



Dynapore® Diffusion Bonded Filter Elements for FCC Slurry Gas Oil Service

Fluidized Catalytic Cracking Units (FCCU's) employ a fluidized catalyst bed for cracking and separation of feedstock into usable and saleable products. The catalyst is cycled from the FCC reactor to the regenerator and back to remove coke formed in the reactor. While not friable, the catalyst is broken down into smaller particles and fines. The un-captured fines in the fractionator feedstock exit in the bottom as heavy coker gas oil, or slurry oil.

The heavy slurry oil is a saleable product as fuel oil or feedstock if particulate catalyst/ash levels do not exceed certain levels. Thus, filtration to remove the fines can enhance the value or utility of the FCC Slurry Oil. The cost of filtration must be considered vis-a-vis the value of the product. To withstand the rigors of this application, sintered metal filter elements, and in particular diffusion-bonded multi-layer wire mesh elements are preferred, owing to their barrier filtration characteristics and high permeability.

Drawing on decades of experience in the field of sintered metallic filter media, PFP offers an optimized filter medium construction specifically for slurry gas oil applications. The Dynapore® sintered wire mesh laminate filter elements have a proven track record of performance at refineries around the world. These Dynapore® filters are easily back-flushed for reuse, thereby eliminating repeated cartridge replacement and waste cartridge disposal.



Features and benefits of sintered wire cloth filter elements include:

- Very high permeability
- "Pass-Thru" media design allowing free flow downstream of the filter layer
- High collapse strength
- Filter ratings from 2-100 microns
- Available in 304L or 316L stainless steel
- Complete element retrofits for existing sintered metal filtration systems
- Easily back-flushable

