

**1. Machine specification:**

SPECIFICATION:	UNIT	VH-4237AH	VH-5237AH	VH-6237AH	VH-8237AH	VH-4242AH	VH-5242AH	VH-6242AH	VH-8242AH
TRAVEL									
Longitudinal travel (X axis)	mm	4200	5200	6200	8200	4200	5200	6200	8200
Cross travel (Y axis)	mm	3700	3700	3700	3700	4200	4200	4200	4200
Vertical travel (Z axis)	mm	1000	1000	1000	1000	1000	1000	1000	1000
Distance from spindle end to table	mm	250-1250	250-1250	250-1250	250-1250	250-1250	250-1250	250-1250	250-1250
Distance from spindle center to column	mm	455	455	455	455	455	455	455	455
Distance between columns	mm	3000	3000	3000	3000	3500	3500	3500	3500
TABLE									
Working surface	mm	4000x2600	5000x2600	6000x2600	8000x2600	4000x3000	5000x3000	6000x3000	8000x3000
T-slot(Size x Number x Pitch)	mm	28x13x200	28x13x200	28x13x200	28x13x200	28x15x200	28x15x200	28x15x200	28x15x200
Max. table load	kg	20,000	24,000	28,000	32,000	24,000	28,000	32,000	36,000
SPINDLE									
Spindle drive motor (Fanuc/Meldas)	kw	22/26	22/26	22/26	22/26	22/26	22/26	22/26	22/26
Spindle speed (Gear)	rpm	50~4200/6000	50~4200/6000	50~4200/6000	50~4200/6000	50~4200/6000	50~4200/6000	50~4200/6000	50~4200/6000
Spindle nose taper		ISO50	ISO50	ISO50	ISO50	ISO50	ISO50	ISO50	ISO50
FEED									
Cutting feedrate	mm/min	1-7000	1-7000	1-7000	1-7000	1-7000	1-7000	1-7000	1-7000



Rapid traverse	m/min	XY10, Z:12	XY:10,Z:12	X:8,Y:10 Z:12	X:8,Y:10 Z:12	XY:10,Z:12	XY:10,Z:12	X:8,Y:10 Z:12	X:8,Y:10 Z:12
X , Y , Z power capacity	Kw	X:9,Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5	X:9, Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5	X:9,Y:4.5,Z:3.5
ACCURACY									
Positioning accuracy	mm	±0.005/300 /±0.015 Full travel							
	mm	P0.045	P0.045	P0.045	P0.045	P0.045	P0.045	P0.045	P0.045
Repeatability accuracy	mm	±0.003	±0.003	±0.003	±0.003	±0.003	±0.003	±0.003	±0.003
	mm	Ps0.028	Ps0.028	Ps0.035	Ps0.035	Ps0.028	Ps0.028	Ps0.035	Ps0.035
ATC									
Tool storage capacity	pcs	60/90	60/90	60/90	60/90	60/90	60/90	60/90	60/90
Max tool weight	kg	18	18	18	18	18	18	18	18
Tool size (full tools)	mm	φ 125x450L	φ 125x450L	φ 125x450L	φ 125x450L	φ 125x450L	φ 125x450L	φ 125x450L	φ 125x450L
Tool size (next pocket empty)	mm	φ 215x450L	φ 215x450L	φ 215x450L	φ 215x450L	φ 215x450L	φ 215x450L	φ 215x450L	φ 215x450L
Tool shank		BT/CAT	BT/CAT	BT/CAT	BT/CAT	BT/CAT	BT/CAT	BT/CAT	BT/CAT
Pull stud bolt		P50T-1	P50T-1	P50T-1	P50T-1	P50T-1	P50T-1	P50T-1	P50T-1
OTHERS									
Electric power consumption	KVA	65	65	65	65	65	65	65	65
Machine net weight	kg	52000	60000	68000	76000	56000	64000	72000	80000
Machine gross weight	kg	59000	68000	77000	86000	62000	71000	80000	90000
Floor space (LxWxH)	cm	1200x870x500	1400x870x500	1600x870x500	1850x870x500	1200x870x500	1400x870x500	1600x870x500	1850x870x500



2. AHC(Auto Head Change) Specification:

a. 90 degree angular head:

Spindle nose taper		BT50/CAT50
Spindle speed	RPM	40-3,500.
The distance between spindle center line to table	mm	0~975
The distance between spindle nose to vertical spindle center line	mm	209
Min. indexing degree	degree	15
Positioning accuracy	sec	+/-3
Max. allowable power	kw(HP)	26(35)
Tool change		Automation

3. Accessories List

A. Standard accessories:

- | | |
|--|--|
| 1. Auto power off | 2. Auto lubrication equipment |
| 3. Semi-splash guard | 4. Work-lamp |
| 5. Air blast through spindle | 6. Leveling blots & blocks |
| 7. Tool box | 8. Operation manual & electric drawing |
| 9. RS-232 interface | 10. Cutting coolant unit |
| 11. Heat exchanger in control box | 12. Remote manual pulse generator |
| 13. Screw type & link type chip conveyor | 14. Spindle cooling system |
| 15. Coolant gum | 15. Transformer |

B. Optional accessories:

- | | |
|--|--|
| 1. Coolant through tool holder interface | 2. Closed-loop linear scale positioning system |
| 3. Oil skimmer system | 4. Mist coolant system |
| 5. Rotary table | 6. Adding 4 TH interface |
| 7. Automatic tool length measure system | 8. Automatic coordinate measure system |



4.Spindle torque & horse power diagram

A.FANUC I series:

