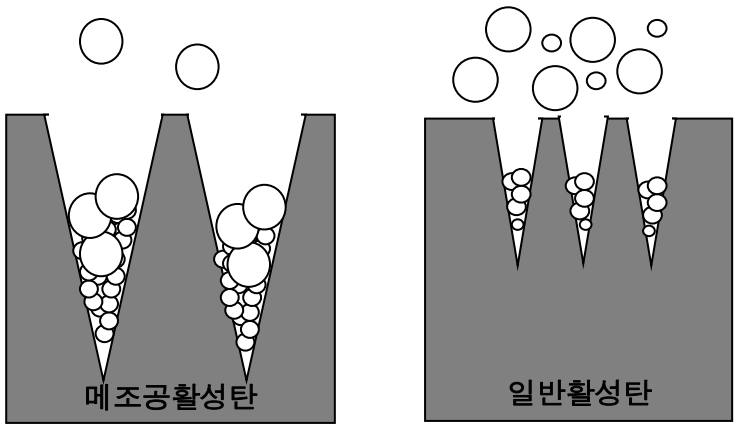
SES 특허기술

VOC 흡착제
(메조공활성탄, Meso-Pore Activated Carbon)

메조공활성탄 특징

- 고분자량, 고농도의 VOC 흡착에 적합함
- 간단한 흡착, 탈착공정에 의한 반복운전이 가능
- 특수제조법에 의한 고강도 메조공활성탄(MPAC)으로 분화 등에 의한 미세가루 발생이 거의 없음
- 메조공활성탄(MPAC) 형상 및 크기
  - Circular Cylinder
  - 직경 2mm, 3mm, 4mm 등)
- 흡착, 탈착시 발생 열량이 작음
  - 흡착, 탈착 관련 설비의 초기 투자비용 감소

메조공활성탄 모델



- 메조포아(Mesopore)란 직경 2~50mm 를 가진 세공임
- 일반적인 활성탄에 비하여 메조공활성탄(MPAC)은 고분자량, 고농도 VOC 가스의 흡착/제거가 가능

메조공활성탄 충진

- 가스농도에 따라 메조공활성탄(MPAC)은 소수성 실리카겔 흡착제 즉, CARiACT-S3 & S6과 함께 흡착탑에 충진 됨(다층 충진)
  - CARiACT-S3 & CARiACT-S6 : 고농도 가스에 적합
  - MPAC & CARiACT-S6 : 저농도 가스에 적합

Note: • CARiACT-S3 & CARiACT-S6 는 SES 특허기술에 의하여 제조
• 다층 충진법에 의해 장치 크기의 소형화 및 투자비용의 감소

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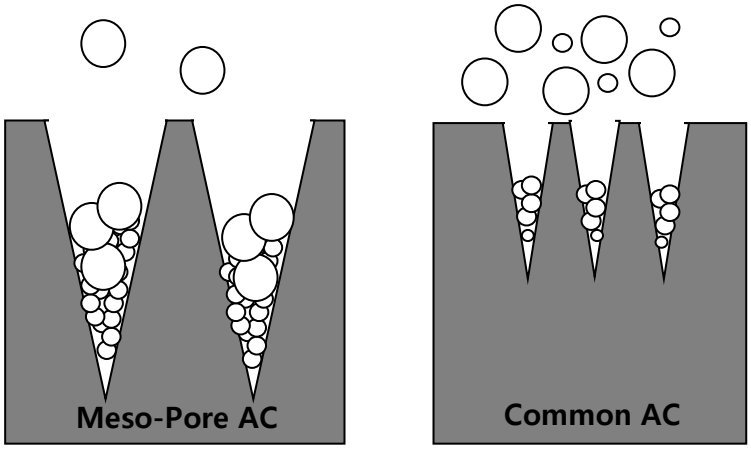
SES PATENT

VOC Adsorbent
(Meso-Pore Activated Carbon)

Characteristics

- Most suitable for adsorbing VOC having high molecular and high concentration.
- Operable by repetition processing due to easy adsorption and desorption.
- High degree of hardness because of special production process and almost no fine powder generation.
- MPAC feature size
  - Circular Cylinder
  - 2mm, 3mm, 4mm in diameter and etc.
- Lower amount of heat generation during adsorption/desorption.
  - Low cost investment for facilities relating to adsorption/desorption.

MPAC model



- Meso-Pore means fine pore having 2~50mm in diameter.
- MPAC can adsorb/remove gases which have higher molecular and/or higher concentration of VOC gas compared to common AC.

Loading MPAC

- Depending on the gas concentration, the following Hydrophobic Silica Gel Adsorbents(CARiACT- S3 and CARiACT-S6) are loaded together with MPAC into Adsorber Towers(Multi-Layer Loading).
  - CARiACT-S3 & CARiACT-S6 : high concentration gases
  - MPAC and CARiACT-S6 : low concentration gases

Note : • CARiACT-S3 & CARiACT-S6 are produced by SES patented technologies.
• Unit size will be downsized and the investment cost will be decreased by applying Multi-Layer Loading.

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