M109 S210.000000

;Sliced at: Sat 16-05-2015 16:28:00

;Basic settings: Layer height: 0.2 Walls: 0.8 Fill: 25

;Print time: 15 hours 48 minutes

;Filament used: 34.537m 103.0g

;Filament cost: None

;M190 S70 ;Uncomment to add your own bed temperature line

;M109 S210 ;Uncomment to add your own temperature line

G21 ;metric values

G90 ;absolute positioning

M107 ;start with the fan off

G28 ;move to endstops

G92 E0 ;zero the extruded length

G1 F200 E3 ;extrude 3mm of feed stock

G92 E0 ;zero the extruded length again

G1 F9000

;Put printing message on LCD screen

M117 Printing...

**以上是3D打印机的初始化**

;Layer count: 350

**一共有350打印层**

;LAYER:0

**第0层开始打印，其中：X、Y的值决定打印头的平面位置；Z值决定打印高度；E值是打印时送出的耗材长度；F\*\*\*\***

**是打印头的行走速度，值越大，越快；指令中：**G1 F1200 X61.939 Y-2.405 E0.05635 **有E值表示打印机在消耗耗材**

**进行打印；指令中：**G0 F9000 X53.885 Y5.423**没有E值表示打印机在从一点移动到另一点，不消耗耗材；指令中：**

;G0 F9000 X61.501 Y-3.958 Z0.300 **表示打印头以9000的速度移动到高度为0.3毫米、坐标是X=61.501 、Y=-3.958** **的**

**位置处。**

**下面进行打印；**

M107

G0 F9000 X61.501 Y-3.958 Z0.300

;TYPE:SKIRT

**以1200的速度进行下面的打印**

G1 F1200 X61.939 Y-2.405 E0.05635

G1 X62.872 Y-1.088 E0.11272

G1 X64.189 Y-0.158 E0.16902

G1 X65.746 Y0.284 E0.22555

G1 X67.360 Y0.184 E0.28202

G1 X68.846 Y-0.449 E0.33843

G1 X70.040 Y-1.546 E0.39505

G1 X70.797 Y-2.969 E0.45134

G1 X71.036 Y-4.570 E0.50788

G1 X70.729 Y-6.159 E0.56439

G1 X69.698 Y-7.911 E0.63539

G1 X67.957 Y-8.936 E0.70594

G1 X66.365 Y-9.247 E0.76259

G1 X64.770 Y-9.012 E0.81890

G1 X63.341 Y-8.256 E0.87535

G1 X62.243 Y-7.065 E0.93193

G1 X61.605 Y-5.579 E0.98840

G1 X61.501 Y-3.958 E1.04513

**以上转换的G代码正常**

G0 F9000 X53.885 Y5.423

**上面指令有问题，原意是：当打印头在高度为0.3毫米、X=61.501、Y=-3.958的地方，不用打印，打印头快速长距离的移动到：高度为0.3毫米、X=52.252 、Y=4.744的地方进行打印。如果按照：**G0 F9000 X53.885 Y5.423**此指令，有二个问题：1）打印头会在已经打印好的模型表面快速移动，容易使打印头在碰到模型表面突出物时，受到较大阻力，使步进电机失步，使模型报废；2）只是快速移动到：X=53.885 、Y=5.423而不是要求的：**X=52.252 Y=4.744**位置。**

