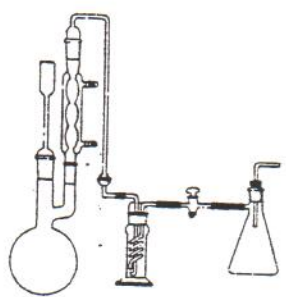


DISTILLATION APPARATUS, CYANIDE

H-451

FOR DETERMINATION OF PRESENCE OF CYANIDE  
IN DOMESTIC AND INDUSTRIAL WASTE WATER

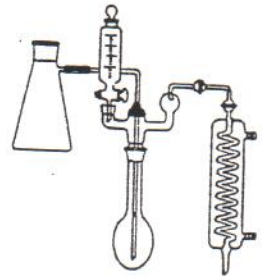


ITEM	CODE
THISTLE TUBE	-1
CLAISEN FLASK	-2
CONDENSER	-3
CONNECTING TUBE	-4
ELBOW CONNECTOR	-5
FISHER-MILLIGAN	-6
STOPCOCK	-7
SUCTION FLASK	-8
COMPLETE	-9

DISTILLATION APPARATUS, KJELDAHL

H-452

USED IN DETERMINING TOTAL KJELDAHL  
NITROGEN IN DOMESTIC AND INDUSTRIAL  
WASTE, SALINE WATERS AND SURFACE WATERS.

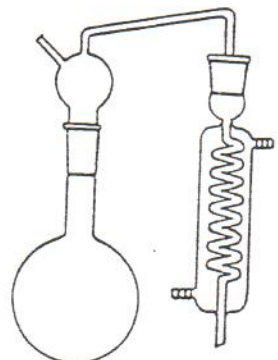


ITEM	CODE
SUCTION FLASK	-1
SEPARATORY FUNNEL	-2
SPECIAL ASSEMBLY	-3
KJELDAHL FLASK	-4
CONNECTING TUBE	-5
CONDENSER	-6
INLET TUBE	-7
COMPLETE UNIT	-8

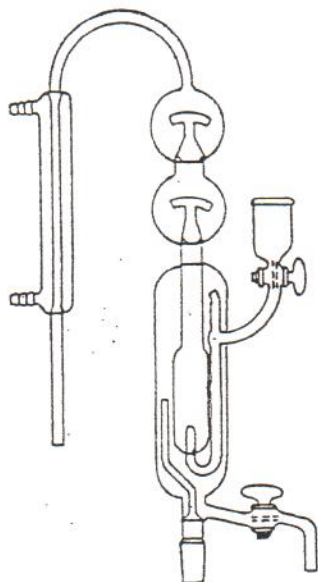
DISTILLATION APPARATUS,

H-453

USED IN DETERMINATION OF ORGANIC  
NITROGEN. 100ml FLASK.



ITEM	CODE
CONDENSER	-1
TRAP	-2
FLASK	-3
COMPLETE UNIT	-4



H-461

DISTILLING HEAD, KJELDAHL

250mm LIEBIG CONDENSER, TWO BULBS WITH T-SHAPED TRAPS. TEFLON STOPCOCKS.

JOINT    CODE

24/40       -1

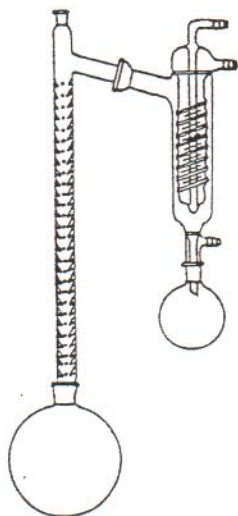
29/42       -2

34/45       -3

H-462

STILL, SOLVENT

2000ml FLASK WITH 24/40 JOINT,  
COLUMN 24" WITH 10/30 FOR THERMOMETER,  
VACUUM TAKE OFF AND 24/40 BOTTOM JOINT,  
1000ml RECEIVER, 35/25 CONNECTING JOINTS



ITEM

CODE

DISTILLING COLUMN       -1

FLASK, 2000ml            -2

RECEIVING FLASK         -3

CONDENSER                -4

CLAMP                     -5

COMPLETE UNIT           -6

## DISTILLING

## DISTILLING

## DISTILLING

## DISTILLING

## DISTILLING COLUMN, HEMPEL

H-471

STANDARD TAPER OF BALL AND SOCKET,

COLUMN LENGTH mm	I.D. JOINT	12.5mm 24/40 CODE	19mm 24/40 CODE	25mm 29/42 CODE	19mm 35/25 CODE
300		-1	-6	-11	-16
400		-2	-7	-12	-17
500		-3	-8	-13	-18
600		-4	-9	-14	-19
900		-5	-10	-15	-20



