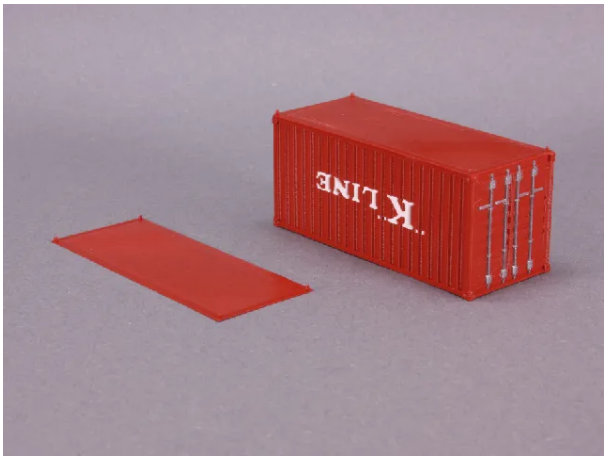

NEM 380 Container Fixing Plates in H0 scale (1:87)

fdmtrains

VIEW IN BROWSER

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Summary

These container fixing plates can be used to add NEM 380 container pins to any container.

0.24 hrs	2 pcs	0.20 mm	0.40 mm	PLA	2 g	Prusa MK3S/+ & MMU2S/3

Hobby & Makers > Other Ideas

NEM 380, “Fixing Elements for Containers and Interchangeable Superstructures” is a standard developed by MOROP, the European Association of Model Railroaders and Railroad Friends (https://www.morop.org/). The standard describes how containers with pins shall be fixed to wagons with matching holes. The standard is used by Märklin, Trix, and other brands.

The container fixing plates can be printed and glued onto any container to make it compatible with NEM 380. The fixing plates are available for 20-foot and 40-foot containers.

NOTE:

- **Custom G-code is required to print the small pins.**
- **The CAD and STL files do only contain the base plates.**

The custom G-code is made for Prusa i3 MK3S+ with MMU3 (as that happens to be the printer I have). Search for, and modify, the following lines to select which filament to load:

; ---------- ; Select filament to load from MMU3 (numbered 0-4) T3 ; ----------

To make custom G-code for you own printer, start by slicing the base plates and then add custom G-code at a suitable place in the G-code file.

The custom G-code for my Prusa printer looks like this for the 40-foot version:

; ---------- ; CUSTOM G-CODE START ; ---------- ; The commented lines below have been removed from the original G-code ;M204 S1000 ; stop printing object NemPlate40ft.stl id:0 copy 0 ;WIPE_START ;G1 F8640;_WIPE ;G1 X57.208 Y116.419 E-.19364 ;G1 X57.208 Y115.886 E-.12307 ;G1 X58.164 Y116.842 E-.31218 ;G1 X58.698 Y116.842 E-.1233 ;G1 X58.552 Y116.696 E-.04781 ;WIPE_END ; The NEM pins are printed in the following order: ; ; 4 START----------> 1 ; ^ | ; | v ; 3 <---------- 2 ; ; Center of bed is X125 Y105 ; Set maximum fan speed M106 S255 ; Move from START to position 1 with filament flowing slowly through the nozzle G1 X193.95 Y118 E0.70 ; Create pin 1 G1 F10 Z1.2 E0.35 ; Extrusion has been experimentally adjusted G1 F8640;_WIPE G1 X193.95 Y117 E-.2374 ; Create pin 2 G1 X193.95 Y92 G1 Z0.2 F720 E.2374 ; Move print head down G1 F10 E0.05 ; Extrusion has been experimentally adjusted G1 F10 Z1.2 E0.15 ; Extrusion has been experimentally adjusted G1 F8640;_WIPE G1 X192.95 Y92 E-.2374 ; Create pin 3 G1 X56.05 Y92 G1 Z0.2 F720 E.2374 ; Move print head down G1 F10 E0.05 ; Extrusion has been experimentally adjusted G1 F10 Z1.2 E0.15 ; Extrusion has been experimentally adjusted G1 F8640;_WIPE G1 X56.05 Y93 E-.2374 ; Create pin 4 G1 X56.05 Y118 G1 Z0.2 F720 E.2374 ; Move print head down G1 F10 E0.05 ; Extrusion has been experimentally adjusted G1 F10 Z1.2 E0.15 ; Extrusion has been experimentally adjusted G1 F8640;_WIPE G1 X57.05 Y118 E-.2374 ; ---------- ; CUSTOM G-CODE END ; ----------

Model files

FreeCAD 2 files

nemplate20ft.fcstd

nemplate40ft.fcstd

STL 2 files



nemplate40ft.stl



nemplate20ft.stl

Print files

G-code 2 files



nemplate40ft_02mm_pla_mk3smmu3_custom.gcode

PLA 0.40 mm 0.20 mm 0.16 hrs 1 g

Prusa MK3S/+ & MMU2S/3



nemplate20ft_02mm_pla_mk3smmu3_custom.gcode

PLA 0.40 mm 0.20 mm 0.08 hrs 1 g

Prusa MK3S/+ & MMU2S/3

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