

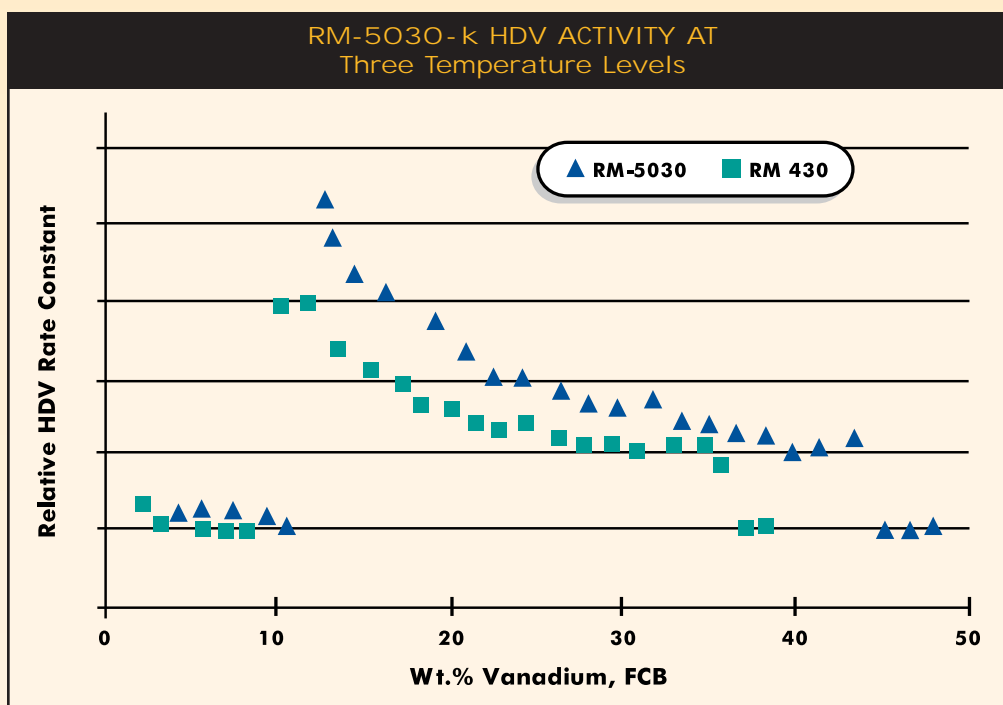


RM-5030 High Metals Deposition Capacity Front End HDM Catalyst

HDM or demetalisation catalysts are designed for metals removal from the feed. These catalysts are manufactured with very wide pores and some macropores for storage of the removed Nickel and Vanadium. In this way, the valuable downstream HDS catalysts are protected.

RM-5030 is the latest addition to Criterion's portfolio of HDM catalysts. This catalyst has very high capacity for metals deposition, allowing the catalyst to hold more than its own weight in metals.

RM-5030 is a catalyst with a very high pore volume of 1.04 cc/g. As expected for this high pore volume catalyst, the pilot plant results above, show its high activity and stability for



Vanadium removal rate constants (1.5 order) in HDM tests for catalysts RM-5030 and RM-430. The feed is a heavy residue and the temperature is operated at three levels to measure the complete kinetic behavior.

vanadium removal at levels of vanadium as high as 58%. Additional experiments with Boscan residue, not shown here, demonstrate that this catalyst can hold more than its own weight in metals. The activity and stability of this catalyst for metals removal make it a prime candidate for Guard bed and Front-End applications.