**为此要做如下改动：**

G0 F9000 X53.885 Y5.423 **此句不要**

**G0 Z0.800 将打印头提高0.5毫米，防止打印头碰到模型表面，避免步进电机失步。**

**G0 F9000** **X52.252 Y4.744 直接将打印头移到需要打印的地方 。**

**G0 Z0.300 将打印头降低到0.3毫米高度，落到模型表面上，进行下面的打印。**

G1 F1200 X52.252 Y4.744 E1.10689

G1 X50.492 Y4.511 E1.16889

G1 X48.734 Y4.741 E1.23081

G1 X47.098 Y5.417 E1.29263

G1 X45.630 Y6.542 E1.35722

G1 X6.545 Y45.627 E3.28758

G1 X5.422 Y47.090 E3.35199

G1 X4.745 Y48.723 E3.41373

G1 X4.511 Y50.484 E3.47577

G1 X4.740 Y52.239 E3.53758

G1 X5.419 Y53.879 E3.59957

G1 X6.575 Y55.388 E3.66595

G1 X8.604 Y57.917 E3.77918

G1 X10.099 Y60.943 E3.89706

G1 X10.903 Y64.223 E4.01499

G1 X10.979 Y67.597 E4.13286

G1 X10.323 Y70.909 E4.25077

G1 X8.965 Y74.000 E4.36867

G1 X7.001 Y76.683 E4.48479

G1 X6.885 Y76.804 E4.49065

G1 X4.503 Y78.892 E4.60127

G1 X4.382 Y78.983 E4.60656

G1 X1.591 Y80.515 E4.71775

G1 X1.383 Y80.609 E4.72572

G1 X-1.618 Y81.483 E4.83488

G1 X-1.780 Y81.528 E4.84075

G1 X-4.982 Y81.740 E4.95282

G1 X-5.178 Y81.746 E4.95967

G1 X-8.336 Y81.260 E5.07125

G1 X-8.506 Y81.221 E5.07734

G1 X-15.843 Y79.255 E5.34261

G1 X-16.339 Y79.118 E5.36058

G1 X-16.342 Y79.121 E5.36073

G1 X-26.535 Y76.390 E5.72926

G1 X-26.081 Y74.687 E5.79081

G1 X-18.878 Y47.807 E6.76266

G1 X-72.517 Y33.435 E8.70198

G1 X-74.958 Y34.053 E8.78992

G1 X-77.953 Y33.993 E8.89453

G1 X-80.825 Y33.142 E8.99914

G1 X-83.368 Y31.562 E9.10370

G1 X-85.402 Y29.367 E9.20821

G1 X-86.781 Y26.713 E9.31266

G1 X-87.410 Y23.786 E9.41721

G1 X-87.242 Y20.796 E9.52180

G1 X-86.289 Y17.958 E9.62635

G1 X-84.621 Y15.476 E9.73078

G1 X-82.355 Y13.522 E9.83528

G1 X-79.650 Y12.238 E9.93985

G1 X-76.702 Y11.714 E10.04441

G1 X-74.945 Y11.876 E10.10603

G1 X-73.721 Y11.990 E10.14896

G1 X-70.921 Y13.043 E10.25344

G1 X-68.500 Y14.799 E10.35788

G1 X-66.627 Y17.136 E10.46248

G1 X-65.440 Y19.885 E10.56705

G1 X-65.023 Y22.850 E10.67161

G1 X-65.251 Y24.616 E10.73380

G1 X-61.463 Y25.630 E10.87075

G1 X25.631 Y-61.464 E15.17221

G1 X24.616 Y-65.251 E15.30913

G1 X22.850 Y-65.023 E15.37132

G1 X19.885 Y-65.440 E15.47589

G1 X17.136 Y-66.627 E15.58046

G1 X14.799 Y-68.500 E15.68505

G1 X13.043 Y-70.921 E15.78950

G1 X11.990 Y-73.721 E15.89397

G1 X11.828 Y-75.477 E15.95556

G1 X11.714 Y-76.701 E15.99849

G1 X12.238 Y-79.650 E16.10309

G1 X13.522 Y-82.355 E16.20766

G1 X15.476 Y-84.621 E16.31215

G1 X17.958 Y-86.289 E16.41659

G1 X20.796 Y-87.242 E16.52114

G1 X23.786 Y-87.410 E16.62572

G1 X26.713 Y-86.781 E16.73028

G1 X29.367 Y-85.402 E16.83473

G1 X31.562 Y-83.368 E16.93923

G1 X33.142 Y-80.825 E17.04379

G1 X33.993 Y-77.953 E17.14840

G1 X34.053 Y-74.958 E17.25302

G1 X33.435 Y-72.518 E17.34092

G1 X47.808 Y-18.878 E19.28028

G1 X75.084 Y-26.187 E20.26645

G1 X76.389 Y-26.538 E20.31364

G1 X78.702 Y-17.904 E20.62580

G1 X81.245 Y-8.418 E20.96878

G1 X81.736 Y-5.236 E21.08122

G1 X81.745 Y-5.066 E21.08717

G1 X81.539 Y-1.914 E21.19748

G1 X81.503 Y-1.681 E21.20571

G1 X80.618 Y1.357 E21.31622

G1 X80.555 Y1.520 E21.32232

G1 X79.048 Y4.265 E21.43168

G1 X78.947 Y4.438 E21.43868

G1 X76.855 Y6.824 E21.54950

G1 X76.731 Y6.965 E21.55606

G1 X74.018 Y8.954 E21.67354

G1 X70.929 Y10.316 E21.79144

G1 X67.617 Y10.977 E21.90938

G1 X64.242 Y10.907 E22.02727

G1 X60.962 Y10.107 E22.14518

G1 X57.933 Y8.614 E22.26311

G1 X55.420 Y6.601 E22.37556

G1 X53.885 Y5.423 E22.44313

**以上转换的G代码正常**

G0 F9000 X-1.070 Y62.863

**上面指令有问题，情况和上面有问题的分析一样。**

**为此要做如下改动：**

G0 F9000 X-1.070 Y62.863 **此句不要**

**G0 E16.44313 将耗材回抽6毫米防止打印头在移动时拉丝。**

**G0 Z0.800 将打印头提高0.5毫米，防止打印头碰到模型表面，避免步进电机失步。**

**G0 F9000** **X-2.386 Y61.931 直接将打印头移到需要打印的地方 。**

**G0 Z0.300 将打印头降低到0.3毫米高度，落到模型表面上，进行下面的打印。**

**G0 E22.44313 到达打印位置后，将耗材回送6毫米**

G1 F1200 X-2.386 Y61.931 E22.49945

G1 X-3.959 Y61.484 E22.55656

G1 X-5.552 Y61.585 E22.61230

G1 X-7.044 Y62.223 E22.66897

G1 X-8.236 Y63.318 E22.72550

G1 X-8.994 Y64.744 E22.78190

G1 X-9.234 Y66.344 E22.83840

G1 X-8.926 Y67.931 E22.89486

G1 X-7.896 Y69.685 E22.96590

G1 X-6.155 Y70.710 E23.03645

G1 X-4.563 Y71.021 E23.09310

G1 X-2.967 Y70.786 E23.14944

G1 X-1.539 Y70.031 E23.20585

G1 X-0.440 Y68.840 E23.26245

G1 X0.195 Y67.355 E23.31885

G1 X0.301 Y65.743 E23.37527

G1 X-0.138 Y64.184 E23.43183

G1 X-1.070 Y62.863 E23.48829

**以上转换的G代码正常**

G0 F9000 X-0.088 Y61.477

**虽然上句指令也是快速移动，但移动的：X、Y距离均在10毫米之内的短距离，不会造成失步，不必修改。**

G0 X0.224 Y61.574

;TYPE:WALL-INNER

G1 F1200 X-1.598 Y60.284 E23.56625

G1 X-3.536 Y59.733 E23.63662

G1 X-3.594 Y59.702 E23.63891

G1 X-3.845 Y59.673 E23.64774

G1 X-5.855 Y59.801 E23.71807

G1 X-6.006 Y59.822 E23.72340

G1 X-7.861 Y60.614 E23.79384

G1 X-8.030 Y60.685 E23.80024

G1 X-9.681 Y62.202 E23.87854

G1 X-10.729 Y64.172 E23.95647

G1 X-11.060 Y66.382 E24.03451

G1 X-10.634 Y68.578 E24.11263

G1 X-9.787 Y70.020 E24.17104

G1 X-16.880 Y77.114 E24.52137

G1 X-24.332 Y75.117 E24.79080

G1 X-16.674 Y46.534 E25.82422

G1 X-72.505 Y31.575 E27.84279

G1 X-75.165 Y32.248 E27.93861

G1 X-77.676 Y32.198 E28.02632

G1 X-80.080 Y31.485 E28.11389

G1 X-82.213 Y30.161 E28.20156

G1 X-83.918 Y28.321 E28.28917

G1 X-85.072 Y26.100 E28.37658

G1 X-85.599 Y23.643 E28.46434

G1 X-85.459 Y21.140 E28.55188

G1 X-84.660 Y18.761 E28.63953

G1 X-83.261 Y16.680 E28.72710

G1 X-81.364 Y15.044 E28.81458

G1 X-79.098 Y13.968 E28.90219

G1 X-76.623 Y13.529 E28.98997

G1 X-74.130 Y13.759 E29.07740

G1 X-71.781 Y14.643 E29.16505

G1 X-69.752 Y16.115 E29.25260

G1 X-68.185 Y18.070 E29.34010