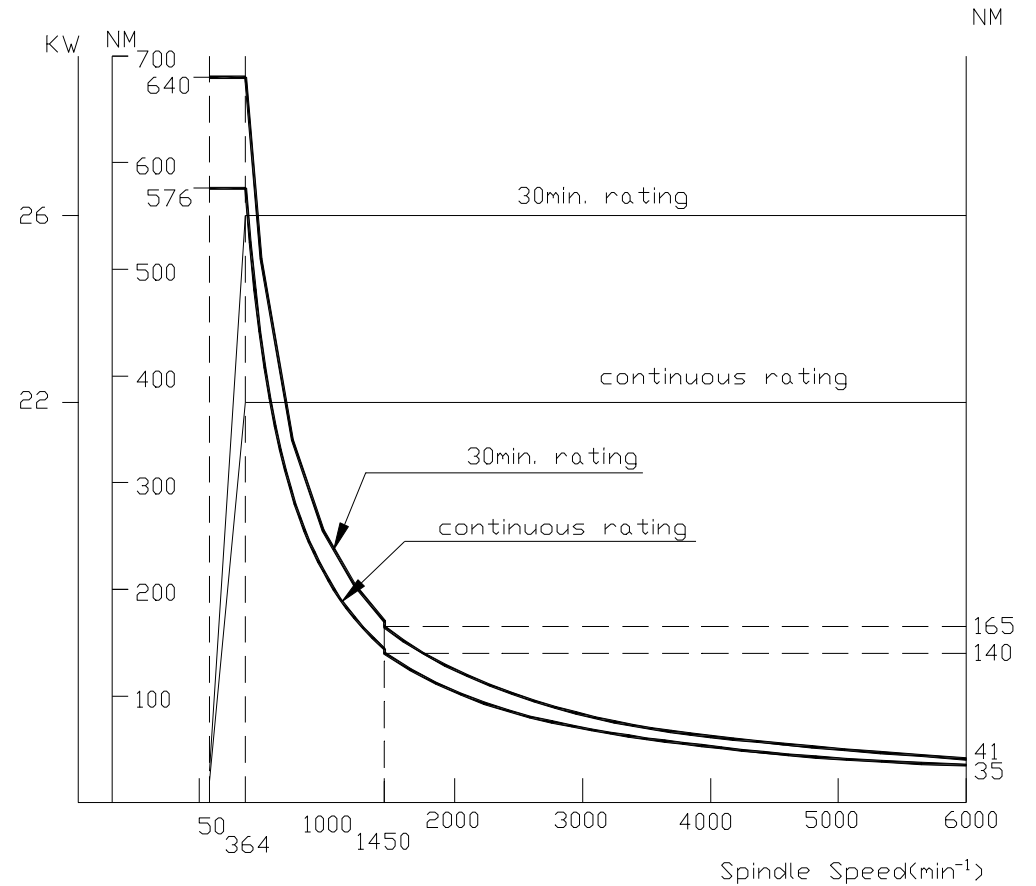
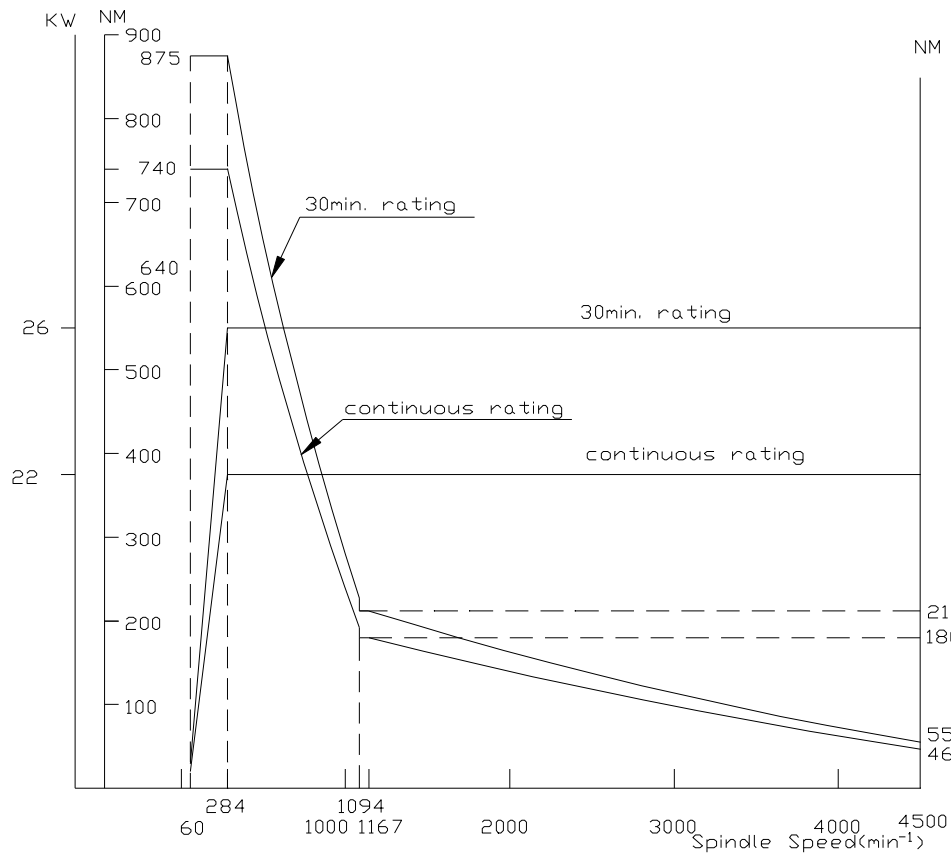
Spindle speed:4200rpm

Spindle power:22/26KW(CON./30 MIN)

Spindle speed:6000rpm

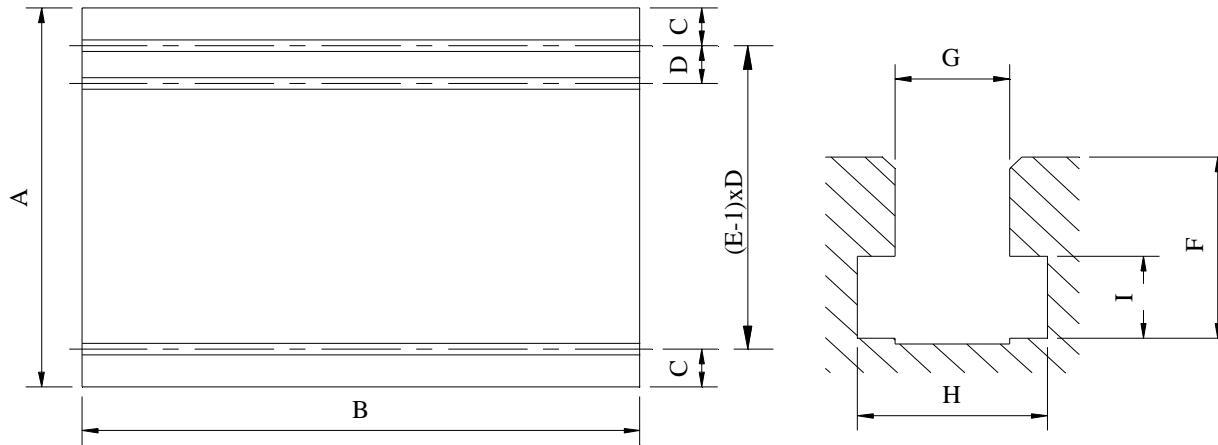
Spindle power:22/26KW(CON./30 MIN)

