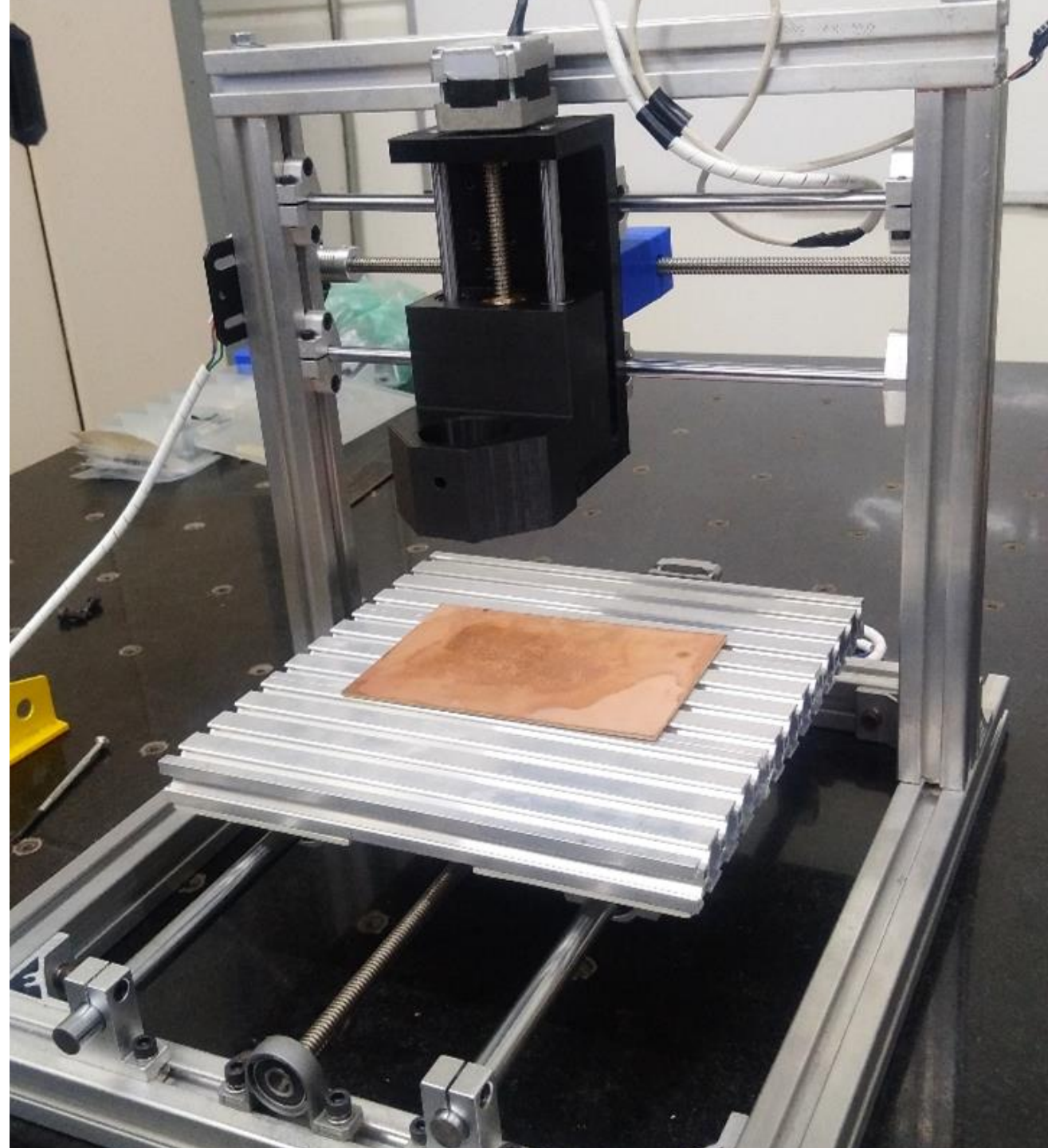
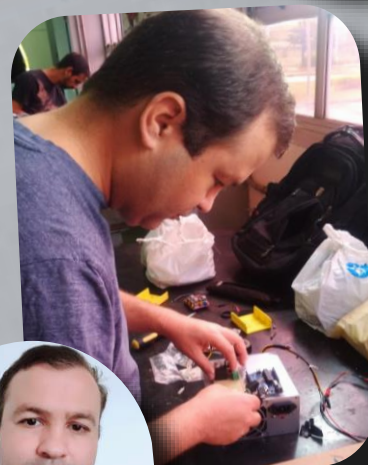
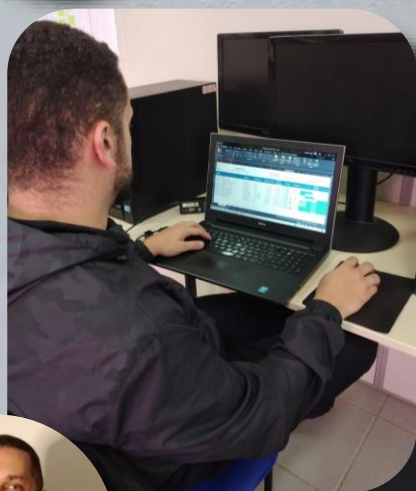


