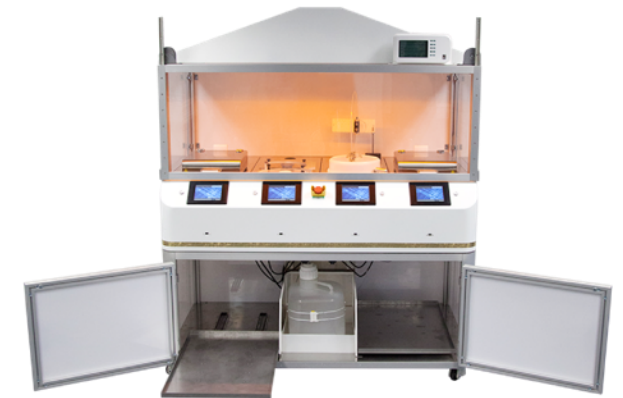


Spin Developer Accessories 02



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Serving the Semiconductor Industry Since 1987

Apogee™ Spinner Accessories

Many accessories are available to enhance:

- Ease of use
- Performance and control
- Cleaning and maintenance

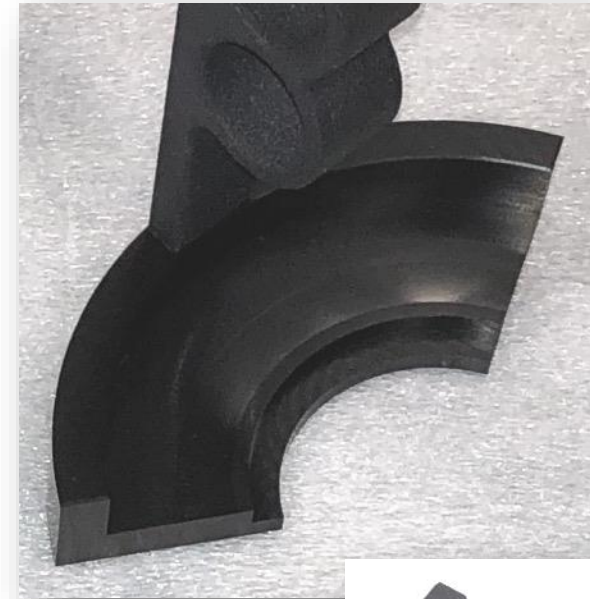
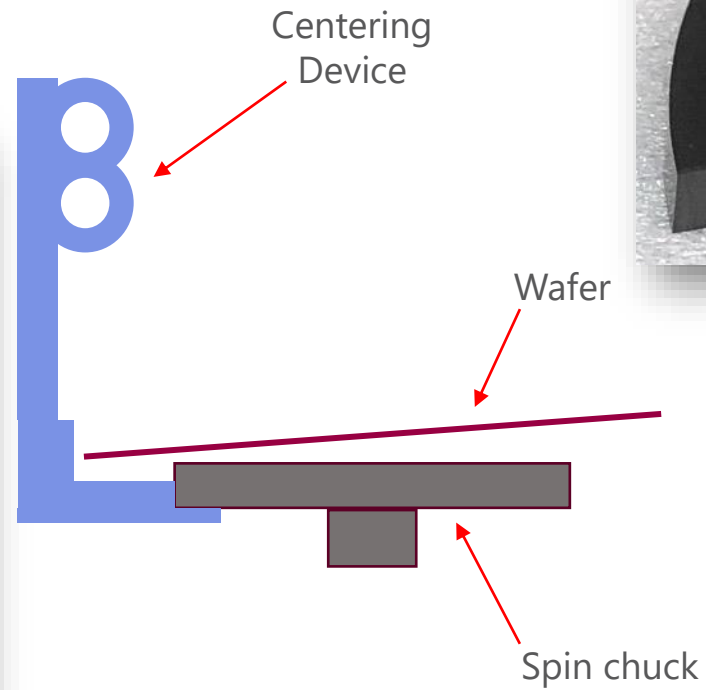
Most can be added later



