

# Machine Specifications

| Model / Descriptions |                             | Unit     | VL-66M                   | VL-66MT                   | VL-86A/AR                | VL-86AT                   | VL-86H                   | VL-86M                   | VL-86MT                       | VL-100A                   | VL-100M          |               |
|----------------------|-----------------------------|----------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--------------------------|-------------------------------|---------------------------|------------------|---------------|
| Capacity             | Max. swing diameter         | mm(inch) | 800 (31.4")              | 800 (31.4")               | 1000 (39.4")             |                           | 1000 (39.4")             | 1000 (39.4")             |                               | 1320 (52.0)               |                  |               |
|                      | Max. turning diameter       | mm(inch) | 700 (27.5")              | 700 (27.5")               | 860 (33.9")              |                           | 860 (33.9")              | 800 (31.5")              |                               | 1100 (43.3)               |                  |               |
|                      | Standard turning diameter   | mm(inch) | 700 (27.5")              | 700 (27.5")               | 690 (27")                |                           | 860 (33.9")              | 800 (31.5")              |                               | 990 (38")                 |                  |               |
|                      | Max. turning height         | mm(inch) | 650 (25.5")              | 650 (25.5")               | 810 (31.9")              |                           | 800 (31.5")              | 700 (27.5")              |                               | 920 (36.2")               | 900 (35.4")      |               |
| Spindle              | Hydraulic chuck             | mm(inch) | 457 (18")                |                           | 533 (21")                |                           | 533 (21")                |                          | 1000 (40")/Manual 4-jaw chuck |                           |                  |               |
|                      | Range of table speed        | rpm      | 25-2000                  |                           | 25-1500                  |                           | 25-1500                  |                          | 5-850                         |                           |                  |               |
|                      | Front bearing diameter      | mm       | 160                      |                           | 200                      |                           | 200                      |                          | 200                           |                           |                  |               |
|                      | Nose of spindle             |          | A2-11                    |                           | A2-11 (Option A2-15)     |                           | A2-11 (Option A2-15)     |                          | ISO 702-4 No.15 (Ø380)        |                           |                  |               |
| Tool turret          | Type of turret              | -        | H12 (BMT75)              | H12+H12 (BMT65)           | H12                      | H12+H12                   | V4/V6/V8                 | H12                      | H12+H12                       | H12                       | H12 (BMT85)      |               |
|                      | Number of tool position     | ea       | 12                       | 12+12                     | 12                       | 12+12                     | 4/6/8                    | 12                       | 12+12                         | 12                        |                  |               |
|                      | Tool size                   | mm       | □25, Ø40, Ø50            |                           | □25, □32, Ø40, Ø50       |                           | □25, Ø40, Ø50            |                          | □25, Ø40, Ø50                 |                           | □32, Ø50         |               |
|                      | Tool live spindle speed     |          | 3000                     | 3000                      | -                        | -                         | -                        | 3000                     | 3000                          | -                         | 3000             |               |
| Feed                 | Rapid rate (X-Axis)         | m/mim    | 20                       |                           | 20                       |                           | 20                       |                          | 20                            |                           | 20               |               |
|                      | Rapid rate (Z-Axis)         | m/mim    | 20                       |                           | 20                       |                           | 20                       |                          | 20                            |                           | 20               |               |
|                      | Horizontal travel (X-Axis)  | mm       | 385                      |                           | 470                      |                           | 50+500                   |                          | 470                           |                           | 625              |               |
|                      | Vertical travel (Z-Axis)    | mm       | 760                      |                           | 860                      |                           | 850                      |                          | 860                           |                           | 1000             |               |
|                      | Cutting feed rate           | mm/rev   |                          |                           | 0.001-500                |                           |                          |                          | 0.001-500                     |                           | 0.001-500        |               |
|                      | Feed override               | %        |                          |                           | 0-150                    |                           |                          |                          | 0-150                         |                           | 0-150            |               |
| Control system       |                             |          | Fanuc 0i-T               |                           |                          |                           |                          |                          |                               |                           | Fanuc 0i-T       |               |
| Motors               | Spindle motor (Cont./30min) | kW       | αp40(18.5/22)            |                           |                          |                           |                          |                          |                               |                           | α40(37/45)       |               |
|                      | Feed motor (X/Z axis)       | kW       | 4.0/7.0                  |                           |                          | 4.0/7.0                   |                          |                          | 4.0/7.0                       |                           |                  |               |
|                      | Live tool motor             |          | 7.5/11                   |                           |                          | -                         |                          |                          | 7.5/11                        |                           |                  |               |
|                      | Power requirement           |          | kVA                      | 45                        | 85                       | 40                        | 75                       | 40                       | 45                            | 85                        | -                | 7.5/11        |
| Machine size         | Floor space (LxW)           | mm(inch) | 1950x3410 (76.8"x134.3") | 3900x3410 (153.5"x134.3") | 2100x3500 (82.7"x137.8") | 4200x3500 (165.4"x137.8") | 1950x3500 (76.8"x137.8") | 2100x3500 (82.7"x137.8") | 4200x3500 (165.4"x137.8")     | 2700x4000 (106.2"x157.4") |                  |               |
|                      | Max. height                 | mm(inch) | 3450 (135.8")            |                           |                          | 3900 (153.5")             |                          |                          | 3900 (153.5")                 |                           |                  | 4050 (159.4") |
|                      | Net. Weight                 | kg(lb)   | 11600 (25574 lb)         | 23200 (51147 lb)          | 14500 (31967 lb)         | 29000 (63934 lb)          | 14600 (32188 lb)         |                          | 29200 (64375 lb)              | 21000 (46297 lb)          | 21800 (48061 lb) |               |

## Standard accessories

- Complete splash guard.
- Hydraulic 3-jaw chuck and rotary cylinder.(VL-46/66/86)
- Manual 4-jaw chuck.(VL-100)
- Hydraulic power unit.
- Soft jaws for hydraulic chuck.(VL-46/66/86)
- Automatic lubrication system.
- Heat exchanger for electrical cabinet.
- Safety glass for front door.
- Foot switch for hydraulic chuck.
- Working light.
- Warning light.(R/Y/G)
- Coolant through turret.
- Coolant system with coolant tank and bed wash down system.
- Hand tool sets with tool box.
- Leveling bolts & seat pads.
- Chip conveyor.(Hinge type)
- Chip trolley.
- Spindle orientation.
- Manual of operation & maintenance.
- Manual of electrical & hydraulic circuit diagram.
- Workpiece counter.(CNC controller)

## Optional accessories

- Hydraulic chuck and rotary cylinder.(VL-100)
- Manual chuck.(VL-86 series)
- Spindle motor upgrade.
- Air conditioner for electrical cabinet.
- Auto door.(Automatic opening & closing of main door)
- Power transformer.
- Oli skimmer.(Disc type)
- Oil mist collector.
- Counter display for each inserts.
- Double cutting tools.
- Tool presetter.
- Dual speed gear box for spindle motor.
- High & low pressure chucking.
- Chuck position sensor.
- Tool holder.
- Hard jaw of chuck.
- High pressure collant through turret.
- Chip conveyor.(scraper type)
- CNC controller 31i series.
- Manual guide i .
- CE certificate.
- Tooling.
- Jig & fixture.
- Turnkey project.
- Linear encoder of X/Z axis.