

# **AUTOMATIC DOSE DIVIDER**

The automatic dose divider is developed to completely mimic the manual syringe filling process for dispensing radiopharmaceuticals in unit doses or multi dose vials. The ADD enables dispensing operations to be carried out in remote hot cell situations where manipulation of syringes and vials by tongs and manipulators is extremely difficult. It is also suitable for bench top applications, laminar air flow cabinet or safety cabinets.

The total time to dispense a single dose from dropping in the syringe to removing the recapped syringe is typically less than 45 seconds.

The ADD is specifically designed for high energy gamma applications (PET) and makes light work of the heavy syringe- and vial shields that are difficult to manipulate by hands.

Variant	нст
Syringe filling module (W*D*H)	402*274*402 mm (when turning)
Weight	13 kg
Key pad/ display unit (W*D*H)	150*210*80 mm
Weight	2 kg
Control PC unit (W*D*H)	365*250*90 mm
Weight	2,7 kg
Tungsten vial shield (W*D*H)	100*100*150 mm
Weight	5 kg
Universal power supply provided	100~240V; 1,5A; 47 - 63 Hz

- Shields have a common outer diameter with various lengths and inner diameters to suit the syringe.
- The minimal shielding is 10 mm tungsten (14 mm lead equivalent) for a 10 cc syringe, smaller syringes have more shielding.
- Tungsten vial shield with 18 mm wall thickness (25 mm lead equivalent).

#### Accuracy

2 ml syringe = 0,02 ml 5 ml syringe = 0,05 ml 10 ml syringe = 0,10 ml

## Minimum volume

2 ml syringe = 0,05 ml 5 ml syringe = 0,10 ml 10 ml syringe = 0,10 ml





## **STANDARD FEATURES**

### Software

To operate the dispenser a user friendly, intuitive touch screen interface is provided.

Simply dial up the type of syringe you want to fill and drop the syringe into the tungsten shield. Then enter the volume you want to fill and the ADD loads the syringe, fills the desired volume and presents the syringe to you for removal or recapping. You can add liquid to a previously filled syringe or dispense into vials in multiple aliquots, all with a minimum of manual handling. The ADD also makes recapping of the syringe needle simple.

#### **Functions**

- Filling of desired volume into syringe by inversion of syringe and vial.
- Optional pressure equalization leaves the vial at atmospheric pressure.
- Add function to add liquid to filled syringe, can be used for in syringe dilution or to adjust the final activity.
- Empty function allows liquid to be emptied from syringe in as many aliquots as required, can be used for adjusting the volume in the syringe or for sub dispensing vials.
- Integrated recapping function.
- Vial shield detection to minimize handling errors.
- Drip elimination pulls back plunger by user controlled volume before needle is removed from vial septum.
- Different needle lengths can be selected, subject to physical constraints.
- Variable penetration of needle depth through vial septum to ensure minimal waste of liquid.
- User selection for most commonly used syringes up to 10 ml volume.
- User calibration for each syringe size.



## **Disposables / Consumables**

Description	Height x diameter	Adaptor
30 ml Abcott/ Hollister	68,8*37,4 mm	None required
20 ml Mallinckrodt	58,6*30,4 mm	
25 ml Mallinckrodt Tenchneval	59*30 mm	4AB5834
10 ml Abbcott Plastic	53,4*26,8 mm	
30 ml Fujisawa	82,3*33,7 mm	
10 ml APP	56*26 mm	
20 ml Technellte	70,5*32 mm	
P6 Vial	57,1*21,8 mm	4AB5889
5 ml Fujisawa	49,5*23,5 mm	
10 ml Mallinckrody	53,4*25,8 mm	
15 ml Elumatic III	57*25,8 mm	
10 ml Bayer/ Hollister	55*21,7 mm	4AB7645
Schott 30 ml Amertech	74*29,25 mm	4AB9175
Japan SENDAI	61,2*32 mm	4AB9299