Centering Devices

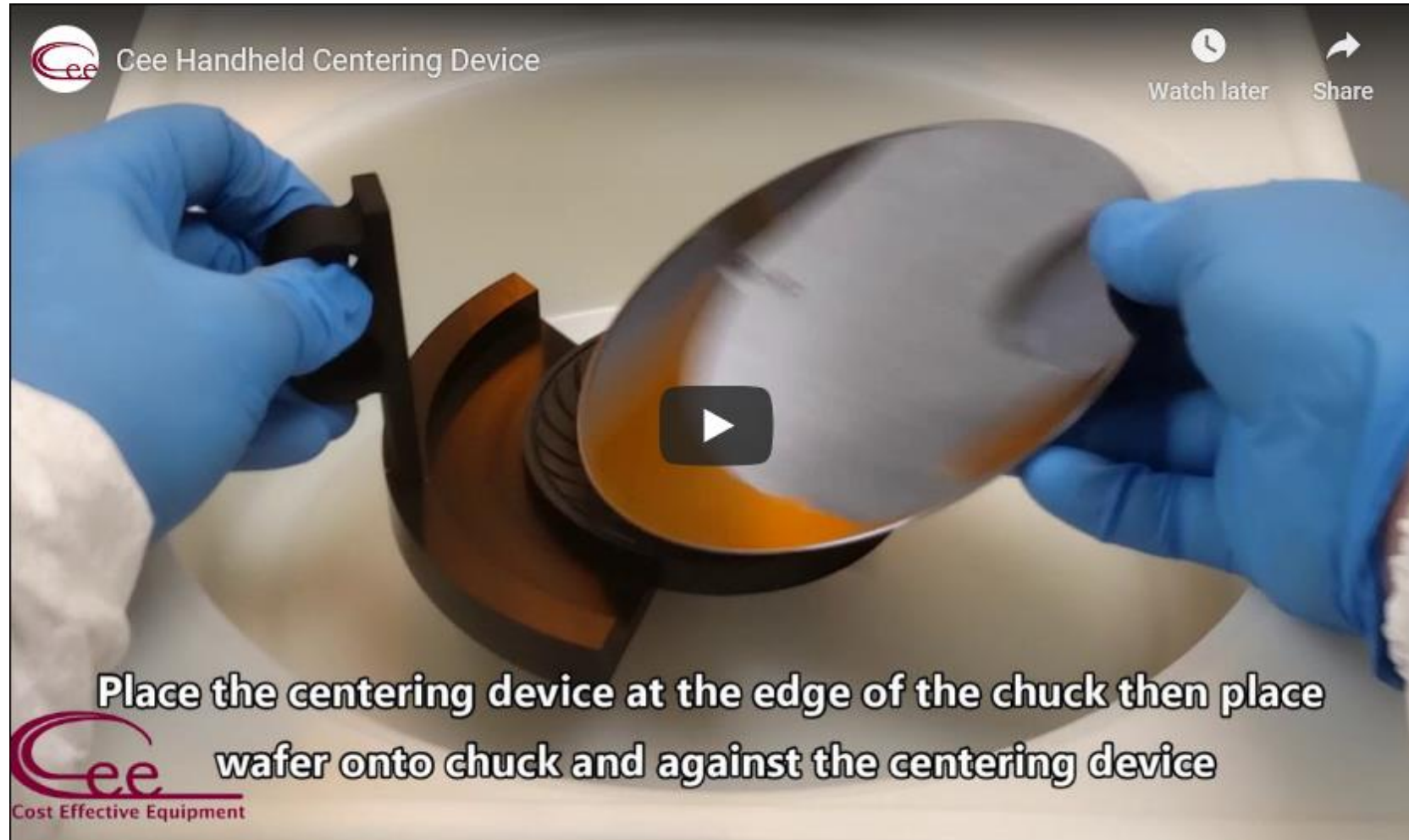
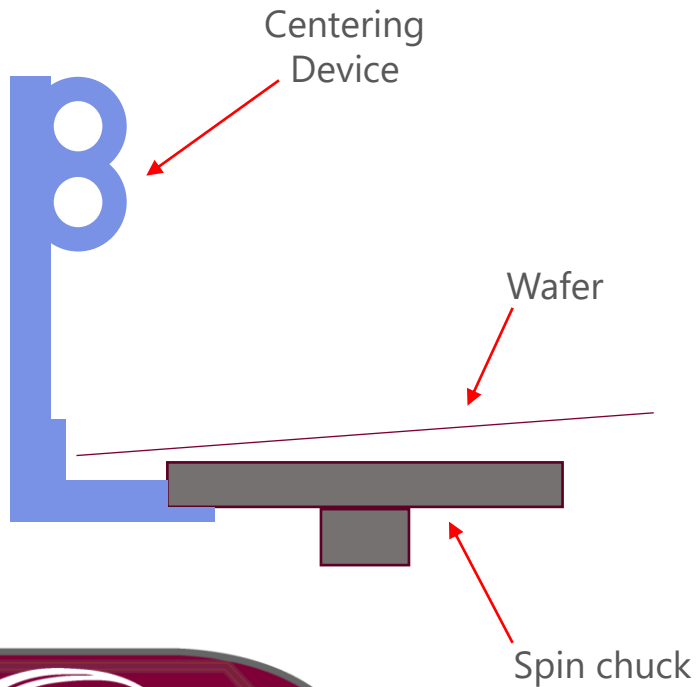
Available for all popular wafer sizes