POWERTECH
TECHNOLOGY



EQUIPE

EQUIPE

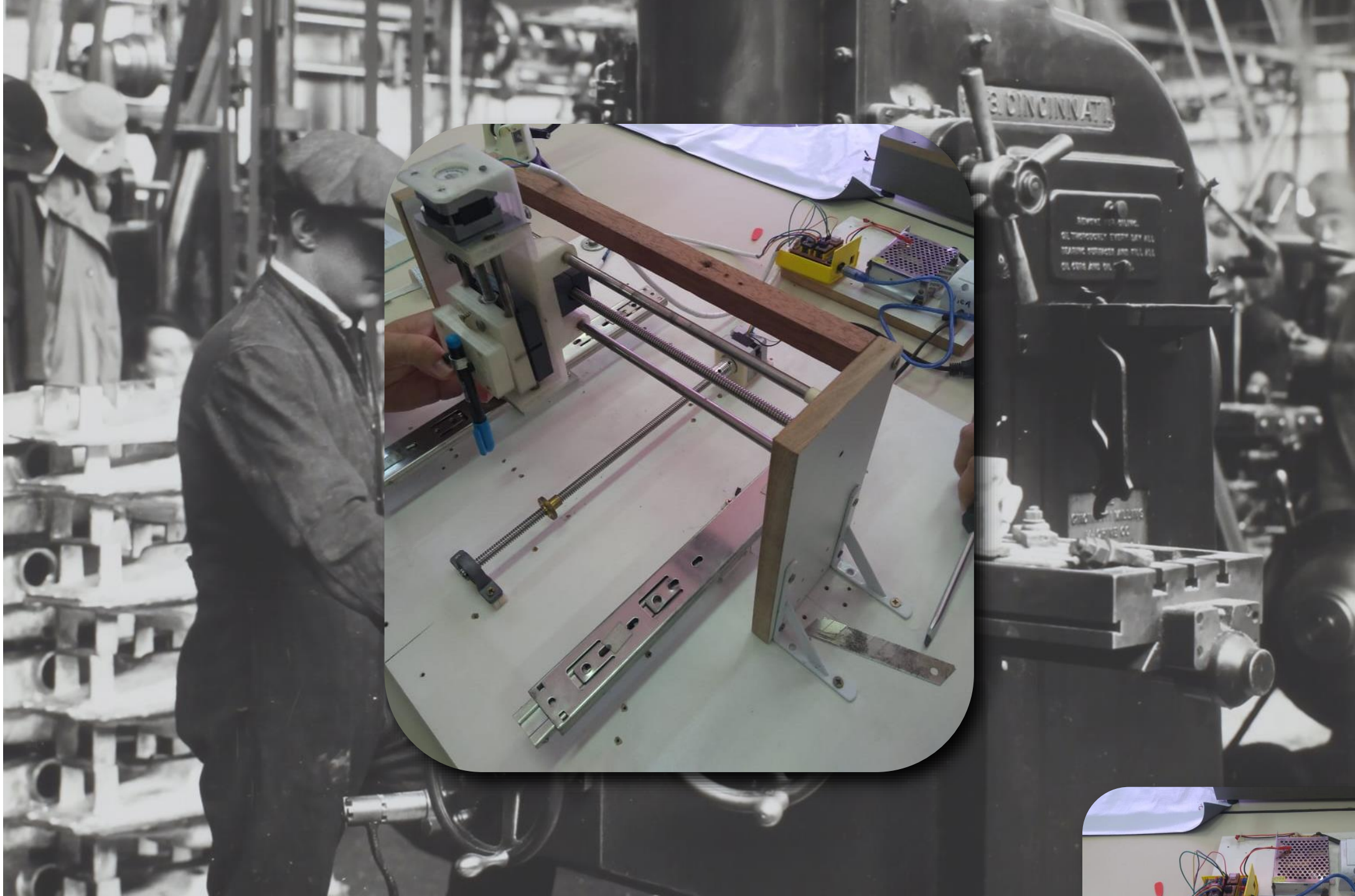



POWERTECH

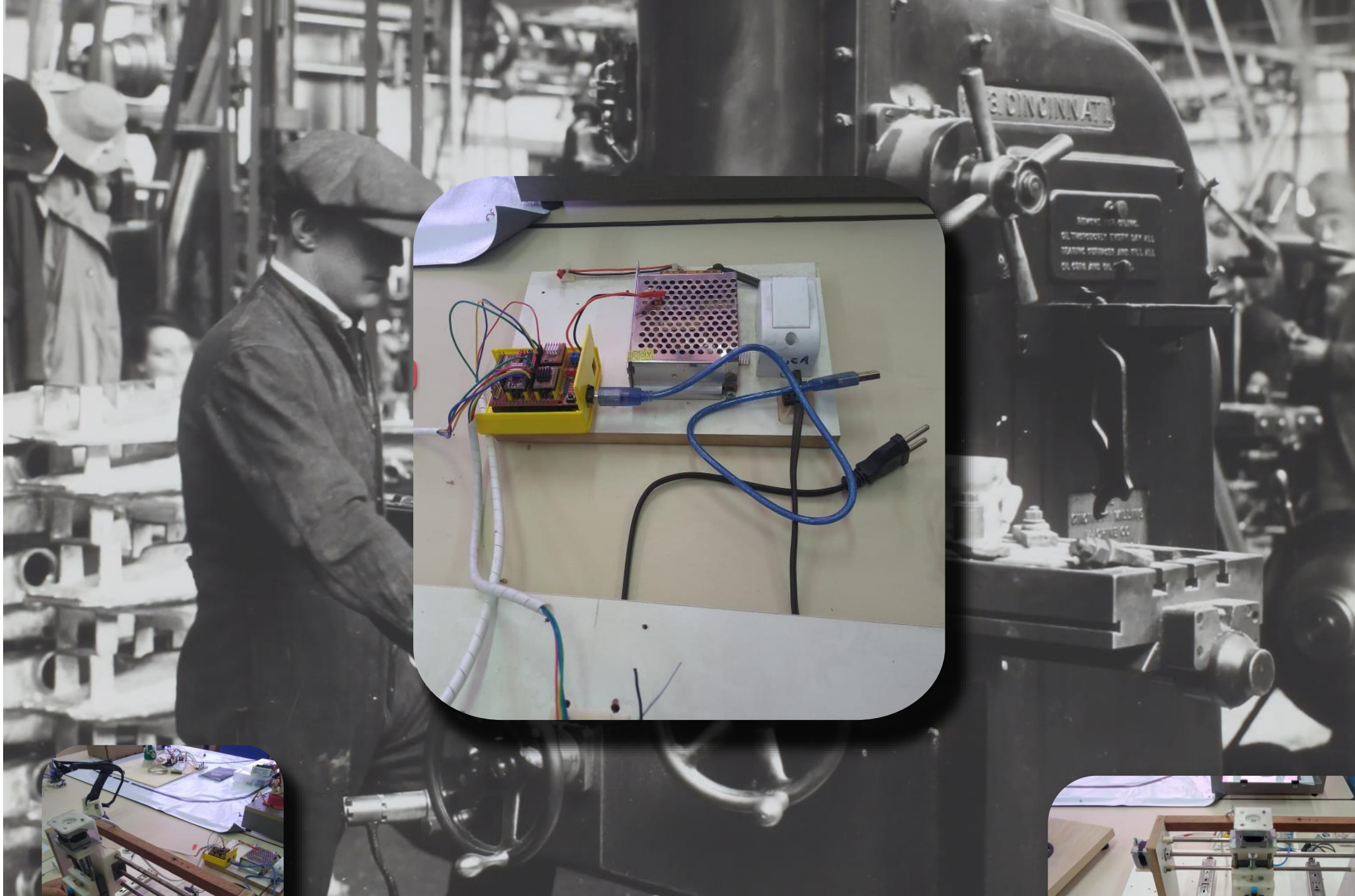


RECORDAR

