The VOC laden air stream enters the first heat exchange bed where the stream passes directly through the media where it is pre-heated en route to the combustion chamber where a burner adds any heat necessary to reach optimum combustion temperature and complete the oxidation process.

The now clean air stream next enters a second heat exchange bed where the clean stream passes directly through the media where the stream is cooled while simultaneously heating the media before being exhausted to atmosphere.
3 Chamber Regenerative Thermal Oxidizer | Mode of Operation

The 3-bed RTO is similar to the 2-bed RTO. The VOC laden air stream enters the first heat exchange bed where the stream passes directly through the media where it is pre-heated en route to the combustion chamber where a burner adds any heat necessary to reach optimum combustion temperature and complete the oxidization process.

The bed which was the last inlet bed will always be purged with clean air before becoming the outlet bed. The dirty air from the last inlet bed has to be cleaned out in order to achieve high destruction efficiency.