## DISTILLING COLUMN, VACUUM JACKETED

H-472

COLUMN ENCLOSED WITH VACUUM JACKET

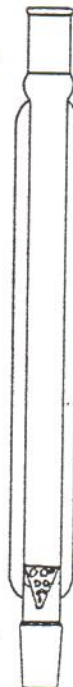
COLUMN LENGTH mm	I.D. JOINT	12mm 24/40 CODE	19mm 24/40 CODE	25mm 29/42 CODE
300		-1	-7	-13
400		-2	-8	-14
500		-3	-9	-15
600		-4	-10	-16
900		-5	-11	-17
1000		-6	-12	-18



## DISTILLING COLUMN, HONEYCOMB VACUUM JACKETED

H-473

COLUMN LENGTH mm	I.D. JOINT	12mm 24/40 CODE	19mm 24/40 CODE	25mm 29/42 CODE
300		-1	-5	-9
400		-2	-6	-10
500		-3	-7	-11
600		-4	-8	-12

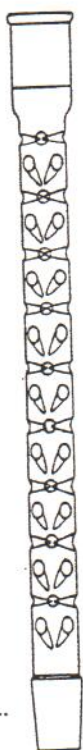


DISTILLING

DISTILLING

DISTILLING

DISTILLING



H-481

DISTILLING COLUMN, VIGREUX

INDENTIONS RETARD UPWARD FLOW OF VAPORS PROMOTING CONDENSATION AND WASHING OF VAPORS TO REMOVE HEAVIER FRACTIONS.

COLUMN LENGTH mm	24/40 CODE	29/42 CODE
200	-1	-8
300	-2	-9
400	-3	-10
500	-4	-11
600	-5	-12
900	-6	-13
1000	-7	-14



H-482

DISTILLING COLUMN, SNYDER

CONSIST OF SECTIONS WITH A FLOATING BALL VALVE. VAPORS LIFT VALVES ALLOWING CONDENSATE TO FLOW DOWN. CONDENSATE ALSO WASHES VAPORS OF HEAVIER FRACTIONS.

NUMBER OF SECTIONS	OVERALL LENGTH mm	24/40 CODE	29/42 CODE
3	320	-1	-4
6	470	-2	-5
12	770	-3	-6



H-483

DISTILLING COLUMN, JACKETED, VIGREUX

COLUMN LENGTH mm	I.D. JOINT	19mm 24/40 CODE	25mm 29/42 CODE
200		-1	-8
300		-2	-9
400		-3	-10
500		-4	-11
600		-5	-12
900		-6	-13
1000		-7	-14

DISTILLING

DISTILLING

DISTILLING

DISTILLING

DISTILLING COLUMN, VACUUM JACKETED, SILVERED

H-491

COLUMN COMPLETELY SILVERED AND VACUUM JACKETED

COLUMN LENGTH mm	I.D. JOINT	12mm 24/40 CODE	19mm 24/40 CODE	25mm 29/42 CODE
300		-1	-7	-13
400		-2	-8	-14
500		-3	-9	-15
600		-4	-10	-16
900		-5	-11	-17
1000		-6	-12	-18



DISTILLING COLUMN,

H-492

PERFORATED GLASS DISC FOR PACKING SUPPORT  
25mm I.D., 24/40 JOINTS

COLUMN LENGTH mm	CODE
200	-1
300	-2
400	-3

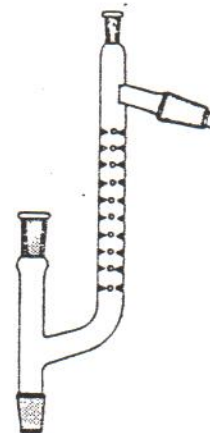


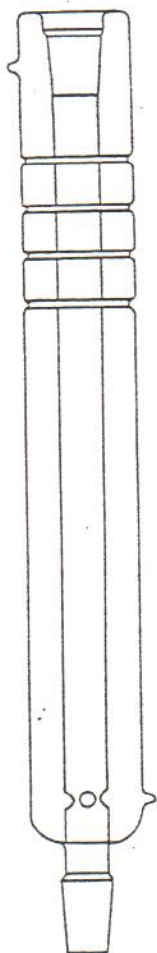
DISTILLING HEAD, VIGREUX-CLAISEN

H-493

CLAISEN TYPE HEAD WITH VIGREUX SIDE ARM.  
TOP OF VIGREUX COLUMN HAS 10/30 JOINT  
WHICH WILL ACCOMMODATE 3" IMMERSION  
THERMOMETER.

