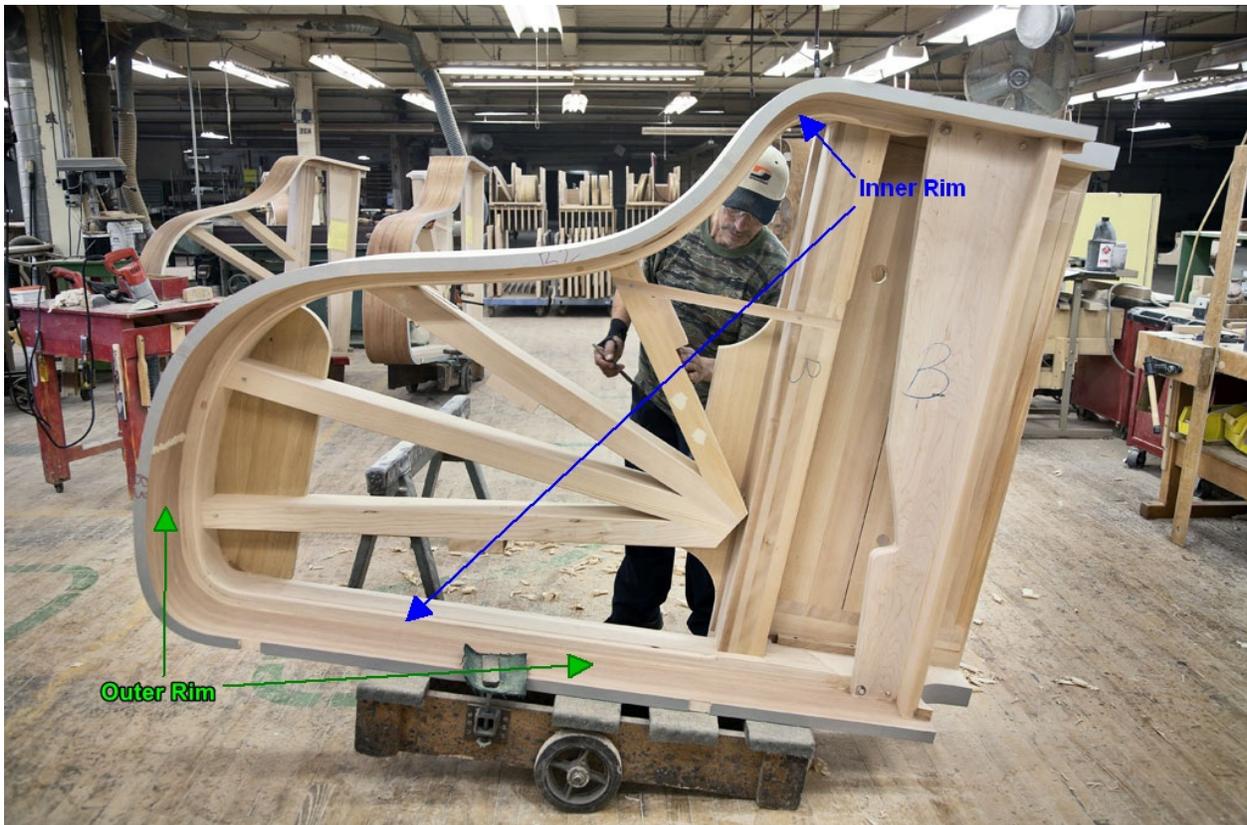
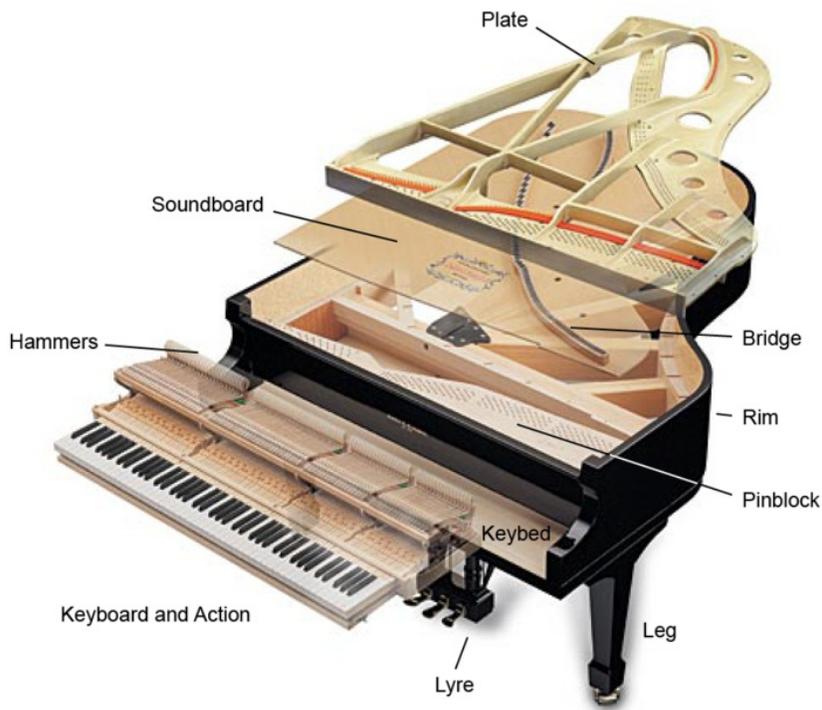


