



ADVANCED FILTRATION SYSTEM

WANT TO INCREASE HYDROPROCESSING
UNIT RUN TIMES BY 50%?



AFS ADVANCED
FILTRATION
SYSTEM

www.unicatcatalyst.com/afs-filter

AFS 2.0

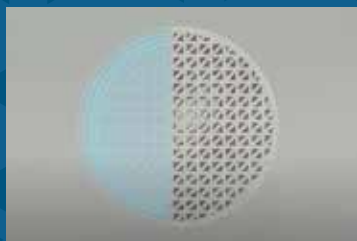
UNICAT Catalyst's grading series are uniquely shaped, high alumina inert filtration grading disks.

These disks have been designed and optimized to mitigate pressure drop problems due to the build-up of

various foulants in the grading and top catalyst layers of hydrotreating reactors and other fixed bed units.

AFS grading solutions have been successfully installed in more than 500 applications.

INNOVATION IN DESIGN



The Next Generation of AFS has optimized uniform flow channels, creating non-restrictive flow distribution that maximises foulant capture. Shape and design have evolved along with a deeper understanding of dynamics which influence filter capacity and pressure drop.

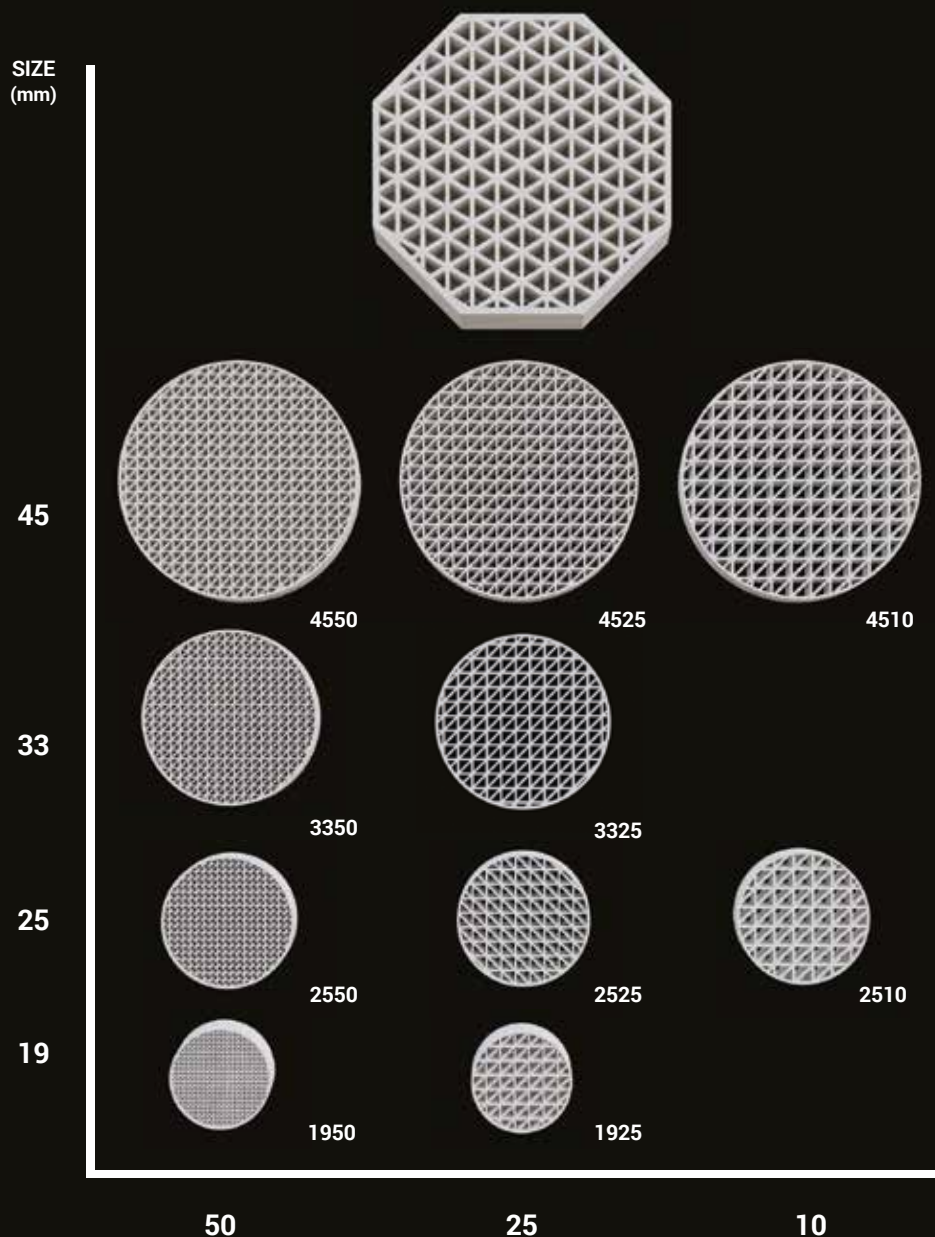
AFS UNIQUE FEATURES

- ▶ Available in promoted type for mild HDS hydrogenation and silica removal.
- ▶ High crush and physical strength guarantees minimal dusting and breakage during loading and unloading.
- ▶ 10 mesh to 50 mesh filter patterns in most sizes provide exceptional flexibility in design.
- ▶ With active Surface Area exceeding $60 \text{ m}^2/\text{g}$ to $110 \text{ m}^2/\text{g}$ AFS can be used as catalyst substrate while maintaining filtration capability.
- ▶ Well suited for high pressure applications such as CFH, GOHT and HCU reactors as well as less severe applications such as NHT and DHT.

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SIZING

SIZE
(mm)



AFS ADVANTAGES

50% Longer Cycle Length

- ▶ **50% + Longer Cycle Length**, compared to reticulated grading, due to having a larger and 100% accessible void space for foulant capture and storage.
 - ▶ Best option at **capturing any size particulate**.
 - ▶ Easily **doubles the run life** of traditional grading in dP limited vessels.
 - ▶ **3x STRONGER** than reticulated product.
 - ▶ Allows pressure drop foulants to get **deeper into the grading** resulting in **significantly longer cycles**
 - ▶ Creates **uniform flow distribution** and **prevents channeling**
- Designed with uniform dimension channels



VIEW OUR AFS
VIDEO ONLINE



If you are interested in taking advantage of 50% longer catalyst bed life, contact us today

E: info@unicatcatalyst.com

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UNICAT
CATALYST TECHNOLOGIES, LLC

AFS

**ADVANCED
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