JOINT	CODE
24/40	-1
29/42	-2



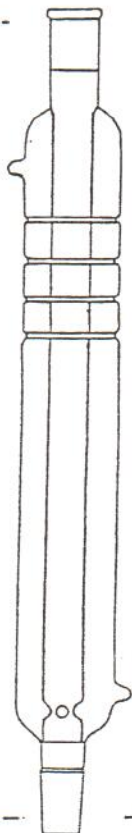


H-501

DISTILLING COLUMN, VACUUM JACKETED,  
SILVERED

INSIDE TUBE CONTAINS ROW OF INDENTIONS  
NEAR TOP TO SUPPORT PACKING. COLUMN AND  
TOP JOINT IS EVACUATED AND SILVERED.  
INTERNAL EXPANSION BELLOW COMPENSATE FOR  
DIFFERENCES IN TEMPERATURE AND EXPANSION  
BETWEEN COLUMN AND JACKET.

COLUMN LENGTH mm	I.D. JOINT	12mm	25mm	37mm
		24/40 CODE	24/40 CODE	29/42 CODE
300		-1	-6	-11
400		-2	-7	-12
600		-3	-8	-13
900		-4	-9	-14
1200		-5	-10	-15



H-502

DISTILLING COLUMN, VACUUM JACKETED,  
SILVERED

SAME AS ABOVE EXCEPT  
TOP JOINT NOT EVACUATED

COLUMN LENGTH mm	I.D. JOINT	12mm	25mm	37mm
		24/40 CODE	24/40 CODE	29/42 CODE
300		-1	-6	-11
400		-2	-7	-12
600		-3	-8	-13
900		-4	-9	-14
1200		-5	-10	-15

-----DISTILLING-----

DISTILLING

DISTILLING

-----DISTILLING-----

DISTILLING COLUMN, OLDERSHAW

H-511

CONSIST OF A SERIES OF PERFORATED PLATES WITH DRAIN THAT DIRECTS THE CONDENSED DISTILLANT TO OPPOSITE SIDE OF NEXT LOWER PLATE. A WEIR IN EACH PLATE TO MAINTAIN A UNIFORM LIQUID LEVEL. RISING VAPORS PASS THROUGH PERFORATIONS TO FORM UNIFORM BUBBLES IN THE LIQUID THAT FLOWS ACROSS EACH PLATE.

NUMBER OF SECTIONS	I.D. JOINT	19mm 29/42 CODE	28mm 29/42 CODE	50mm 55/50 CODE
5		-1	-8	-15
10		-2	-9	-16
15		-3	-10	-17
20		-4	-11	-18
25		-5	-12	-19
30		-6	-13	-20
40		-7	-14	-21

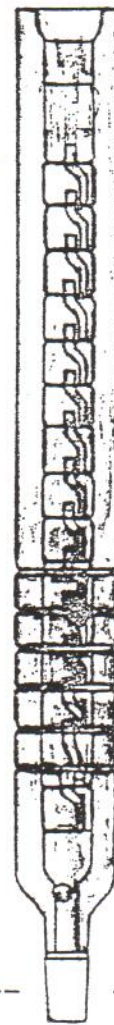


DISTILLING COLUMN, OLDERSHAW, JACKETED SILVERED

H-512

SAME AS ABOVE EXCEPT COLUMN IS VACUUM JACKETED AND SILVERED

NUMBER OF SECTIONS	I.D. JOINT	19mm 29/42 CODE	28mm 29/42 CODE	50mm 55/50 CODE
5		-1	-8	-15
10		-2	-9	-16
15		-3	-10	-17
20		-4	-11	-18
25		-5	-12	-19
30		-6	-13	-20
40		-7	-14	-21



ALL TYPES COLUMN PACKING AVAILABLE

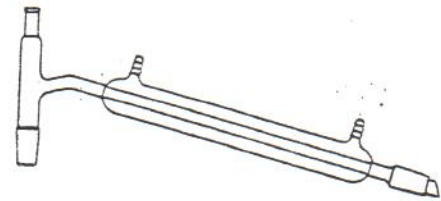


DISTILLING HEAD

H-531

ADAPTER HAS 10/30 OUTER JOINT FOR A 75mm IMMERSION THERMOMETER WITH A SEALED LIEBIG CONDENSER ON SIDE. BOTTOM JOINT OF ADAPTER AND TAKE OFF JOINT ARE THE SAME SIZE.