G1 X-67.188 Y20.377 E29.42787

G1 X-66.839 Y22.860 E29.51543

G1 X-67.237 Y25.947 E29.62413

G1 X-60.925 Y27.638 E29.85234

G1 X27.636 Y-60.922 E34.22624

G1 X25.947 Y-67.237 E34.45453

G1 X22.860 Y-66.839 E34.56323

G1 X20.377 Y-67.188 E34.65079

G1 X18.070 Y-68.185 E34.73856

G1 X16.115 Y-69.752 E34.82606

G1 X14.643 Y-71.781 E34.91361

G1 X13.759 Y-74.130 E35.00126

G1 X13.529 Y-76.623 E35.08869

G1 X13.968 Y-79.098 E35.17647

G1 X15.044 Y-81.364 E35.26408

G1 X16.680 Y-83.261 E35.35156

G1 X18.761 Y-84.660 E35.43913

G1 X21.140 Y-85.459 E35.52678

G1 X23.643 Y-85.599 E35.61432

G1 X26.100 Y-85.072 E35.70208

G1 X28.321 Y-83.918 E35.78949

G1 X30.161 Y-82.213 E35.87710

G1 X31.485 Y-80.080 E35.96477

G1 X32.198 Y-77.676 E36.05234

G1 X32.248 Y-75.165 E36.14005

G1 X31.575 Y-72.505 E36.23587

G1 X46.535 Y-16.673 E38.25448

G1 X75.117 Y-24.332 E39.28787

G1 X77.114 Y-16.880 E39.55730

G1 X70.034 Y-9.801 E39.90695

G1 X68.604 Y-10.644 E39.96492

G1 X66.409 Y-11.073 E40.04303

G1 X64.201 Y-10.748 E40.12097

G1 X62.227 Y-9.703 E40.19897

G1 X60.710 Y-8.059 E40.27709

G1 X59.888 Y-6.143 E40.34991

G1 X59.828 Y-5.996 E40.35545

G1 X59.698 Y-3.978 E40.42607

G1 X59.687 Y-3.906 E40.42862

G1 X59.694 Y-3.730 E40.43477

G1 X60.245 Y-1.780 E40.50553

G1 X60.302 Y-1.604 E40.51199

G1 X61.497 Y0.084 E40.58422

G1 X61.587 Y0.208 E40.58957

G1 X63.402 Y1.489 E40.66715

G1 X65.553 Y2.100 E40.74525

G1 X67.781 Y1.961 E40.82321

G1 X69.836 Y1.086 E40.90121

G1 X71.483 Y-0.428 E40.97934

G1 X72.532 Y-2.398 E41.05728

G1 X72.862 Y-4.608 E41.13532

G1 X72.438 Y-6.804 E41.21342

G1 X71.589 Y-8.246 E41.27186

G1 X77.770 Y-14.427 E41.57714

G1 X79.481 Y-8.044 E41.80792

G1 X79.941 Y-5.067 E41.91312

G1 X79.748 Y-2.109 E42.01664

G1 X78.916 Y0.764 E42.12110

G1 X77.480 Y3.381 E42.22535

G1 X75.510 Y5.628 E42.32971

G1 X73.111 Y7.387 E42.43360

G1 X70.382 Y8.590 E42.53775

G1 X67.460 Y9.174 E42.64181

G1 X64.477 Y9.111 E42.74601

G1 X61.579 Y8.404 E42.85019

G1 X58.905 Y7.087 E42.95429

G1 X56.521 Y5.177 E43.06097

G1 X54.796 Y3.852 E43.13693

G1 X52.721 Y2.991 E43.21539

G1 X50.495 Y2.696 E43.29381

G1 X48.267 Y2.986 E43.37227

G1 X46.192 Y3.844 E43.45069

G1 X44.443 Y5.184 E43.52763

G1 X5.191 Y44.435 E45.46622

G1 X3.851 Y46.180 E45.54305

G1 X2.991 Y48.254 E45.62146

G1 X2.696 Y50.481 E45.69992

G1 X2.986 Y52.708 E45.77835

G1 X3.845 Y54.784 E45.85681

G1 X5.167 Y56.509 E45.93271

G1 X7.076 Y58.889 E46.03926

G1 X8.398 Y61.563 E46.14343

G1 X9.108 Y64.461 E46.24763

G1 X9.174 Y67.439 E46.35166

G1 X8.594 Y70.370 E46.45600

G1 X7.397 Y73.095 E46.55995

G1 X5.628 Y75.511 E46.66452

G1 X3.390 Y77.474 E46.76848

G1 X0.778 Y78.907 E46.87253

G1 X-2.083 Y79.744 E46.97663

G1 X-5.070 Y79.941 E47.08117

G1 X-8.003 Y79.490 E47.18481

G1 X-14.427 Y77.770 E47.41706

G1 X-8.232 Y71.575 E47.72302

G1 X-6.802 Y72.418 E47.78099

G1 X-4.607 Y72.847 E47.85910

G1 X-2.398 Y72.522 E47.93707

G1 X-0.425 Y71.478 E48.01503

G1 X1.092 Y69.834 E48.09315

G1 X1.971 Y67.781 E48.17114

G1 X2.116 Y65.551 E48.24919

G1 X1.511 Y63.399 E48.32725

G1 X0.224 Y61.574 E48.40524

**以上转换的G代码正常**

G0 F9000 X-3.967 Y40.548

**上面指令有问题，情况和上面有问题的分析一样。**

**为此要做如下改动：**

G0 F9000 X-3.967 Y40.548 **此句不要**

**G1 E42.40524 将耗材回抽6毫米，防止打印头在移动时拉丝。**

**G0 Z0.800 将打印头提高0.5毫米，防止打印头碰到模型表面，避免步进电机失步。**

**G0 F9000** **X-3.909 Y40.552 直接将打印头移到需要打印的地方 。**

**G0 Z0.300 将打印头降低到0.3毫米高度，落到模型表面上，进行下面的打印。**

**G1 E48.40524 到达打印位置后，将耗材回送6毫米**

G1 F1200 X-3.909 Y40.552 E48.40727

G1 X-3.692 Y40.505 E48.41503

G1 X-2.768 Y39.942 E48.45281

G1 X-1.231 Y38.412 E48.52855

G1 X39.927 Y-2.747 E50.56132

G1 X40.445 Y-3.598 E50.59611

G1 X40.534 Y-3.757 E50.60248

G1 X40.604 Y-4.771 E50.63797

G1 X40.613 Y-4.825 E50.63988

G1 X40.477 Y-6.961 E50.71463

G1 X40.474 Y-7.005 E50.71617

G1 X40.767 Y-8.959 E50.78517

G1 X40.961 Y-10.469 E50.83834

G1 X40.771 Y-11.912 E50.88917

G1 X29.941 Y-52.334 E52.35062

G1 X29.640 Y-53.310 E52.38629

G1 X-52.575 Y28.906 E56.44682

G1 X-52.849 Y29.164 E56.45996

G1 X-52.677 Y29.847 E56.48456

G1 X-11.917 Y40.770 E57.95825

G1 X-10.478 Y40.961 E58.00895

G1 X-9.063 Y40.785 E58.05874

G1 X-6.991 Y40.474 E58.13191

G1 X-4.973 Y40.601 E58.20253

G1 X-4.887 Y40.611 E58.20555

G1 X-3.967 Y40.548 E58.23776

G0 F9000 X-3.968 Y40.148

**虽然上句指令也是快速移动，但移动的：X、Y距离均在10毫米之内的短距离，不会造成失步，不必修改。**

;TYPE:WALL-OUTER

G1 F1200 X-3.940 Y40.149 E58.23873

G1 X-3.843 Y40.128 E58.24220

G1 X-3.017 Y39.625 E58.27597

G1 X39.610 Y-2.995 E60.38110

G1 X40.100 Y-3.800 E60.41401

G1 X40.141 Y-3.874 E60.41696

G1 X40.207 Y-4.824 E60.45022

G1 X40.211 Y-4.846 E60.45100

G1 X40.078 Y-6.936 E60.52414

G1 X40.073 Y-7.023 E60.52718

G1 X40.376 Y-9.043 E60.59852

G1 X40.558 Y-10.468 E60.64869

G1 X40.378 Y-11.834 E60.69680

G1 X29.556 Y-52.223 E62.15707

G1 X29.453 Y-52.557 E62.16928

G1 X-52.301 Y29.198 E66.20703

G1 X-52.404 Y29.294 E66.21195

G1 X-52.346 Y29.522 E66.22016

G1 X-11.838 Y40.377 E67.68474

G1 X-10.476 Y40.558 E67.73273

G1 X-9.118 Y40.389 E67.78052

G1 X-7.029 Y40.076 E67.85429

G1 X-6.981 Y40.073 E67.85597

G1 X-4.941 Y40.203 E67.92735

G1 X-4.878 Y40.210 E67.92957

G1 X-3.968 Y40.148 E67.96142

G0 F9000 X-3.966 Y40.448

**虽然上句指令也是快速移动，但移动的：X、Y距离均在10毫米之内的短距离，不会造成失步，不必修改。**

G0 X3.925 Y46.267

G0 X4.200 Y46.382

G1 F1200 X3.380 Y48.359 E68.03617

G1 X3.099 Y50.482 E68.11096

G1 X3.376 Y52.604 E68.18569

G1 X4.194 Y54.583 E68.26048

G1 X5.482 Y56.262 E68.33438

G1 X7.416 Y58.674 E68.44235

