

〈 藤工芸 opendesk 製作の注意事項 〉

2019年 10月 19日

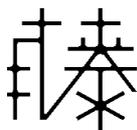
CNCに関する注意事項

1. opendeskホームページから、LeanDeskデザインデータをダウンロード
2. デザインデータは、DWG形式かDXF形式の提供ファイルをCNCに読み込ませる。
3. CNC加工機に材料をしっかり固定し加工する。
(固定が緩いと材料のズレ及び飛散の危険性あり)
4. 加工データの読み込ませ方・加工の仕方は、その機器のマニュアルに沿うこと。
5. 榫合部の板厚を合わせるため補正が必要
6. 作業時間：データ入力=半日 加工・補正=1日

製作に関する注意事項

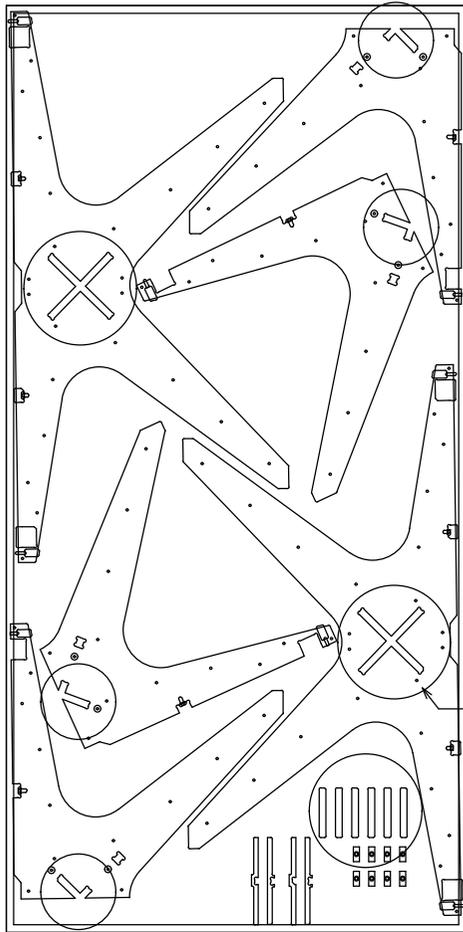
1. すべり止めの付いた軍手の使用が好ましい。
2. 組み立ての際は、十分なスペースを確保する。
3. 基本、二人以上で作業する。
4. 板の張り合わせは、ボンドを使用しプレス機または、クランプにてよく締め厚さを統一する。(ボンドの塗りすぎに注意)
5. ボルトは、強度を考慮し長さを変える。 <別紙>
6. 誰が何処を触っても不快な思いをしないよう入念にヤスリをかけ、仕上げる。
7. 作業時間：加工=1日 塗装(3分ツヤ)=2日 組み立て=3名10分

- <使用材料>
- ・ラワン合板 t12 4X8 * 4
 - ・シナベニヤ t2,5 4X8 * 8
 - ・六角ボルト M6-30 * 30 M6-40 * 8
 - ・鬼目ナット M6-13 * 38
 - ・ダボ 6mm-30 * 70 6mm-50 * 20
 - ・ウレタン塗料(クリア)