CONDENSER LENGTH	24/40	29/42
mm	CODE	CODE
200	-1	-5
300	-2	-6
500	-3	-7
600	-4	-8

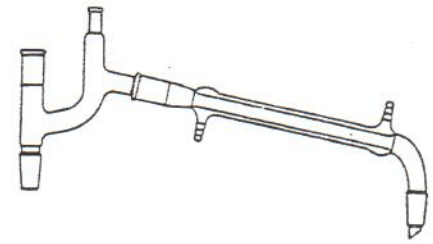


DISTILLING HEAD

H-532

MAIN BODY HAS 24/40 OUTER TOP AND 24/40 INNER BOTTOM WITH 10/30 OUTER ON SIDE JOINT FOR 75mm IMMERSION THERMOMETER. 24/40 JOINTS ON TAKE-OFF ARM AND LIEBIG CONDENSER.

ITEM	CODE
ADAPTER	-1
CONDENSER	-2
COMPLETE	-3

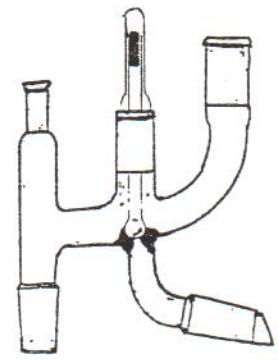


DISTILLING HEAD, MAGNETICALLY CONTROLLED

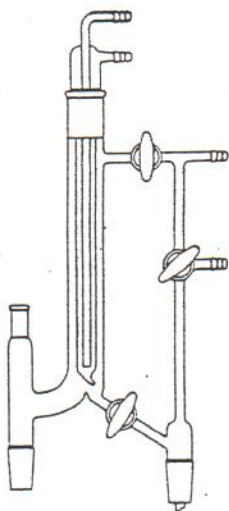
H-533

VALVE STEM HAS GROUND BALL TO MATCH GROUND SEAT IN TOP OF TAKE OFF ARM. IRON CORE IS ENCLOSED INSIDE OF THE STEM. TOP JOINT OF MAIN TUBE 10/30.

JOINT	CODE
24/40	-1
29/42	-2



H-541 DISTILLING HEAD, COLD FINGER

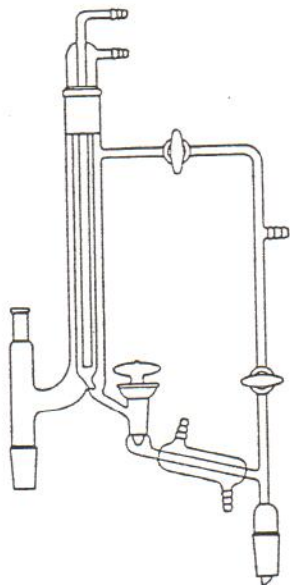


FOR ATMOSPHERIC OR REDUCED PRESSURE. 10/30 OUTER ALLOWS USE OF 3" IMMERSION THERMOMETER. GLASS OR TEFLON STOPCOCK. USE STOPCOCK TO TAKE OFF DISTILLATE WITH OUT INTERFERING WITH VACUUM. COLD FINGER AND UNIT ARE JOINED BY 29/42 JOINTS. COLD FINGER IS SEPARABLE FROM UNIT.

JOINTS BOTTOM	CONDENSER CODE	HEAD		COMPLETE	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
24/40	-1	-4	-7	-10	-13
29/42	-2	-5	-8	-11	-14
35/25	-3	-6	-9	-12	-15

TEFLON METERING STOPCOCK AVAILABLE FOR REFLUX CONTROL

H-542 DISTILLING HEAD, COLD FINGER

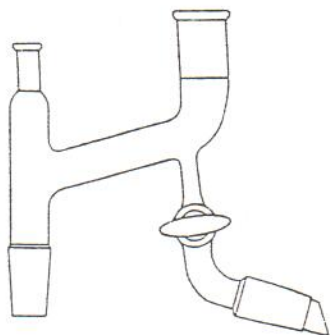


SIMILAR AS ABOVE EXCEPT: STRAIGHT STOPCOCK REPLACED BY NEWMAN STOPCOCK AND LIEBIG CONDENSER.