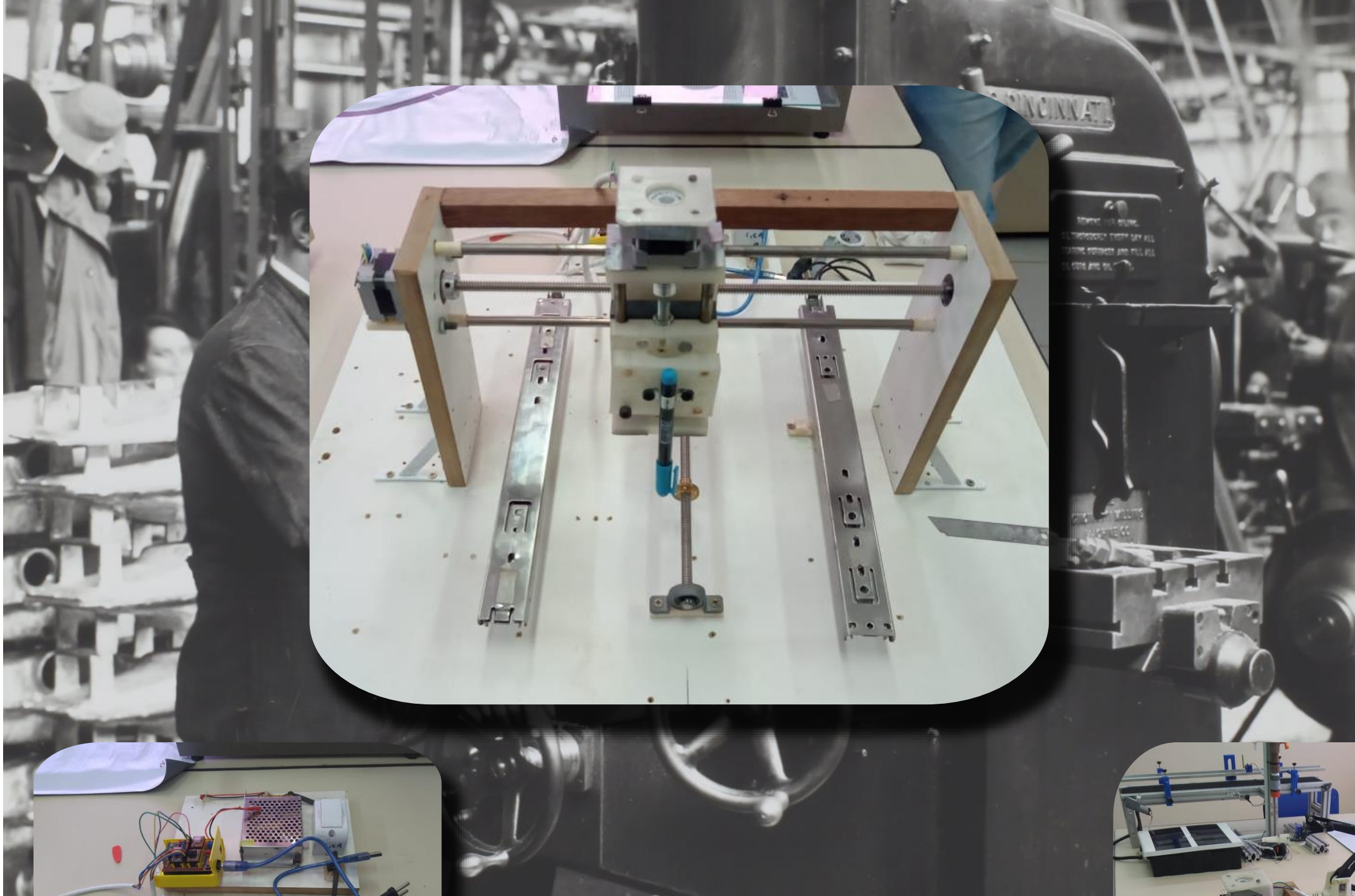
RECORDAR



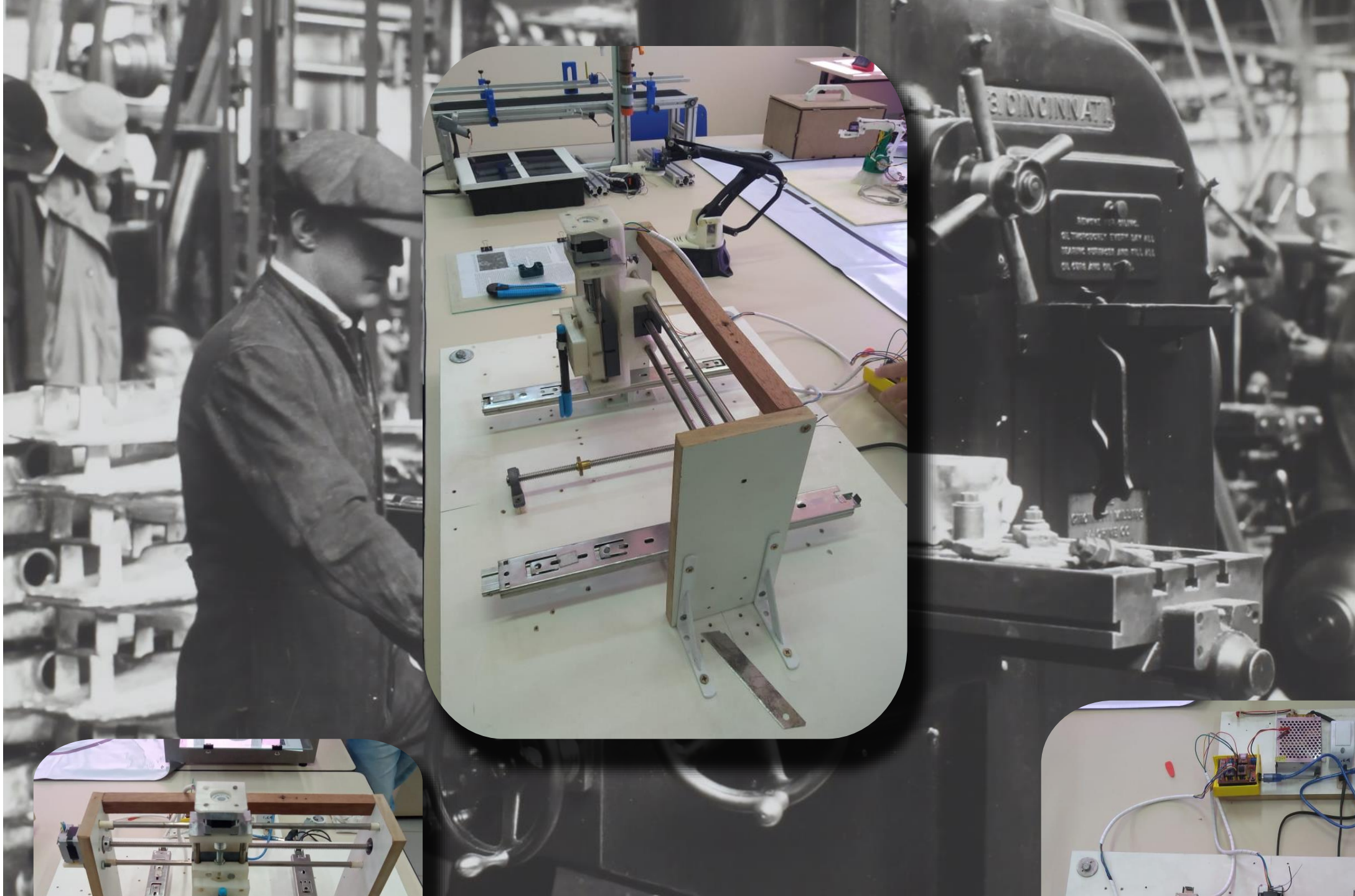
RECORDAR



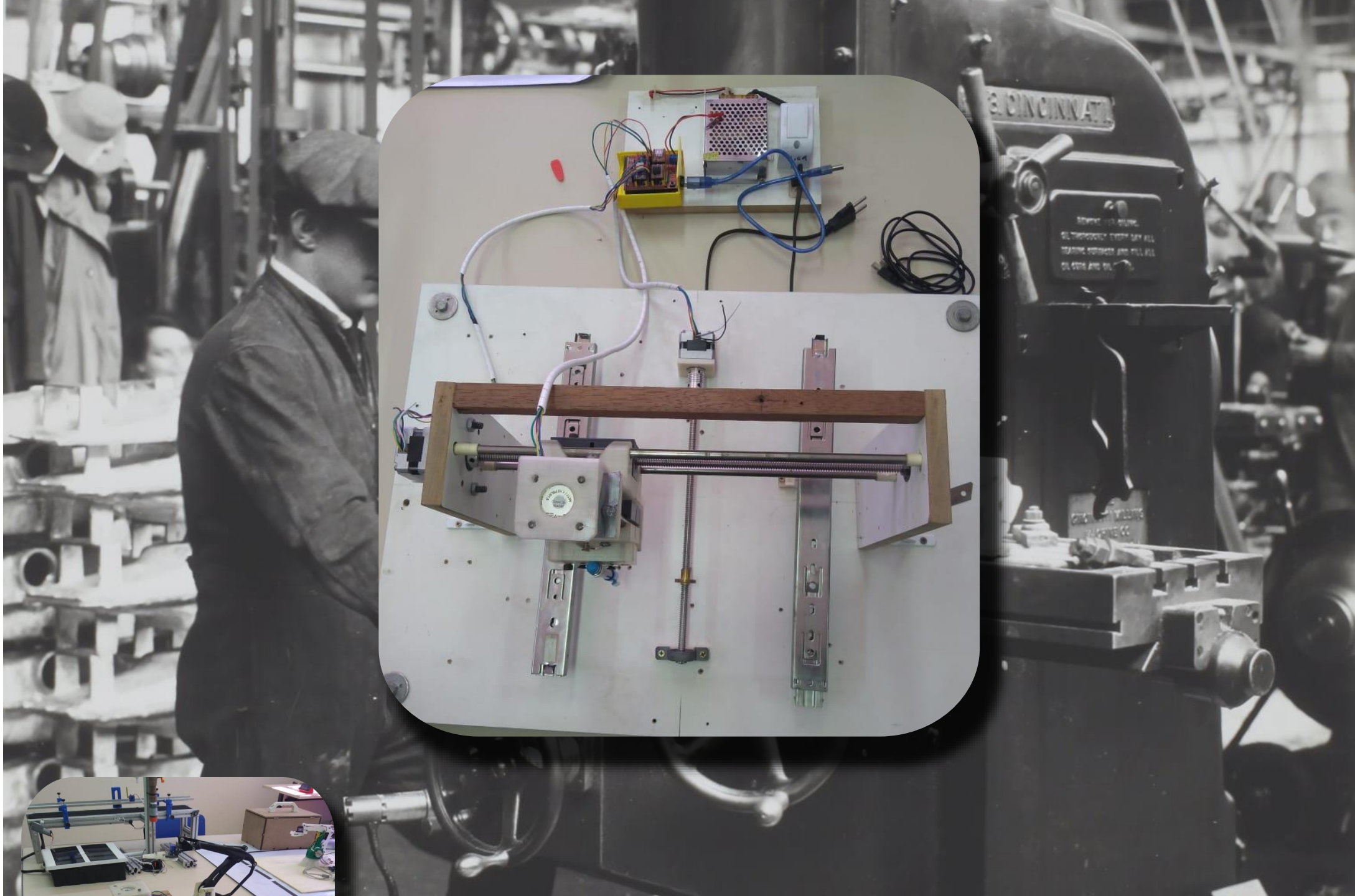
RECORDAR