Spindle torque/power diagrams





5. Table and T-slot dimension

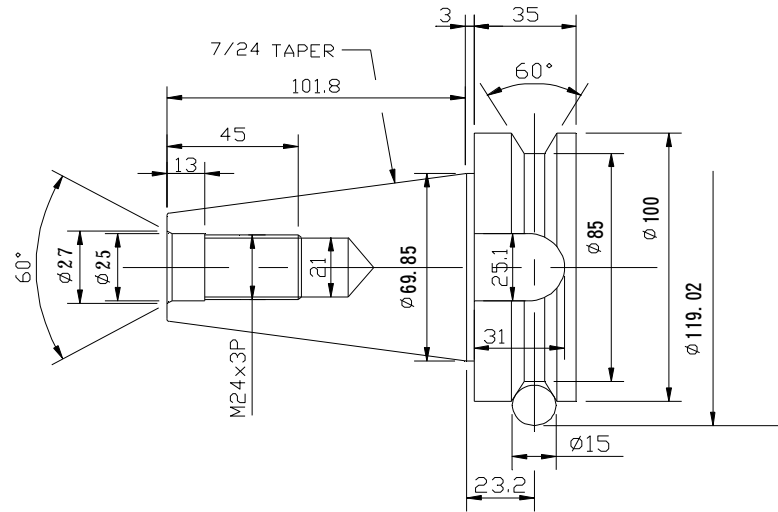


MODEL		A	B	C	D	E	F	G	H	I
VH-4230	mm	2600	4000	100	200	13	48	28H8	48	20
VH-4235	mm	3000	4000	100	200	15	48	28H8	48	20
VH-5230	mm	2600	5000	100	200	13	48	28H8	48	20
VH-5235	mm	3000	5000	100	200	15	48	28H8	48	20
VH-6230	mm	2600	6000	100	200	13	48	28H8	48	20
VH-6235	mm	3000	6000	100	200	15	48	28H8	48	20
BM-8230	mm	2600	8000	100	200	13	48	28H8	48	20
BM-8235	mm	3000	8000	100	200	15	48	28H8	48	20
BM-10230	mm	2600	10000	100	200	13	48	28H8	48	20
BM-10235	mm	3000	10000	100	200	15	48	28H8	48	20

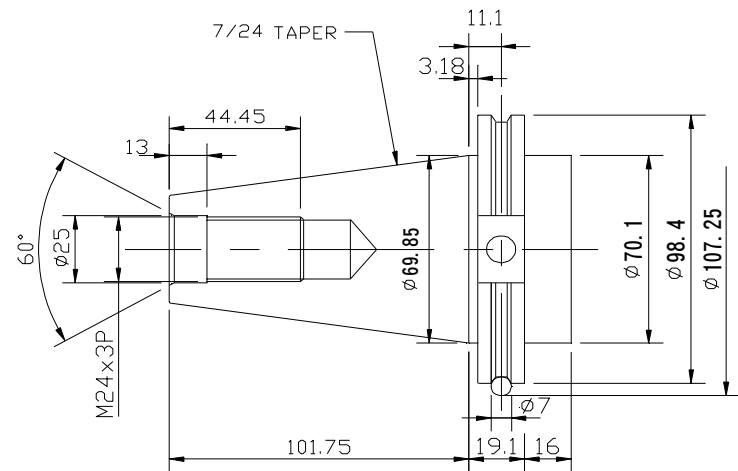


6.Tool shank and tool stud

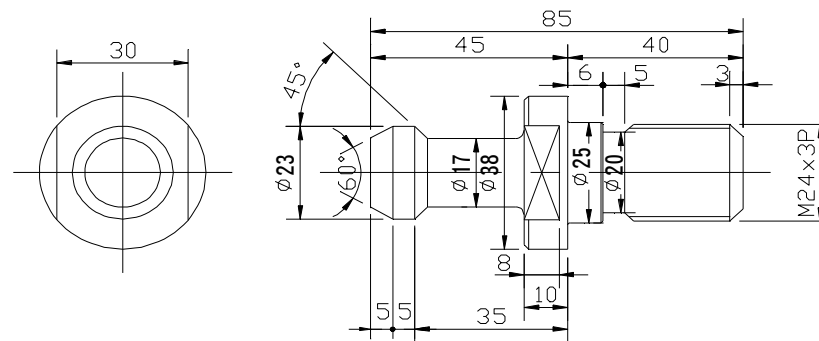
Tool shank(BT-50)



Tool shank(CAT-50)