JOINTS BOTTOM	CONDENSER CODE	HEAD CODE	COMPLETE CODE
24/40	-1	-4	-7
29/42	-2	-5	-8
35/25	-3	-6	-9

TEFLON METERING STOPCOCK AVAILABLE FOR REFLUX CONTROL

H-543 DISTILLING ADAPTER, CLAISEN



MAIN TUBE TOP HAS 10/30 JOINT FOR 76mm IMMERSION THERMOMETER. OTHER JOINTS ARE 24/40. SIDE ARM IS AT 75 DEGREES. GLASS OR TEFLON STOPCOCK.

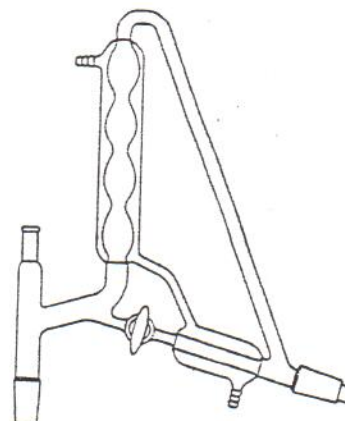
GLASS CODE	TEFLON CODE
-1	-2

DISTILLING HEAD

H-551

10/30 OUTER FOR 75mm IMMERSION THERMOMETER. DISCHARGE TUBE HAS 24/40 INNER. REFLUX RATIO VARIED BY USE OF STOPCOCK.

UPTAKE JOINTS	GLASS CODE	TEFLON CODE
24/40	-1	-3
29/42	-2	-4



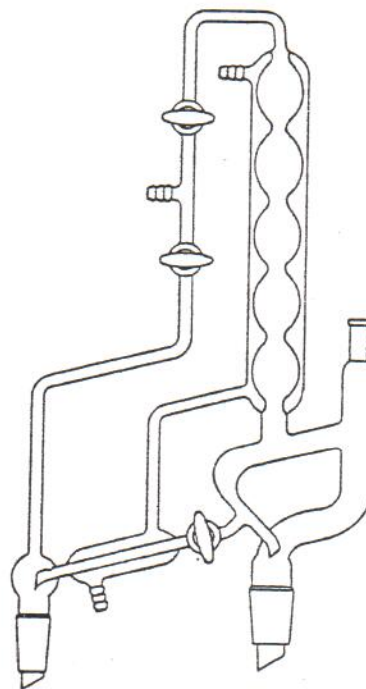
DISTILLING HEAD

H-552

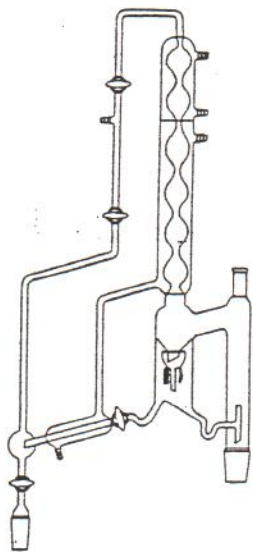
10/30 OUTER ALLOWS USE OF 75mm IMMERSION THERMOMETER. USED AT ATMOSPHERIC OR REDUCED PRESSURE. DISCHARGE TUBE HAS 24/40 INNER JOINT. CONTROL REFLUX RATIO VACUUM WITH GLASS OR TEFLON STOPCOCK.

UPTAKE JOINT	24/40		29/42	
	GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
24/40	-1	-4	-7	-10
29/42	-2	-5	-8	-11
35/25	-3	-6	-9	-12

UPTAKE JOINT	35/25	
	GLASS CODE	TEFLON CODE
24/40	-13	-16
29/42	-14	-17
35/25	-15	-18



HAMMETT SCIENTIFIC GLASS 803/279-6591

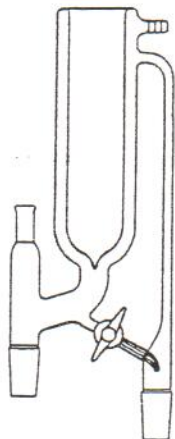


H-561

## DISTILLING HEAD, MAGNETIC CONTROL

ELECTROMAGNETIC COIL POSITIONING OF THE FUNNEL ALLOWS DISTILLATE TO BE TAKEN OFF INTO RECEIVER OR RETURNED TO FLASK. RECEIVERS CAN BE CHANGED WITHOUT INTERRUPTING PROCEDURE BY USE OF STOPCOCK IN DISCHARGE TUBE.