RECORDAR

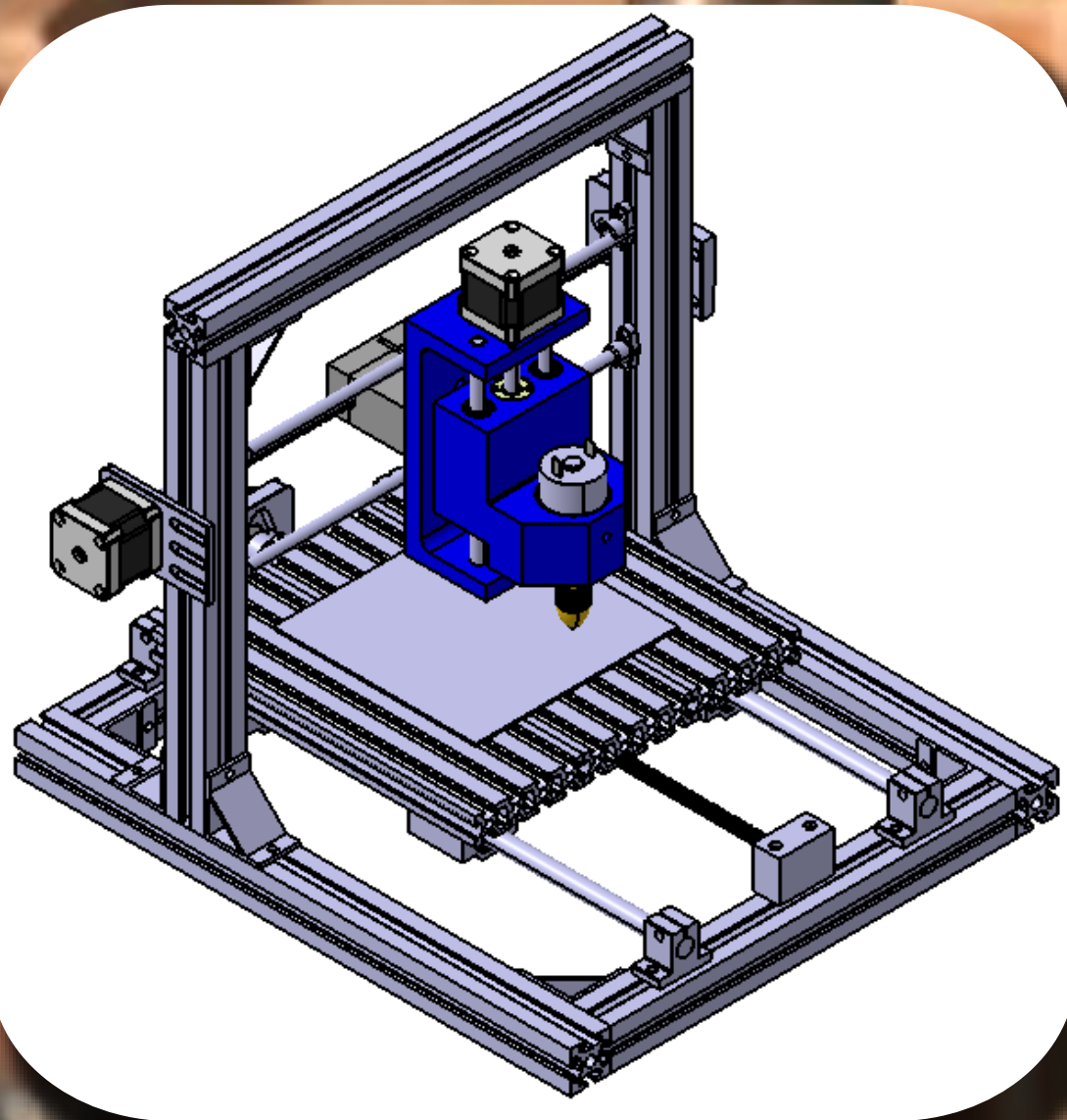


RECORDAR

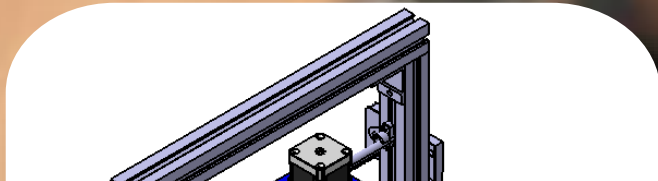
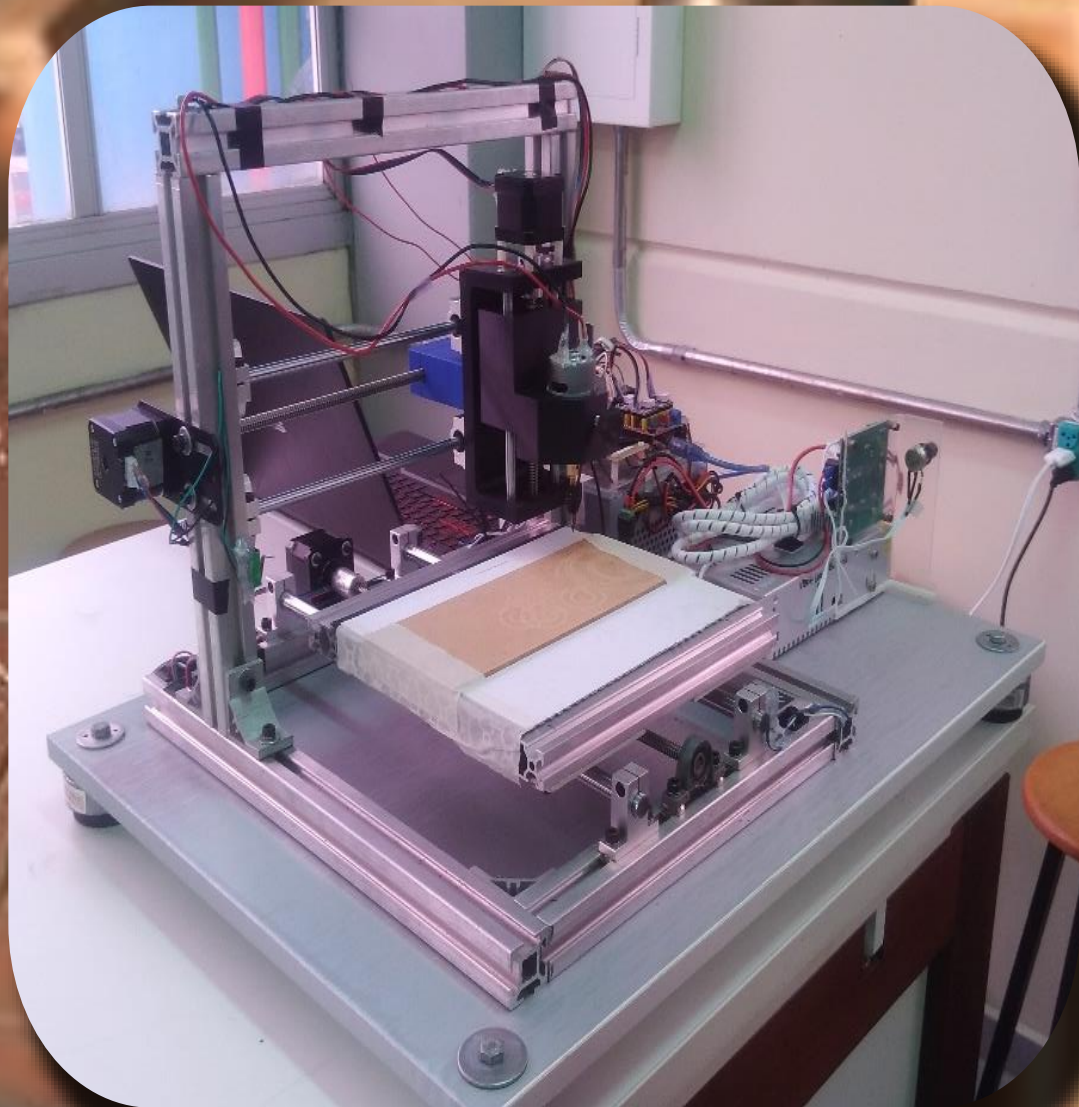


