# Technical data

AC Progress VP2

AC Progress VP3

AC Progress VP4

| | | AC Progress VP2 | AC Progress VP3 | AC Progress VP4 |
|---|---|---|---|---|
| **Travels** | | | | |
| X/Y/Z axes | mm<br>in | 350 x 250 x 256<br>13.77 x 9.84 x 10 | 500 x 350 x 426<br>19.7 x 13.77 x 16.8 | 800 x 550 x 525<br>31.5 x 21.65 x 20.67 |
| Max. speed X/Y | m/min.<br>ft/min. | 3<br>9.84 | 3<br>9.84 | 3<br>9.84 |
| U/V axes | mm (in) | ±70 (± 2.7) | ±70 (± 2.7) | 800/550 (31.5/21.65) |
| Max. taper angle <°/height | mm (in) | 30°/100 (30°/3.93) | 30°/100 (30°/3.93) | 30°/500 (30°/19.68) |
| Dual measuring System for X/Y axes | | Standard | Standard | Standard |
| **Work area** | | | | |
| Max. workpiece dimensions * | mm<br>in | 750 x 550 x 250<br>29.5 x 21.6 x 9.8 | 1050 x 650 x 420<br>41.3 x 25.6 x 16.5 | 1300 x 1000 x 510<br>51.9 x 39.3 x 20 |
| Max. workpiece weight:<br>with bath / without bath | kg<br>lbs | 200/450<br>440/992.08 | 400/800<br>880/1763.70 | 3000<br>6613.86 |
| Accessibility | | Front | Front/Top | Front/Top |
| Frontal drop door | | Manual | Manual | Manual |
| Universal clamping frame for best utilisation of the work zone | | Standard | Standard | Standard |
| Machining in bath | mm (in) | 250 (9.84) | 420 (16.54) | 525 (20.67) |
| **Wire threading system** | | | | |
| Agiejet threadable height | mm (in) | Up to 250 (9.84) | Up to 420 (16.5) | Up to 525 (20.67) |
| Threading nozzle | ø mm (in) | 2 (0.07)<br>1 (0.039) Option<br>0.6 (0.0234) Option | 2 (0.07)<br>1 (0.039) Option<br>0.6 (0.0234) Option | 2 (0.07)<br>1 (0.039) Option<br>0.6 (0.0234) Option |
| Wire threading in small holes and start hole search function ≤ 0.10 mm | | Option | Option | Option |
| Wire guides: standard equipment | ø mm<br>ø in | 0.15-0.33<br>0.0059-0.0129 | 0.15-0.33<br>0.0059-0.0129 | 0.15-0.33<br>0.0059-0.0129 |
| Kit 70: extension kit | ø mm<br>ø in | 0.07-0.10<br>0.0027-0.0039 | 0.07-0.10<br>0.0027-0.0039 | 0.07-0.10<br>0.0027-0.0039 |
| Kit 50: extension kit | ø mm<br>ø in | 0.05-0.10<br>0.0196-0.0039 | 0.05-0.10<br>0.0196-0.0039 | |
| Combination wire guide system | "V" guide<br>Toroid guide | Cylindrical up to 2°<br>2° up to 30° | Cylindrical up to 2°<br>2° up to 30° | Cylindrical up to 2°<br>2° up to 30° |
| Increased accuracy in tapered cut AGIECONIC PLUS | | Option | Option | Option |
| Wire drive, wire spool | kg | Up to 25 | Up to 25 | Up to 25 |
| Wire disposal | | Chopper | Chopper | Chopper |

