Twin Doctor Blade Assembly

Challenge
A mill in the Midwest US experienced several center roll wraps with its double doctor system. This caused damage to the wet felt at least twice due to the center roll doctor passing the sheet numerous times.

Solution
The mill was seeking to eliminate roll wraps and reduce wet end breaks by two per month, equating to 29 hours or 1,300 tons annually.

It was recommended to upgrade the existing double assembly to a twin doctor blade assembly including SynTek™ and Grafgrit™ doctor blades. The twin assembly addressed the issues with the existing assembly; especially if there were to be internal or structural damage due to multiple wraps.

Results
Wet end breaks have dropped significantly, exceeding the two per month goal, and no center roll wraps have been attributed to a failure with the Twin Doctor Assembly.

The successful installation of the twin doctor blade assembly also led to the discovery of an issue with the steam box allowing Kadant the opportunity to provide further assistance in modifications for a solution to this problem as well.

Highlights
• Enables independent and separate adjustment of each doctor.
• Open area between the assemblies enables anything that gets by the first blade to pass directly into the broken pit.
• Can be designed with a pivoting mounting bracket for the primary doctor to enable access for servicing the internal shower and secondary doctor.