Pull Stud Bolt (P50t-1) for both BT-50 and CAT-50

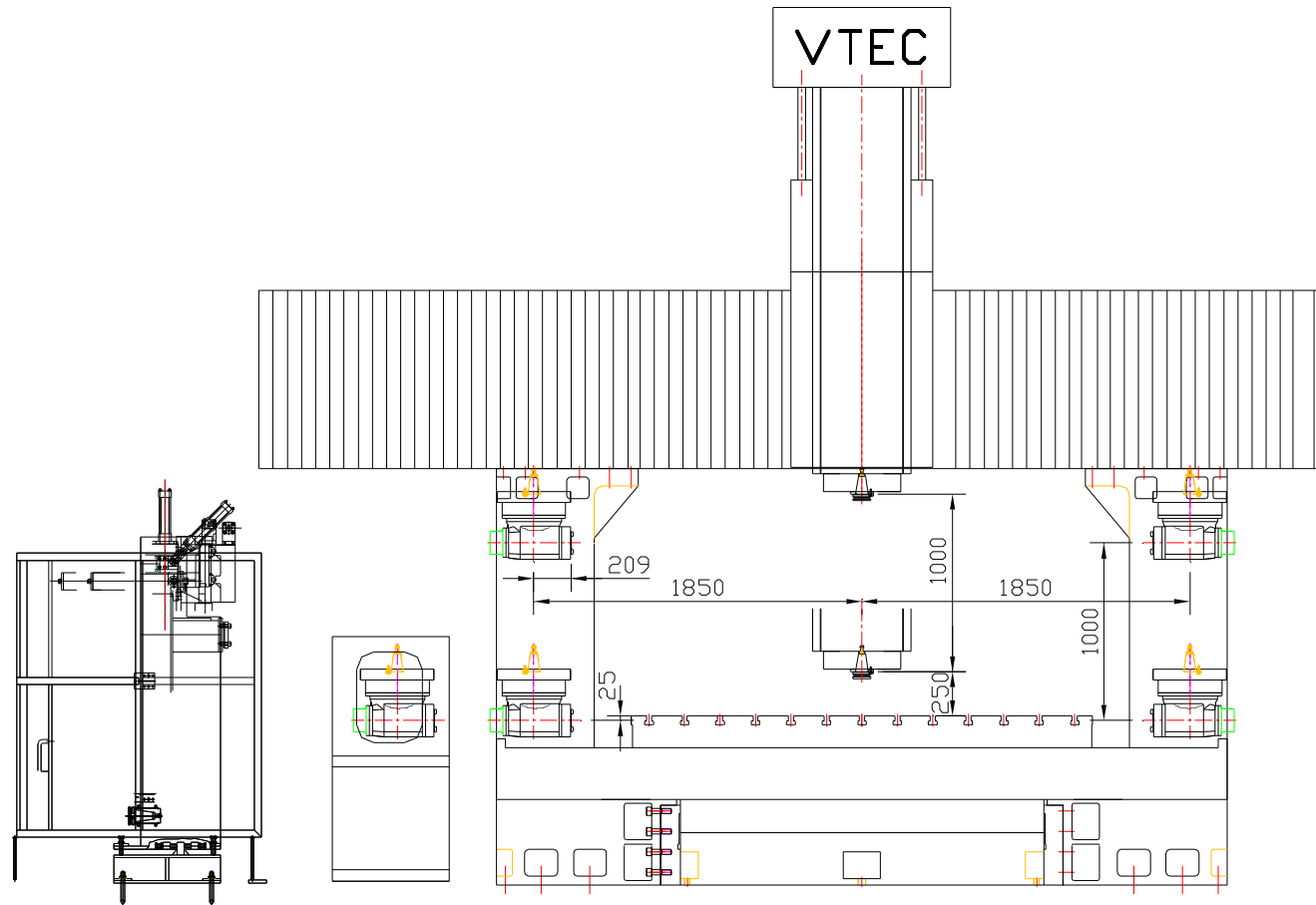


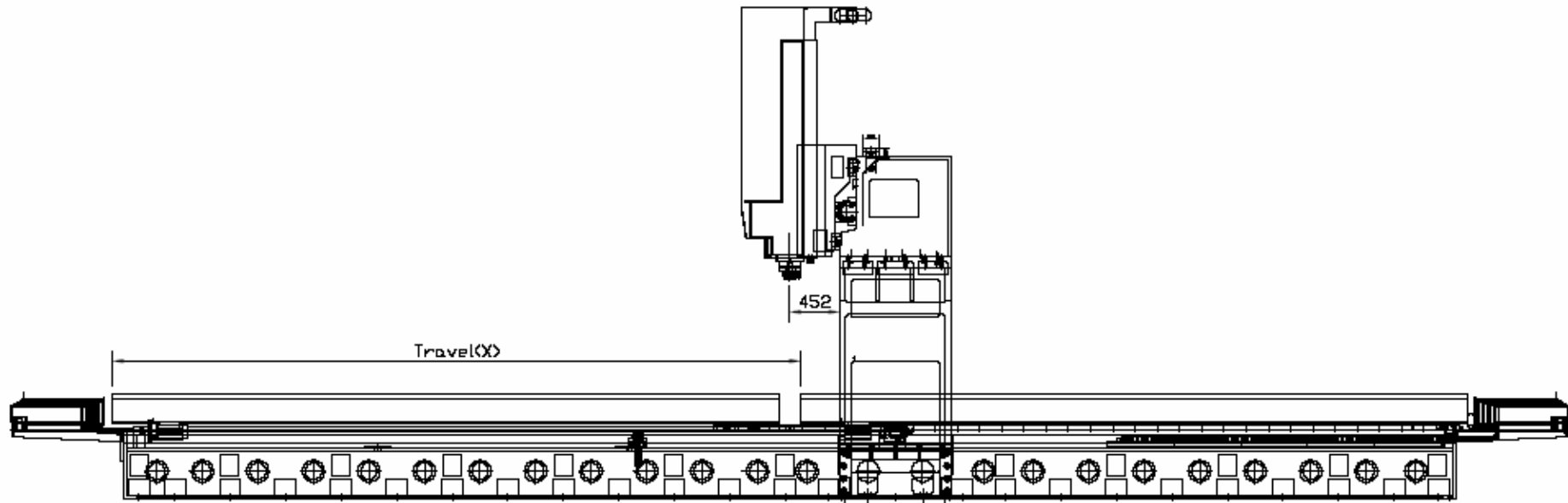


7. Work range

a. VH-4237/5237/6237/8237/10237 AH series

Unit: mm

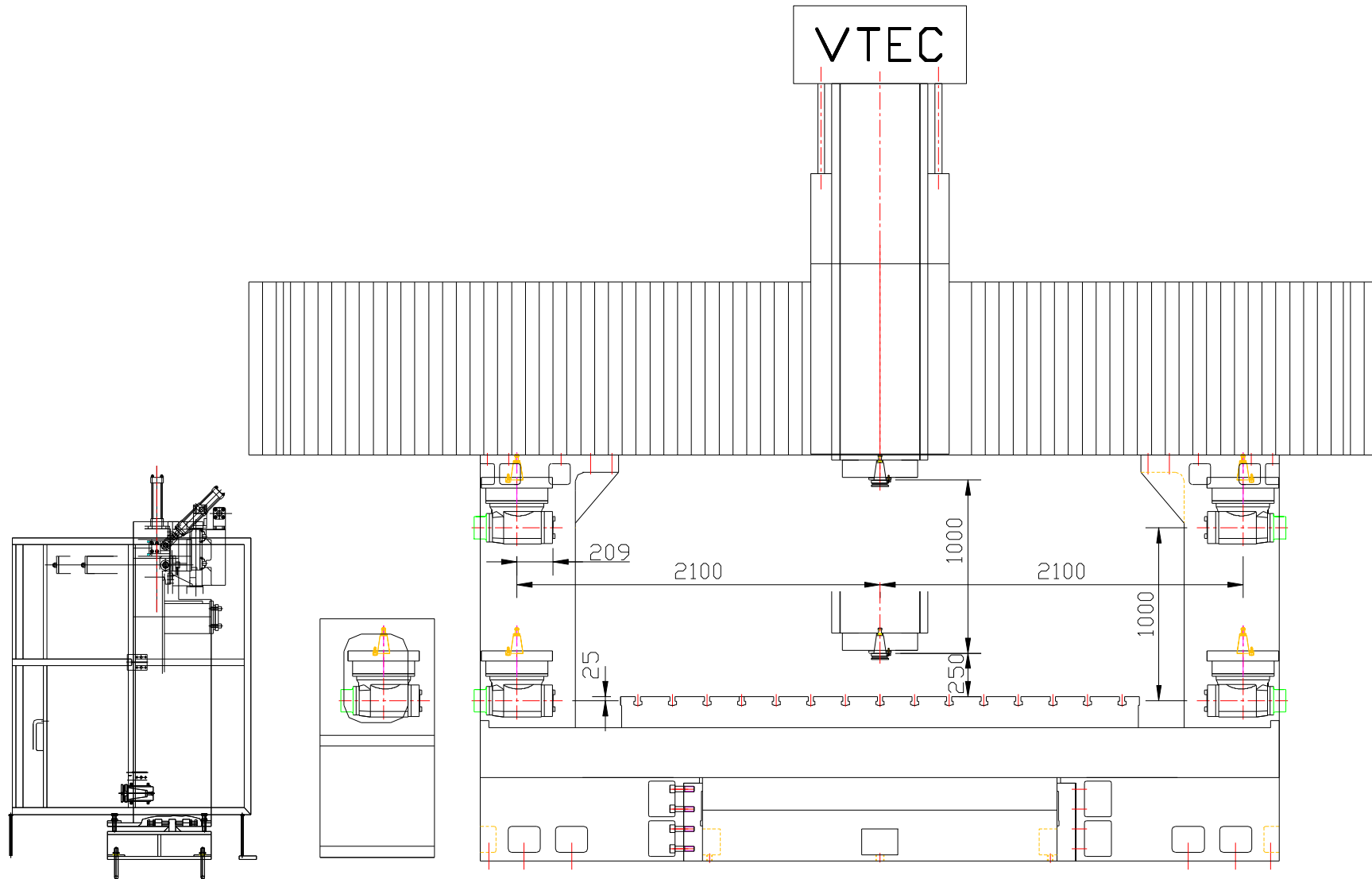






b. VH-4242/5242/6242/8242/10242 AH series

Unit: mm