G1 X8.776 Y61.426 E68.54955

G1 X9.506 Y64.406 E68.65670

G1 X9.576 Y67.477 E68.76398

G1 X8.979 Y70.487 E68.87114

G1 X7.745 Y73.297 E68.97832

G1 X5.929 Y75.777 E69.08567

G1 X3.622 Y77.803 E69.19289

G1 X0.970 Y79.259 E69.29855

G1 X0.895 Y79.293 E69.30143

G1 X-2.000 Y80.136 E69.40673

G1 X-5.053 Y80.341 E69.51359

G1 X-5.092 Y80.342 E69.51495

G1 X-8.080 Y79.882 E69.62053

G1 X-15.201 Y77.978 E69.87795

G1 X-8.296 Y71.073 E70.21898

G1 X-6.658 Y72.039 E70.28539

G1 X-4.598 Y72.441 E70.35869

G1 X-2.524 Y72.136 E70.43190

G1 X-0.672 Y71.157 E70.50506

G1 X0.751 Y69.613 E70.57839

G1 X1.576 Y67.686 E70.65160

G1 X1.713 Y65.594 E70.72481

G1 X1.144 Y63.574 E70.79810

G1 X-0.063 Y61.861 E70.87128

G1 X-1.773 Y60.650 E70.94446

G1 X-3.686 Y60.107 E71.01391

G1 X-3.715 Y60.091 E71.01506

G1 X-3.856 Y60.074 E71.02002

G1 X-5.814 Y60.199 E71.08854

G1 X-5.898 Y60.211 E71.09151

G1 X-7.707 Y60.983 E71.16019

G1 X-7.811 Y61.027 E71.16414

G1 X-9.360 Y62.450 E71.23760

G1 X-10.344 Y64.299 E71.31074

G1 X-10.654 Y66.373 E71.38398

G1 X-10.255 Y68.435 E71.45733

G1 X-9.285 Y70.084 E71.52414

G1 X-16.760 Y77.560 E71.89334

G1 X-24.822 Y75.400 E72.18483

G1 X-17.163 Y46.817 E73.21825

G1 X-72.508 Y31.988 E75.21925

G1 X-75.119 Y32.649 E75.31331

G1 X-77.735 Y32.597 E75.40468

G1 X-80.248 Y31.852 E75.49622

G1 X-82.468 Y30.473 E75.58749

G1 X-84.249 Y28.552 E75.67897

G1 X-85.451 Y26.238 E75.77004

G1 X-86.001 Y23.676 E75.86155

G1 X-85.855 Y21.064 E75.95291

G1 X-85.021 Y18.582 E76.04435

G1 X-83.563 Y16.412 E76.13565

G1 X-81.585 Y14.707 E76.22685

G1 X-79.218 Y13.583 E76.31836

G1 X-76.642 Y13.126 E76.40973

G1 X-74.037 Y13.367 E76.50109

G1 X-71.591 Y14.286 E76.59235

G1 X-69.474 Y15.822 E76.68369

G1 X-67.839 Y17.863 E76.77502

G1 X-66.800 Y20.268 E76.86651

G1 X-66.436 Y22.860 E76.95792

G1 X-66.796 Y25.651 E77.05620

G1 X-61.044 Y27.192 E77.26416

G1 X27.191 Y-61.043 E81.62198

G1 X25.651 Y-66.796 E81.82996

G1 X22.860 Y-66.436 E81.92824

G1 X20.268 Y-66.800 E82.01965

G1 X17.863 Y-67.839 E82.11114

G1 X15.822 Y-69.474 E82.20247

G1 X14.286 Y-71.591 E82.29382

G1 X13.367 Y-74.037 E82.38507

G1 X13.126 Y-76.642 E82.47643

G1 X13.583 Y-79.218 E82.56780

G1 X14.707 Y-81.585 E82.65931

G1 X16.412 Y-83.563 E82.75051

G1 X18.582 Y-85.021 E82.84181

G1 X21.064 Y-85.855 E82.93325

G1 X23.676 Y-86.001 E83.02461

G1 X26.238 Y-85.451 E83.11612

G1 X28.552 Y-84.249 E83.20719

G1 X30.473 Y-82.468 E83.29867

G1 X31.852 Y-80.248 E83.38994

G1 X32.597 Y-77.735 E83.48148

G1 X32.649 Y-75.119 E83.57285

G1 X31.988 Y-72.508 E83.66691

G1 X46.818 Y-17.163 E85.66792

G1 X75.400 Y-24.822 E86.70131

G1 X77.560 Y-16.760 E86.99279

G1 X70.098 Y-9.299 E87.36131

G1 X68.460 Y-10.265 E87.42772

G1 X66.400 Y-10.667 E87.50101

G1 X64.327 Y-10.362 E87.57419

G1 X62.474 Y-9.382 E87.64740

G1 X61.051 Y-7.838 E87.72072

G1 X60.257 Y-5.988 E87.79103

G1 X60.223 Y-5.905 E87.79416

G1 X60.096 Y-3.939 E87.86297

G1 X60.088 Y-3.885 E87.86487

G1 X60.092 Y-3.793 E87.86809

G1 X60.628 Y-1.895 E87.93696

G1 X60.664 Y-1.785 E87.94101

G1 X61.822 Y-0.149 E88.01101

G1 X61.872 Y-0.081 E88.01395

G1 X63.577 Y1.123 E88.08685

G1 X65.596 Y1.697 E88.16015

G1 X67.688 Y1.566 E88.23335

G1 X69.616 Y0.745 E88.30654

G1 X71.162 Y-0.676 E88.37987

G1 X72.147 Y-2.525 E88.45303

G1 X72.456 Y-4.599 E88.52626

G1 X72.058 Y-6.661 E88.59960

G1 X71.087 Y-8.310 E88.66643

G1 X77.977 Y-15.200 E89.00672

G1 X79.872 Y-8.133 E89.26224

G1 X80.342 Y-5.091 E89.36974

G1 X80.342 Y-5.077 E89.37023

G1 X80.145 Y-2.065 E89.47564

G1 X79.291 Y0.908 E89.58367

G1 X77.832 Y3.573 E89.68977

G1 X75.781 Y5.926 E89.79878

G1 X73.315 Y7.734 E89.90557

G1 X70.503 Y8.974 E90.01290

G1 X67.494 Y9.575 E90.12006

G1 X64.423 Y9.510 E90.22733

G1 X61.442 Y8.783 E90.33449

G1 X58.691 Y7.428 E90.44158

G1 X56.274 Y5.492 E90.54973

G1 X54.594 Y4.201 E90.62372

G1 X52.616 Y3.380 E90.69852

G1 X50.494 Y3.099 E90.77327

G1 X48.371 Y3.376 E90.84804

G1 X46.393 Y4.193 E90.92278

G1 X44.705 Y5.487 E90.99706

G1 X5.492 Y44.699 E92.93371

G1 X4.200 Y46.382 E93.00781

G0 F9000 X3.832 Y45.976

**虽然上句指令也是快速移动，但移动的：X、Y距离均在10毫米之内的短距离，不会造成失步，不必修改。**

;TYPE:SKIN

G1 F1200 X-2.385 Y39.757 E93.31491

G0 F9000 X-2.102 Y39.474

G1 F1200 X4.077 Y45.655 E93.62013

G0 F9000 X4.323 Y45.336

G1 F1200 X-1.820 Y39.192 E93.92355

G0 F9000 X-1.537 Y38.909

G1 F1200 X4.569 Y45.015 E94.22512

G0 F9000 X4.814 Y44.695

G1 F1200 X-1.254 Y38.626 E94.52484

G0 F9000 X-0.971 Y38.343

G1 F1200 X5.060 Y44.375 E94.82273

G0 F9000 X5.338 Y44.088

G1 F1200 X-0.688 Y38.060 E95.12039

G0 F9000 X-0.405 Y37.777

G1 F1200 X5.621 Y43.805 E95.41806

G0 F9000 X5.904 Y43.522

G1 F1200 X-0.123 Y37.495 E95.71573

G0 F9000 X0.159 Y37.212

G1 F1200 X6.187 Y43.239 E96.01342

G0 F9000 X6.470 Y42.956

G1 F1200 X0.442 Y36.929 E96.31111

G0 F9000 X0.725 Y36.646

G1 F1200 X6.752 Y42.673 E96.60877

G0 F9000 X7.035 Y42.391

G1 F1200 X1.008 Y36.363 E96.90646

G0 F9000 X1.291 Y36.080

G1 F1200 X7.318 Y42.108 E97.20415

G0 F9000 X7.601 Y41.825

G1 F1200 X1.574 Y35.797 E97.50185

G0 F9000 X1.856 Y35.515

G1 F1200 X7.884 Y41.542 E97.79954

G0 F9000 X8.167 Y41.259

G1 F1200 X2.139 Y35.232 E98.09723

G0 F9000 X2.422 Y34.949

G1 F1200 X8.449 Y40.976 E98.39489

G0 F9000 X8.732 Y40.693

G1 F1200 X2.705 Y34.666 E98.69256

G0 F9000 X2.988 Y34.383

G1 F1200 X9.015 Y40.411 E98.99025

G0 F9000 X9.298 Y40.128

G1 F1200 X3.271 Y34.100 E99.28794

G0 F9000 X3.553 Y33.818