- Custom sizes on request
- Easy to use
- Repeatable



Centering Devices

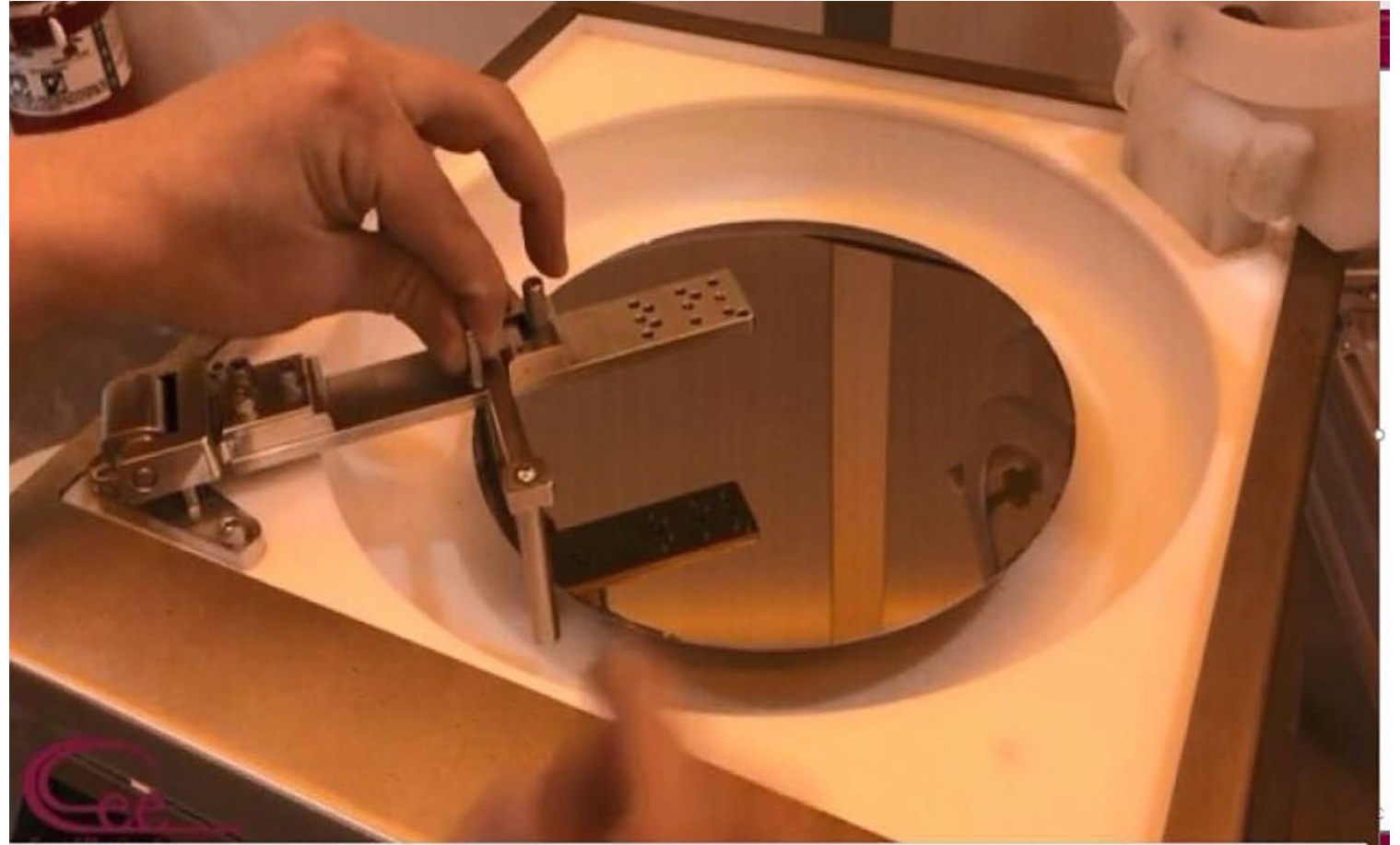