SOLUÇÃO

SOLUÇÃO

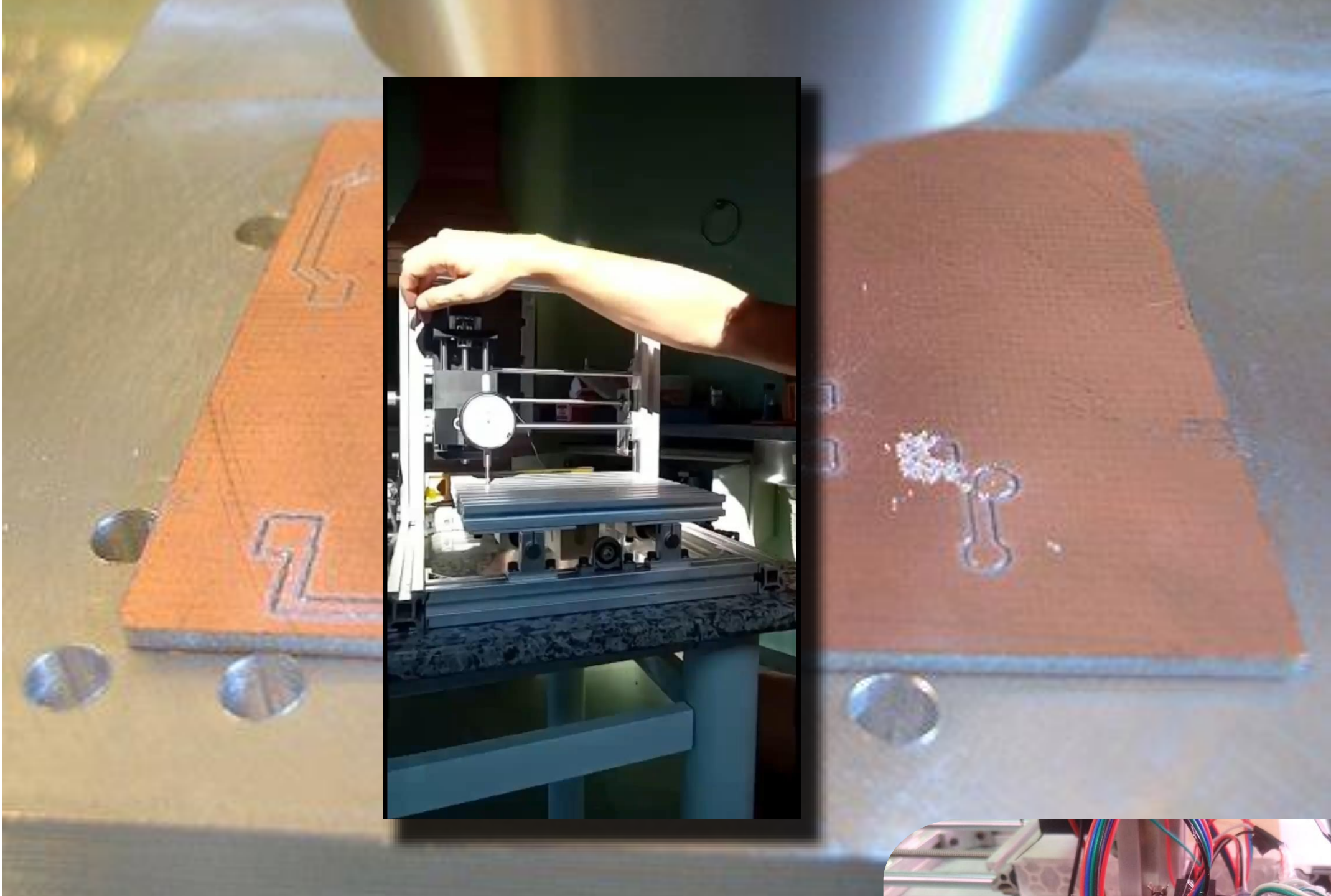


SOLUÇÃO

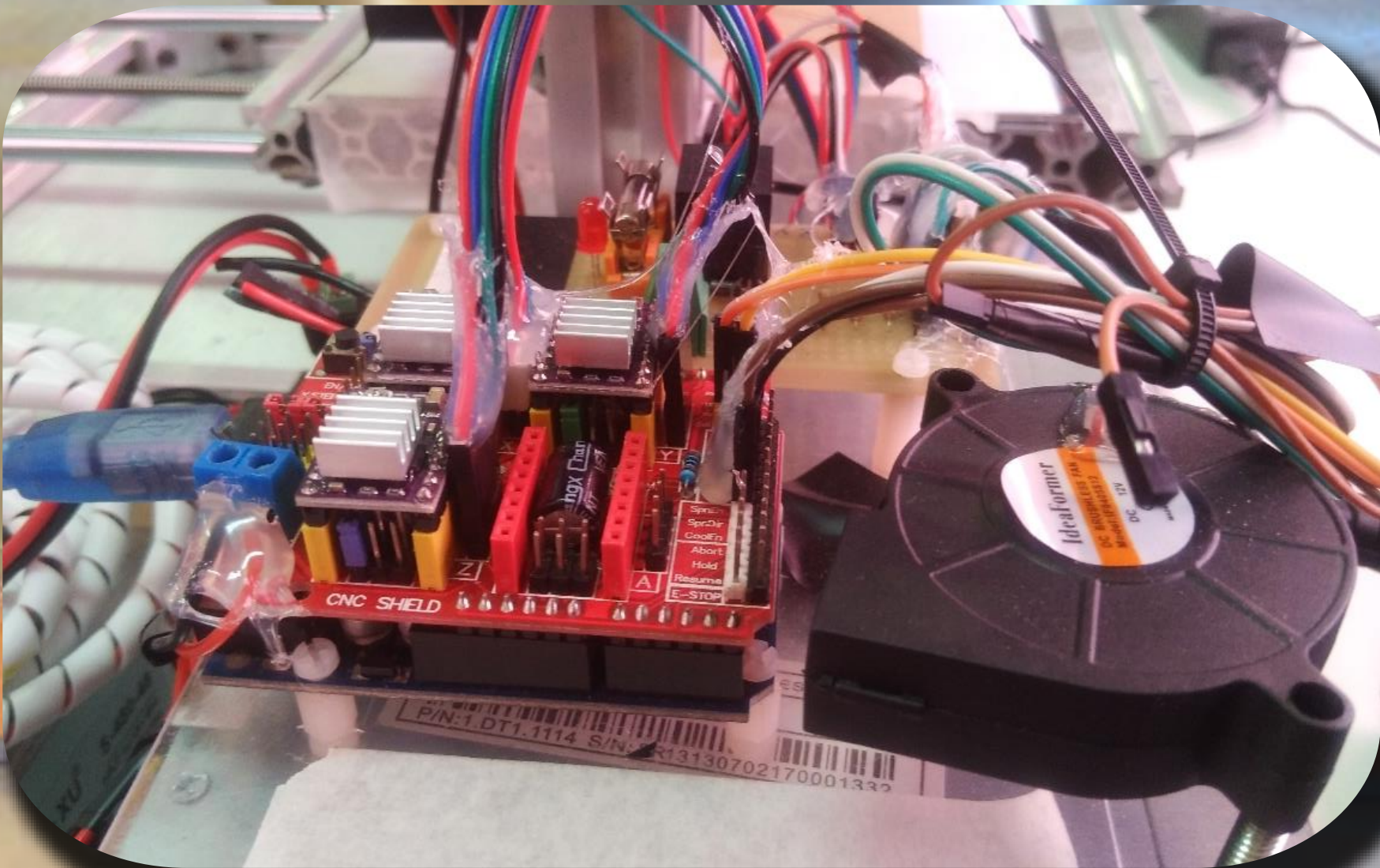


DESAFIOS

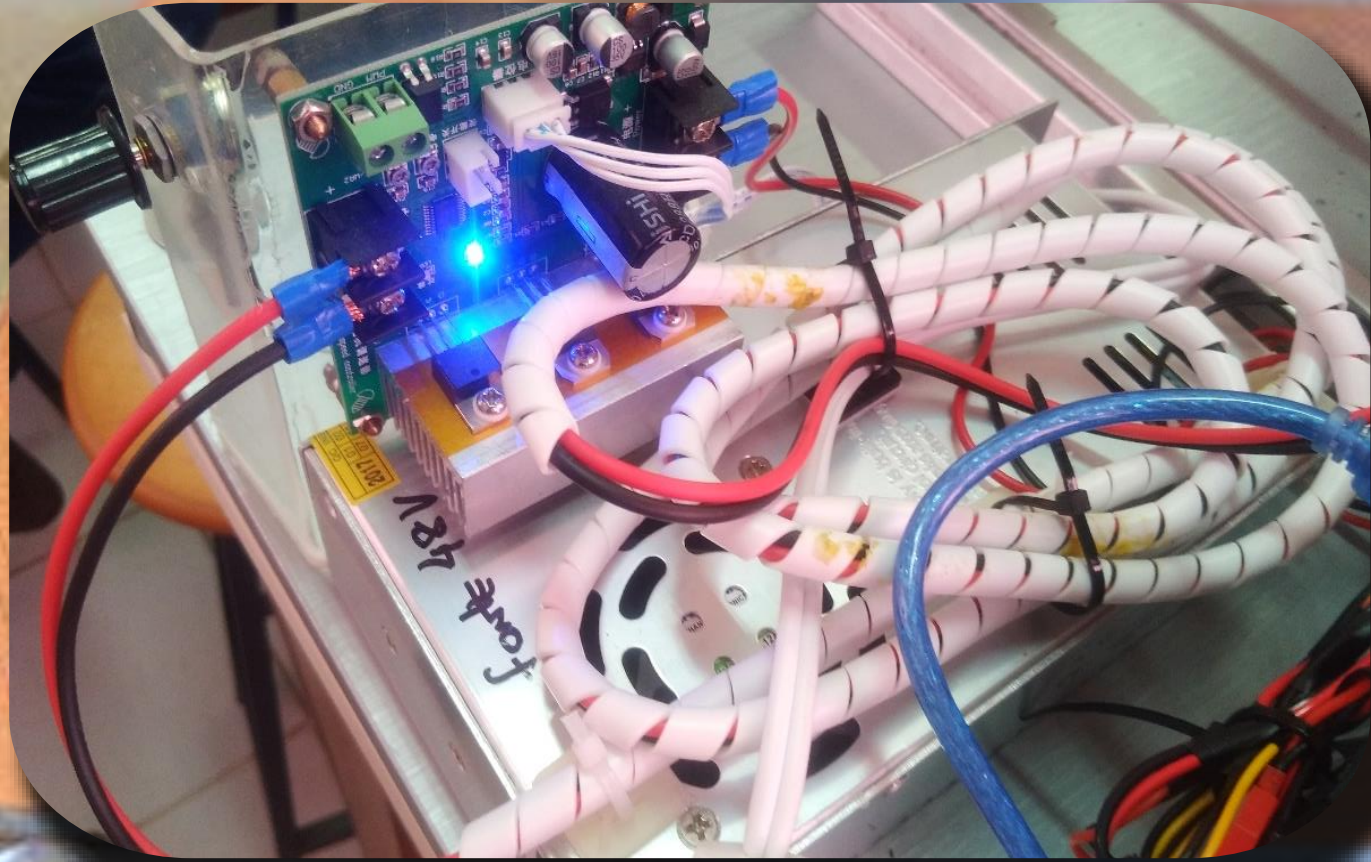
NIVELAMENTO



AQUECIMENTO

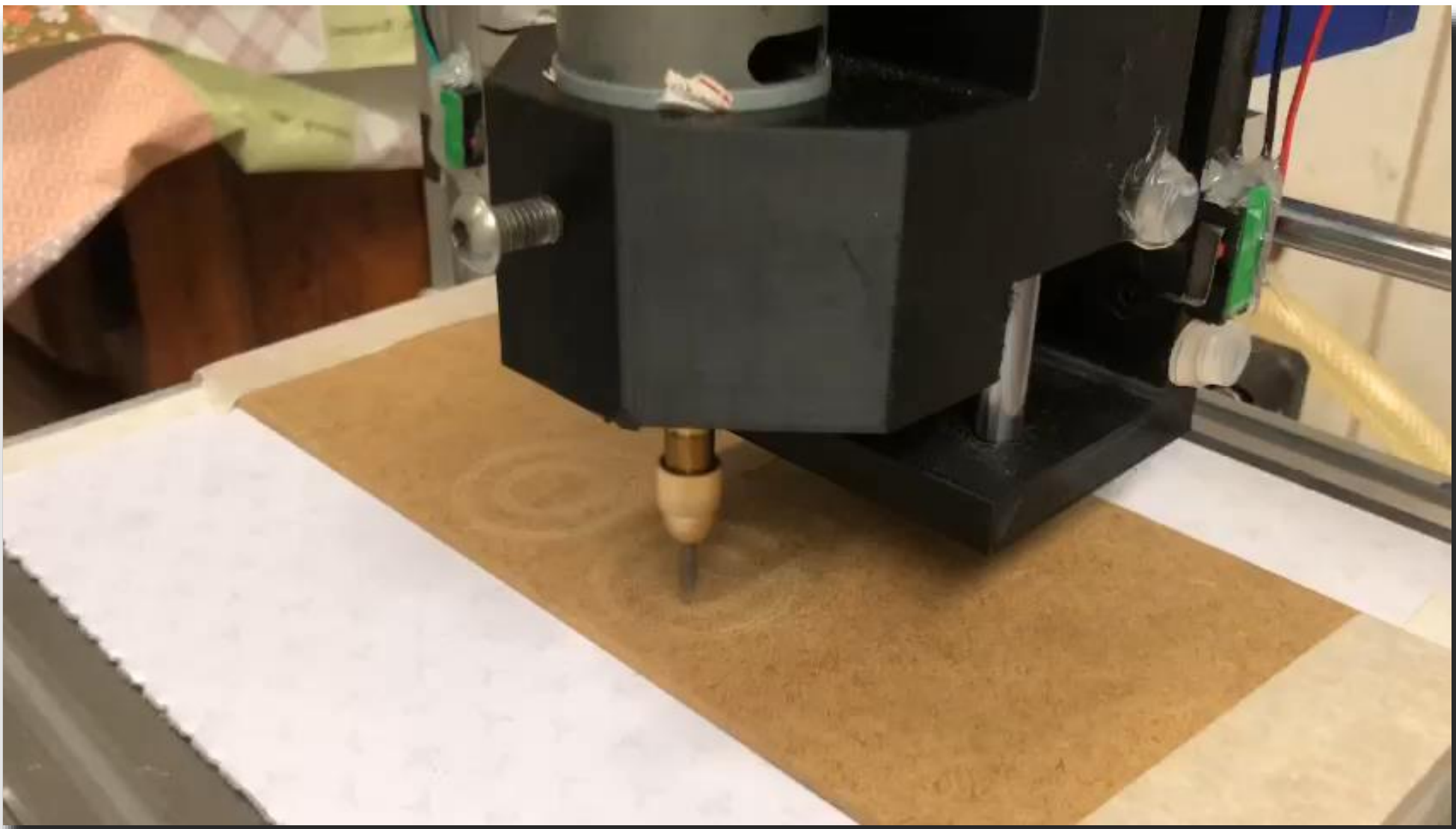


AQUECIMENTO

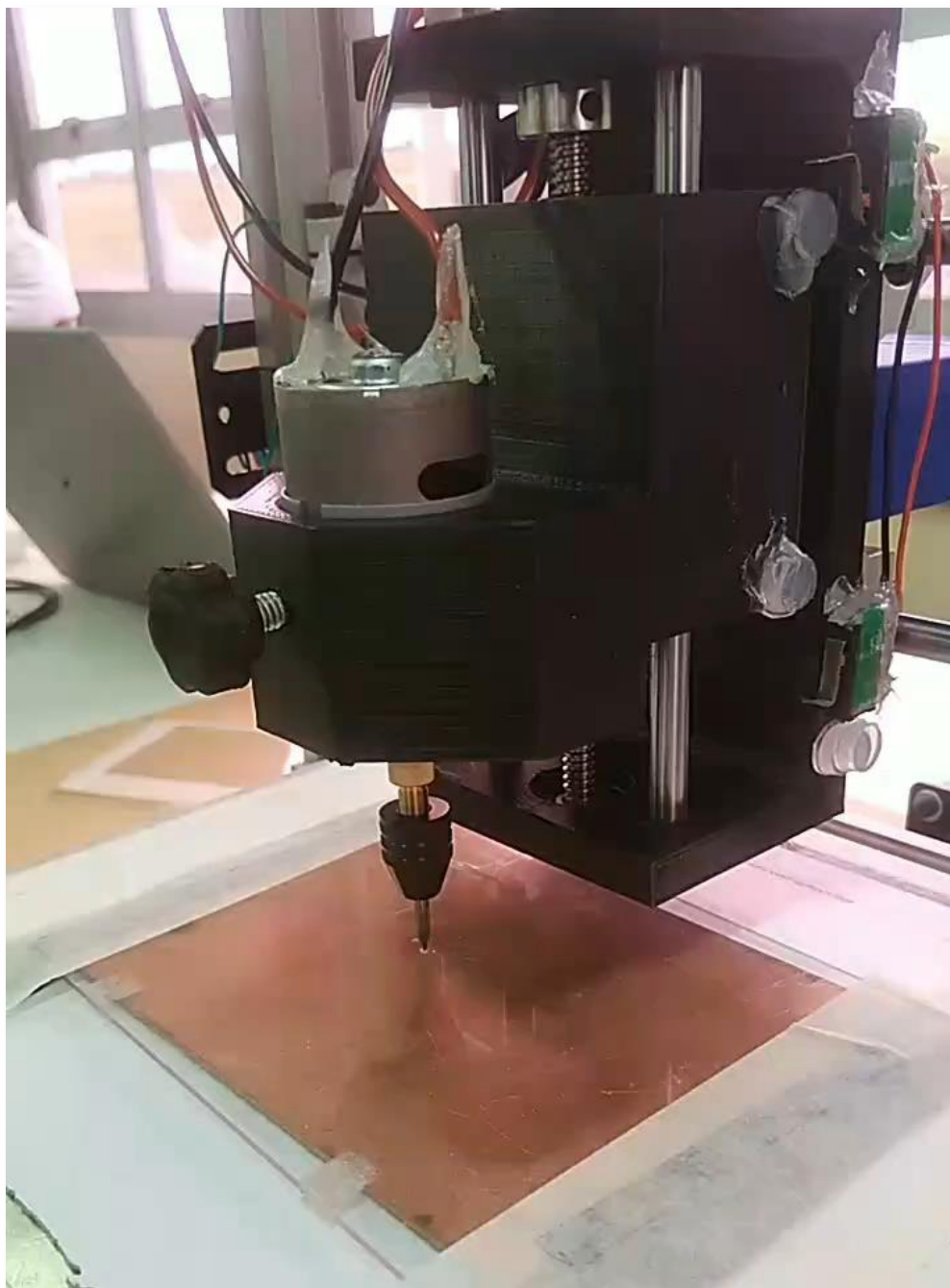


TESTE

TESTE

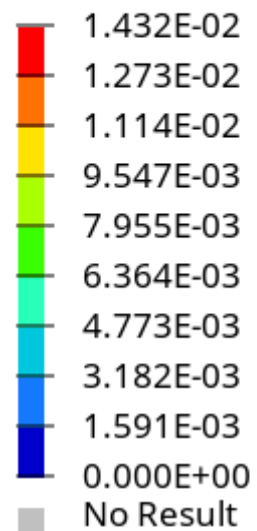


TESTE

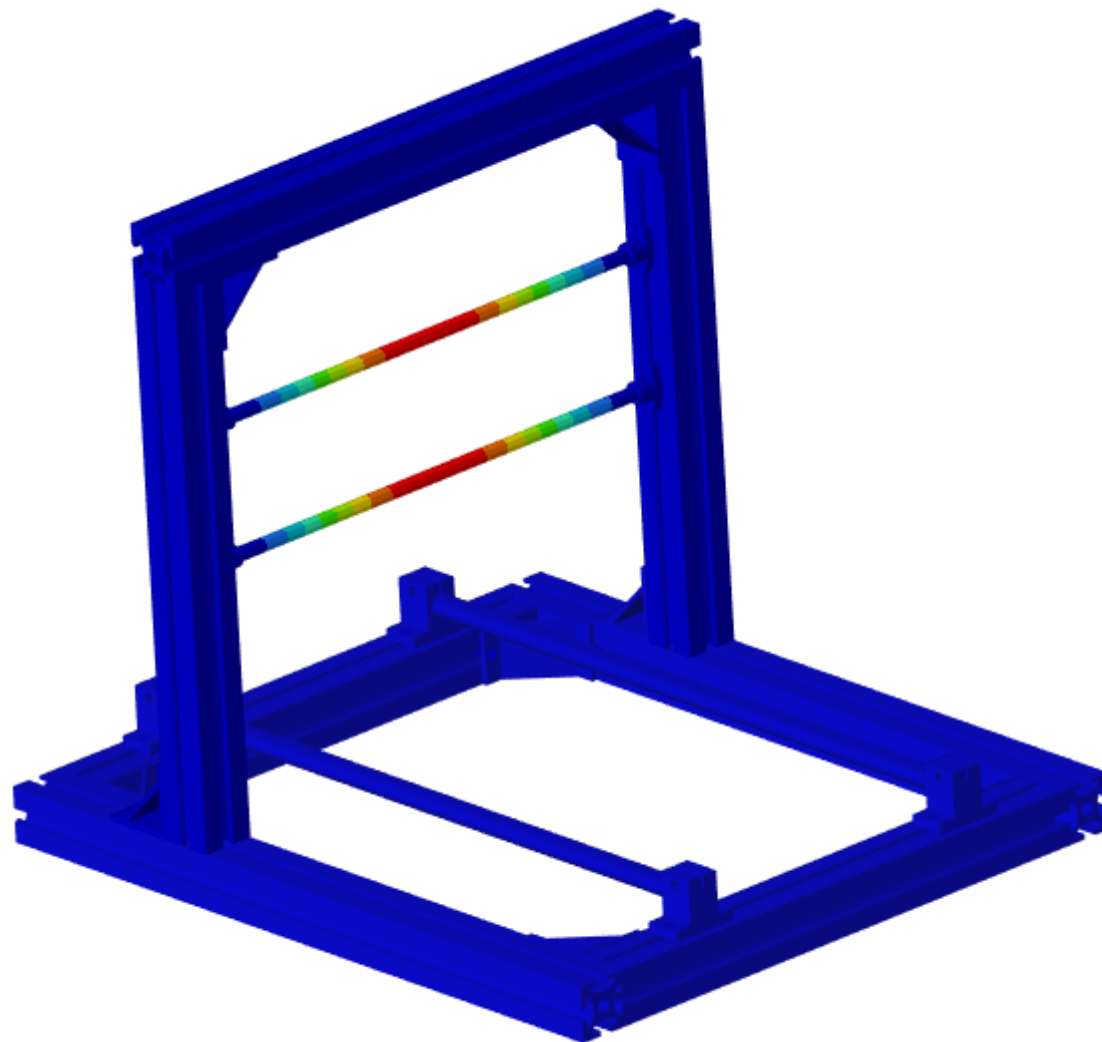
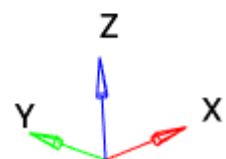


TESTE

Contour Plot
Displacement(Mag)
Analysis system



Max = 1.432E-02
Grids 33456
Min = 0.000E+00
Grids 1109



CUSTO TOTAL

CUSTO TOTAL

Estrutura de custo				
Elétricos				
Descrição	Qtde.	Unid.	Valor	Total
Cnc Shield V3	1	-	R\$ 21,00	R\$ 21,00
Arduino Uno R3	1	-	R\$ 78,50	R\$ 78,50
4 Driver A4988	4	-	R\$ 9,00	R\$ 36,00