G1 F1200 X9.581 Y39.845 E99.58563

G0 F9000 X9.864 Y39.562

G1 F1200 X3.836 Y33.535 E99.88332

G0 F9000 X4.119 Y33.252

G1 F1200 X10.146 Y39.279 E100.18099

G0 F9000 X10.429 Y38.996

G1 F1200 X4.402 Y32.969 E100.47866

G0 F9000 X4.685 Y32.686

G1 F1200 X10.712 Y38.714 E100.77635

G0 F9000 X10.995 Y38.431

G1 F1200 X4.968 Y32.403 E101.07404

G0 F9000 X5.250 Y32.121

G1 F1200 X11.278 Y38.148 E101.37173

G0 F9000 X11.561 Y37.865

G1 F1200 X5.533 Y31.838 E101.66942

G0 F9000 X5.816 Y31.555

G1 F1200 X11.844 Y37.582 E101.96711

G0 F9000 X12.126 Y37.299

G1 F1200 X6.100 Y31.273 E102.26473

G0 F9000 X6.383 Y30.990

G1 F1200 X12.409 Y37.017 E102.56237

G0 F9000 X12.692 Y36.734

G1 F1200 X6.665 Y30.707 E102.86003

G0 F9000 X6.948 Y30.424

G1 F1200 X12.975 Y36.451 E103.15770

G0 F9000 X13.258 Y36.168

G1 F1200 X7.231 Y30.141 E103.45537

G0 F9000 X7.514 Y29.858

G1 F1200 X13.541 Y35.885 E103.75303

G0 F9000 X13.823 Y35.602

G1 F1200 X7.797 Y29.576 E104.05065

G0 F9000 X8.080 Y29.293

G1 F1200 X14.106 Y35.319 E104.34827

G0 F9000 X14.389 Y35.037

G1 F1200 X8.362 Y29.010 E104.64593

G0 F9000 X8.645 Y28.727

G1 F1200 X14.672 Y34.754 E104.94360

G0 F9000 X14.955 Y34.471

G1 F1200 X8.928 Y28.444 E105.24127

G0 F9000 X9.211 Y28.161

G1 F1200 X15.238 Y34.188 E105.53893

G0 F9000 X15.520 Y33.905

G1 F1200 X9.494 Y27.879 E105.83655

G0 F9000 X9.777 Y27.596

G1 F1200 X15.803 Y33.622 E106.13417

G0 F9000 X16.086 Y33.340

G1 F1200 X10.060 Y27.313 E106.43181

G0 F9000 X10.342 Y27.030

G1 F1200 X16.369 Y33.057 E106.72947

G0 F9000 X16.652 Y32.774

G1 F1200 X10.625 Y26.747 E107.02714

G0 F9000 X10.908 Y26.464

G1 F1200 X16.935 Y32.491 E107.32481

G0 F9000 X17.218 Y32.208

G1 F1200 X11.191 Y26.182 E107.62245

G0 F9000 X11.474 Y25.899

G1 F1200 X17.500 Y31.925 E107.92006

G0 F9000 X17.783 Y31.643

G1 F1200 X11.757 Y25.616 E108.21770

G0 F9000 X12.039 Y25.333

G1 F1200 X18.066 Y31.360 E108.51537

G0 F9000 X18.349 Y31.077

G1 F1200 X12.322 Y25.050 E108.81304

G0 F9000 X12.605 Y24.767

G1 F1200 X18.632 Y30.794 E109.11070

G0 F9000 X18.915 Y30.511

G1 F1200 X12.888 Y24.484 E109.40837

G0 F9000 X13.171 Y24.202

G1 F1200 X19.197 Y30.228 E109.70599

G0 F9000 X19.480 Y29.945

G1 F1200 X13.454 Y23.919 E110.00360

G0 F9000 X13.736 Y23.636

G1 F1200 X19.763 Y29.663 E110.30127

G0 F9000 X20.046 Y29.380

G1 F1200 X14.019 Y23.353 E110.59894

G0 F9000 X14.302 Y23.070

G1 F1200 X20.329 Y29.097 E110.89660

G0 F9000 X20.612 Y28.814

G1 F1200 X14.586 Y22.788 E111.19422

G0 F9000 X14.869 Y22.505

G1 F1200 X20.895 Y28.531 E111.49184

G0 F9000 X21.177 Y28.248

G1 F1200 X15.151 Y22.222 E111.78945

G0 F9000 X15.434 Y21.940

G1 F1200 X21.460 Y27.966 E112.08707

G0 F9000 X21.743 Y27.683

G1 F1200 X15.717 Y21.657 E112.38469

G0 F9000 X16.000 Y21.374

G1 F1200 X22.026 Y27.400 E112.68230

G0 F9000 X22.309 Y27.117

G1 F1200 X16.283 Y21.091 E112.97992

G0 F9000 X16.566 Y20.808

G1 F1200 X22.592 Y26.834 E113.27754

G0 F9000 X22.874 Y26.551

G1 F1200 X16.848 Y20.525 E113.57515

G0 F9000 X17.131 Y20.243

G1 F1200 X23.157 Y26.269 E113.87277

G0 F9000 X23.440 Y25.986

G1 F1200 X17.414 Y19.960 E114.17039

G0 F9000 X17.697 Y19.677

G1 F1200 X23.723 Y25.703 E114.46800

G0 F9000 X24.006 Y25.420

G1 F1200 X17.980 Y19.394 E114.76562

G0 F9000 X18.263 Y19.111

G1 F1200 X24.289 Y25.137 E115.06324

G0 F9000 X24.571 Y24.854

G1 F1200 X18.545 Y18.828 E115.36085

G0 F9000 X18.828 Y18.545

G1 F1200 X24.854 Y24.571 E115.65847

G0 F9000 X25.137 Y24.289

G1 F1200 X19.111 Y18.263 E115.95609

G0 F9000 X19.394 Y17.980

G1 F1200 X25.420 Y24.006 E116.25370

G0 F9000 X25.703 Y23.723

G1 F1200 X19.677 Y17.697 E116.55132

G0 F9000 X19.960 Y17.414

G1 F1200 X25.986 Y23.440 E116.84894

G0 F9000 X26.269 Y23.157

G1 F1200 X20.243 Y17.131 E117.14655

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G0 F9000 X27.400 Y22.026

G1 F1200 X21.374 Y16.000 E118.33702

G0 F9000 X21.657 Y15.717

G1 F1200 X27.683 Y21.743 E118.63464

G0 F9000 X27.966 Y21.460

G1 F1200 X21.940 Y15.434 E118.93226

G0 F9000 X22.222 Y15.151

G1 F1200 X28.248 Y21.177 E119.22987

G0 F9000 X28.531 Y20.895

G1 F1200 X22.505 Y14.869 E119.52749

G0 F9000 X22.788 Y14.586

G1 F1200 X28.814 Y20.612 E119.82511

G0 F9000 X29.097 Y20.329

G1 F1200 X23.072 Y14.304 E120.12267

G0 F9000 X23.355 Y14.021

G1 F1200 X29.380 Y20.046 E120.42024

G0 F9000 X29.663 Y19.763

G1 F1200 X23.637 Y13.738 E120.71783

G0 F9000 X23.920 Y13.455

G1 F1200 X29.945 Y19.480 E121.01540

G0 F9000 X30.228 Y19.197

G1 F1200 X24.203 Y13.172 E121.31297

G0 F9000 X24.486 Y12.889

G1 F1200 X30.511 Y18.915 E121.61056

G0 F9000 X30.794 Y18.632

G1 F1200 X24.769 Y12.607 E121.90813

G0 F9000 X25.052 Y12.324

G1 F1200 X31.077 Y18.349 E122.20569

G0 F9000 X31.360 Y18.066

G1 F1200 X25.334 Y12.041 E122.50329

G0 F9000 X25.617 Y11.758

G1 F1200 X31.643 Y17.783 E122.80088

G0 F9000 X31.925 Y17.500

G1 F1200 X25.900 Y11.475 E123.09845

G0 F9000 X26.183 Y11.192

G1 F1200 X32.208 Y17.218 E123.39604

G0 F9000 X32.491 Y16.935

G1 F1200 X26.466 Y10.909 E123.69363

G0 F9000 X26.749 Y10.627

G1 F1200 X32.774 Y16.652 E123.99120

G0 F9000 X33.057 Y16.369

G1 F1200 X27.031 Y10.344 E124.28879

G0 F9000 X27.314 Y10.061

G1 F1200 X33.340 Y16.086 E124.58638

G0 F9000 X33.622 Y15.803

G1 F1200 X27.597 Y9.778 E124.88395

G0 F9000 X27.880 Y9.495

G1 F1200 X33.905 Y15.520 E125.18152

G0 F9000 X34.188 Y15.238

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G1 F1200 X35.602 Y13.823 E126.96697

