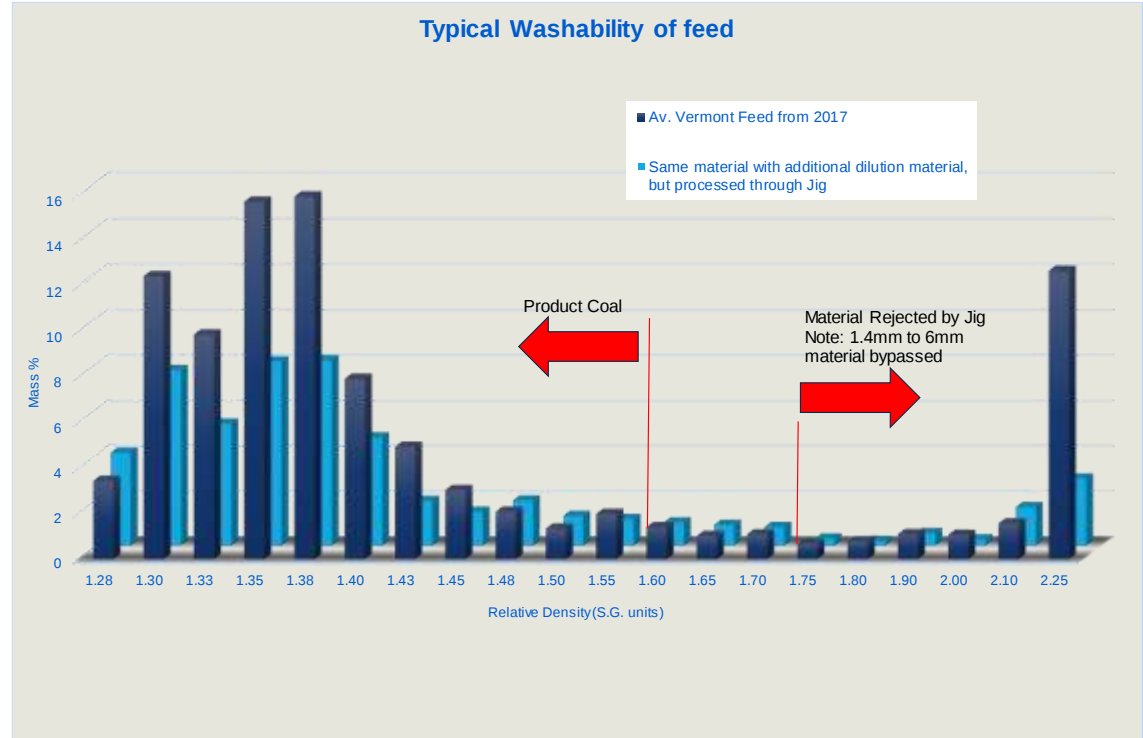


Why Mod 4?

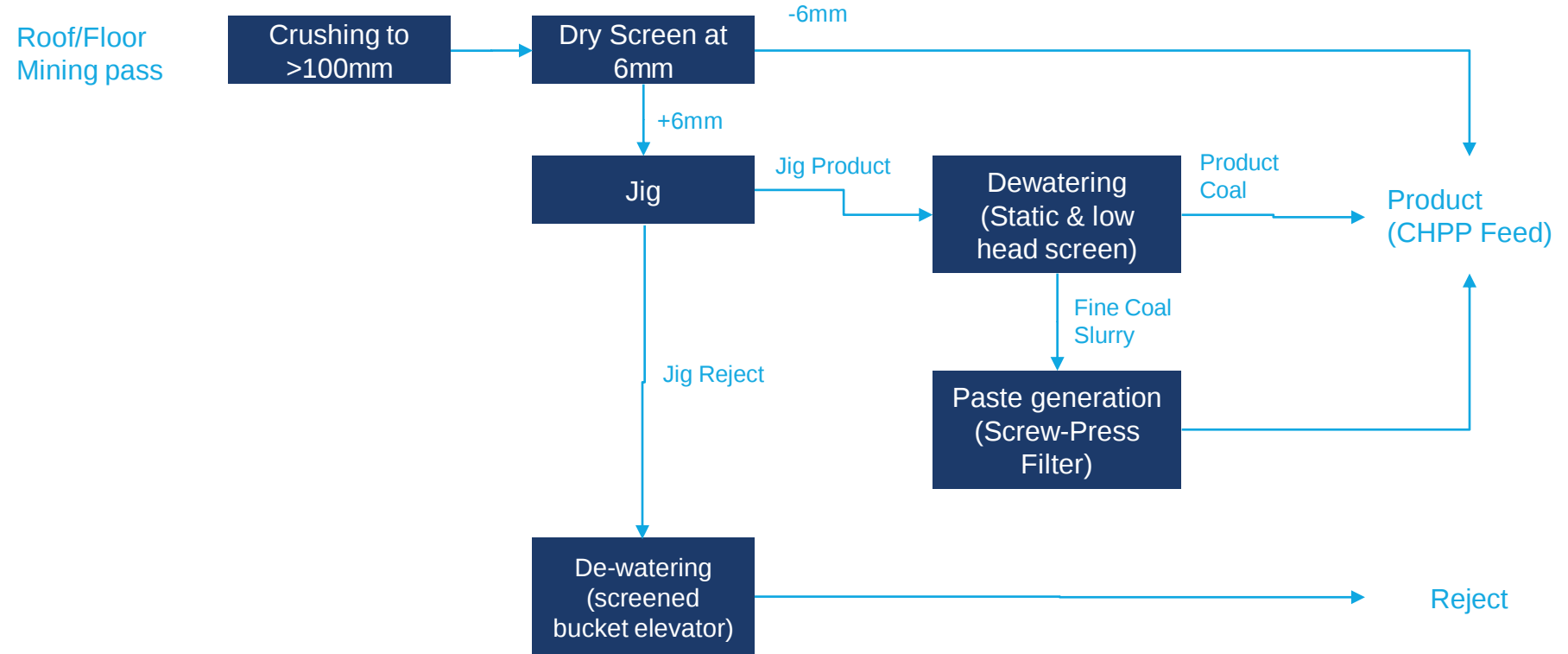
- Mining process increases dilution so as to decrease coal loss – dig horizon is adjusted so as to keep undulating coal/ dilution interface within the retained portion
- Dilution material is dense rock ($>2.2\text{S.G.}$) so is easily separated from the product coal ($<1.6\text{S.G.}$)
- “Increases” CHPP capacity by reducing dilution in feed

