

# EN Concrete Compression Machines

## Related Standards: EN12390-3 & 4

VJ Tech compression machines are manufactured to strict quality control systems and EN standards to ensure reliability. All frames are of heavy duty welded steel construction and supplied as standard with a rapid approach pump. The machine, together with the digital readout unit is works calibrated and supplied with certificates. The integral load pacer, together with a large LED error band display, enables the operator to maintain accurate pace control in Manual mode, if Automatic control is not required.

The optional distance pieces are 205 mm in diameter and are designed to reduce the clearance of the upper platen to the top surface of the specimen.

The VJ Tech range of concrete compression machines may also be used for strength testing rock samples in Hoek Cells.

**Note: The VJT51-xxx range of Concrete Compression Machines & Accessories replaces the VJT6000 series**

## Features

- EN stability tested
- Unattended operation
- Automatic control of load at selected pace rate
- User programmable rapid approach start/stop conditions
- Automatic stop on sample failure
- Capable of testing both cubes and cylinders (multiple preset or User defined dimensions)
- Welded steel frame construction
- Rapid approach pump as standard
- Perspex safety door
- Upper and lower platens are tested for hardness, flatness and surface texture
- Self-aligning ball seat
- Large graphics LED display (75 x 125mm)
- Built-in speed control pot for manual use if required
- Low noise stepper motor controlled hydraulic power pack
- Vertical clearance to allow both cubes and cylinders
- Memory storage for up to 150 results
- RS232 serial port for computer or printer



VJT51-2011 - 2000kN Automatic Concrete Machine (Autocon)



VJT51-2011 - 2000kN Autocon Front Panel

## Ordering Information

Model Number	VJT51-2011	VJT51-3011
Capacity	2000 kN	3000 kN

## Specification

Capacity	2000 kN	3000 kN
Low Range	0 – 400 x 0.1kN	0 – 400 x 0.1kN
High Range	400 – 2000 x 1kN	400 – 3000 x 1kN
Flexural Range	0 – 100 x 0.01kN	0 – 100 x 0.01kN
Maximum Vertical Clearance	350 mm	350 mm
Piston diameter	250 mm	300 mm
Maximum piston movement	50 mm	50 mm
Power	240V 50 Hz 1ph	240V 50 Hz 1ph
Dimensions (W x L x H) mm	940 x 500 x 970	1000 x 540 x 1050
Weight	770 kg	1070 kg

## Accessories

VJT51-0032	Distance Piece 205 mm Dia. x 30 mm high
VJT51-0052	Distance Piece 205 mm Dia. x 50 mm high
VJT51-0092	Distance Piece 205 mm Dia. x 90 mm high

# Clisp Studio – csCON Software

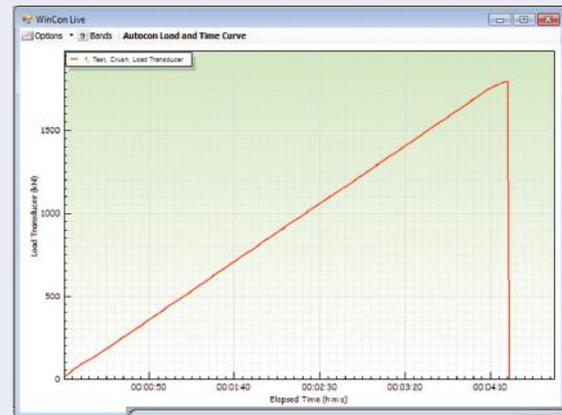
The VJ Tech Clisp Studio User friendly Concrete Software module enables you to perform concrete compression tests to evaluate the strength of concrete. The software is used with both the VJ Tech EN or ASTM Automatic Compression machines (available for 2000kN & 3000kN).

## Features

- Automatic test control
- Switchable between a number of different languages
- Easy test setup using wizard style Assistant
- User configurable data logging
- Customisable System Units
- Live View of Test, Instrument and Transducer Status
- Live Autocon Test Data View (Load Transducer, Current Setpoint, Stress)
- Live graphical display of Autocon Load and Time Curve (Elapsed Time vs Load Transducer)
- Live tabular display of logged and calculated data (Elapsed Time, Load Transducer)
- Final Test Results Display (Peak Measured Load & Maximum Stress)
- User configurable views, graphs and tables (customisable from Input, Measured and Result data)
- Data Export to Excel
- Entire Test export and import using scripts
- Predefined summary presentation report
- Customised presentation reports on request
- Tests can be set up and run on an individual client and job basis with a dummy borehole and sample
- E-mail Test Status if requested

## Ordering Information

**VJT-csCON** Clisp Studio Concrete Testing Software



Autocon Test Data		
Load Transducer	kN <sub>IP</sub>	<b>1248</b> (kN)
Current Setpoint	T <sub>i</sub>	<b>890</b> (kN)
Stress	σ	<b>55.43</b> (MPa)

Autocon Test Logged Data				
	Elapsed Time h:m:s	Load Transducer kN (kN)	Error high band T (kN)	Error low band T (kN)
1	00:00:00	11.3	4	4
2	00:00:10	89.4	59	45
3	00:00:20	147.6	114	94
4	00:00:30	218.0	169	139
5	00:00:40	287.9	224	184
6	00:00:50	358.2	279	229
7	00:01:00	429	334	274
8	00:01:10	497	389	319
9	00:01:20	569	444	364
10	00:01:30	638	499	409
11	00:01:40	708	554	454
12	00:01:50	778	609	499
13	00:02:00	849	664	544
14	00:02:10	918	719	589
15	00:02:20	988	774	634
16	00:02:30	1059	829	679
17	00:02:40	1128	884	724
18	00:02:50	1198	939	769
19	00:03:00	1269	994	814
20	00:03:10	1337	1049	859
21	00:03:20	1408	1104	904

Automated Concrete Tests			
<b>Cube or Cylinder Crushing</b>			
Serial Details			
Depth			1
Description			
Type	Default		
Initial Area	A <sub>0</sub>	(mm <sup>2</sup> )	333.00
Initial Volume	V <sub>0</sub>	(mm <sup>3</sup> )	3335.00
Specimen Weight	W <sub>0</sub>	(N)	1493.0
Initial Density	ρ <sub>0</sub>	(kN/m <sup>3</sup> )	0.43
Base Level	h <sub>0</sub>	(mm)	4
Place Rate	R <sub>0</sub>	(mm)	0
Final Conditions			
Peak Measured Load	N <sub>max</sub>	(kN)	1248
MaxStress	P <sub>max</sub>	(MPa)	55.43
Notes			
		Test Method	ICISIP Procedures
		Test Name	Concrete Sample 22
		Site Reference	(*Delete according to the procedure used)
		Database	:\SQL\EXPRESS\13970\Sujl
		Client	Cavesham Heights Hotel
		Test Date	20/03/2014
		Operator	Taylor Woodrow
		Sample	Concrete
		Borehole	BT
		Checked	Approved

Final Test Results		
Peak Measured Load	N <sub>max</sub>	<b>1248.0</b> (kN)
MaxStress	P <sub>max</sub>	<b>55.43</b> (MPa)