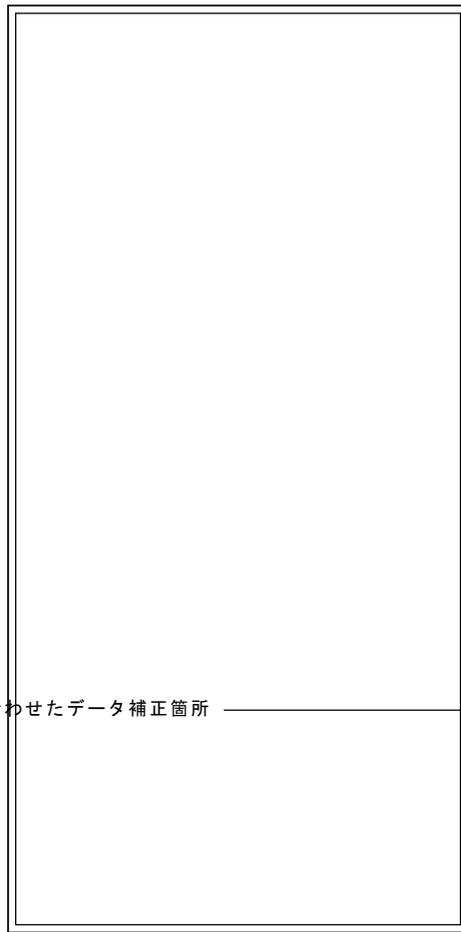


FUJI KOGEI

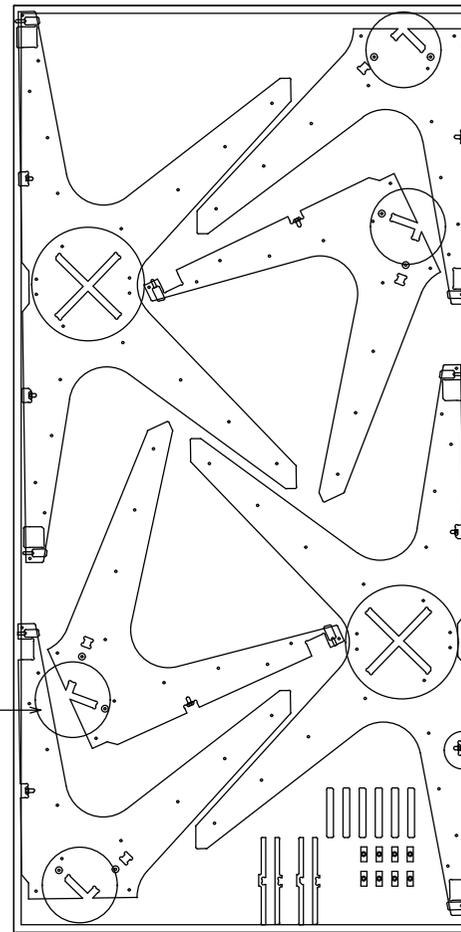
MADE TO ORDER FUJI KOGEI



FRONT FACE



REVERSE FACE



BOTH FACES

opendeskk

Lean Lean Desk

Product: Standard
 Fileset: 1600x240x738_SA_AP @ 1.5.0
 Sheet: Sheet 2

DESIGNERS:

DESIGNED FOR CNC-MILLING:

Sheet thickness: None
 Recommended drill bit (not an official standard): See 13.47)

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MODEL VERSION:
 V1.5.0

基材厚に合わせたデータ補正箇所

穴開けなおし済

USING THIS DRAWING

Opendesk products are designed to be CNC-milled from standard sheet materials such as plywood. This file as provided is mastered for use with the recommended sheet material specification, sheet sizes and thicknesses, and bit sizes provided, however the exact materials being used, tolerances, drill bits, and other local considerations are at the discretion of the end user (maker). If you are working with variations on those you may need to reposition and nest parts within your own sheet frames accordingly, and take account of any changes in tolerance particularly on joints, tabs, and slots prior to cutting.

All Opendesk drawings are drawn in 'Top' projection, and all vectors are arranged into suitably named layers describing the type and depth of cut required. All such cut depths are assumed to be measured from the top (maximum Z-indent) surface of the material. For example the layer 'TOP-POCKET-INSIDE_14MM' denotes a pocketing inside-line cut of depth 14mm from the top surface of the material. *

All Opendesk drawings are provided in .dxf format. After importing into your CNC-machine's CAM software you will need to ensure that all vectors are visible and all polylines are closed where necessary. A .pdf version of the drawing is provided with each download for reference.

Layers with names beginning 'OO_NUPRINT' should not be milled. For convenience you can turn these layers off or delete their elements before setting up your CAM software.

Most Opendesk products require some combination of 'inside cuts', and 'outside cuts', and in some instances 'on-line cuts', 'pocketing', or 'chamfering'. Some Opendesk products require double-side cutting (ie cutting to both front and reverse faces of a single sheet). As a result each sheet is drawn in 'Front Face', 'Reverse Face', and 'Both Faces' layouts, with corresponding layers and vectors in each for you to choose your preferred setup according to your CNC-software and machine.

A minimum of 15mm tolerance is left between parts on Opendesk sheets when nested. This should be sufficient for most bit diameters.