G0 F9000 X35.885 Y13.541

G1 F1200 X29.860 Y7.515 E127.26456

G0 F9000 X30.143 Y7.232

G1 F1200 X36.168 Y13.258 E127.56215

G0 F9000 X36.451 Y12.975

G1 F1200 X30.426 Y6.950 E127.85972

G0 F9000 X30.708 Y6.667

G1 F1200 X36.734 Y12.692 E128.15731

G0 F9000 X37.017 Y12.409

G1 F1200 X30.991 Y6.384 E128.45491

G0 F9000 X31.274 Y6.101

G1 F1200 X37.299 Y12.126 E128.75247

G0 F9000 X37.582 Y11.844

G1 F1200 X31.558 Y5.819 E129.05002

G0 F9000 X31.841 Y5.536

G1 F1200 X37.865 Y11.561 E129.34756

G0 F9000 X38.148 Y11.278

G1 F1200 X32.123 Y5.253 E129.64513

G0 F9000 X32.406 Y4.970

G1 F1200 X38.431 Y10.995 E129.94269

G0 F9000 X38.714 Y10.712

G1 F1200 X32.689 Y4.688 E130.24024

G0 F9000 X32.972 Y4.405

G1 F1200 X38.996 Y10.429 E130.53775

G0 F9000 X39.279 Y10.146

G1 F1200 X33.255 Y4.122 E130.83527

G0 F9000 X33.538 Y3.839

G1 F1200 X39.562 Y9.864 E131.13282

G0 F9000 X39.845 Y9.581

G1 F1200 X33.820 Y3.556 E131.43038

G0 F9000 X34.103 Y3.273

G1 F1200 X40.128 Y9.298 E131.72795

G0 F9000 X40.411 Y9.015

G1 F1200 X34.386 Y2.991 E132.02549

G0 F9000 X34.669 Y2.708

G1 F1200 X40.693 Y8.732 E132.32301

G0 F9000 X40.976 Y8.449

G1 F1200 X34.952 Y2.425 E132.62053

G0 F9000 X35.235 Y2.142

G1 F1200 X41.259 Y8.167 E132.91807

G0 F9000 X41.542 Y7.884

G1 F1200 X35.517 Y1.859 E133.21564

G0 F9000 X35.800 Y1.576

G1 F1200 X41.825 Y7.601 E133.51321

G0 F9000 X42.108 Y7.318

G1 F1200 X36.083 Y1.294 E133.81075

G0 F9000 X36.366 Y1.011

G1 F1200 X42.391 Y7.035 E134.10829

G0 F9000 X42.673 Y6.752

G1 F1200 X36.649 Y0.728 E134.40581

G0 F9000 X36.932 Y0.445

G1 F1200 X42.956 Y6.470 E134.70335

G0 F9000 X43.239 Y6.187

G1 F1200 X37.215 Y0.162 E135.00089

G0 F9000 X37.497 Y-0.120

G1 F1200 X43.522 Y5.904 E135.29844

G0 F9000 X43.805 Y5.621

G1 F1200 X37.780 Y-0.403 E135.59598

G0 F9000 X38.063 Y-0.685

G1 F1200 X44.088 Y5.338 E135.89350

G0 F9000 X44.373 Y5.058

G1 F1200 X38.346 Y-0.968 E136.19114

G0 F9000 X38.629 Y-1.251

G1 F1200 X44.694 Y4.813 E136.49066

G0 F9000 X45.014 Y4.567

G1 F1200 X38.912 Y-1.534 E136.79200

G0 F9000 X39.194 Y-1.817

G1 F1200 X45.334 Y4.322 E137.09523

G0 F9000 X45.655 Y4.077

G1 F1200 X39.477 Y-2.100 E137.40033

G0 F9000 X39.760 Y-2.382

G1 F1200 X45.975 Y3.831 E137.70723

G0 F9000 X46.339 Y3.630

G1 F1200 X40.041 Y-2.667 E138.01825

G0 F9000 X40.255 Y-3.019

G1 F1200 X46.739 Y3.464 E138.33847

G0 F9000 X47.139 Y3.299

G1 F1200 X40.469 Y-3.370 E138.66786

G0 F9000 X40.671 Y-3.734

G1 F1200 X47.540 Y3.133 E139.00707

G0 F9000 X47.940 Y2.968

G1 F1200 X40.708 Y-4.263 E139.36422

G0 F9000 X40.747 Y-4.789

G1 F1200 X48.368 Y2.831 E139.74059

G0 F9000 X48.868 Y2.765

G1 F1200 X40.716 Y-5.386 E140.14318

G0 F9000 X40.678 Y-5.990

G1 F1200 X49.369 Y2.700 E140.57239

G0 F9000 X49.870 Y2.635

G1 F1200 X40.639 Y-6.595 E141.02828

G0 F9000 X40.638 Y-7.162

G1 F1200 X50.370 Y2.569 E141.50890

G0 F9000 X50.985 Y2.619

G1 F1200 X40.711 Y-7.654 E142.01630

G0 F9000 X40.785 Y-8.145

G1 F1200 X51.637 Y2.705 E142.55222

G0 F9000 X52.289 Y2.791

G1 F1200 X40.859 Y-8.638 E143.11671

G0 F9000 X40.929 Y-9.133

G1 F1200 X53.030 Y2.967 E143.71434

G0 F9000 X53.998 Y3.369

G1 F1200 X40.993 Y-9.635 E144.35661

G0 F9000 X41.057 Y-10.137

G1 F1200 X55.123 Y3.929 E145.05131

G0 F9000 X57.719 Y5.958

G1 F1200 X41.073 Y-10.687 E145.87342

G0 F9000 X40.987 Y-11.338

G1 F1200 X59.600 Y7.274 E146.79266

G0 F9000 X60.715 Y7.824

G1 F1200 X40.891 Y-11.999 E147.77172

G0 F9000 X40.685 Y-12.771

G1 F1200 X61.762 Y8.305 E148.81267

G0 F9000 X62.511 Y8.488

G1 F1200 X40.478 Y-13.544 E149.90082

G0 F9000 X40.271 Y-14.317

G1 F1200 X63.259 Y8.670 E151.03615

G0 F9000 X64.007 Y8.852

G1 F1200 X40.063 Y-15.090 E152.21866

G0 F9000 X46.386 Y-16.687

G1 F1200 X37.165 Y-25.908 E152.67408

G0 F9000 X37.372 Y-25.136

G1 F1200 X59.851 Y-2.656 E153.78431

G0 F9000 X59.628 Y-3.445

G1 F1200 X46.543 Y-16.530 E154.43056

G0 F9000 X46.990 Y-16.649

G1 F1200 X59.563 Y-4.076 E155.05153

G0 F9000 X59.597 Y-4.607

G1 F1200 X47.436 Y-16.769 E155.65217

G0 F9000 X47.882 Y-16.888

G1 F1200 X59.632 Y-5.138 E156.23249

G0 F9000 X59.667 Y-5.669

G1 F1200 X48.328 Y-17.008 E156.79251

G0 F9000 X48.774 Y-17.127

G1 F1200 X59.744 Y-6.158 E157.33428

G0 F9000 X59.913 Y-6.554

G1 F1200 X49.220 Y-17.247 E157.86239

G0 F9000 X49.667 Y-17.366

G1 F1200 X60.082 Y-6.950 E158.37680

G0 F9000 X60.252 Y-7.346

G1 F1200 X50.112 Y-17.486 E158.87760

G0 F9000 X50.558 Y-17.606

G1 F1200 X60.422 Y-7.742 E159.36478

G0 F9000 X60.592 Y-8.138

G1 F1200 X51.005 Y-17.725 E159.83827

G0 F9000 X51.451 Y-17.845

G1 F1200 X60.864 Y-8.432 E160.30316

G0 F9000 X61.135 Y-8.726

G1 F1200 X51.897 Y-17.964 E160.75942

G0 F9000 X52.343 Y-18.084

G1 F1200 X61.407 Y-9.020 E161.20708

G0 F9000 X61.678 Y-9.314

G1 F1200 X52.789 Y-18.203 E161.64609

G0 F9000 X53.235 Y-18.323

G1 F1200 X61.950 Y-9.608 E162.07652

G0 F9000 X62.250 Y-9.874

G1 F1200 X53.682 Y-18.442 E162.49968

G0 F9000 X54.128 Y-18.562

G1 F1200 X62.619 Y-10.070 E162.91906

G0 F9000 X62.989 Y-10.266

G1 F1200 X54.574 Y-18.681 E163.33467

G0 F9000 X55.020 Y-18.801

G1 F1200 X63.359 Y-10.462 E163.74652

G0 F9000 X63.729 Y-10.658

G1 F1200 X55.466 Y-18.920 E164.15460

G0 F9000 X55.913 Y-19.040

