

Components list for a CNC frame 600x400x150 mm working size with a Z axis and 1.5kW spindle

Mechanical parts for a CNC frame 600x400x150 mm working size

Part	Purchasing link	Costs, RUB	Costs, USD	Exchange rate, RUR/USD
Structural profile 40x80 --- 5 meters	https://www.rsi-llc.ru/catalog/70/534/	4 425,00	62,32	71
Corner 40x40 ---- 4 pieces	https://www.rsi-llc.ru/catalog/73/364/	345,00	4,86	
T-bolt --- 20 pcs	https://www.rsi-llc.ru/catalog/74/200/	480,00	6,76	
Flange nut --- 20 pcs	https://www.rsi-llc.ru/catalog/138/491/	80,00	1,13	
Crackle groove m6 --- 250 pcs	https://www.rsi-llc.ru/catalog/86/245/	5 250,00	73,94	
Profile guide 20 mm - 5 m	https://cnc-tehnologi.ru/profilnye-relsy-hsac/rels-ghr20	12 250,00	172,54	
Carriage for profile rail 20 mm - 6 pcs	https://cnc-tehnologi.ru/karetki-profilnykh-relsov-hsac/ghh20	9 300,00	130,99	
Belt 20mm XL --- 5 meters	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/remen/remen_zubchatyy_nezamknutyy_xl_5_08_20mm/	1 200,00	16,90	
Rollers for belt 20 mm - 6 pcs	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/roliki/rolik_natyazhnoy_20mm/	1 950,00	27,46	
Pulley XL 12 teeth for a belt 20 mm - 3 pieces	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/shkivy/shkiv_xl_z_12_dlya_remnya_20mm/	1 080,00	15,21	
Pulley XL 12 teeth for a belt 10 mm - 2 pieces	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/shkivy/shkiv_xl_z_12_dlya_remnya_10mm/	500,00	7,04	

Pulley XL 60 teeth for 10 mm belt - 2pcs	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/shkivy/shkiv_xl_z_60_dlya_remnya_10mm/	2 560,00	36,06
Closed toothed belt XL 105 teeth - 2 pieces	https://www.duxe.ru/catalog/peredachi/remni_i_shkivy/remen/remen_zubchatyy_zamknuty_105_zubev_xl_5_08_10mm/	190,00	2,68
Spindle GDF 46-18 z /1.5 - 1 piece	https://m.darxton.ru/catalog_item/shpindel-vozdushnyy-gdf46-18z-1-5-220-380-v/	26 410,00	371,97

Electronics

Frequency drive for the spindle	https://darxton.ru/catalog_item/chastotnyy-preobrazovatel-e550-2s0015b-1-5-kvt-220-v-1000-gts/	14 226,00	200,37
Controller	https://purelogic.ru/search/?q=%D0%9D%D0%B0%D0%B1%D0%BE%D1%80+PLC4x-G2+Ethernet&s=	17 271,00	243,25
Stepper motors NEMA 86 - 2 units (X axis)	https://darxton.ru/catalog_item/dvigatel-shagovyy-bipolyarnyy-st86-80-flanets-nema34-86-mm/	8 416,00	118,54
Stepper motors NEMA 86 - 1 unit (Y axis)	https://darxton.ru/catalog_item/shagovyy-dvigatel-st86-80d-val-s-dvukhstoron/	4 217,00	59,39
Stepper motor NEMA 57- 1 unit (Z axis)	https://darxton.ru/catalog_item/shagovyy-dvigatel-st57-56-flanets-57mm-nema23/	1 420,00	20,00

Drivers

for X and Y	https://darxton.ru/catalog_item/drayver-shagovogo-dvigatelya-ema882s-leadshine/	11 940,00	168,17
For Z	https://darxton.ru/catalog_item/drayver-shagovogo-dvigatelya-ema882s-leadshine/	5 970,00	84,08

Power Supply

For X and Y	https://darxton.ru/catalog_item/istochnik-pitaniya-800w-70-a-napryazhenie-60-80-v-11-5-a-800-vt/	6 784,00	95,55
For other Z-axis electronics and sensors	https://darxton.ru/catalog_item/impulsnyy-blok-pitaniya-s-75-12-vykhodnoe-napryazhenie-12-v-tok-do-6-0-a-moshchnost-12-vt/	1 240,00	17,46
For back EMF protection	https://darxton.ru/catalog_item/dampner-ustroystvo-dlya-zashchity-drayvera-ot-obratnoy-eds-15a-200v/	1 539,00	21,68
Braking resistor for the frequency converter spindle (may not be required) 2 pcs.	https://www.chipdip.ru/product0/9000199283	950,00	13,38
Box, cable channels, etc		15 000,00	211,27
Internal delivery		20 000,00	281,69
Mechanical guys payment		30 000,00	422,54
Electronics guys payment		30 000,00	422,54
US delivery		40 000,00	563,38
Total Endurance costs		274 993,00	3 873,14