- * A pocket may be accompanied by a corresponding second line in, for example, 'TOP-POCKET-OUTSIDE_14MM' describing the limits of the associated pocket.

FABRICATION GUIDELINES

Before starting to cut your product please take account of the following guidelines. These reflect our personal research and learning and are by no means comprehensive. Please let us know if you have any recommendations for improved standards, and/or cutting methods:

- Every CNC-machine is slightly different, you should follow your machine manufacturer's guidelines for best practice, and consult your supplier for suitable drill bits and other recommendations. In our experience the best quality finish is achieved using a suitable vacuum bed to prevent material slippage, and a compression cutter to prevent splintering of the surface of the material, however these will not always be available and such details are left to the discretion and experience of the fabricator.
- It is strongly recommended that you perform some test cuts using the appropriate material prior to fabrication, to calibrate for suitable tolerance and bit size. A test sheet is included with this download package. The test file includes some of the standard Opendesk joints of different types in three varying degrees of tolerance to account for variations in material thickness (± 0.10). Please refer to the test sheet guidelines for more information.
- It is highly recommended that you accurately measure the thickness of sheet you are using prior to fabrication, for example using calipers at several points along the sheet. For best results ensure your sheet is adequately flat and free of any warping, knots, or imperfections.
- When performing double-side cuts it is important to locate the flipped sheet exactly, to ensure cuts to both faces align correctly. This can be achieved using a suitable jig or locating packs/reggie according to your machine bed. For more information consult the guidance on www.opendeskk.com.
- Inside cuts may produce off-cut pieces that can vibrate out of place and interfere with cutting. It is recommended to secure such pieces to the bed prior to cutting for removal afterwards.
- Where designs include chamfering and pocketing it is strongly advisable to start with these cuts prior to full-depth cut-outs in order to avoid any slippage and misalignment in the material.
- Each Opendesk part can be cut using single or multi-pass cutting. Slower speeds and multiple passes will tend to produce higher quality cuts and reduce the need for sanding and finishing at the expense of cutting time. This is left to the discretion of the user based on their time and machine.

SUMMARY TERMS AND CONDITIONS

This file represents the latest version of an open source product, designed to be CNC-milled from standard sheet materials. Whilst Opendesk make every effort to provide fully prototyped and tested designs, it is the responsibility of the end user (maker) to check file contents prior to fabrication, and ensure suitable due diligence and reasonable skill and care in fabrication and assembly.

All Opendesk designs are open source and provided as is. Opendesk cannot accept any liability for any error or omission in the information contained herein. Opendesk accepts no design liability, and provides no guarantee of quality or warranty of fitness for purpose on any open product in the Opendesk library.

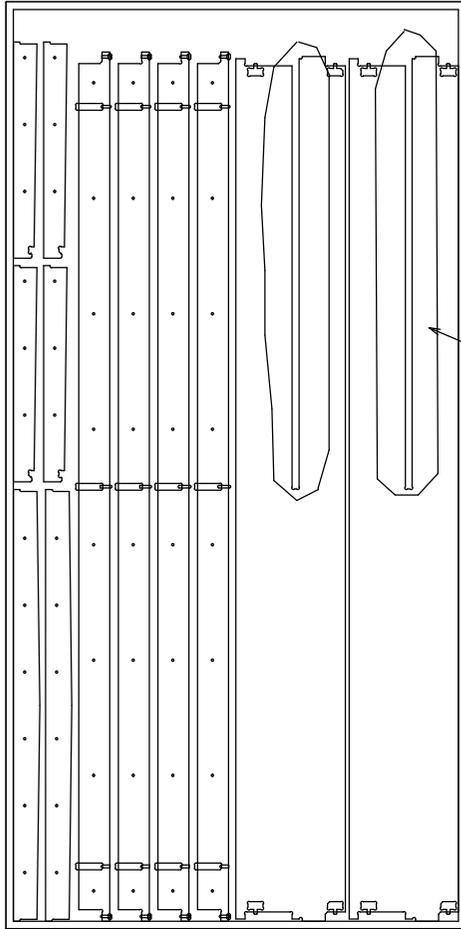
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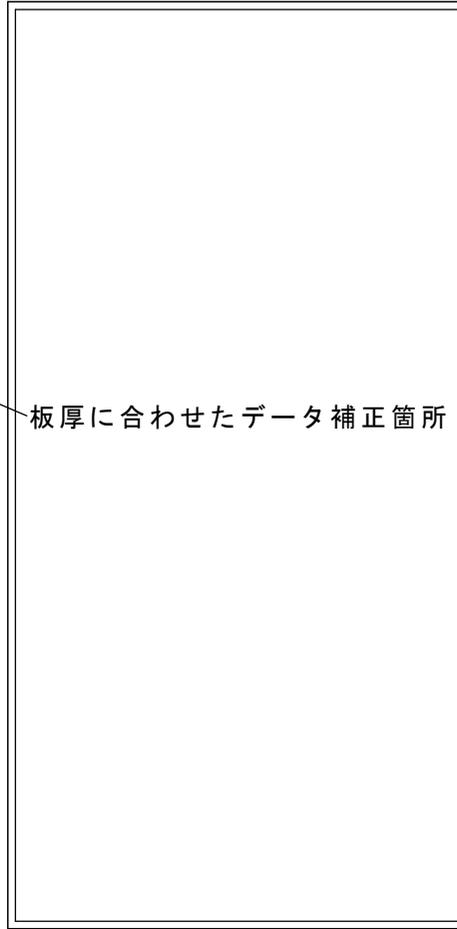
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Welcome to the industrial revolution and thanks for trailblazing!