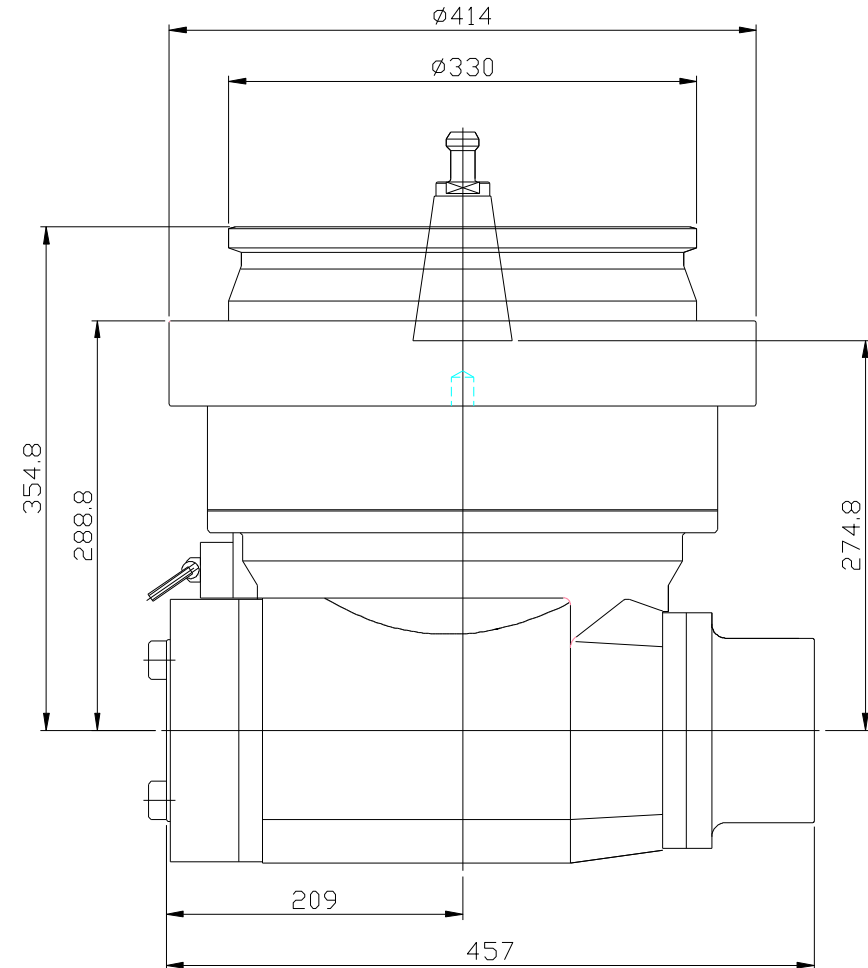
8. Attachment head

A. AAC 90degree head

Unit: mm

Specification:

Gear ratio	1:1
Max. speed	3500RPM
Output capacity	35HP
C axis indexing position	Manual/ Automatic
Head change method	Half-automatic /Automatic
Min. indexing position	15 degree
Positioning accuracy	+/- 0.0025 degree



