

Rate Anly

RATE ANALYSIS OF CONSTRUCTION ITEMS

Rate-Anly is advanced **Windows** based Rate Analysis software for Construction Applications. The software is designed such that the User can define the analysis of any item for deriving the Item Rates, in terms of Materials, Machinery, Labours and Overheads involved. New rates of these items can be worked out easily by changing the rates of materials and labours based on current market rates.

It is useful for Consultants, Contractors, Architects and Builders for preparing the Rate Analysis of items like Concrete, Brickwork, Plaster etc. Rate analysis of various type of projects like, Buildings, Roads, Bridges, Tunnels, Railways can be prepared. Estimates and Cost Abstracts can be prepared easily, by entering the BOQ quantities of the project. Program will automatically work out Material Take Off, Material Cost and Labour Cost involved in project, using the same rate analysis constants.

Why RATE-ONLY ?

The use of MS-Excel like Spreadsheets is a widely accepted practice for doing the rate analysis. This method involves writing the formulas, in terms of CELL Nos (like A1, B1). Formulae are hidden inside CELLS and are not visible. One has to click of cells to see the Formulas. They are not easily understandable by one who has not created that sheet. Generating Report Summary is a tedious work of Linking of cells and sheets. All this hassle is eliminated with the use of RATE-ONLY software. The software is menu driven and easy to use.

Methodology

List of Items involved in the project is first created. Program has a facility of defining Item Code, Short description (255 char) and 2024 char Long description for each Item.

Rate analysis of an Item is defined in terms of 4 parts namely, Material, Labour, Machinery and Overheads.

There are no limitations on number of items or even materials which can be entered. The rate analysis of various types of projects is supplied along with the software as a sample data.

Multiple **Units** for a single material can be defined. E.g. **Cement** is purchased in terms of **bags** unit, but consumed in **kg, ft3, mt3** unit and can be used in the rate analysis. Similarly **Aluminum** is purchased in **kg** units, but consumed in terms of **running feet**.

Labour Cost can be entered in terms of wages of mason, carpenters etc. per day basis. Optionally **Labour cost** can also be entered in terms of item units i.e mt^2 , mt^3 , ... etc.

RATE ANALYSIS : Mumbai Site

Reinforced Concrete Works

Item of Work : RCC-M20 Rate Analysis for : 10.000 cu.mt
Description : RCC M20 (1:1.5:3) concrete in Ordinary Works

Sr.	Description	Qty	Unit	Rate	Amount
** Material **					
1.	43 grade opc cement i/c 2.5% wastage	80.566	bags	240.00	19335.84
2.	River sand i/c 20% wastage	5.060	cu.mt	1230.00	6223.80
3.	Metal-1 of size 10mm	4.430	cu.mt	795.00	3521.85
4.	Metal no 1 of size 20mm i/c 5% wastage	4.430	cu.mt	775.00	3433.25
5.	Water for mixing & curing	3.550	cu.mt	35.00	124.25
Total of Material [M] : Rs.					32638.99
** Machinery **					
1.	Cost of Concrete mixer.All inclusive Hiring Charges	0.800	days	250.00	200.00
2.	Cost of concrete vibrator.All inclusive Hiring Charges	0.800	days	100.00	80.00
Total of Machinery [H] : Rs.					280.00
** Labour **					
1.	Foreman	1.250	days	170.00	212.50
2.	Mason concreting works	1.500	days	106.00	159.00
3.	Male Mazdoor	9.000	days	140.00	1260.00
4.	Female Mazdoor	12.000	days	120.00	1440.00
5.	Waterman	1.500	days	110.00	165.00
6.	Labour.Add	1.750	days	150.00	262.50
Total of Labour [L] : Rs.					3499.00
Add For Sales Tax On Material : 0.00 % [S] : Rs.					0.00
Total[M+H+L+S] = Rs.					36417.99
** Overheads **					
Add ComonOH @ 9.50 % of [M+H+L+S]is [A] : Rs.					3459.70
Add Supervision @ 2.50 % of [M+H+L+S+A]is [B] : Rs.					450.67
Add Profit @ 10.00 % of [M+H+L+S+A+B]is [C] : Rs.					4032.84
Grand Total Cost for 10.000 cu.mt: Rs.					44361.20
.'. Unit Cost per cu.mt is : Rs.					4436.00