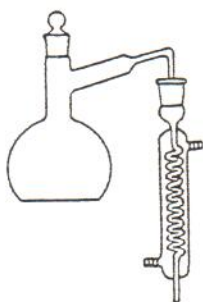
UPTAKE JOINTS	GLASS CODE	TEFLON CODE
24/40	-1	-5
29/42	-2	-6
45/50	-3	-7
35/25	-4	-8



H-562

## DISTILLING HEAD, DEWAR TYPE

24/40 INNERS BOTTOM. 10/30 OUTER FOR 75mm THERMOMETER.



H-563

## DISTILLING APPARATUS

USE FOR DETERMINATION OF ALBUMINOID NITROGEN, AMMONIA, SELENIUM, PHENOL AND FLUORIDE. 2000ml FLASK.

ITEM	CODE
FLASK	-1
CONDENSER	-2
COMPLETE	-3

DISTILLING      DISTILLING      DISTILLING      DISTILLING

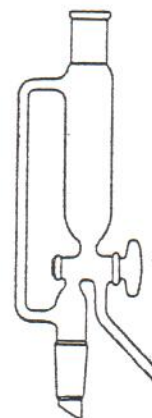
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DISTILLING RECEIVER, UNGRADUATED

H-571

GLASS OR TEFLON STOPCOCK. RETURN DISTILLATE TO STILL OR RECEIVER.

JOINT	GLASS CODE	TEFLON CODE
24/40	-1	-4
29/42	-2	-5
35/25	-3	-6



DISTILLING RECEIVER, GRADUATED

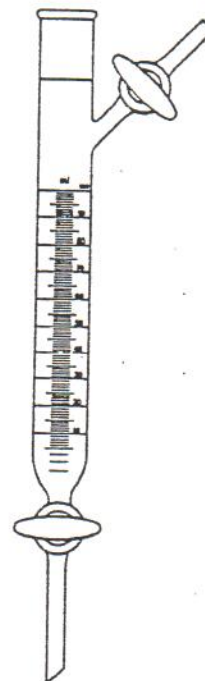
H-572

STOPCOCK ABOVE SCALE FOR VACUUM CONNECTION.

CAPACITY ml	DIVISION ml	24/40		29/42	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
50	1	-1	-6	-11	-16
100	1	-2	-7	-12	-17
250	2	-3	-8	-13	-18
500	5	-4	-9	-14	-19
1000	10	-5	-10	-15	-20

CAPACITY ml	DIVISION ml	35/25	
		GLASS CODE	TEFLON CODE
50	1	-21	-26
100	1	-22	-27
250	2	-23	-28
500	5	-24	-29
1000	10	-25	-30



DISTILLING

DISTILLING

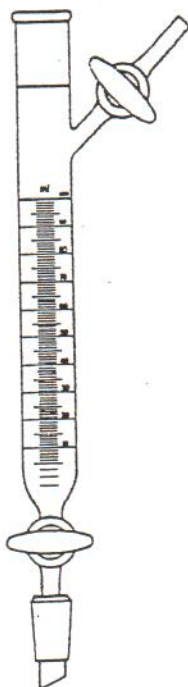
DISTILLING

DISTILLING

H-581

DISTILLING RECEIVER, GRADUATED

STOPCOCK ABOVE SCALE FOR VACUUM  
CONNECTION. INNER OR BALL JOINT AT BOTTOM



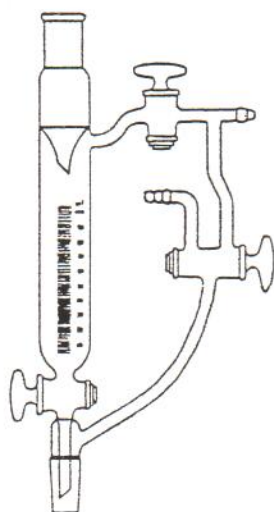
CAPACITY ml	DIVISION ml	24/40		29/42	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
50	1	-1	-6	-11	-16
100	1	-2	-7	-12	-17
250	2	-3	-8	-13	-18
500	5	-4	-9	-14	-19
1000	10	-5	-10	-15	-20

CAPACITY ml	DIVISION ml	35/25	
		GLASS CODE	TEFLON CODE
50	1	-21	-26
100	1	-22	-27
250	2	-23	-28
500	5	-24	-29
1000	10	-25	-30

H-582

DISTILLING RECEIVER, GRADUATED

GLASS OR TEFLON STOPCOCK.



