

KATALCO 51-102

Highly stable catalyst achieves more methanol production for longer

KATALCO™ 51-102, is Johnson's Matthey's (JM) latest generation of methanol synthesis catalyst designed to deliver unparalleled stability and performance, leading to higher end-of-life activity, helping methanol producers make more methanol for longer.

The unique promoters in **KATALCO 51-102**, offer greater resistance to thermal sintering, the most common cause for catalyst deactivation and die-off.

This new generation of methanol synthesis catalysts has been engineered with finely dispersed copper and zinc particles, which are stabilised by metal oxides that act as effective barriers to prevent sintering and loss of activity over the catalyst's lifetime.

Significant value generation for customers

The improved performance of **KATALCO 51-102** has translated into the following for a typical 3000 mtpd plant:

- an additional 2.5% methanol make over 4 years, worth \$9 million extra (assuming \$100/mt margin).
- An extra year on the change-out cycle would be worth a further \$0.8 million per year.
- A more stressed or revamped plant could generate even more value.

KATALCO 51-102 ensures consistent and efficient performance, making it the preferred choice for large scale methanol production facilities.

The benefits that can be achieved by any individual operator will depend on the specific circumstances on their plant.

Benefits

- Increased methanol production
- Enhanced long-term stability
- Lower feedstock utilisation
- High mechanical strength
- Reliable operation
- Low temperature operation

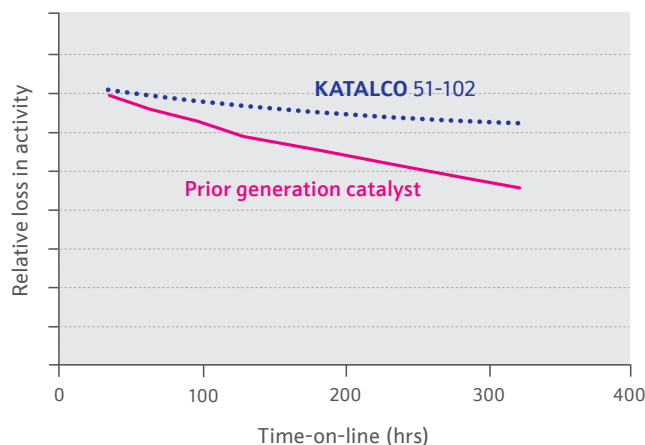


Figure 1: **KATALCO 51-102** performance under accelerated ageing conditions vs previous generation methanol synthesis catalyst.

With its advanced stabilisation mechanism **KATALCO 51-102**, offers further advantages of being able to operate at cooler temperatures than before, improving selectivity towards methanol and reducing by-product formation, thereby improving feedstock utilisation and plant operational efficiency.

For more information about how **KATALCO 51-102** can unlock the value potential from your methanol plant