G1 F1200 X64.099 Y-10.854 E164.55889

G0 F9000 X64.573 Y-10.945

G1 F1200 X56.359 Y-19.159 E164.96457

G0 F9000 X56.805 Y-19.279

G1 F1200 X65.066 Y-11.018 E165.37258

G0 F9000 X65.560 Y-11.090

G1 F1200 X57.251 Y-19.398 E165.78292

G0 F9000 X57.697 Y-19.518

G1 F1200 X66.053 Y-11.162 E166.19561

G0 F9000 X66.604 Y-11.177

G1 F1200 X58.143 Y-19.637 E166.61347

G0 F9000 X58.589 Y-19.757

G1 F1200 X67.307 Y-11.040 E167.04401

G0 F9000 X68.010 Y-10.902

G1 F1200 X59.035 Y-19.877 E167.48728

G0 F9000 X59.481 Y-19.996

G1 F1200 X68.770 Y-10.708 E167.94603

G0 F9000 X70.039 Y-10.004

G1 F1200 X59.928 Y-20.116 E168.44542

G0 F9000 X46.576 Y-16.745

G0 X45.351 Y-20.550

G1 F1200 X36.130 Y-29.772 E168.90086

G0 F9000 X35.923 Y-30.544

G1 F1200 X45.144 Y-21.323 E169.35627

G0 F9000 X44.937 Y-22.096

G1 F1200 X35.715 Y-31.317 E169.81171

G0 F9000 X35.508 Y-32.090

G1 F1200 X44.730 Y-22.868 E170.26718

G0 F9000 X44.523 Y-23.641

G1 F1200 X35.301 Y-32.863 E170.72264

G0 F9000 X35.095 Y-33.635

G1 F1200 X44.316 Y-24.414 E171.17805

G0 F9000 X44.109 Y-25.187

G1 F1200 X34.887 Y-34.408 E171.63349

G0 F9000 X34.680 Y-35.181

G1 F1200 X43.902 Y-25.960 E172.08893

G0 F9000 X43.694 Y-26.732

G1 F1200 X34.473 Y-35.954 E172.54437

G0 F9000 X34.266 Y-36.727

G1 F1200 X43.488 Y-27.505 E172.99983

G0 F9000 X43.281 Y-28.277

G1 F1200 X34.059 Y-37.499 E173.45530

G0 F9000 X33.852 Y-38.272

G1 F1200 X43.074 Y-29.050 E173.91076

G0 F9000 X42.866 Y-29.823

G1 F1200 X33.645 Y-39.045 E174.36620

G0 F9000 X33.438 Y-39.817

G1 F1200 X42.659 Y-30.596 E174.82161

G0 F9000 X42.452 Y-31.369

G1 F1200 X33.231 Y-40.590 E175.27703

G0 F9000 X33.024 Y-41.363

G1 F1200 X42.246 Y-32.141 E175.73249

G0 F9000 X42.038 Y-32.914

G1 F1200 X32.817 Y-42.135 E176.18790

G0 F9000 X32.610 Y-42.908

G1 F1200 X41.831 Y-33.687 E176.64332

G0 F9000 X41.624 Y-34.460

G1 F1200 X32.403 Y-43.681 E177.09873

G0 F9000 X32.195 Y-44.454

G1 F1200 X41.417 Y-35.233 E177.55417

G0 F9000 X41.210 Y-36.005

G1 F1200 X31.988 Y-45.227 E178.00963

G0 F9000 X31.781 Y-46.000

G1 F1200 X41.003 Y-36.778 E178.46510

G0 F9000 X40.796 Y-37.550

G1 F1200 X31.575 Y-46.772 E178.92054

G0 F9000 X31.367 Y-47.545

G1 F1200 X40.589 Y-38.323 E179.37600

G0 F9000 X40.382 Y-39.096

G1 F1200 X31.160 Y-48.318 E179.83146

G0 F9000 X30.953 Y-49.090

G1 F1200 X40.174 Y-39.869 E180.28688

G0 F9000 X39.968 Y-40.641

G1 F1200 X30.746 Y-49.863 E180.74234

G0 F9000 X30.539 Y-50.635

G1 F1200 X39.761 Y-41.414 E181.19778

G0 F9000 X39.554 Y-42.187

G1 F1200 X30.332 Y-51.408 E181.65322

G0 F9000 X30.125 Y-52.181

G1 F1200 X39.346 Y-42.960 E182.10863

G0 F9000 X39.139 Y-43.733

G1 F1200 X29.885 Y-52.987 E182.56567

G0 F9000 X29.503 Y-53.369

G1 F1200 X24.892 Y-57.979 E182.79338

G0 F9000 X24.610 Y-57.697

G1 F1200 X29.220 Y-53.086 E183.02109

G0 F9000 X28.937 Y-52.803

G1 F1200 X24.327 Y-57.414 E183.24879

G0 F9000 X24.044 Y-57.131

G1 F1200 X28.654 Y-52.521 E183.47648

G0 F9000 X28.371 Y-52.238

G1 F1200 X23.761 Y-56.848 E183.70416

G0 F9000 X23.478 Y-56.565

G1 F1200 X28.089 Y-51.955 E183.93187

G0 F9000 X27.806 Y-51.672

G1 F1200 X23.195 Y-56.282 E184.15957

G0 F9000 X22.913 Y-56.000

G1 F1200 X27.523 Y-51.389 E184.38728

G0 F9000 X27.240 Y-51.106

G1 F1200 X22.630 Y-55.717 E184.61499

G0 F9000 X22.347 Y-55.434

G1 F1200 X26.957 Y-50.824 E184.84267

G0 F9000 X26.674 Y-50.541

G1 F1200 X22.064 Y-55.151 E185.07035

G0 F9000 X21.781 Y-54.868

G1 F1200 X26.392 Y-50.258 E185.29806

G0 F9000 X26.109 Y-49.975

G1 F1200 X21.498 Y-54.585 E185.52577

G0 F9000 X21.216 Y-54.302

G1 F1200 X25.826 Y-49.692 E185.75345

G0 F9000 X25.543 Y-49.409

G1 F1200 X20.933 Y-54.020 E185.98116

G0 F9000 X20.650 Y-53.737

G1 F1200 X25.260 Y-49.126 E186.20886

G0 F9000 X24.977 Y-48.844

G1 F1200 X20.367 Y-53.454 E186.43654

G0 F9000 X20.084 Y-53.171

G1 F1200 X24.694 Y-48.561 E186.66423

G0 F9000 X24.412 Y-48.278

G1 F1200 X19.801 Y-52.888 E186.89193

G0 F9000 X19.518 Y-52.605

G1 F1200 X24.129 Y-47.995 E187.11964

G0 F9000 X23.846 Y-47.712

G1 F1200 X19.236 Y-52.323 E187.34735

G0 F9000 X18.953 Y-52.040

G1 F1200 X23.563 Y-47.429 E187.57505

G0 F9000 X23.280 Y-47.147

G1 F1200 X18.670 Y-51.757 E187.80274

G0 F9000 X18.387 Y-51.474

G1 F1200 X22.997 Y-46.864 E188.03042

G0 F9000 X22.715 Y-46.581

G1 F1200 X18.104 Y-51.191 E188.25813

G0 F9000 X17.821 Y-50.908

G1 F1200 X22.432 Y-46.298 E188.48583

G0 F9000 X22.149 Y-46.015

G1 F1200 X17.539 Y-50.626 E188.71354

G0 F9000 X17.256 Y-50.343

G1 F1200 X21.866 Y-45.732 E188.94125

G0 F9000 X21.583 Y-45.449

G1 F1200 X16.973 Y-50.060 E189.16895

G0 F9000 X16.690 Y-49.777

G1 F1200 X21.300 Y-45.167 E189.39664

G0 F9000 X21.018 Y-44.884

G1 F1200 X16.407 Y-49.494 E189.62434

G0 F9000 X16.124 Y-49.211

G1 F1200 X20.735 Y-44.601 E189.85205

G0 F9000 X20.452 Y-44.318

G1 F1200 X15.842 Y-48.928 E190.07973

G0 F9000 X15.559 Y-48.646

G1 F1200 X20.169 Y-44.035 E190.30744

G0 F9000 X25.175 Y-58.262

G1 F1200 X38.932 Y-44.506 E190.98686

G0 F9000 X38.726 Y-45.278

G1 F1200 X25.458 Y-58.545 E191.64212

G0 F9000 X25.741 Y-58.828

G1 F1200 X38.518 Y-46.051 E192.27316

G0 F9000 X38.311 Y-46.823

G1 F1200 X26.024 Y-59.111 E192.88003

G0 F9000 X26.307 Y-59.394

G1 F1200 X38.104 Y-47.596 E193.46269