* Width x depth x height

| | | AC Progress VP2 | AC Progress VP3 | AC Progress VP4 |
|---|---|---|---|---|
| **Generator** | | | | |
| High power generator IPG-VPC integrated | ~ A | 60 | 60 | 60 |
| Wide range of tested technologies for commonly used workpiece materials | | Standard | Standard | Standard |
| Max. cutting rate with CCS Ø 0.33 mm wire | $mm^2$/min.<br>in/h | > 500<br>> 47 | > 500<br>> 47 | > 500<br>> 47 |
| Finishing quality, best roughness | µm Ra<br>µin | 0.2<br>8 | 0.2<br>8 | 0.2<br>8 |
| Best Ra with SF modul, finishing power module (option) | µm Ra<br>µin | 0.1<br>4 | 0.1<br>4 | 0.1<br>4 |
| Duotec, technology for the use of two wires type in a single contour | | Standard | Standard | Standard |
| PCD Module, machining of PCD disks or cutting tools | | Option | Option | Option |
| Smoothsurf, best surface homogeneity, uniformity of the eroded surfaces | | Standard | Standard | Standard |
| Correction of the cylindrical residual error, AWO (Advanced Wire Offset) | | Standard | Standard | Standard |
| Dynamic path optimisation and process adaptation in the radii DCC | | Standard | Standard | Standard |
| Real time detection and correction of the wire bending WBC | | Standard | Standard | Standard |
| Automatic power optimisation Variocut | | Standard | Standard | Standard |
| Prodtec: technology for highest productivity | | Standard | Standard | Standard |
| **Dielectric conditioning unit** | | | | |
| Dielectric conditioning unit integrated | l (us gal) | 750 (200) | 1000 (264) | 1600 (423) |
| Filter cartridges 4 canisters with 8 cartridge filters | | Standard | Standard | Standard |
| Filtrate quality | µm (µin) | 5 (197) | 5 (197) | 5 (197) |
| **Deionizing** | | | | |
| Deionizing bottle charge volume | l (us gal) | 10 (2.64)<br>30 (7.92) Option | 10 (2.64)<br>30 (7.92) Option | 10 (2.64)<br>30 (7.92) Option |
| **Cooling** | | | | |
| Generator and control unit with air / water, and dielectric with water / water heat exchanger | | Standard | Standard | Standard |
| **System** | | | | |
| System dimensions * | mm<br>in | 1640 x 2040 x 2220<br>64.5 x 80.3 x 87.4 | 1940 x 2300 x 2600<br>76.4 x 90.5 x 87.4 | 2900 x 3050 x 2850<br>114.2 x 20.1 x 112.2 |
| Net weight | kg (lbs) | 2580 (5688) | 3460 (7628) | 6000 (13228) |
| Weight ready-to-run | kg (lbs) | ca. 3350 (7385) | ca. 4200 (9260) | ca. 11000 (24250) |

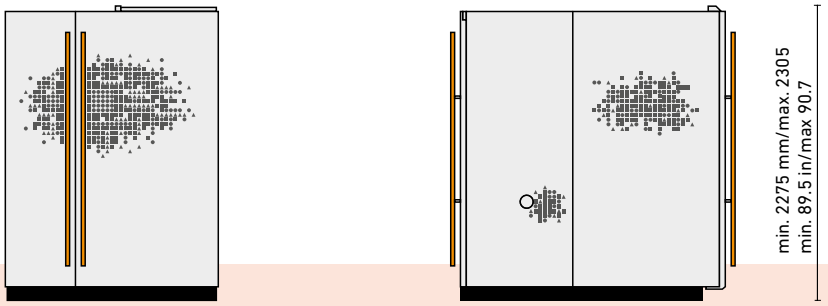
* Width x depth x height

| **Interface for automation (only AC Progress VP2)** | |
|---|---|
| Basic equipment for handling devices | Automation |
| Communication interface for handling devices | Robotcommand |
| Communication interface for cell computer connection | Hostcontrol |

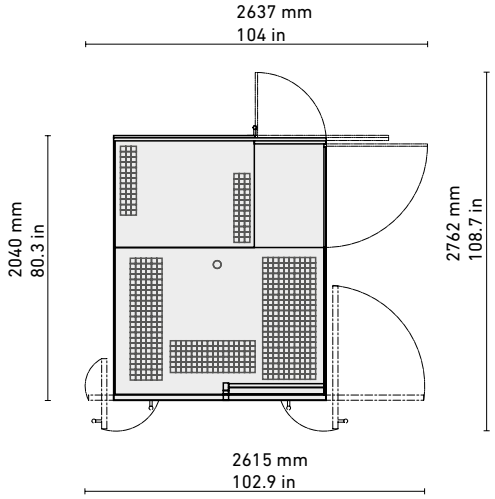
| **Connections** | |
|---|---|
| Line power | 12.1 kW |
| Line voltage | 3 x 400 V |
| Compressed air | 6 bar, 5 $m^3$/h (85 psi, 6.54 $yd^3$/h) |
| Cooling capacity required | 9-11 kW |