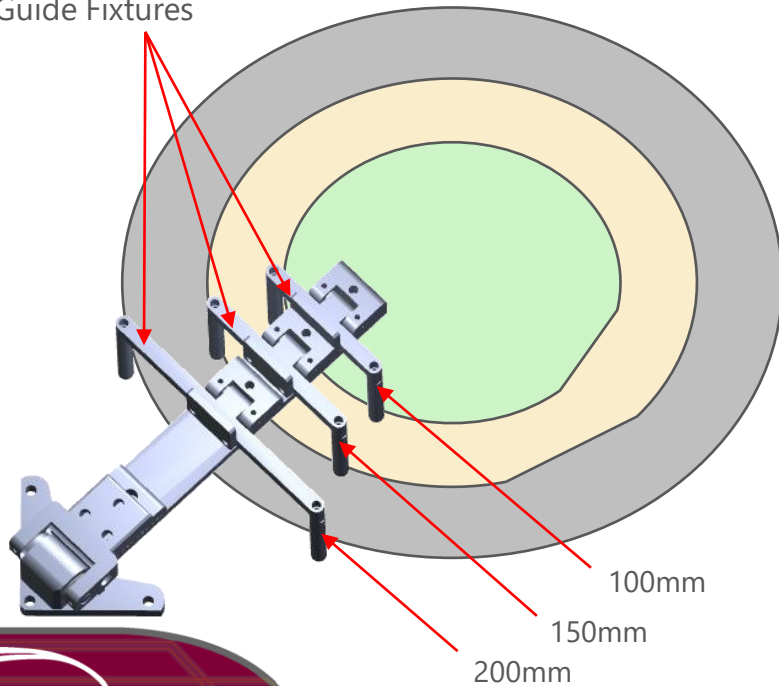
<https://www.youtube.com/watch?v=W3kV4bNnCYo>



