

*Hydrapulper Success Story*

## GPM More than Quadruples Life of Hydrapulper Agitator with GPM-Eliminator Technology

### SUMMARY

GPM Engineered Fabrication dramatically extends wear life of hydrapulper operation at ceiling tile manufacturer.

### THE CUSTOMER

A world-leading manufacturer of building products.

### THE CHALLENGE

Ceiling tiles are made of various erosive materials including mineral wool, fiberglass, clay, recycled paper, etc. With high customer expectations, when a new tile isn't quite right, it's recycled and used as filler in a new tile. Our customer uses a powerful hydrapulper to mix and break down waste materials from rejected ceiling tiles. The hydrapulper mixes the waste material and water with a very powerful agitator. The agitation breaks everything down into an oatmeal-like slurry which is then pumped away for reuse. Throughout this process, the contents of the pulp and waste materials are extremely abrasive and cause significant wear on the agitator itself. The process worked, but it was eating through the agitators in 14 weeks or less. Needless to say, the customer was not satisfied with the rate at which they were replacing agitators. That's why they reached out to GPM Engineered Fabrication for a solution.

### HOW GPM HELPED

With our extensive knowledge of pumping abrasive slurries and the importance of understanding the correct metallurgy to withstand wear in any application, our team reverse-engineered a new GPM-Eliminator Hydrapulper Blade with an improved metallurgical composition. At 36" in diameter, this was our largest open faced impeller casting to date.

### THE RESULTS

The new GPM-Eliminator Hydrapulper Blade was installed and has now been in service for over 63 weeks, more than 4X the original design! Our solution has saved the customer over **\$100,000** in the first year by more than quadrupling the mean time between failure (MTBF) and creating a huge reduction in downtime and spare parts inventory. And it's still running strong!



Previous design after 12 weeks of runtime.



New GPM-Eliminator Hydrapulper Blade.



GPM-Eliminator Hydrapulper Blade After 32 weeks in service.