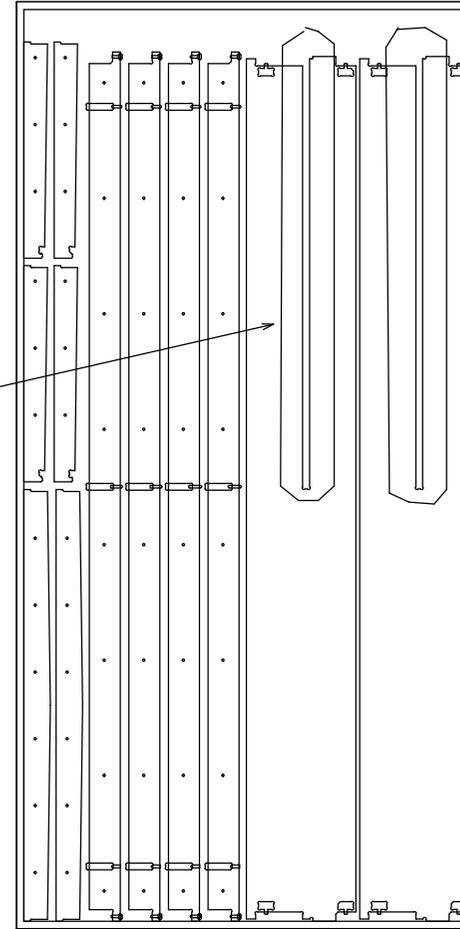
MIRROR LINE



FRONT FACE



REVERSE FACE



BOTH FACES

板厚に合わせたデータ補正箇所

opendesk

Lean Lean Desk

Product: Standard

Fileset: 1600x2400x738_SA_AP # 1.5.0

Sheet: Sheet 3

DESIGNERS:

DESIGNED FOR CNC-MILLING:

Sheet thickness: None

Recommended drill bit: (unless otherwise noted)

See (3/4)

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MODEL VERSION:

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All Opendesk drawings are drawn in "Top" projection, and all vectors are arranged into suitably named layers describing the type and depth of cut required. All such cut depths are assumed to be measured from the top (maximum Z-index) surface of the material. For example the layer "TOP-POCKET-INSIDE_SAW" describes a pocketing inside-line cut of depth 1mm from the top surface of the material.

All Opendesk drawings are provided in dxf format. After importing into your CNC-machine's CAM software you will need to ensure that all vectors are visible and all polygons are closed where necessary. A dxf version of the drawing is provided with each download for reference.

Layers with names beginning "00_EXPORT" should not be filled. For convenience you can turn these layers off or delete their elements before setting up your CAM software.

Most Opendesk products require some combination of "inside cuts", and "outside cuts", and in some instances "on-line cuts", "pocketing", or "shearfering". Some Opendesk products require double-side cutting (ie cutting to both front and reverse faces of a single sheet). As a result each sheet is drawn in "Front Face", "Reverse Face", and "Both Faces" layers, with corresponding layers and vectors in each for you to choose your preferred setup according to your CNC-software and machine.