Centering Arm

- Quick and easy to use
- Best for 1 or 2 wafer sizes
- Great for production use

Interchangeable Wafer Guide Fixtures



Spin Bowl Purge

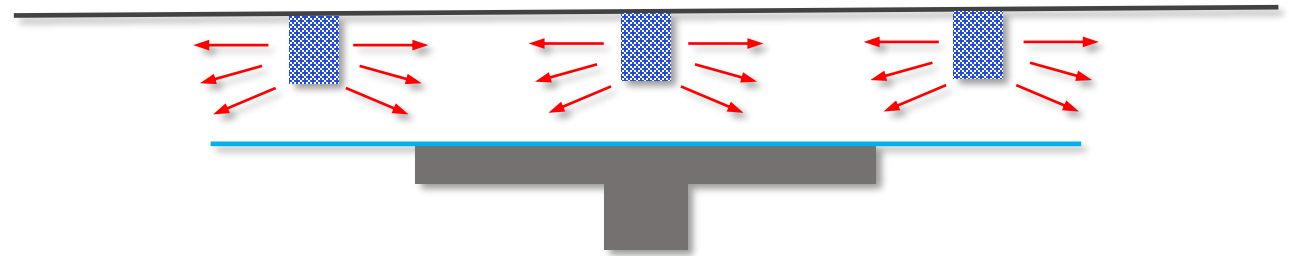
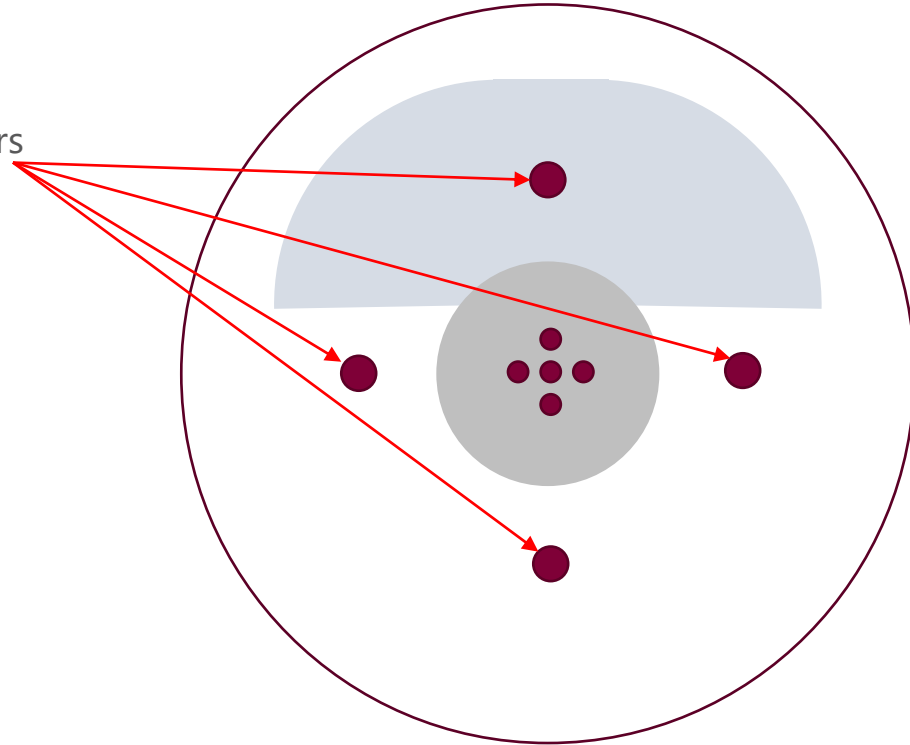
Used to reduce humidity or oxygen

Sintered metal diffusers

Manual or recipe controlled



4 gas diffusers



Bowl Liners

Custom made for the Apogee™ spin bowl

Thermoformed polypropylene

Disposable

Cleanable

Affordable (10-pack pricing)



Bowl Liners

<https://www.youtube.com/watch?v=hHWr2EZWJj>

g



Programmable Exhaust

Provides recipe control of spin bowl exhaust

Control drying rate

Good for very thick films

Recipe line control

<https://www.costeffectiveequipment.com/service-support/technical-resources/solvent-vapor-control/>

