(ii) Suppose now that $k$ has the Pick property and $\{\lambda_i\}$ is an interpolating sequence for $\mathcal{H}_k$, so there are constants $c_1, c_2 > 0$ such that
\[c_1 \sum |a_i|^2 \leq \|a_i g_i\|^2 \leq c_2 \sum |a_i|^2.\]
Let $(w_i)$ be any sequence in the closed unit ball of $l^\infty$. Define a linear operator $R$ on $\vee\{g_i\}$ by
\[R : g_i \mapsto \bar{w}_i g_i.\]
Then $\|R\| \leq \sqrt{\frac{c_2}{c_1}}$, because
\[
\| \left( \frac{c_2}{c_1} - R^* R \right) \sum a_i g_i \|^2 = \sum \bar{a}_j a_i \left( \frac{c_2}{c_1} - R^* R \right) g_j, g_i \]
\[= \sum \bar{a}_j a_i \left[ \frac{c_2}{c_1} \langle g_j, g_i \rangle - w_i \bar{w}_j \langle g_j, g_i \rangle \right] \]
\[= \frac{c_2}{c_1} \sum |a_i|^2 - \sum |a_i \bar{w}_i g_i|^2 \]
\[\geq \frac{c_2}{c_1} \sum |a_i|^2 - c_2 \sum |a_i|^2 \]
\[\geq 0.
\]
Therefore by the Pick property, there is a multiplier $\phi$ of norm at most $\sqrt{\frac{c_2}{c_1}}$ such that $\phi(\lambda_i) = w_i$ on any finite subset of the $\{\lambda_i\}$. Passing to a weak-star limit, one gets that this holds on the whole sequence $\{\lambda_i\}$. As the sequence $(w_i)$ is arbitrary, $\{\lambda_i\}$ is an interpolating sequence.