Title: 3-axis Cartesian Manipulator

Date: 16.06.2025

| S/N | Part Name Qty  | Material    | Description Supplier            | Cost /1 (PL | Price (qty) | Link   |
|-----|----------------|-------------|---------------------------------|-------------|-------------|--|
|     | 1 NEMA 17 S1   | 3 Steel     | X/Y/Z-axis l Mouser (Pl         | 255,03      | 765,09      | https://www.mouser.pl/ProductDetail/Applied-Motion/HT17-221?qs=X     |
|     | 2 GT2 Timing   | 2 Aluminium | Timing pull Botland.pl          | 8,9         | 26,7        | https://botland.com.pl/kola-zebate/12520-kolo-zebate-20t-gt2-8mm-r   |
|     | 3 8mm_Bar (I   | 2 Steel     | Linear guid Botland.pl          | 26,9        | 53,8        | https://botland.com.pl/elementy-do-budowy-drukarek-3d/18919-wale     |
|     | 4 Lead Screw   | 2 Steel     | Linear actu Botland.pl          | 29,9        | 59,8        | https://botland.com.pl/elementy-do-budowy-drukarek-3d/18923-srub     |
|     | 5 688 Bearins  | 4 Steel     | Support for Allegro.pl          | 2,73        | 10,92       | https://allegro.pl/oferta/688-2rs-lozysko-wysokoobrotowe-8x16x5-618  |
|     | 6 STM32 Micı   | 1 Silicon   | Robot moticTME.eu               | 123,15      | 123,15      | https://www.tme.eu/pl/details/nucleo-f767zi/zestawy-do-ukladow-stm   |
|     | 7 PLC (interfa | 1 Plastic   | Supervisory Kamami.pl           | 51,18       | 51,18       | https://kamami.pl/stm32-nucleo/560180-x-nucleo-plc01a1-plytka-plc    |
|     | 8 Low Profile  | 2 Steel     | Structure fa TME.eu             | 0,7         | 1,4         | https://www.tme.eu/pl/details/b5x25_bn612/sruby/bossard/1234056/     |
|     | 9 Nylon Inser  | 4 Steel     | Self-lockin <sub>{</sub> TME.eu | 0,8         | 1,6         | https://www.tme.eu/pl/details/m5_d985-a2/nakretki/kraftberg/?brutto  |
|     | 10 GT2 Timing  | 2 Aluminium | Belt routing Botland.pl         | 5,9         | 11,8        | https://botland.com.pl/kola-zebate/12579-kolo-zebate-20t-gt2-5mm-{   |
|     | 11 GT2 Belt 93 | 1 Rubber    | Timing belt Botland.pl          | 23,9        | 23,9        | https://botland.com.pl/akcesoria-do-profili/17336-pasek-gt2-1-metr-5 |
|     | 12 Double Tee  | 2 Steel     | Mounting o Botland.pl           | 3,9         | 7,8         | https://botland.com.pl/akcesoria-do-profili/19876-nakretka-mloteczkc |
|     |                | TOTAL =     |                                 | 532,99      | 1 137,14    |  |