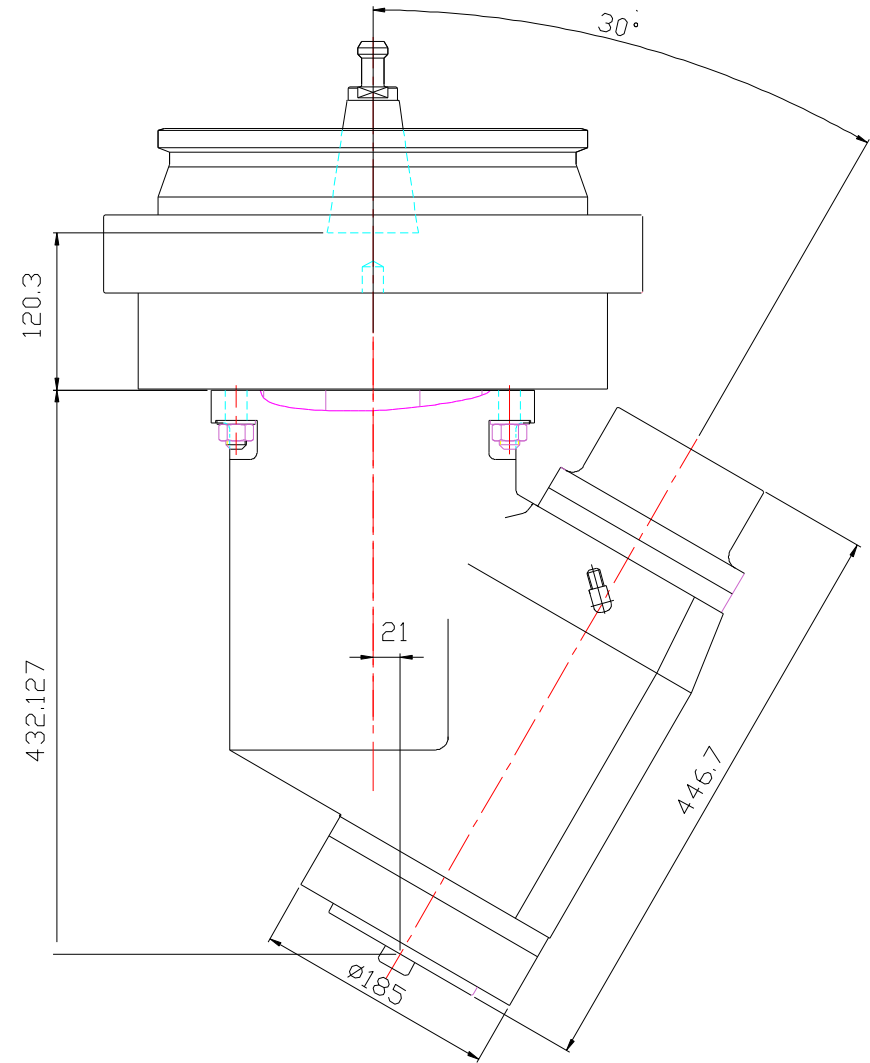
S9108E



B. AAC 30 degree head

Unit: mm

Gear ratio	1:1
Max. speed	3500RPM
Output capacity	35HP
C axis indexing position	Manual/ Automatic
Head change method	Half-automatic /Automatic
Min. indexing position	15 degree
Positioning accuracy	+/- 0.0025 degree

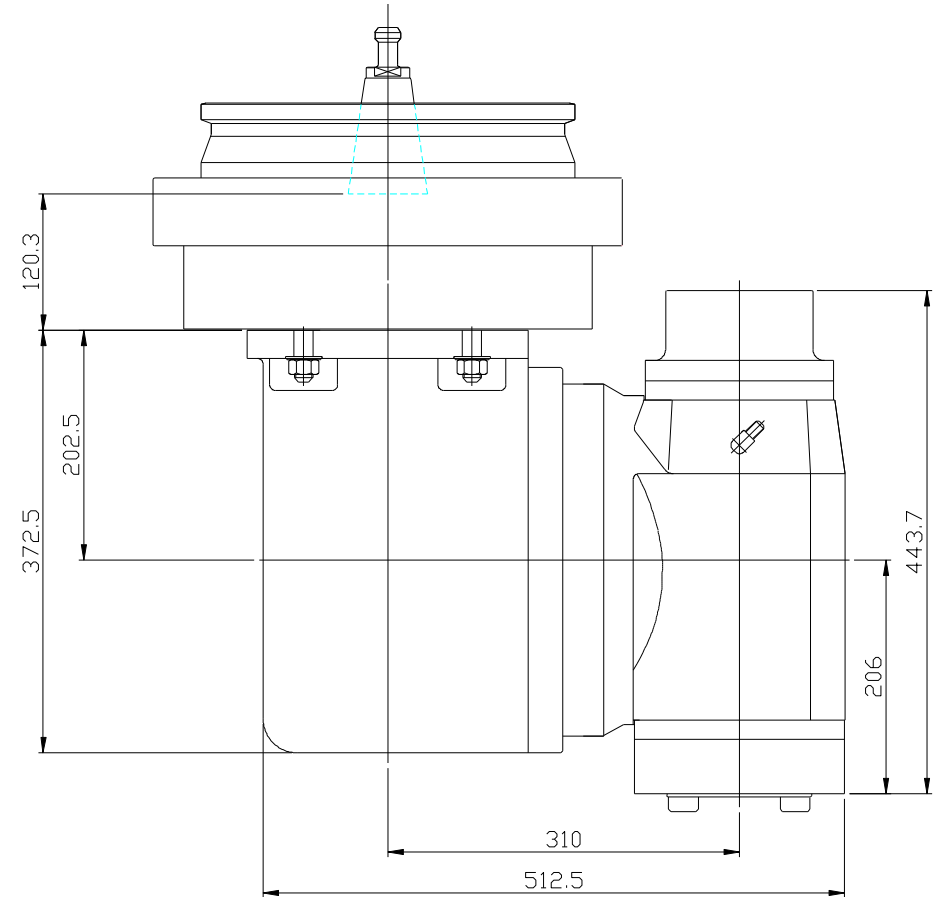




C. AAC Universal head

Unit: mm

Gear ratio	1:1
Max. speed	3500RPM
Output capacity	35HP
C axis indexing position	Manual/ Automatic
B axis indexing position	Manual
Head change method	Half-automatic /Automatic
Min. indexing position	15 degree
Positioning accuracy	+/- 0.0025 degree

