PIVOT POINT

PRECISION MANUFACTURING

Cast Scans & File Requirements

Which type of file formats do we currently accept?

Currently our system accepts .stl and .obj file formats. If you need to send us another file type, please contact us directly. STL file formats are the most common as the file size is smaller and easier to transfer.

Please export your model in the scale of mm. Please let us know if your export is other than mm.

Which type of scanner do we recommend?

White light, lidar and infrared scanners are ideal. If you are scanning with an iPhone or android phone, we recommend EM3D.

We *do not* recommend the structure scanner for AFOs. We have been unsuccessful in capturing the heels of casts and patients.

Do I have to cast differently to scan the outside of my cast?

YES, here are requirements to scan the external of the cast:

1. A single stage, two-layer cast from top to bottom. Uniformity to the best of your ability will yield the best brace.
2. Keep your cut off strip on the mid sagittal line keeping it from moving medial or lateral works the best.
3. Cut any leftover cast tape and do not continue to wrap with it until the roll is gone. This only distorts the outside shape preventing your cast from representing the patients form on the external of your cast. Doing this yields a good internal patient representation but not a good external representation.
4. Optional: Apply an external footplate to the bottom of the cast to mark key areas during the cast modification process. (Often small patients do not have adequate prominences that are identifiable, i.e., you cannot see the 1st met)
5. Do not overly correct the patient sacrificing the shape for alignment. In some cases, you must apply significant pressure to achieve

correction. With these cases apply only mild pressure and correct the patient as much as that mild pressure will achieve. Then document the correction that you want in the order instructions. This will allow for a more precise fitting brace and we will apply the balance of the desired correction in cad. Every Pivot point brace is molded to the patient model. Aggressive handling can lead to such a poor cast that the only option is to scale a brace to fit the patient.

6. After removing the cast, glue the cast back together to maintain the shape.
7. If you used the optional footplate remove the footplate prior to scanning. This will expose the true arch under the footplate for cavous patients and will apply slight arch pressure to patients that are overly flat. You may use any footplate on the market, the most common is the DAFO. A footplate is not required but utilizing a footplate will create a better cast and therefore potentially a better brace.

DO NOT:

1. Do not Utilize 2 or 3 stage casts
2. Do not leave cast tape transitions sticking up. always rub them together. elevated cast tape transitions will significantly alter the outside shape.
3. Do not request Trim lines more than 10mm taller than your cast.
4. Do not submit measurements of the external of your cast without first speaking to a Pivot point representative. This is acceptable on a rare occasion. Repeated submission without patient measurements will void your fit warranty.