CAPACITY ml	DIVISION ml	24/40		29/42	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
50	1	-1	-4	-7	-10
100	1	-2	-5	-8	-11
250	2	-3	-6	-9	-12

CAPACITY ml	DIVISION ml	35/25	
		GLASS CODE	TEFLON CODE
50	1	-13	-16
100	1	-14	-17
250	2	-15	-18

DISTILLING

DISTILLING

DISTILLING

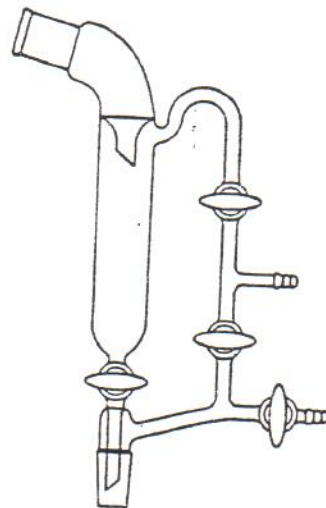
DISTILLING

DISTILLING RECEIVER, UNGRADUATED

H-591

GLASS OR TEFLON STOPCOCK .

CAPACITY ml	DIVISION ml	24/40		29/42	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
50	1	-1	-5	-9	-13
100	1	-2	-6	-10	-14
250	2	-3	-7	-11	-15
500	5	-4	-8	-12	-16



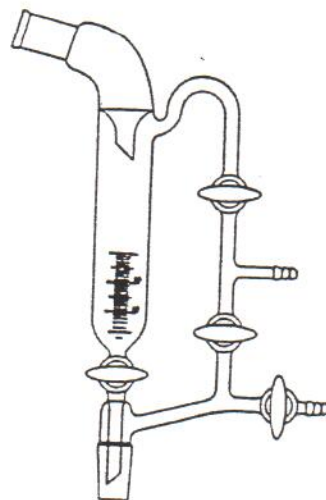
CAPACITY ml	DIVISION ml	35/2	
		GLASS CODE	TEFLON CODE
50	1	-17	-21
100	1	-18	-22
250	2	-19	-23
500	5	-20	-24

DISTILLING RECEIVER, GRADUATED

H-592

GLASS OR TEFLON STOPCOCK .

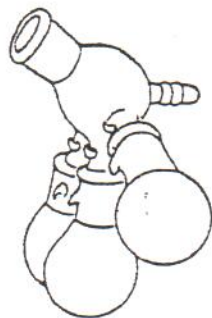
CAPACITY ml	DIVISION ml	24/40		29/42	
		GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
50	1	-1	-5	-9	-13
100	1	-2	-6	-10	-14
250	2	-3	-7	-11	-15
500	5	-4	-8	-12	-16



CAPACITY ml	DIVISION ml	35/2	
		GLASS CODE	TEFLON CODE
50	1	-17	-21
100	1	-18	-22
250	2	-19	-23
500	5	-20	-24

H-601

DISTILLING RECEIVER

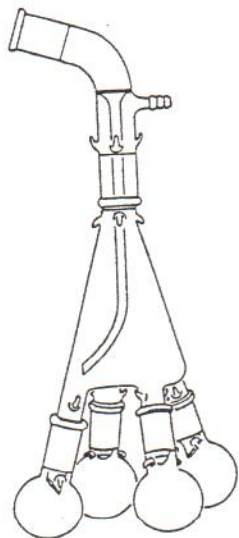


DISTRIBUTING ADAPTER WITH 24/25 JOINT AND VACUUM CONNECTION. THREE 24/40 OUTLETS ON BOTTOM, USED TO CONNECT 250ml RECEIVERS. COMPLETE WITH SPRINGS AND HOOKS.