Sample List of Materials, Machinery, Labour is shown below:

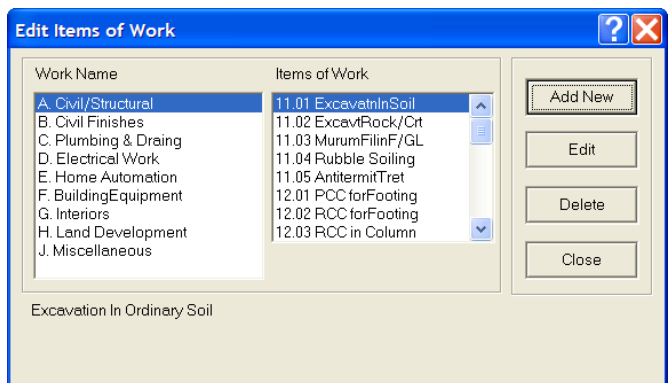
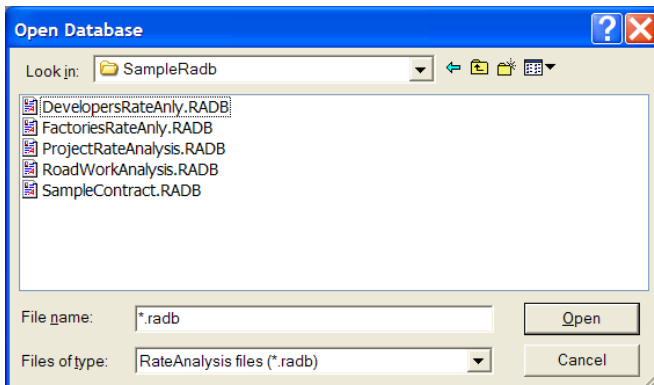
MATERIAL LIST				
Sr. No.	Material Code	Material Description	Rate at Site (per unit)	
1.	Bricks	Traditional Bricks(9"x4.5"x3")	nos.	1.40
2.	Bl.s. Fuse	Nominal size i/c 5% wastage	nos.	25.00
3.	Bl.s. Powder	Blasting Fuse/Detonators	kg	50.00
4.	Cement	Blasting Powder		
5.	Filler Mat	43 grade opc cement i/c 2.5% wastage	bags	240.00
6.	Glass	Filler Materials	cu.mt	155.00
7.	Metal -1	Glass	sq.mt	100.00
8.	Metal -2	Metal -1 of size 10mm	cu.mt	795.00
9.	Metal -4	Metal no 1 of size 20mm i/c 5% wastage	cu.mt	775.00
10.	Rubble	Metal no 4 of size 40mm i/c 5% Wastage	cu.mt	97.00
11.	Sand	6" thk Rubbles for Soling	cu.mt	205.00
12.	Water	River sand i/c 20% wastage	cu.mt	1230.00
		Water for mixing & curing	cu.mt	35.00

MACHINERY LIST				
Sr. No.	Machinery Code	Machinery Description	Rate at Site (per unit)	
1.	Concrete mixer	Cost of Concrete mixer. All inc Lusive Hiring Charges	days	250.00
2.	Concrete Vibrator	Cost of concrete vibrator. All inclusive Hiring Charges	days	100.00
3.	Machin-1	Mass excavation by machine and getting out upto 15m	hours	56.25
4.	Machin-2	Excavation in rock by pneumatic Tools	hours	200.00
5.	Vehicle	Disposal of mass excavation for each KM or part thereof	hours	37.50

LABOUR LIST				
Sr. No.	Labour Code	Labour Description	Rate at Site (per unit)	
1.	Blaster	Licensed Blastman	days	150.00
2.	Breaker	Breaker	days	0.00
3.	Compactor.	Compactor.	days	80.00
4.	Driver	Driver	days	0.00
5.	Excavator	Excavator	days	120.00
6.	F. Mazdoor	Female Mazdoor	days	120.00
7.	Foreman	Foreman	days	170.00
8.	Labour. Add	Labour. Add	days	150.00
9.	M. Mazdoor	Male Mazdoor	days	140.00
10.	Mason-1	Mason concreting works	days	106.00
11.	Mason-2	Mason for BK-masonry works	days	200.00
12.	Mixer Oper.	Mixer Operator	days	100.00
13.	Waterman	Waterman	days	110.00

Multiple Databases

Master data for various types of projects is stored in separate .RADB database files. Data of one project is then copied and modified for each new project. List of Items, Materials etc. can also be modified easily.