Apogee Spinner Process Recipes About Tools - admin

Editor Controls

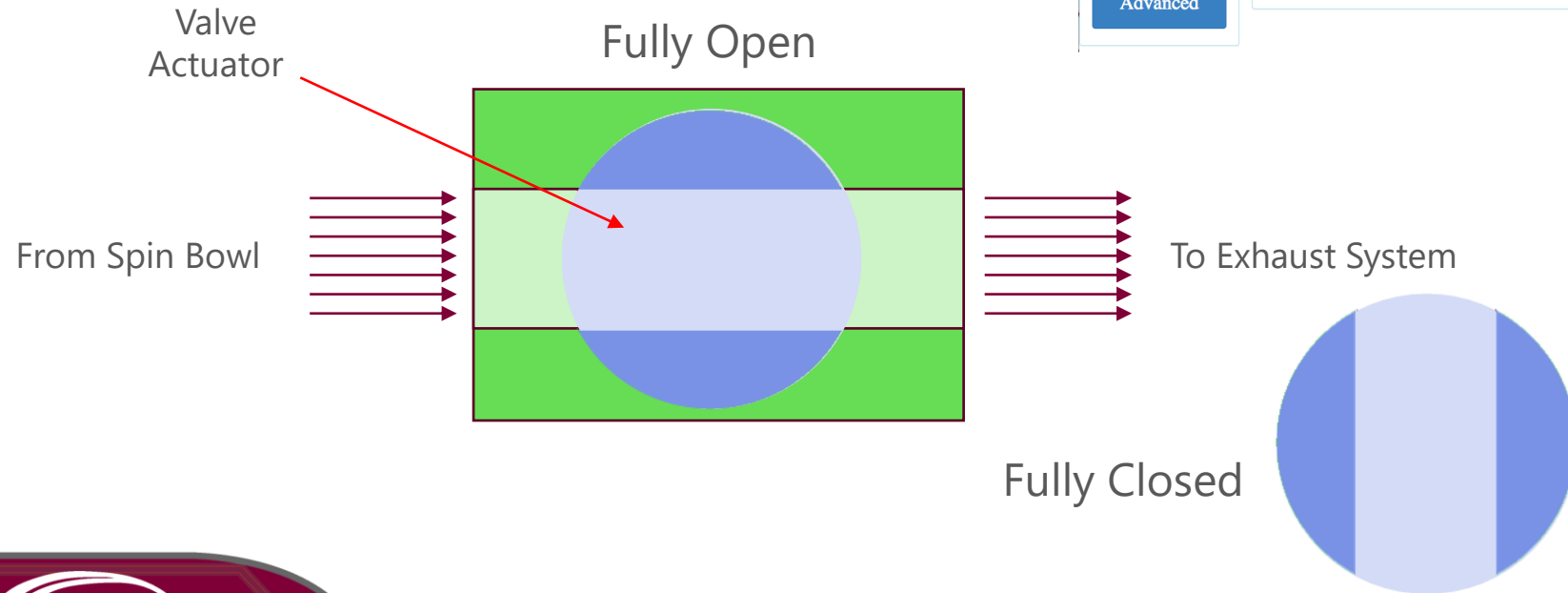
Save Cancel Insert ^ v Delete Advanced

Editing Recipe-

Name: Thick_Resist_Coat_7 Force thick resist coat with EBR

Enable Chuck Vac

Step	Velocity (rpm)	Ramp (rpm/s)	Time (seconds)	Exhaust (%)	Dispenses
1	100	1000	3	25	1
2	475	300	5	60	None
3	4000	15000	30	100	None
4	250	15000	30	4	4
5	2500	15000	15	100	



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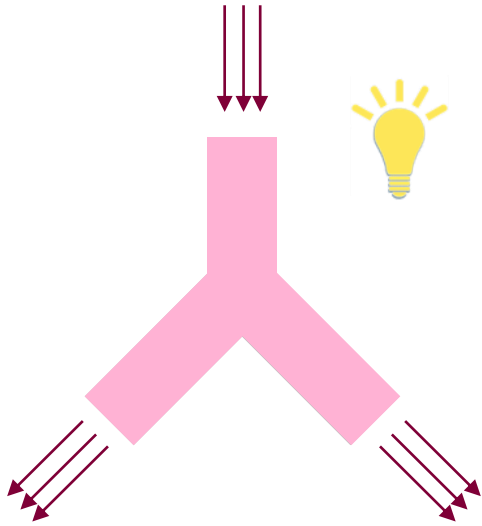
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Drain Divertor Valve

Use to direct waste liquid flow between two paths

Mostly used on spin developer tools

Recipe control allows switch during process



Liquid Sensors

Waste Carboy Full Sensor

- Capacitive proximity sensor outside of container
- Prevents starting a recipe when full
- Eliminates messy overflows

Pressure Can Empty Sensor

- All Teflon wetted parts
- Adjustable
- Prevents starting a recipe when fluid level is low

