



Johnson Matthey

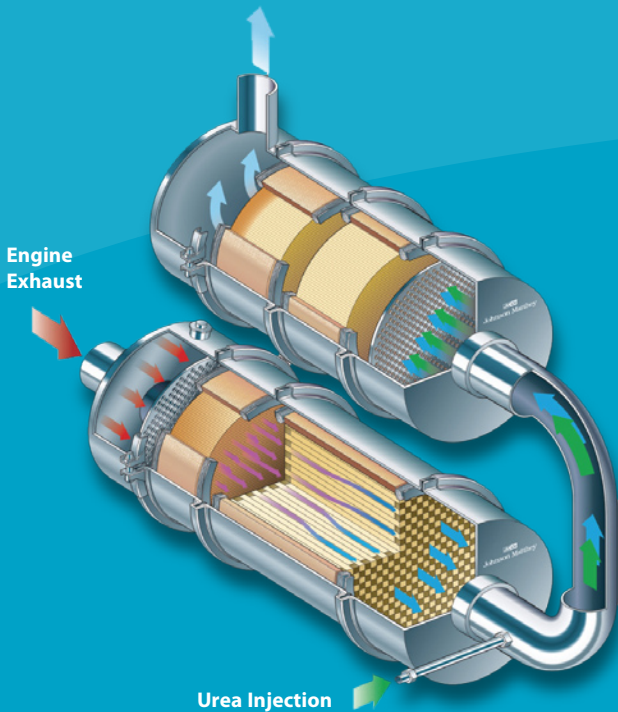
# SCRT

SELECTIVE CATALYTIC REDUCTION TECHNOLOGY

## SCRT® Selective Catalytic Reduction Technology

*Four-way emission control system that delivers highest NOx reduction across a broad range of applications.*

For diesel applications where maximum NOx reduction is critical, SCR technology provides the highest NOx reduction available today. The SCRT® system is Johnson Matthey's patented 4-Way emission control technology. JM's SCRT system reduces all four regulated exhaust emissions: CO, HC, and PM by over 90%, and NOx by 70%.



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## SCRT® Selective Catalytic Reduction Technology

### TECHNOLOGY DRIVEN

Urea-based SCR technology is combined with Johnson Matthey's patented CRT® particulate filter system to achieve maximum emission control. First, engine exhaust flows through Johnson Matthey's CRT diesel particulate filter to reduce CO, PM, and HC. A controlled amount of urea (DEF) is then injected into the exhaust before it enters the SCR catalyst modules. The urea is converted to ammonia and provides the necessary chemical conditions for the SCR catalyst to reduce NOx. The SCR system consists of a commercially available urea injection system, a JM developed control system that precisely delivers urea, and SCR and ammonia slip catalysts.

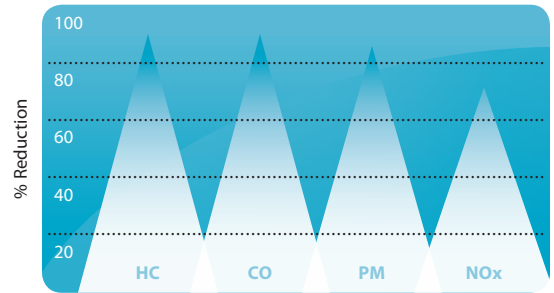
### FEATURING

- PM, HC, and CO reduction over 90% and 70% NOx reduction.
- Air assisted injection for optimum droplet size.
- Meets EPA NO<sub>2</sub> slip requirements.
- Turnkey kit ready for installation.
- Well suited to retrofit fleets with central fueling capability.

### PROVEN SUCCESS

Johnson Matthey's SCR experience extends back over three decades. JM supports SCR in stationary applications for prime or back-up power, gas turbines and refinery heaters. Additionally, most U.S. engine OE's have selected JM as their partner for PM/NOx control for U.S. 2010 and European engine OE's have selected Johnson Matthey as their partner for Euro 4/5 mobile SCR supply.

### SCRT® Test Results



### SCRT® Performance on Heavy Duty Diesel

	(G/BHP-HR%)	
	NOx	PM
2004 Standard	2.5	0.1
2007 Standard	1.2	0.01
2010 Standard	0.2	0.01
<b>SCRT Performance</b>		
FTP Weighted Emissions	0.450	0.005
OICA Weighted Emissions	0.050	0.007

<http://ect.jmcatalysts.com>