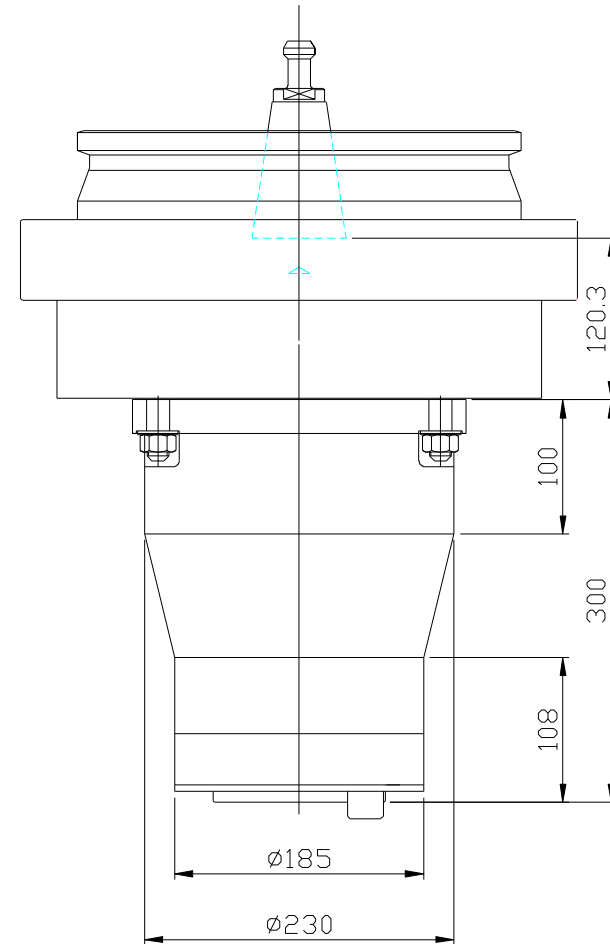




D. AAC Universal head

Unit: mm

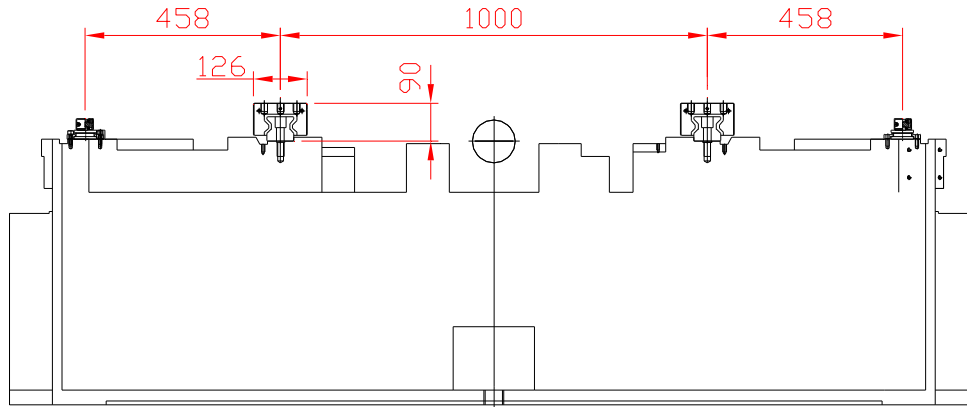
Gear ratio	1:1
Max. speed	4000RPM
Output capacity	35HP
Head change method	Half-automatic /Automatic



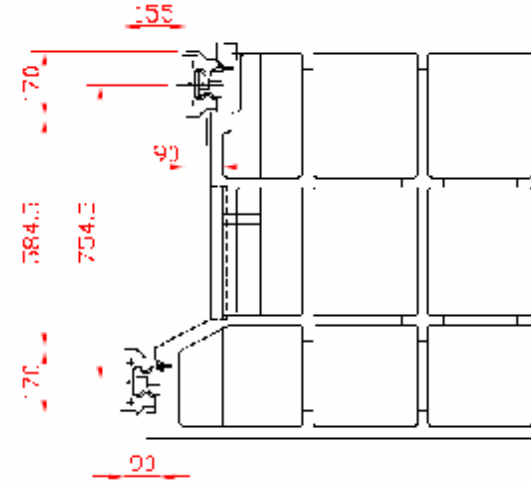


Box & Linear Guideway dimension

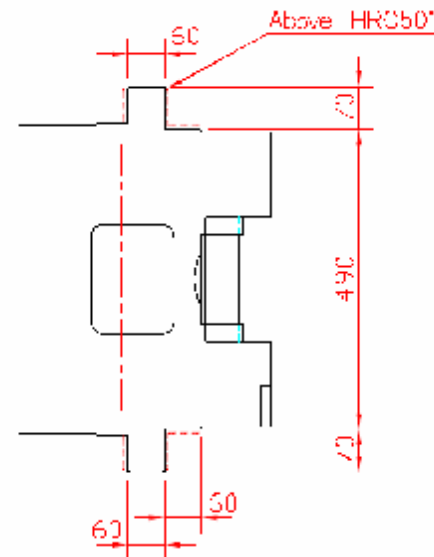
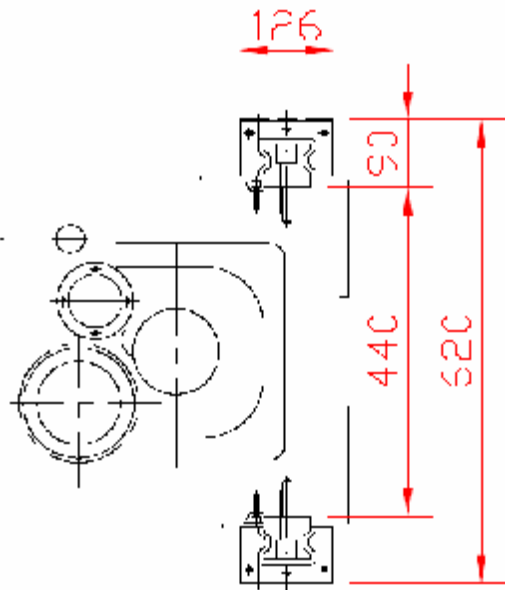
1) X axis—Linear Guideway(Add Linear BEARING)



2) Y axis—Linear Guideway



3) Z axis— Linear Guideway (or BOX Guideway)

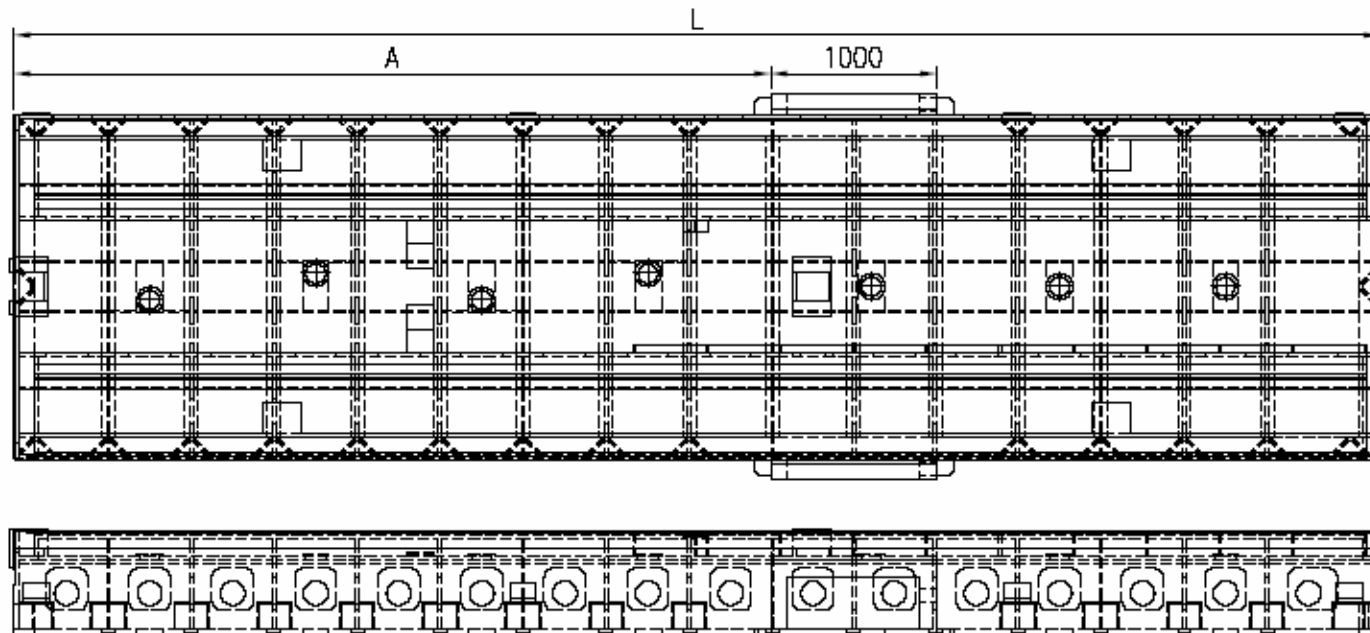
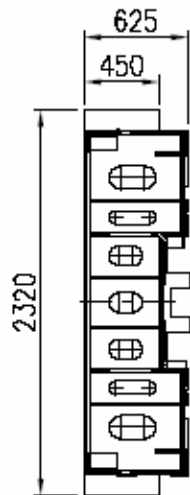