ITEM	CODE
DISTRIBUTING ADAPTER	-1
COMPLETE	-2

H-602

DISTILLING RECEIVER, WITH ADAPTER

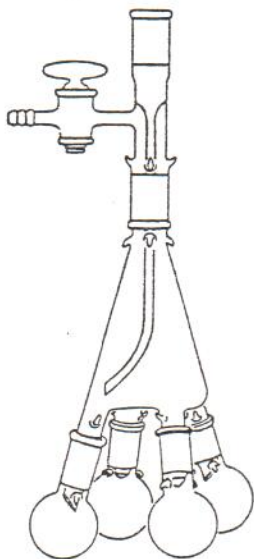


VACUUM ADAPTER AT 105 DEGREES. FOUR 50ml RECEIVING FLASK CONNECTED WITH 19/38 JOINTS. DISTRIBUTING ADAPTER AND TOP OF VACUUM ADAPTER THE SAME SIZE. COMPLETE WITH SPRINGS AND HOOKS

JOINT	VACUUM ADAPTER CODE	DISTRIBUTING ADAPTER CODE	COMPLETE CODE
24/40	-1	-3	-5
29/42	-2	-4	-6

H-603

DISTILLING RECEIVER, WITH ADAPTER



GLASS OR TEFLON STOPCOCK FOR CONNECTION. FOUR 50ml RECEIVING FLASK CONNECTED WITH 19/38 JOINTS. DISTRIBUTING ADAPTER AND TOP OF VACUUM ADAPTER THE SAME SIZE. COMPLETE WITH SPRINGS AND HOOKS

JOINT	VACUUM ADAPTER		DISTRIBUTING ADAPTER	COMPLETE	
	GLASS CODE	TEFLON CODE		GLASS CODE	TEFLON CODE
24/40	-1	-3	-5	-7	-9
29/42	-2	-4	-6	-8	-10

\_\_\_DISTILLING\_\_\_

\_\_\_DISTILLING\_\_\_

\_\_\_DISTILLING\_\_\_

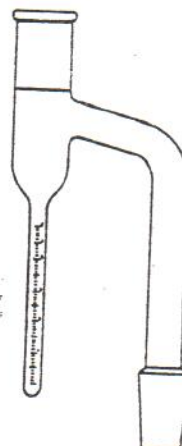
\_\_\_DISTILLING\_\_\_

DISTILLING RECEIVER, BIDWELL-STERLING TYPE

H-611

GRADUATED WITH JOINTS

CAPACITY	24/40	29/42
ml	CODE	CODE
5	-1	-3
10	-2	-4

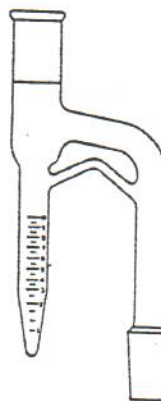


DISTILLING RECEIVER, DEAN STARK TYPE

H-612

GRADUATED WITH JOINT, RETURN ARM ALLOWS  
EXCESS SOLVENT TO RETURN TO FLASK.

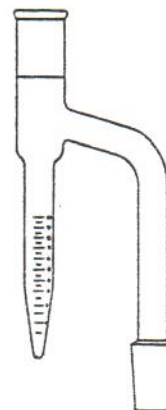
CAPACITY	24/40	29/42
ml	CODE	CODE
10	-1	-4
20	-2	-5
25	-3	-6



DISTILLING RECEIVER, DEAN STARK TYPE

H-613

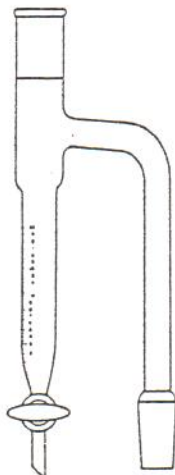
CAPACITY	24/40	29/42
ml	CODE	CODE
10	-1	-4
20	-2	-5
25	-3	-6



H-621

DISTILLING RECEIVER, BARRETT TYPE

2mm GLASS OR TEFLON STOPCOCK



CAPACITY ml	24/40		29/42	
	GLASS CODE	TEFLON CODE	GLASS CODE	TEFLON CODE
10	-1	-10	-19	-28
20	-2	-11	-20	-29
25	-3	-12	-21	-30
50	-4	-13	-22	-31
125	-5	-14	-23	-32
250	-6	-15	-24	-33
500	-7	-16	-25	-34
1000	-8	-17	-26	-35
2000	-9	-18	-27	-36

WATER JACKETED DISTILLING RECEIVERS AVAILABLE