Program works out the quantities of materials, labours and its cost by entering project BOQ

MATERIAL TAKEOFF for Item BOQ Quantities

Sr. No.	Item of Work	Description	Qty	Basic Unit	Rate	Amount
1.	Excavation	Excavation in Ordinary Soil	500.000	cu. mt	130.13	65064.00
2.	PCC M10	P.C.C. 1:3:6 in foundation / leveling course	40.000	cu. mt	3204.09	128160.00
3.	RCC M20	Rcc M20 (1:1.5:3) concrete in Ordinary Works	200.000	cu. mt	4436.00	887200.00
4.	Masonry	MBK/ VOL-1	100.000	cu. mt	1695.00	169500.00
Total of Items :						1249959.00

MATERIAL CONSUMPTION for Above Items Quantity

Sr. No.	Material Code	Material Description	Qty	Basic unit	Rate	Amount
1.	Cement	43 grade opc cement i/c 2.5% wastage	1918.000	bags	240.00	460320.00
2.	Sand	River sand i/c 20% wastage	155.000	cu. mt	1230.00	190650.00
3.	Metal -2	metal no 1 of size 20mm i/c 5% wastage	106.000	cu. mt	775.00	82150.00
4.	Metal -4	Metal no 4 of size 40mm i/c 5% wastage	18.000	cu. mt	5.37	97.00
5.	Water	Water for mixing & curing	121.000	cu. mt	35.00	4235.00
6.	Metal -1	Metal no 1 of size 10mm i/c 5% wastage	88.000	cu. mt	795.00	69960.00
7.	BK-Trad.	Traditional Bricks	50000.000	nos.	1.40	70000.00
8.	Misc. Wk	Miscellaneous Works	88.000		795.00	69960.00
Material Total :						947372.00

MACHINERY CONSUMPTION for Above Items Quantity

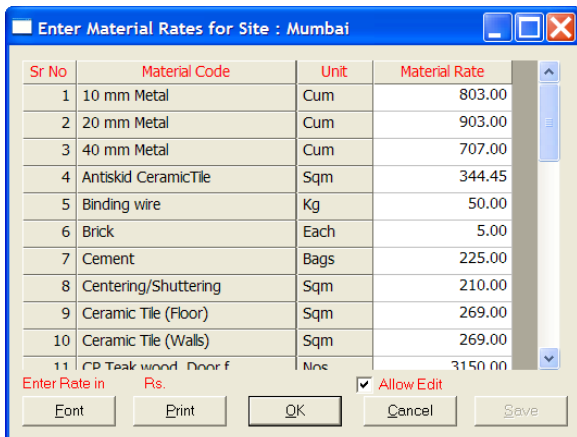
Sr. No.	Machinery Code	Machinery Description	Qty	Basic unit	Rate	Amount
1.	Concrete mixer	Cost of Concrete mixer. All inclusive Hiring Charges	18.000	days	250.00	4500.00
2.	Concrete Vibrator	Cost of concrete vibrator. All inclusive Hiring Charges	18.000	days	100.00	1800.00
Machinery Total :						6300.00

LABOUR CONSUMPTION for Above Items Quantity

Sr. No.	Labour Code	Labour Description	Qty	Basic Unit	Rate	Amount
1.	F. Mazdoor	Female Mazdoor	535.300	days	120.00	64236.00
2.	Foreman	Foreman	89.000	days	170.00	15130.00
3.	Labour. Add	Labour. Add	50.600	days	150.00	7590.00
4.	M. Mazdoor	Male Mazdoor	398.000	days	140.00	55720.00
5.	Mason-1	Mason concreting works	34.000	days	106.00	3604.00
6.	Waterman	Waterman	59.000	days	110.00	6490.00
7.	Mason-2	Mason for BK-masonry works	83.300	days	200.00	16660.00
Labour Total :						169430.00

Multiple Sites

Program can store the rates of materials and labours separately for different sites of works, so that the separate item rates are calculated for each site.



The greatest advantage of this software is that the rates of all the items are calculated automatically, by changing the Material or Labour rates only at one place.

All the above features of **Standard Edition** of software are easy to use and so special training is required.

For more details, Get in touch with us **Today !**

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