Fonte de alimentação 24V a 40V 10	1	-	R\$ 74,00	R\$ 74,00
Motores Nema 17 - 4kgf	3	-	R\$ 72,67	R\$ 218,01
Fim de curso	6	-	R\$ 2,59	R\$ 15,54
Capacitor 100nF	3		R\$ 0,13	R\$ 0,39
Resistor 4,7K.	3		R\$ 0,19	R\$ 0,57
Barra de pinos	1		R\$ 1,19	R\$ 1,19
Terminal 3 vias macho	1		R\$ 4,99	R\$ 4,99
Conector engate rápido	1		R\$ 2,99	R\$ 2,99
Conector borne 2 vias	2		R\$ 1,50	R\$ 3,00
Fio Amarelo	1	m	R\$ 1,10	R\$ 1,10
Fio Vermelho	1	m	R\$ 1,10	R\$ 1,10
Fio Azul	1	m	R\$ 1,10	R\$ 1,10
Fio preto	1	m	R\$ 1,10	R\$ 1,10

CUSTO TOTAL

Estrutura de custo				
Elétricos				
Descrição	Qtde.	Unid.	Valor	Total
Cnc Shield V3	1	-	R\$	
Arduino Uno R3	1	-	R\$	
4 Driver A4988	4	-	R\$	
Fonte de alimentação 24V a 40V 10	1	-	R\$	
Motores Nema 17 - 4kgf	3	-	R\$	
Fim de curso	6	-	R\$	
Capacitor 100nF	3		R\$	
Resistor 4,7K.	3		R\$	