Seiler's Membrator Soundboard

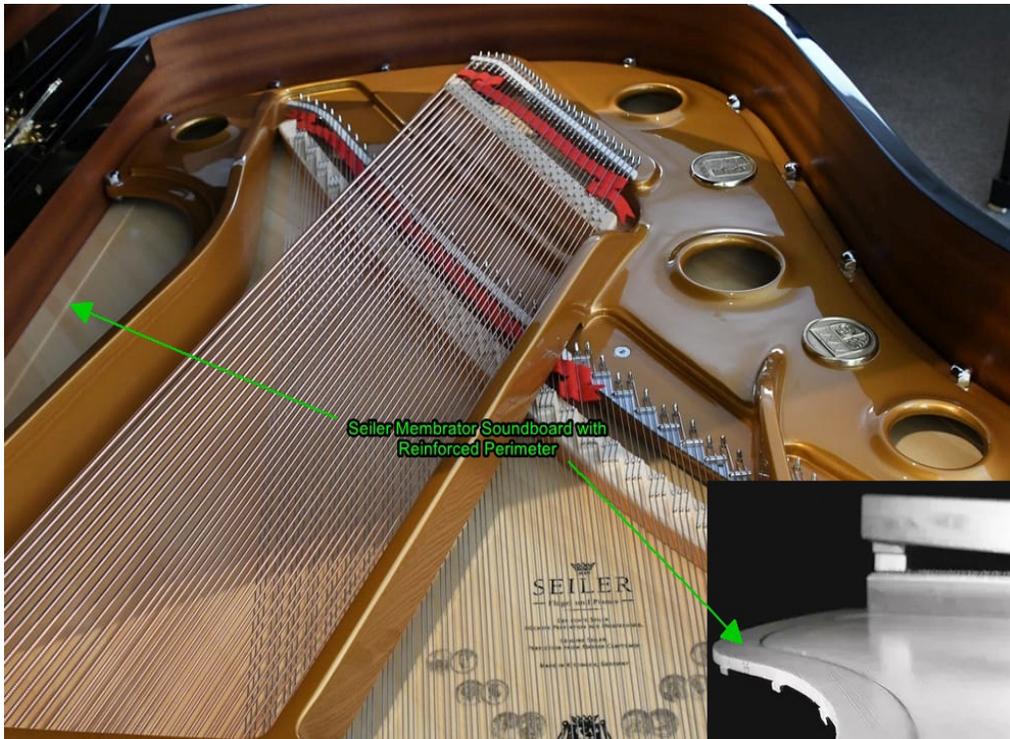
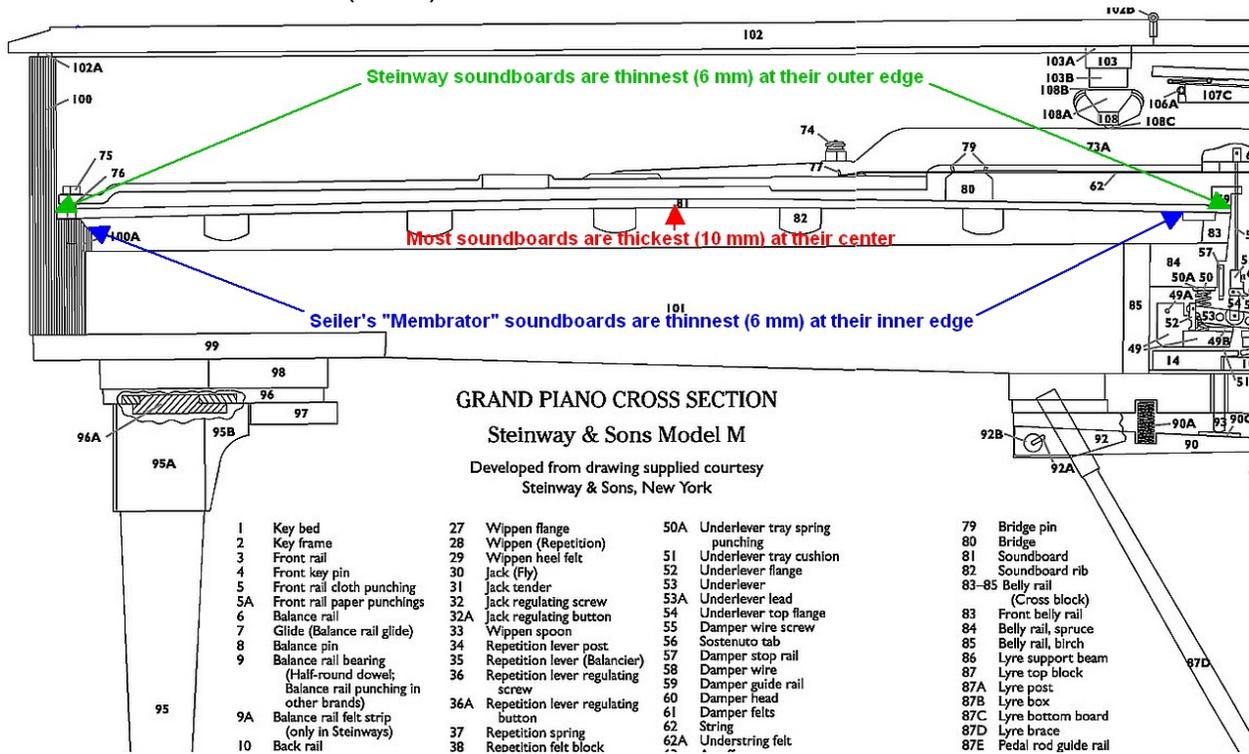
Modern pianos are constructed with a cast iron plate, mounted above a spruce soundboard, which is mounted to a hardwood rim.

