

# ACTIVITY DISTRIBUTION SYSTEM

The activity distribution system is designed for the safe distribution of radioactive fluids and gasses from cyclotron to hot cells, making use of multi position valves. The ADS is operated remotely through the use of touch screens. The operator logs into the system and selects the route, from cyclotron to a (specific) hot cell. After submitting the route, the door of the destination hot cell will be interlocked to ensure a safe transfer. After the target content is transferred, the ADS system will confirm delivery has been successful.

## Model VG-ADS

### KEY FEATURES

- Easy to operate via Human Machine Interface (HMI)
- Cyclotron status can be displayed on HMI
- High quality multi position valves
- Valves up to 12 positions with waste and home position
- Maximum of 6 multi position valves
- Liquid- and gas target handling
- Exterior smooth finish easy to decontaminate
- Electrically locked and interlocked shielded door
- Easy target line connection through airtight connections
- Airtight enclosure
- Remote access service (EWON)
- Stand alone and fully integrated versions
- Shielded or unshielded (for bunker installation)
- Smaller of the shelf system with two valves as one piece installation available as well
- Separately ventilated
- Could also be used to direct your synthesized product to a specific dispensing cell

**SHIELDED CABINET  
CAN BE INTEGRATED IN  
HOT CELL  
CONFIGURATION**

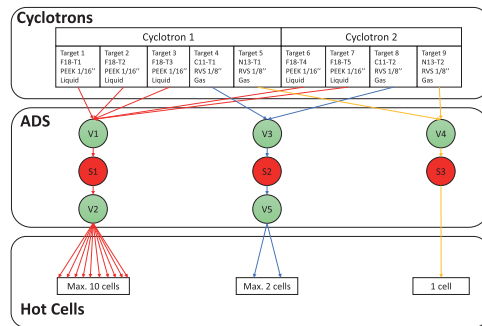
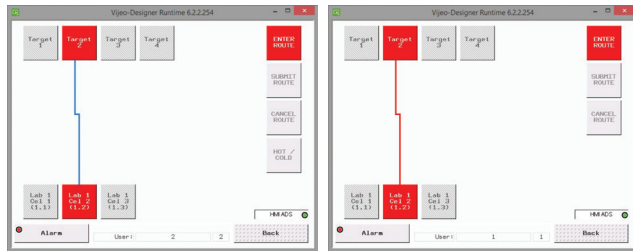
**VENTILATED  
CABINET**

**ELECTRICAL LOCK  
WITH INTERLOCK**

**HIGH QUALITY  
MULTI POSITION VALVES**



**YOUR GUARANTEE FOR QUALITY. FOR SURE.**



## TECHNICAL DATA

- Separately ventilated airtight box
- Air inlet is fitted with a HEPA filter
- Cabinet 75 mm lead shielding in all directions
- Shielded cabinet for 2 multi position valves:
  - Internal dimensions  $\pm 600*210*380$  mm (W\*D\*H)
  - External dimensions  $\pm 850*300*500$  mm (W\*D\*H)
  - Total weight:  $\pm 1750$  kg
- Shielded cabinet for 6 multi position valves:
  - Internal dimensions:  $\pm 1030*495*1200$  mm (W\*D\*H)
  - External dimensions:  $\pm 1280*585*1400$  mm (W\*D\*H)
  - Total weight:  $\pm 2700$  kg
- Analogue pressure gauge
- Separate electrical cabinet
- Liquid target lines feed through using corrugated guide tubes
- Smooth exterior finish, color traffic white (RAL 9016)

## SOFTWARE

- User friendly, intuitive interface
- Different user languages available
- A failure mode and effect analysis is performed on the system
- Implementation of software and firmware are conform SDLC (software development life cycle)

## OPTIONS

- Multi position valves with up to 12 configurable positions
- Pneumatically or electrically actuated multi position valves
- Unshielded cabinet
- Uninterruptible power supply (UPS)
- Manual valve controller for maintenance
- Safety valve(s)
- Ion chamber (further modifications may apply)
- Activity sensor with door interlock
- Additional external 10 inch touch screen(s)
- Liquid waste bottle
- Additionally safety shutdown valve
- Integrated control with hot cell