Barra de pinos	1		R\$	
Terminal 3 vias macho	1		R\$	
Conector engate rápido	1		R\$	
Conector borne 2 vias	2		R\$	
Fio Amarelo	1	m	R\$	
Fio Vermelho	1	m	R\$	
Fio Azul	1	m	R\$	
Fio preto	1	m	R\$	

Estrutural				
Descrição	Qtde.	Unid.	Valor	Total
Guia Linear 8x300mm	2	-	R\$ 24,90	R\$ 49,80
Guia Linear 12x400mm	2	-	R\$ 62,54	R\$ 62,54
Pillow block 8mm	4	-	R\$ 16,49	R\$ 65,96
Pillow block 12mm	4	-	R\$ 29,30	R\$ 119,60
Fuso tr8 300mm c/ castanha	1	-	R\$ 54,80	R\$ 54,80
Fuso tr8 400mm c/ castanha	1	-	R\$ 52,50	R\$ 52,50
Fuso tr8 150mm c/ castanha	1	-	R\$ 33,90	R\$ 33,90
Perfil de alumínio 30x30mm 400mm	2	-	R\$ 23,96	R\$ 47,92
Perfil de alumínio 30x30mm 300mm	5	-	R\$ 17,96	R\$ 89,80
Perfil de alumínio 20x80mm	1	m	R\$ 134,90	R\$ 134,90
Cantoneira aluminio	10	-	R\$ 4,50	R\$ 45,00
