customer							
Unit : mm											
No.	Item	Data					Average	Max	Min.	Range	Memo
		1	2	3	4	5	\bar{x}				
1	1-May	30.0	32.0	35.0	8.0	37.0	28.4	37.0	8.0	29.0	
2	2-May	23.0	27.0	30.0	9.0	12.0	20.2	30.0	9.0	21.0	
3	3-May	35.0	41.0	8.0	29.0	32.0	29.0	41.0	8.0	33.0	
4	4-May	32.0	34.0	17.0	23.0	24.0	25.0	34.0	17.0	17.0	
5	5-May	29.0	42.0	34.0	23.0	20.0	29.6	42.0	20.0	22.0	
6	6-May	29.0	28.0	15.0	20.0	4.0	19.7	29.0	4.0	25.0	
7	7-May	34.0	13.0	37.0	38.0	35.0	33.0	38.0	13.0	25.0	
8	8-May	17.0	9.0	45.0	26.0	32.0	26.0	45.0	9.0	36.0	
9	9-May	44.0	17.0	21.0	32.0	28.0	28.0	44.0	17.0	27.0	
10	10-May	28.0	24.0	37.0	35.0	9.0	26.6	37.0	9.0	28.0	
11	11-May	22.0	39.0	21.0	49.0	49.0	36.0	49.0	21.0	28.0	
12	12-May	25.0	28.0	20.0	12.0	17.0	20.4	28.0	12.0	16.0	
13	13-May	19.0	44.0	29.0	38.0	28.0	31.2	44.0	19.0	25.0	
14	14-May	51.0	24.0	29.0	19.0	25.0	29.6	51.0	19.0	32.0	
15	15-May	18.0	31.0	26.0	12.0	39.0	25.2	39.0	12.0	27.0	
16	16-May	19.0	41.0	28.0	37.0	25.0	30.0	41.0	19.0	22.0	
17	17-May	19.0	22.0	29.0	21.0	28.0	23.8	29.0	19.0	10.0	
18	18-May	11.0	34.0	44.0	16.0	19.0	24.8	44.0	11.0	33.0	
19	19-May	27.0	29.0	35.0	9.0	34.0	26.8	35.0	9.0	26.0	
20	20-May	16.0	37.0	47.0	21.0	22.0	28.6	47.0	16.0	31.0	
21	21-May	17.0	29.0	32.0	41.0	44.0	32.6	44.0	17.0	27.0	
22	22-May	31.0	34.0	22.0	28.0	16.0	26.2	34.0	16.0	18.0	
23	23-May	41.0	8.0	8.0	13.0	16.0	17.2	41.0	8.0	33.0	
24	24-May	35.0	26.0	56.0	39.0	26.0	36.4	56.0	26.0	30.0	
25	25-May	22.0	9.0	33.0	42.0	25.0	26.2	42.0	9.0	33.0	
Average							27.2	*	*	26.2	

\bar{x} Chart	$UCL = \bar{x} + A_2 \bar{R}$	42.278
	$LCL = \bar{x} - A_2 \bar{R}$	12.090
R Chart	$UCL = D_4 \bar{R}$	55.328

n	5
A2	0.577
D4	2.115

Menu

Data Clear

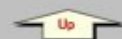
Yellow Clear

Sample Data

Print

5

Set the number of data.
 (n = 2~5)
 (Coefficient is changed)



p - Chart

1) Input the data. (yellow area)

* When you want to clear the readings of the cell, use [Delete] key. ([Space] key error.)

Input Item name, etc.

Trial Edition

p Chart (n = Variable)		Issue No.	AAA-0502-12345	Approve.	Check	Plan
		Dept.	Manufacture			Planner
		Date				
Part Name :		Part No. :	12345-6789	Measure :		
Process :		Lot No. :		Customer :		

Unit :

No.	Item	Sample size n	Number of defectives p n	Fraction defective p	Control limit		Memo
					UCL	LCL	
1	1-May	345	8	2.319	2.975	-0.568	
2	2-May	758	6	0.792	2.400	0.018	
3	3-May	287	7	2.622	3.216	-0.797	
4	4-May	807	9	1.115	2.354	0.055	
5	5-May	628	10	1.592	2.517	-0.099	
6	6-May	936	11	1.175	2.281	0.138	
7	7-May	682	4	0.587	2.485	-0.046	
8	8-May	297	6	2.020	3.112	-0.693	
9	9-May	365	2	0.548	2.926	-0.507	
10	10-May	874	9	1.030	2.318	0.100	
11	11-May	769	8	1.040	2.392	0.027	
12	12-May	467	8	1.713	2.727	-0.308	
13	13-May	324	9	2.778	3.031	-0.612	
14	14-May	855	7	0.819	2.331	0.088	
15	15-May	629	8	1.272	2.517	-0.098	
16	16-May	376	2	0.532	2.900	-0.482	
17	17-May	183	6	3.279	3.633	-1.215	
18	18-May	990	7	0.707	2.251	0.167	
19	19-May	950	10	1.053	2.273	0.145	
20	20-May	348	5	1.437	2.967	-0.548	
21	21-May	661	8	1.210	2.485	-0.066	
22	22-May	472	6	1.271	2.719	-0.300	
23	23-May	845	7	0.828	2.337	0.081	
24	24-May	468	8	1.709	2.725	-0.306	
25	25-May	423	7	1.655	2.804	-0.385	
Average		588.8	7.1	0.712	*	*	

p chart

$$UCL = \bar{p} + 3\sqrt{\bar{p}(1-\bar{p})/n}$$

$$LCL = \bar{p} - 3\sqrt{\bar{p}(1-\bar{p})/n}$$

p chart

Trial Edition
ABC Co., Ltd.
Planning Dept.

Menu

Data Clear

Yellow Clear

Sample Data

Print

Up

Light blue area shows " UCL - LCL ".

Graph :
Drew automatically by data

Consideration

Trial Edition

Consideration	Issue No.	AAA-0502-12345	Approve.	Check	Plan
	Dept.	Manufacture.			Planner
	Date				
Part Name :	Part No. :	12345-8789	Measure :		
Process :	Lot No. :		Custom :		

Menu

Print

A large text area with a red border and horizontal dotted lines for writing. A small green box is present at the top left of this area.

Use it for the entry such as the consideration of data, the summary of the findings.

Trial Edition

ABC Co., Ltd.

Planning Dept.

