

# VHStation™

VHStation™1.0 is a unique automatic steel reinforcement taking-off system that requires no manual input of drawing data. Measurement of reinforcement is the most time consuming step during the quantity surveying process. Usually it takes an average of 4 to 5 months for a skillful surveyor to finish a single project.

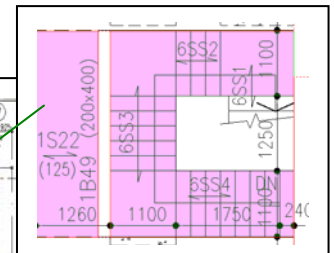
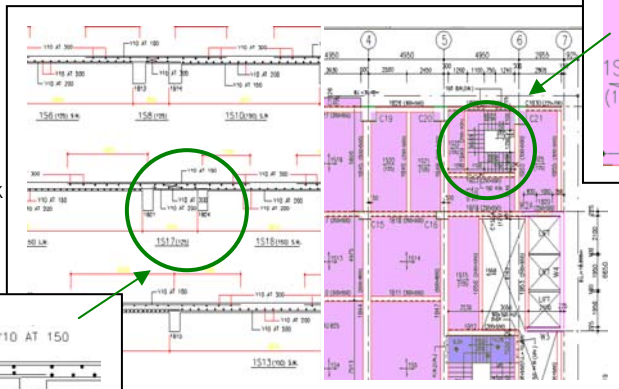
VHStation™1.0 uses Framing Plans and Reinforcement Details in DXF/DWG formats as its input, recognizes those drawing plans using Artificial Intelligence, and produces accurate Bending Schedules and Sub-summaries in Microsoft® Excel format, shortening the whole taking off process to less than 30 minutes per drawing, a whole 30 times faster than the manual approach.

VHStation™1.0 has a series of checking and verification tools to ensure the final accuracy. All the results are traceable to the authenticated source. It is a highly reliable and efficient tool for steel reinforcement taking off in construction industry.

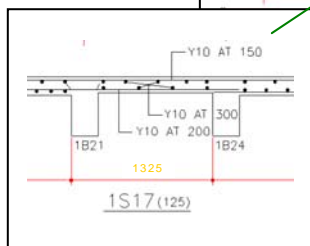
Features	Benefits
Quick data extraction using Artificial Intelligence technology	Time for data extraction from Framing Plan and Reinforcement Details can be shortened from 6 months to a few hours.
Customized algorithms for calculation of steel reinforcement taking off	Proficiency in processing thousand of data calculations. The calculation is fully automatic and reduces human errors. Reduce reinforcement wastage to a minimum.
Efficiency in error checking	The uncertain data in the data extraction process can be easily located and identified. Mistakes can be rectified interactively. Potential drawing errors, confusion and discrepancies can be discovered before project commencement.
Complies with DWG / DXF format (produced by VHCAD and AutoCAD® R13, R14 and 2000) for input and Microsoft® Excel format for output report	Reports can be generated according to drawings files, elements or steel categories etc. The report can be exported to other software for further processing.

Runs on Windows® 95/98/2000 and NT platforms

VH Framing™ analyzes the Framing plan, recognizes each element such as Column, Beam, Staircase, Wall, Slab, etc. on each floor, and understands the whole construction framework through their layouts and dimensions.



VHDetails™ analyzes the Reinforcement Details, determines the shape, characteristics and length calculation method of the steel bar by recognizing steel bars through indication of lines, legends, bar marks and dimension lines.



Finally, combines and processes the results generated by VH Framing™ and VHDetails™. It checks and validates the data and calculates the quantities of steel reinforcement by using predetermined algorithms. Bending schedule reports can be generated by drawings, elements or categories correspondently. Various queries to the steel information are also available.

	A	B	C	D	E	F	G	H
1	Bending Schedule of Steel Rod Reinforcement							
2								
3	Mong Kok							
4			Column	Wall	Beam	Slab		Staircase
5								
6	Minutes	Location	Floor	Bar Mark	Type	Size	No of Minutes	No of Each
7	CL2 (Ground - Level 1)	COLUMN	Ground	NULL	R	16	1	8
8	CL2 (Ground - Level 1)	COLUMN	Ground	NULL	R	16	1	8
9	CL2 (Ground - Level 1)	COLUMN	Ground	NULL	R	16	1	8
10	CL2 (Ground - Level 1)	COLUMN	Ground	NULL	Y	25	1	16
11								
12	W5 (Ground TO Level 1)	WALL	Ground	NULL	Y	25	1	30
13	W5 (Ground TO Level 1)	WALL	Ground	NULL	Y	25	1	4
14	W5 (Ground TO Level 1)	WALL	Ground	NULL	Y	10	1	16
15	W5 (Ground TO Level 1)	WALL	Ground	NULL	Y	10	1	16
16								
17	SL2 (Level 1) 1B18 1B7	SLAB	Level 1	NULL	Y	10	1	16