| | AC Progress VP2 | AC Progress VP3 | AC Progress VP4 |
|---|---|---|---|

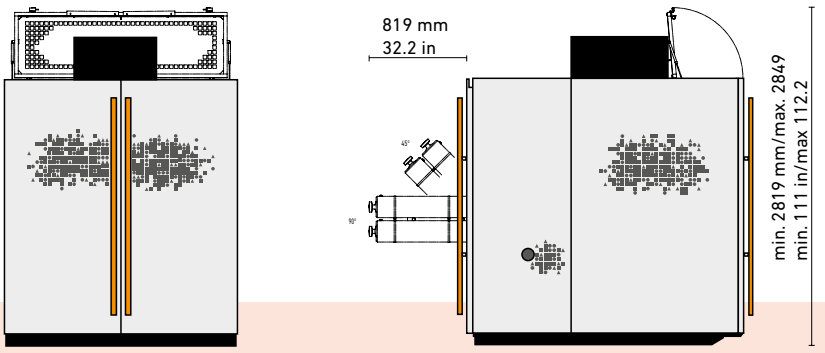
| **Control unit integrated, modules and functions** | |
|---|---|
| Remote control with all setup functions | Agiejogger with electronic handwheel and LCD display |
| Operator interface system | 15"-LCD-display, Keyboard and mouse |
| Control unit integrated | Agievision object oriented man-machine interface |
| Operating system | Multitasking Windows XP |
| Operating mode | Multiprocessor |
| CPU's | Pentium for CNC and operator interface |
| Servocontrolled axes | X/Y/Z/U/V |
| Supplementary servocontrolled axis | A axis |
| Smallest programmable step | 0.0001 mm (0.000004 in) |
| Easy preparation of machining programs | Easywork |
| Automatic pickup cycles | Agiesetup 3D, for automatic determination of workpiece plane and position |
| Automatic technology selection based on machining objectives | Teccut |
| Import of job-specific data from CAD/CAM systems | Camlink |
| Predefined machining strategies | Autosequence |
| Predefined and user defined machining strategies | Usersequence |
| Simple 2D on-board geometry programming | IGES files Agiegeo with import of DXF and IGES files |
| Import in Agiegeo of third party ISO codes | Agiegeo Isoconverter |
| Quickly insert rush orders without effort | Pieceinsert |
| DNC port with Xon/Xoff and LSV2 protocols | DNC |
| Help functions, explanations with text and graphics | Help and online manual |
| Machining simulation 2D and 3D view | Graficheck |
| Automatic instructions and commands execution | Easyrun |
| Automatic machining sequence definition | Lotto for multiple workpieces clamping |
| Rethreading on wire break/on «no- thread» detection restart after power failure Rescue strategies | |
| Languages | English, CN, CZ, DE, DK, ES, FR, HU, IT, JP, NL, PL, RU, US, SE |
| Storage capacity | > 40 GB HD, 1 GB Ram |
| Interfaces | 2 x RS232C, 1 x parallel, 1 LAN (Local Area Network), 1 USB |
| Data storage media | CD/DVD-ROM for updates and on line manual, floppy-disk, USB |

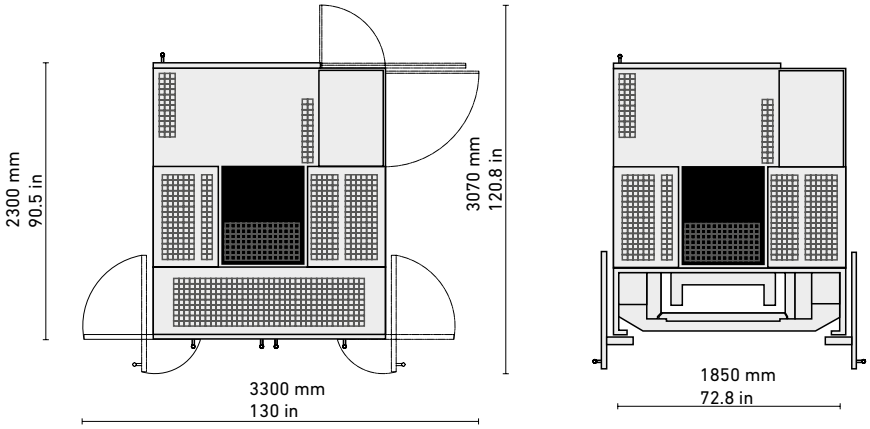



## AC Progress VP2



## AC Progress VP3




## AC Progress VP4