Grand piano rims are comprised of an inner and an outer rim. The inner rim is a reinforced surface on which the soundboard and plate are mounted.

The outer rim serves two purposes. Its outer surface is purely decorative, whereas its inner surface enhances the piano's tonal palette by reflecting sound back into the soundboard.



Most manufacturers' soundboards are machined/tapered to be thickest (10mm) at their center and are thinnest (6mm) at the outer rim.



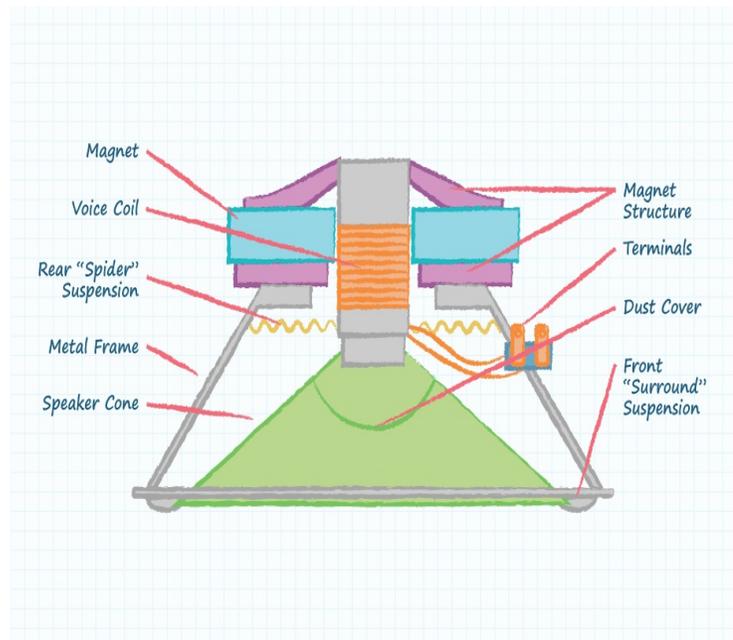
Seiler's "Membrator" soundboard perimeter is 10mm thick, matching its center depth, but is milled to only 6mm at the inner rim.

This thicker edge reflects sound waves more efficiently from the outer rim (creating greater reverberation).

Using modern speaker design for inspiration, Seiler maximizes sound energy efficiency by milling their soundboard's inner edge to its thinnest at the inner rim, not the outer rim.

Similarly, an audio speaker driver consists of a rigid frame (akin to a piano rim), foam/rubber surround/suspension (piano ribs), and a speaker cone/diaphragm (piano soundboard).

If a speaker's surround/suspension is too rigid, it requires more energy and has a muddier tone (lower fidelity). To mitigate this unnatural coloration of sound in a piano, traditional manufacturers taper their soundboards to be thinnest at their edges. This technique improves clarity but diminishes reverberation efficiency.



However, Seiler's uniquely tapered "Membrator" inner edge mates perfectly with the piano's inner rim, creating a "low-energy" diaphragm, resulting in unsurpassed imaging (clarity) and amplitude (sound levels), while its reinforced outer perimeter insures maximum sustain and bloom (reverberation).

"Which soundboard design is superior?" It's a matter of personal preference.

- Many artists find Steinway's tonal impedance (resistance to distortion, as in a high-wattage speaker) comforting. Although this design inherently lacks the refinement and fidelity of a Seiler, Steinway's signature thick tonal "roar" allows a powerful pianist to play at extreme volumes without harshness.
- Conversely, if you are a finesse performer playing counterpoint (Baroque music) or sparkling Classical Era pieces, you'll find the efficient power, fidelity, and clarity of Seiler's tonal responsiveness refreshing and exhilarating.

Meanwhile, please feel free to call or email if you have any questions or wish to learn more about Seiler pianos!