

## LOW PRESSURE FOAM MACHINE TYPE ARIEL 30 ECO



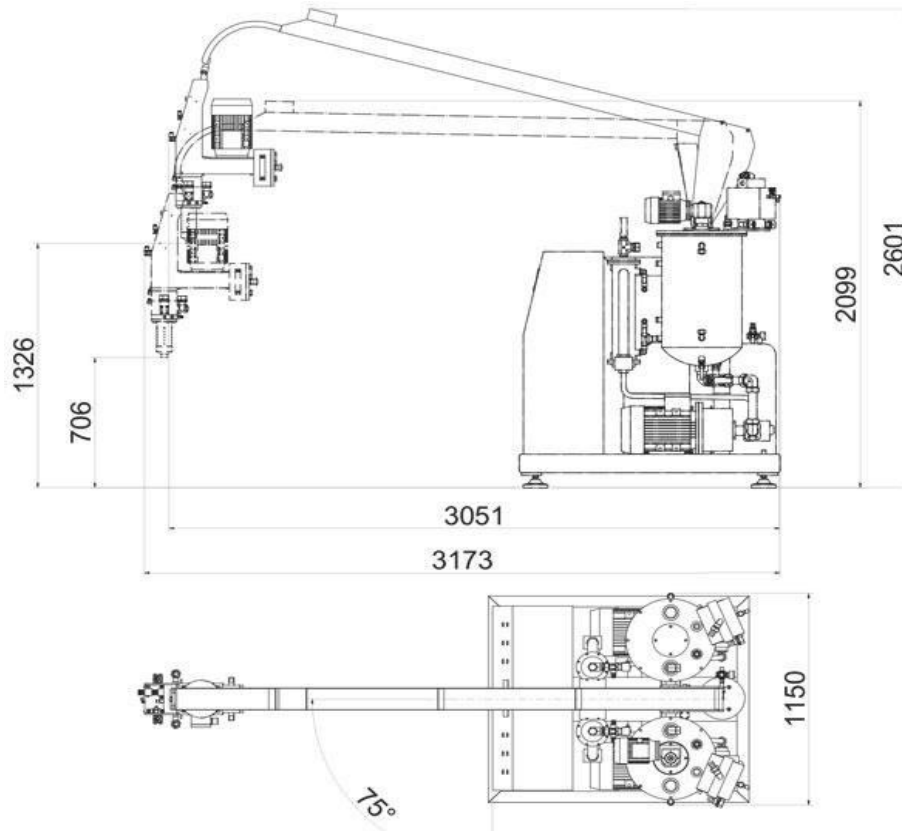
### MACHINE DESCRIPTION :

**Ekosystem Ariel Low Pressure** is a user-friendly solution for Mixing and Injection of polyurethane, this is a Low-Pressure Injector designed with high quality parts for longer life. This assures best quality of the Foam mix and gives a firm bond.

### WORKING PRINCIPLE:

The Ariel is managed by an electrical cabinet with PLC software built in to ensure continuous control of the foaming cycles. The end-user can set flow rates, head cleaning cycle, daily tank filling from storage tanks, working temperatures and the pouring programs. Different ratios and flow-rates can be adjusted through the touchscreen HMI which also displays the machine alarms too.

**Dimension:**



**Key features:**

- German high accuracy gear low pressure volumetric pumps, for easy maintenance and long life.
- Automatic system for output adjustment managed by VSDs directly connected to the motors.
- Digital pressure gauges for reading the recycle and pouring pressures.
- Heat exchanges for the thermoregulation of the two chemicals.
- 80 liter daily tanks are equipped with level sensor, stirrer, silica gel, diaphragm loading pumps.

**Highly reliable mixing head with direct recycle is complete with:**

- Coupling motor and pulley for a high-speed rotation
- Additional mixing air
- Valves for pressure regulation
- Complete cleaning system (solvent and drying air)
- Calibrator for the output control
- Accommodation for water cleaning
- Accommodation for additional dosing
- Different mixer shapes are available on request

**TECHNICAL PARAMETER:**

|                                                                                                                                                                                                                                |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Working ratio                                                                                                                                                                                                                  | : 1:1      |
| Minimum output                                                                                                                                                                                                                 | : 6kg/min  |
| Max output                                                                                                                                                                                                                     | : 30kg/min |
| 100l capacity carbon steel tanks c/w visual levels                                                                                                                                                                             |            |
| 18l capacity solvent pressurized tank c/w min. level alarm managed by control panel.                                                                                                                                           |            |
| Kracht high accuracy gear volumetric pumps coupled to 3-phase asynchronous motors, and driven by frequency converters to ensure total flexibility to the system                                                                |            |
| 0-20 bar digital pressure gauges sited at pumps feed port, having max pressure contacts interconnected to the control panel for safe working of the foaming machine.                                                           |            |
| Thermoregulation system by PF tube nest exchangers. Heating by means of armoured resistors having IP 65 protection degree                                                                                                      |            |
| Low pressure mixing head with recycle in head through self-controlled valves at two positions with electrical drive                                                                                                            |            |
| Flexible hoses for connecting the pumps to the mixing head. Hoses max working pressure: 20 bar                                                                                                                                 |            |
| Head washing cycle and dry air through automatic system                                                                                                                                                                        |            |
| Control panel type "Touch Screen" to set: pumps velocity with frequency converters, 12 standard pouring times, pause times, washing and air dry times for mixing chamber in automatic mode. The system is fully checked by PLC |            |
| Temperature adjustment through digital thermoregulators (+/- 1°C tolerance).                                                                                                                                                   |            |
| Control push button panel with display to visualise the program under process, counting of seconds needed to end the pouring phase, and buttons for selecting programs, air blast, cycle stop, washing and emergency.          |            |

**Standard head holder boom.**
**Voltage : 380 V, 3 phases + earth, 60 Hz**
**Brand New : Italy**

Machine Features:

- \*50/80 l tanks;
- \*Touch screen control panel with PLC;
- \*Heat exchangers;
- \*Digital pressure gauges;
- \*Gear pumps;
- \*Water washing system option on request in order to eliminate costs for solvent and to protect the environment;
- \*Agitator to mix components on request.
- \*Loading pumps to fill the tanks on request.