Coal Feed

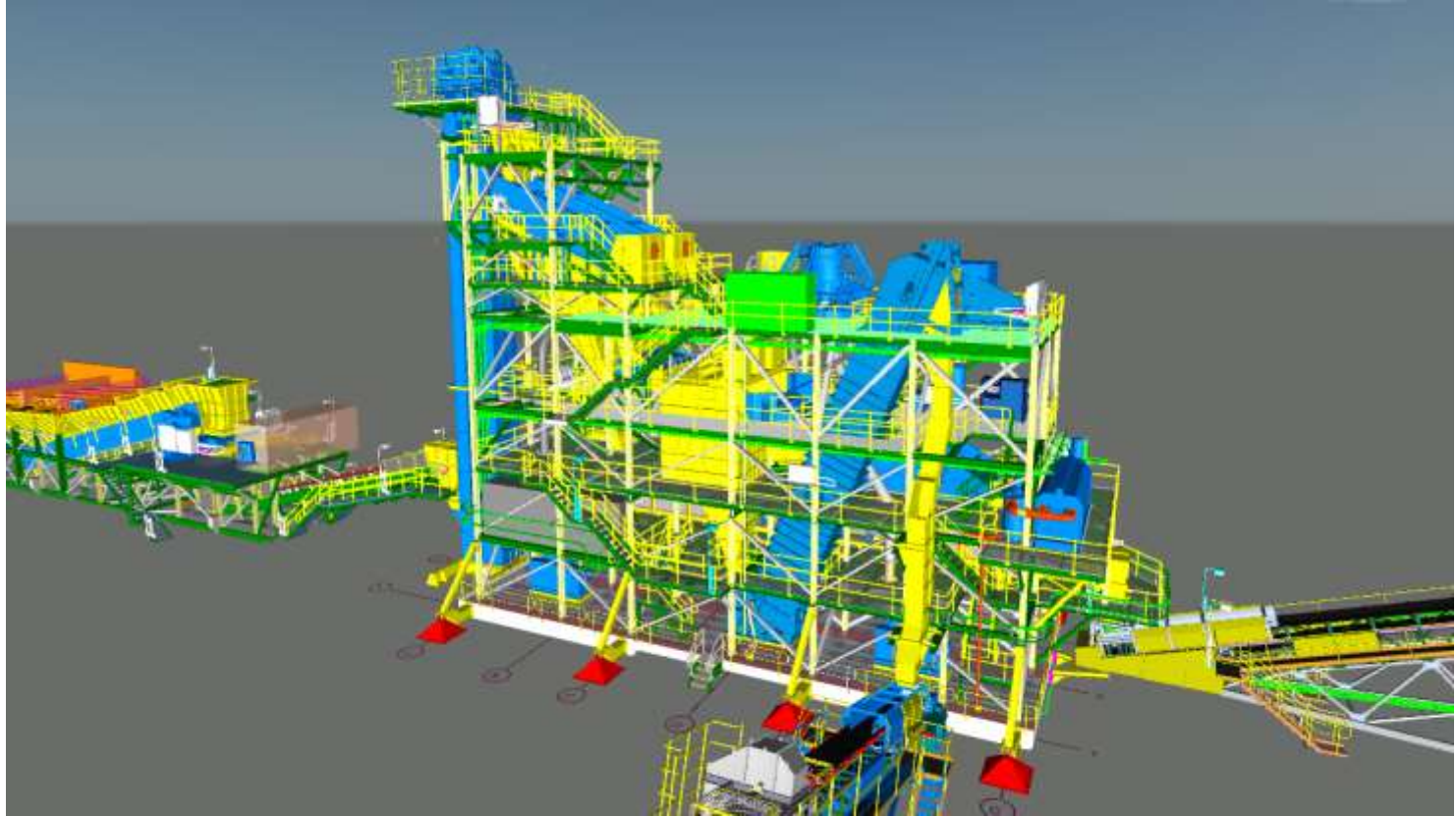
- Washability data indicates a barren zone in density between product coal and reject.
 - This means the amount of misplaced material will be minimal



Material Flows



The Plant



Demonstrated Benefits

- To Date Mod 4 has processed 310kt diluted feed, removing ~140kt of dilution (approx. 4 days CHPP feed – 2 mods at full production or 6months of maintenance days)
- To date 10kt of coal recovered that would have gone to waste dump*
- Other unquantified benefits are reduced coal/rock blockages in mods 1-2

*Based on estimates of additional dilution in product, applying matched coal loss/ dilution volumes and using coal in-pit density 50% that of reject

Innovations

- Use of a density separation process as a pre-treatment step
 - Minimal coal loss compared with rotary breaker as pre-treatment step
- Use of Bucket elevators (used in coal in other parts of the world)
- Screw-press filter instead of thickener/ belt-press filter
 - Reduces capital cost significantly
- Water circuit overflow launder
 - Builds in robustness to process – can