A minimum of 15mm tolerance is left between parts on Opendesk sheets when nested. This should be sufficient for most bit diameters.

* A pocket may be accompanied by a corresponding second line in, for example, "TOP-POCKET-OUTSIDE_SAW", describing the limits of the associated pocket.

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- It is strongly recommended that you perform some test cuts using the appropriate material prior to fabrication, to calibrate for suitable tolerance and bit size. A test sheet is included with this download package. The test file includes some of the standard Opendesk joints of different types in three varying degrees of tolerance to account for variations in material thickness (±0.10). Please refer to the test sheet guidelines for more information.

- It is highly recommended that you accurately measure the thickness of sheet you are using prior to fabrication, for example using callipers at several points along the sheet. For best results ensure your sheet is adequately flat and free of any warping, knots, or imperfections.

- When performing double-side cuts it is important to locate the flipped sheet exactly, to ensure cuts to both faces align correctly. This can be achieved using a suitable jig or locating pins/registers according to your machine bed. For more information consult the guidance on www.opendesk.co.

- Inside cuts may produce off-cut pieces that can vibrate out of place and interfere with cutting. It is recommended to secure such pieces to the bed prior to cutting for removal afterwards.

- Where designs include shearfering and pocketing it is strongly advisable to start with these cuts prior to full-depth cut-outs in order to avoid any slippage and misalignment in the material.

- Each Opendesk part can be cut using single or multi-pass cutting. Slower speeds and multiple passes will tend to produce higher quality cuts and reduce the need for sanding and finishing at the expense of cutting time. This is left to the discretion of the user based on their time and machine.

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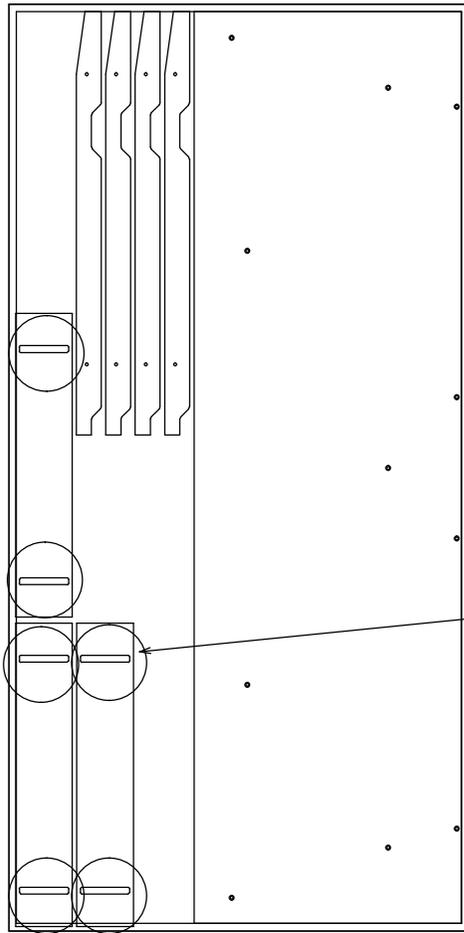
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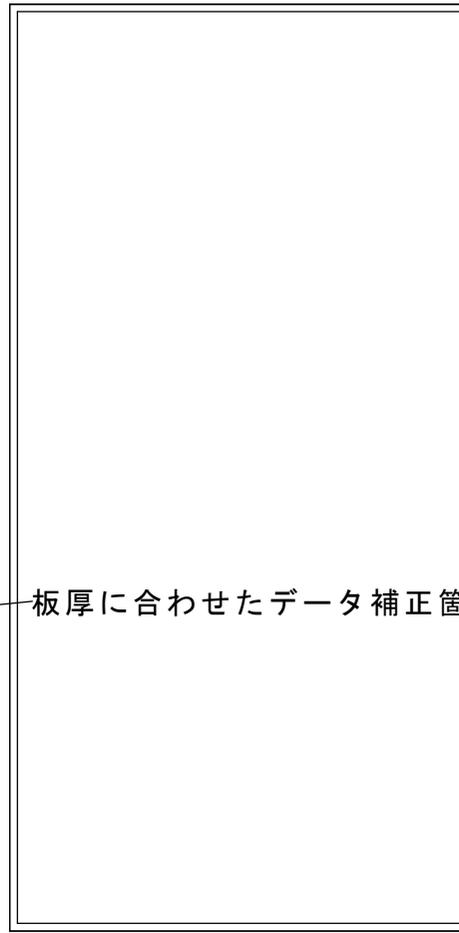
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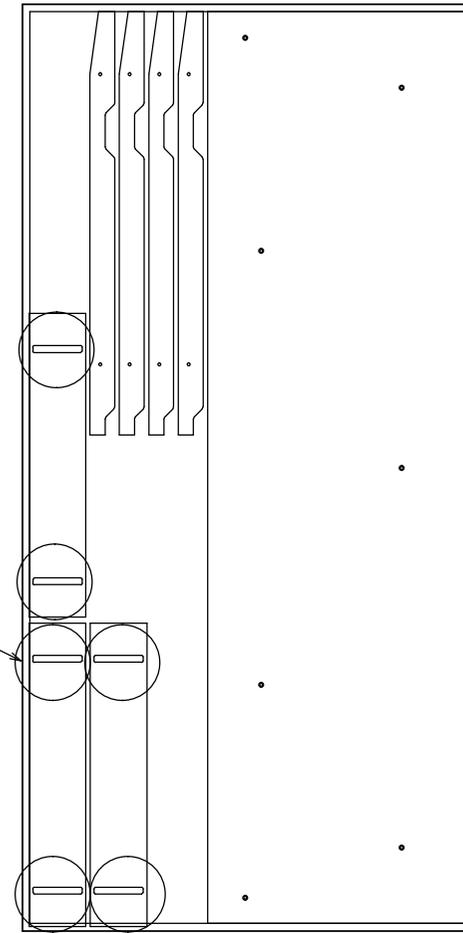
Welcome to the industrial revolution and thanks for trailblazing!