Mancal p/ eixo kp001 12mm	1	-	R\$ 24,75	R\$ 24,75
Mancal p/ guia 12mm	2	-	R\$ 16,80	R\$ 33,60
Suporte guia 8mm	4	-	R\$ 9,90	R\$ 39,60
Mancal p/ eixo 8mm	1	-	R\$ 19,52	R\$ 19,52
Suporte motor Nema 17	2	-	R\$ 17,44	R\$ 34,88
Acoplador Fuso	3	-	R\$ 14,16	R\$ 42,48
Parafuso M3x16mm	8	-	R\$ 1,10	R\$ 8,80
Parafuso M3x12mm	8	-	R\$ 1,05	R\$ 8,40
Parafuso M4x12mm	20	-	R\$ 0,44	R\$ 8,80
Parafuso M5x30mm	16	-	R\$ 2,90	R\$ 46,40
Parafuso M5x20mm	40	-	R\$ 1,93	R\$ 77,20
Porca martelo M4	20	-	R\$ 1,25	R\$ 25,00
Porca martelo M5	36	-	R\$ 1,44	R\$ 51,84
Barra roscada 3/16"	0,680	mm	R\$ 3,03	R\$ 2,06
Total	-	-	-	R\$ 1.640,63

PRÓXIMOS PASSOS

PRÓXIMOS PASSOS

PROTEÇÃO

**MELHORIAS
ELÉTRICA/ELETRÔNICA**

FIRMWARE DEDICADO

MANUAL DE OPERAÇÃO

GITHUB

GITHUB



**“Crescimento e conforto
não coexistem.”**

Ginni Rometty