G0 F9000 X37.897 Y-48.369

G1 F1200 X26.590 Y-59.676 E194.02113

G0 F9000 X26.872 Y-59.959

G1 F1200 X37.690 Y-49.142 E194.55539

G0 F9000 X37.483 Y-49.914

G1 F1200 X27.155 Y-60.242 E195.06548

G0 F9000 X27.438 Y-60.525

G1 F1200 X37.276 Y-50.687 E195.55137

G0 F9000 X37.069 Y-51.460

G1 F1200 X27.721 Y-60.808 E196.01305

G0 F9000 X27.635 Y-61.459

G1 F1200 X36.862 Y-52.233 E196.46874

G0 F9000 X36.655 Y-53.006

G1 F1200 X27.429 Y-62.231 E196.92438

G0 F9000 X27.222 Y-63.003

G1 F1200 X36.447 Y-53.779 E197.37996

G0 F9000 X36.241 Y-54.551

G1 F1200 X27.017 Y-63.775 E197.83552

G0 F9000 X26.810 Y-64.547

G1 F1200 X36.034 Y-55.324 E198.29106

G0 F9000 X35.826 Y-56.096

G1 F1200 X26.604 Y-65.319 E198.74655

G0 F9000 X26.397 Y-66.091

G1 F1200 X35.619 Y-56.869 E199.20201

G0 F9000 X35.412 Y-57.642

G1 F1200 X26.191 Y-66.863 E199.65743

G0 F9000 X25.708 Y-67.346

G1 F1200 X14.086 Y-78.968 E200.23142

G0 F9000 X14.251 Y-79.369

G1 F1200 X35.205 Y-58.415 E201.26632

G0 F9000 X34.998 Y-59.187

G1 F1200 X14.434 Y-79.752 E202.28197

G0 F9000 X14.001 Y-78.488

G1 F1200 X25.207 Y-67.281 E202.83545

G0 F9000 X24.706 Y-67.217

G1 F1200 X13.916 Y-78.007 E203.36835

G0 F9000 X13.831 Y-77.526

G1 F1200 X24.205 Y-67.152 E203.88071

G0 F9000 X23.704 Y-67.088

G1 F1200 X13.746 Y-77.045 E204.37250

G0 F9000 X13.676 Y-76.549

G1 F1200 X23.203 Y-67.023 E204.84300

G0 F9000 X22.652 Y-67.008

G1 F1200 X13.734 Y-75.927 E205.28348

G0 F9000 X13.791 Y-75.304

G1 F1200 X21.993 Y-67.101 E205.68859

G0 F9000 X21.334 Y-67.194

G1 F1200 X13.848 Y-74.681 E206.05834

G0 F9000 X13.952 Y-74.011

G1 F1200 X20.676 Y-67.287 E206.39043

G0 F9000 X32.099 Y-70.006

G1 F1200 X18.076 Y-84.029 E207.08301

G0 F9000 X17.738 Y-83.802

G1 F1200 X32.307 Y-69.233 E207.80255

G0 F9000 X32.514 Y-68.460

G1 F1200 X17.400 Y-83.574 E208.54901

G0 F9000 X17.061 Y-83.347

G1 F1200 X32.721 Y-67.687 E209.32244

G0 F9000 X32.927 Y-66.915

G1 F1200 X16.734 Y-83.109 E210.12222

G0 F9000 X16.472 Y-82.805

G1 F1200 X33.135 Y-66.142 E210.94518

G0 F9000 X33.342 Y-65.369

G1 F1200 X16.210 Y-82.501 E211.79131

G0 F9000 X15.948 Y-82.198

G1 F1200 X33.549 Y-64.597 E212.66060

G0 F9000 X33.756 Y-63.824

G1 F1200 X15.686 Y-81.894 E213.55306

G0 F9000 X15.424 Y-81.590

G1 F1200 X33.963 Y-63.051 E214.46868

G0 F9000 X34.170 Y-62.279

G1 F1200 X15.162 Y-81.286 E215.40744

G0 F9000 X14.980 Y-80.903

G1 F1200 X34.377 Y-61.506 E216.36543

G0 F9000 X34.584 Y-60.733

G1 F1200 X14.798 Y-80.519 E217.34264

G0 F9000 X14.615 Y-80.136

G1 F1200 X34.791 Y-59.960 E218.33910

G0 F9000 X31.892 Y-70.779

G1 F1200 X18.415 Y-84.256 E219.00472

G0 F9000 X18.753 Y-84.484

G1 F1200 X31.685 Y-71.552 E219.64341

G0 F9000 X31.478 Y-72.324

G1 F1200 X19.159 Y-84.644 E220.25186

G0 F9000 X19.582 Y-84.786

G1 F1200 X31.518 Y-72.850 E220.84136

G0 F9000 X31.632 Y-73.302

G1 F1200 X20.006 Y-84.928 E221.41556

G0 F9000 X20.429 Y-85.070

G1 F1200 X31.746 Y-73.753 E221.97449

G0 F9000 X31.860 Y-74.205

G1 F1200 X20.852 Y-85.213 E222.51816

G0 F9000 X21.305 Y-85.326

G1 F1200 X31.975 Y-74.656 E223.04514

G0 F9000 X32.089 Y-75.107

G1 F1200 X21.841 Y-85.356 E223.55130

G0 F9000 X22.377 Y-85.385

G1 F1200 X32.098 Y-75.664 E224.03141

G0 F9000 X32.087 Y-76.241

G1 F1200 X22.913 Y-85.415 E224.48450

G0 F9000 X23.449 Y-85.445

G1 F1200 X32.075 Y-76.818 E224.91055

G0 F9000 X32.065 Y-77.394

G1 F1200 X24.105 Y-85.354 E225.30369

G0 F9000 X24.825 Y-85.200

G1 F1200 X31.927 Y-78.098 E225.65445

G0 F9000 X31.687 Y-78.903

G1 F1200 X25.545 Y-85.045 E225.95779

G0 F9000 X26.399 Y-84.758

G1 F1200 X31.448 Y-79.708 E226.20718

G0 F9000 X30.790 Y-80.931

G1 F1200 X27.574 Y-84.148 E226.36604

G0 F9000 X14.294 Y-73.104

G1 F1200 X19.813 Y-67.584 E226.63864

G0 F9000 X18.818 Y-68.014

G1 F1200 X14.635 Y-72.197 E226.84523

G0 F9000 X15.683 Y-70.583

G1 F1200 X17.232 Y-69.034 E226.92174

**以上转换的G代码正常**

G0 F9000 X25.910 Y-67.182

**上面指令有问题，情况和上面有问题的分析一样。**

**为此要做如下改动：**

G0 F9000 X25.910 Y-67.182 **此句不要**

**增加下面语句**

**G1 F1200 E220.92174 将耗材回抽6毫米，防止打印头在移动时拉丝。**

**G0 Z0.800 将打印头提高0.5毫米，防止打印头碰到模型表面，避免步进电机失步。**

**G0 F9000** **X19.886 Y-43.752 直接将打印头移到需要打印的地方 。**

**G0 Z0.300 将打印头降低到0.3毫米高度，落到模型表面上，进行下面的打印。**

**G1 F1200 E226.92174 到达打印位置后，将耗材回送6毫米**

G0 X27.607 Y-60.931

G0 X15.276 Y-48.363

**上面二句不带E值的语句一起不要**

G1 F1200 X19.886 Y-43.752 E227.14945

G0 F9000 X19.603 Y-43.470

G1 F1200 X14.993 Y-48.080 E227.37713

G0 F9000 X14.710 Y-47.797

………….

**以上是举例，修改原则如下：**

1. **遇到：G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*，先判断上面一句的X或Y值与下面一句有E值的X或Y值分别进行比较，当X或Y的差值的绝对值大于10毫米时，就要进行如下修改。**
2. **取消当前G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*语句。**
3. **将G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*上一句中的E\*\*\*.\*\*\*\*\*值减去6毫米，写成：G1 F1200 E（\*\*\*.\*\*\*\*\*-6.00000），加入指令中。**
4. **将G0 Z（0.5+打印层数\*0.2+0.3）加入指令中。**
5. **将下面一句有E值的语句中的X、Y值，以：G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*形式，写入指令**
6. **将G0 Z（打印层数\*0.2+0.3）加入指令中。**
7. **将G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*上一句中的E\*\*\*.\*\*\*\*\*值恢复，写成：G1 F1200 E\*\*\*.\*\*\*\*\*加入指令中。**
8. **将G0 F9000 X\*\*\*\*\* Y\*\*\*\*\*下面一句有E值的语句接在下面，加入指令中，其中不带E值的语句一起不要。**

**以上原则不知我写清楚了没有？是否可以实现？及时沟通！**