FRONT FACE



REVERSE FACE



BOTH FACES

板厚に合わせたデータ補正箇所

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All Opendesk drawings are drawn in 2D projection, and all vectors are arranged into suitably named layers describing the type and depth of cut required. All such cut depths are assumed to be measured from the top (maximum Z-index) surface of the material. For example the layer 'TOP-POCKET-INSIDE_1MM' describes a pocketing inside-line cut of depth 1.0mm from the top surface of the material.*

All Opendesk drawings are provided in dxf format. After importing into your CNC-machine's CAM software you will need to ensure that all vectors are visible and all polylines are closed where necessary. A pdf version of the drawing is provided with each download for reference.

Layers with names beginning '00_MOVEMENT' should not be milled. For convenience you can turn these layers off or delete their elements before setting up your CAM software.

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A minimum of 15mm tolerance is left between parts on Opendesk sheets when nested. This should be sufficient for most bit diameters.

* A pocket may be accompanied by a corresponding second line in, for example, 'TOP-POCKET-OUTSIDE_1MM', describing the limits of the associated pocket.

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- It is strongly recommended that you perform some test cuts using the appropriate material prior to fabrication, to calibrate for suitable tolerance and bit size. A test sheet is included with this download package. The test file includes some of the standard Opendesk joints of different types in three varying degrees of tolerance to account for variations in material thickness (± 0.15). Please refer to the test sheet guidelines for more information.

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- When performing double-side cuts it is important to locate the flipped sheet exactly, to ensure outs to both faces align correctly. This can be achieved using a suitable jig or locating pins/rogs according to your machine bed. For more information consult the guidance on www.opendesk.co.

- Inside outs may produce off-cut pieces that can vibrate out of place and interfere with cutting. It is recommended to secure such pieces to the bed prior to cutting for removal afterwards.

- Where designs include chamfering and pocketing it is strongly advisable to start with these cuts prior to full-depth cut-outs in order to avoid any slippage and misalignment in the material.

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opendesk

Lean Lean Desk

Product: Standard

Fileset: 1600x2400x738_SA_AP # 1.5.0

Sheet: Sheet 4

DESIGNERS:

DESIGNED FOR CNC-MILLING:

Sheet thickness: 6mm

Recommended drill bit: Unless otherwise noted:

See (3.4*)

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