

## عنوان مقاله:

Comparative Study of Various Thermal Boundary Conditions on FCCU Riser Reactor Wall

## محل انتشار:

دومین کنفرانس بین المللی مهندسی و علوم کاربردی (سال: 1395)

تعداد صفحات اصل مقاله: 9

## نویسندگان:

Iman Ahmadi Kakavandi - PART-SHIMI Knowledge Based Company

Ehsan Javadi Shokroo - PART-SHIMI Knowledge Based Company

Mehdi Farniaei - PART-SHIMI Knowledge Based Company

## خلاصه مقاله:

The performance of a fluidized bed catalytic cracking unit (FCCU) with gas oil feed in the various thermal conditions of the riser wall is investigated. Four different thermal boundary conditions on the riser wall, namely adiabatic (A), non-adiabatic (NA), a constant heat flux introduced on the wall (CFW) and isothermal wall (IW) are studied. Results show that the best operating mode for the light gas yield is the case of CFW boundary condition and the best process performance in terms of gasoline yield is corresponding to isothermal wall. In addition, the coke formation in the case of CFW boundary condition is about three or more times larger than other cases while in the case of IW this will not increase rapidly as the CFW mode

## کلمات کلیدی:

Fluidized bed catalytic cracking; Mathematical modeling; Isothermal wall; Non-isothermal wall; Adiabatic wall

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/539445>

