

G12 - Jumper Machine - Cost analysis - V3.3

Bill of materials (B.O.M.)

| Component | Unit Price (euros) TTC | Quantity | Supplier | Step | Comments | Order URL | Ordered? | Delivery |
|----------------------------------|------------------------|----------|-------------|----------------------------------|---|------------------------------|-------------------------------------|------------|
| V blade | 7,37 € | 1 | AliExpress | Agile 1 - Cutting | 38°16'30 | Lâminas de reposição peço | <input checked="" type="checkbox"/> | 13/11/2022 |
| Stepper motor Nema 17 | 19,50 € | 2 | Go Tronic | Agile 1 - Cutting & Distribution | 59 Ncm 2A | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Drivers TB6600 | 20,95 € | 2 | Go Tronic | Agile 2 - Cutting & distrib | more efficient than the A8850 | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Arduino Nano | 25,90 € | 1 | Go Tronic | All | | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Breadboard kit with power supply | 9,50 € | 1 | Go Tronic | All | includes jumpers and a 5 V power supply | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| ender 3 extruder | 13,49 € | 1 | Amazon | Agile 1 - Distribution | | C/?psc=1&smid=AEVHDV | <input checked="" type="checkbox"/> | 01/01/2023 |
| Limit switch | 0,86 € | 1 | L3D Service | Agile 1 - Distribution | Our current model have the little roll | ce.com/449-lot-de-5-interf | <input checked="" type="checkbox"/> | 03/01/2003 |
| Capacitor découplage 100µF | 0,07 € | 1 | Conrad | Agile 1 - Distribution | | n=surfaces&utm_campaign | <input checked="" type="checkbox"/> | 17/03/2023 |
| Tube Polyamide Legris 4mm*2,7mm | 17,95 € | 1 | RS | Agile 2 - Stripping | Need only 15 cm | com/web/p/tuyaux-a-air-co | <input checked="" type="checkbox"/> | 07/04/2023 |
| Alimentation GS6012 Mean Well | 27,70 € | 1 | Go Tronic | Agile 3 | 12VDC ; 5A | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Emergency button | 7,80 € | 1 | Go Tronic | All | suited for the alimentation | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Module joystick GT1079 | 2,90 € | 1 | Go Tronic | Agile 2 - Stripping | with the push button option | nic.fr/art-module-joystick-p | <input checked="" type="checkbox"/> | 07/04/2023 |
| LCD Arduino 16°2 I2C protocol | 8,50 € | 1 | Go Tronic | Agile - stripping | less pins used than without protocol | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Connector USB A into mini USB b | 1,90 € | 1 | Go Tronic | Agile 2 | 1 m | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| Cordon IEC155 | 6,90 € | 1 | Go Tronic | Agile 3 | 2 m | https://www.gotronic.fr/ | <input checked="" type="checkbox"/> | 07/04/2023 |
| | | | | | | | <input type="checkbox"/> | |
| | | | | | | | <input type="checkbox"/> | |

| Cost of labor | | | |
|-----------------------------|--|------------------------------------|------------------|
| | Number of hours/week (average during year) | Number of week : | 33 |
| GI/workshop | 6 | number of member : | 5 |
| At home | 1 | salary per hour (€) : | 28,00 € |
| | | number of hours allocated in total | Cost of activity |
| conception - CAO (%) | 55,00% | 635,25 | 17 787 € |
| Test (%) | 30,00% | 346,5 | 9 702 € |
| deliverable preparation (%) | 15,00% | 173,25 | 4 851 € |

| Total cost | |
|--------------|-------------|
| Labor Cost | 32 340,00 € |
| Process Cost | 174,21 € |
| B.O.M. | 211,74 € |
| | 32 725,95 € |

File Tracability

| version | Changes |
|---------|---|
| V2.1 | creation of the cost analysis file |
| V2.2 | add of "cost labor"section and english translation |
| V2.3 | add of "cost of process" and "total cost" sections.Add of the two calcul sheets |
| V3.1 | Add of bending parts cost |
| V3.2 | Price updating with the order |
| V3.3 | Add the allocated hours section in the cost of labor |

| Cost of process | | | |
|-------------------------------|--------------|-------------------------|-------------------------|
| Part Name | Step | Process | (according to GiNova's) |
| Support Bot | Distribution | Filament Fused Modeling | 11,03 € |
| Support Top | Distribution | Filament Fused Modeling | 2,34 € |
| Tension adler | Distribution | Filament Fused Modeling | 2,13 € |
| Motor Support | Distribution | Filament Fused Modeling | 4,38 € |
| Base bobine support plate | Distribution | Laser Cutting | 1,26 € |
| Bobine support plate | Distribution | Laser Cutting | 0,80 € |
| Lock plate | Distribution | Laser Cutting | 0,76 € |
| Steps (x5) | Distribution | Laser Cutting | 0,70 € |
| Bearing support | Distribution | Filament Fused Modeling | 0,73 € |
| Hex nut | Distribution | Filament Fused Modeling | 0,56 € |
| Pipe guide with angle | Distribution | Filament Fused Modeling | 1,50 € |
| Support plate | Cutting | Laser Cutting | 3,11 € |
| Moving plate | Cutting | Laser Cutting | 0,94 € |
| Guides attach | Cutting | Filament Fused Modeling | 6,99 € |
| Blade support | Cutting | Filament Fused Modeling | 7,59 € |
| Came | Cutting | Filament Fused Modeling | 0,73 € |
| Pentes | Cutting | Filament Fused Modeling | 0,69 € |
| Semiflex (x8 sizes) | Bending | Filament Fused Modeling | 21,28 € |
| Lower die (x8 sizes) | Bending | Filament Fused Modeling | 37,04 € |
| Upper die (x8 sizes) | Bending | Filament Fused Modeling | 30,08 € |
| Plate (x8 sizes) | Bending | Filament Fused Modeling | 9,12 € |
| Remover | Bending | Filament Fused Modeling | 2,99 € |
| Plank | Assembly | Laser Cutting | 5,19 € |
| Legs | Assembly | Laser Cutting | 0,88 € |
| HMI top | Assembly | Filament Fused Modeling | 8,40 € |
| HMI bottom | Assembly | Filament Fused Modeling | 4,75 € |
| Emergency button bottom | Assembly | Filament Fused Modeling | 4,81 € |
| Emergency button top | Assembly | Laser Cutting | 0,64 € |
| Switch bottom | Assembly | Filament Fused Modeling | 1,07 € |
| Switch top | Assembly | Filament Fused Modeling | 1,16 € |
| Breadboard corner anchor (x3) | Assembly | Filament Fused Modeling | 0,56 € |