Main Part dimension

1) Base

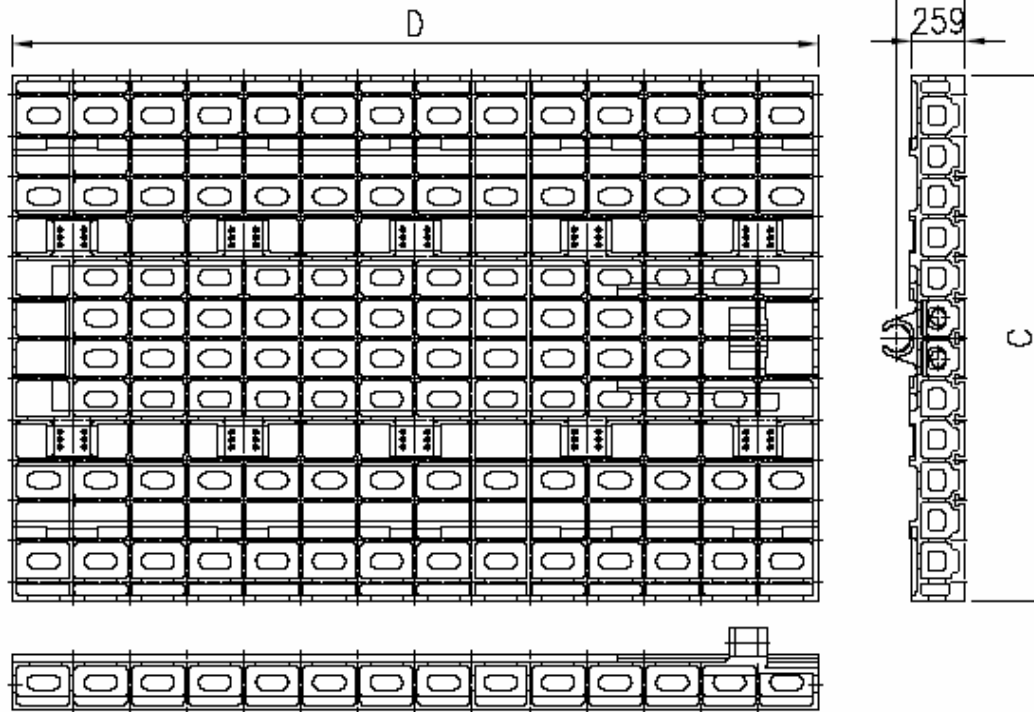
MODEL	(L)	(A)
VH-42XX	8230	4558
VH-52XX	10230	5558
VH-62XX	12230	6558
VH-82XX	16230	8558





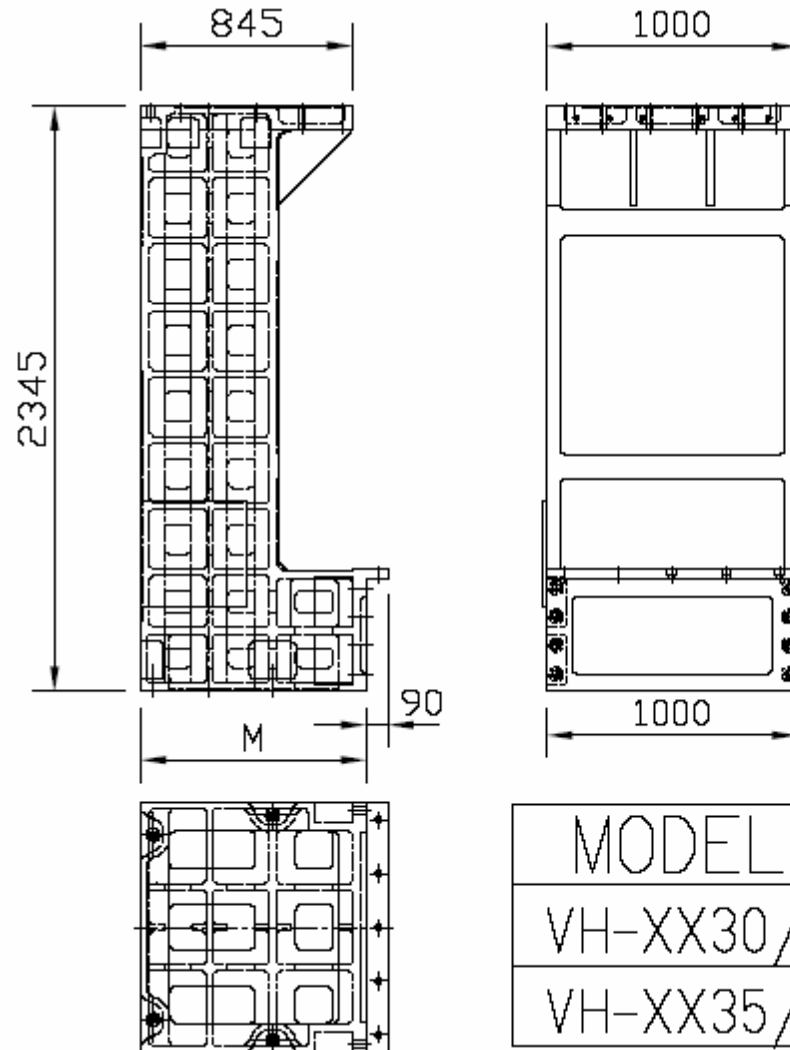
2) Table

MODEL	(C)	(D)
VH-4230/4237	2600	4000
VH-5230/5237	2600	5000
VH-6230/6237	2600	6000
VH-8230/8237	2600	8000
VH-4235/4242	3000	4000
VH-5235/5242	3000	5000
VH-6235/6242	3000	6000
VH-8235/8242	3000	8000





3) Column



MODEL	(M)
VH-XX30/XX37	900
VH-XX35/XX42	1150



4) Cross Beam

MODEL	(B)	(C)
VH-XX30	4420	2420
VH-XX35	4920	2920
VH-XX37	5450	2420
VH-XX42	5950	2920

