

WIRED DATA COLLECTION EQUIPMENT PACKAGE

Recommended Components

FOR HEAT PENETRATION TESTING

			<u>Cans</u>	<u>Cans (Low profile)</u>	<u>Cans (Steritort)</u>	<u>Glass Jars</u>	<u>Plastic Cups/Trays</u>	<u>Pouches</u>	<u>Tetra Recart</u>
	SKU	Quantity							
SOFTWARE									
CALSoft Software	CSF	1	•	•	•	•	•	•	•
DATALOGGER									
CALPlex Datalogger	CPLX / ROTARY	1	•	•	•	•	•	•	•
WIRES									
HP Lead Wires	HP-WIRE	12	•	•		•	•	•	•
Free Lead Wires	TD-WIRE	2	•	•	•	•	•	•	•
Rotary Contactors/ Wires	S28	12			•				
THERMOCOUPLES									
Needle Thermocouples	CNS	12 (per size)	•	•	•	•	•		•
Pouch Thermocouples	PCH-TC	12						•	
RECEPTACLES									
Thermocouple Receptacles - Stainless	C5 / C9	12	•		•	•			•
Thermocouple Receptacles - Delrin	C5D / C9D	12					•		
Pouch Receptacles - Brass	C5.2	12						•	
Low Profile Receptacle - Brass	SARDINE-REC	12		•					
Low Profile Adapter Wire	LOW-PRO-WIRE	12		•					
Pouch Spacer Post - Delrin	PCH-POST	12						•	
GASKETS									
Receptacle Gasket	C16	1 bag 100	•		•	•	•		•
Thermocouple Gasket	C17	1 bag 100	•	•	•	•	•		•
Pouch Receptacle Gasket	C26	1 bag 100						•	
Pouch Receptacle Packing Gasket	C27	1 bag 100						•	
Low Profile Receptacle O-Ring	NE-GASK	1 bag 100		•					
PUNCH									
Can Punch- Lever Type	C12	1	•			•	•		•
Can Punch- Manual Type & Awl	C11-A	1			•				
Pouch Punch	PCH-PUNCH	1						•	
Forstner Drill Bit - 7/16"	FORSTNER-7/16	1		•					
TOOLS									
Thermocouple Spanner Wrench	C14S		•	•	•	•	•		•
End Wrench	C13		•	•	•	•	•		•
REORT PACKING GLAND									
Retort Packing Gland	C24FL	1	•	•	•	•	•	•	•
Extra Gasket Material 12" x 12"	GSK-MAT	1 – 12"x12"	•	•	•	•	•	•	•
18-Circuit Hub for Steritort	ESR-HUB	1			•				

WIRED DATA COLLECTION EQUIPMENT PACKAGE

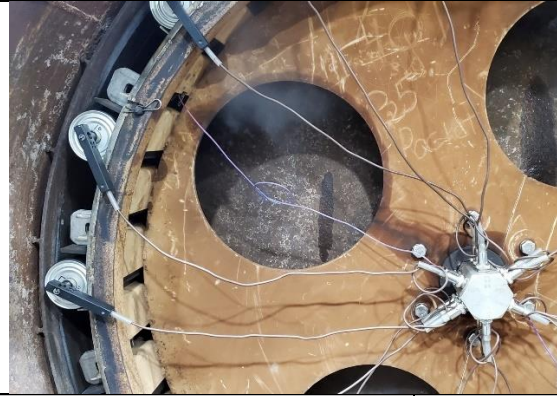

Recommended Components for Conducting
Heat Penetration Testing
 with
METAL CANS

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	- Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Thermocouple Receptacles - SS	C5 / C9	12	Two Types. Depends on retort: - C9 Locking - for agitating retorts - C5 Non-Locking - for static retorts - Receptacle comes with a gasket
GASKETS			
Receptacle Gaskets	C16	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Can Punch- Lever Type	C12	1	- Punches a 9/16” hole for Receptacle
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
End Wrench 3/4”	C13	1	- For installing receptacle
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	- Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	- Gaskets will wear over time - Extra gasket material for future use

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting
Heat Penetration Testing
 with
METAL CANS
Low Profile (Sardine Cans)

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	- Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Low Profile Receptacle	SARDINE-REC	12	- Designed for low-profile sardine can - Receptacle comes with an O-Ring - Special adapter wire for receptacle - Connects to standard HP wire
Adapter Wire for Low Profile	LOW-PRO-WIRE	12	
GASKETS			
Low Profile Receptacle O-Ring	NE-GASK	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Forstner Drill Bit 7/16” size	FORSTNER-7/16	1	- Drill 7/16” hole for Low Profile Receptacle
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	- Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	- Gaskets will wear over time - Extra gasket material for future use

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting
Heat Penetration Testing
 with
METAL CANS
 (in a pilot Steritort)

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	ROTARY	1	- Rotary version for use with Steritort
WIRES			
Rotary Contactors/Wires	S28	12	- Choose wire type, length, & connectors - S28's connect to test cans and hub - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Thermocouple Receptacles - SS	C9	12	- Locking receptacle for agitating retort - Receptacle comes with a gasket
GASKETS			
Receptacle Gaskets	C16	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Can Punch- combination punch/countersink & Awl	C11-A	1	- Punches a 9/16” hole for Receptacle - Use for punching hole in bottom of can
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
End Wrench ¾”	C13	1	- For installing receptacle
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	- Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	- Gaskets will wear over time - Extra gasket material for future use
18-Circuit Hub for Steritort	ESR-HUB	1	- Installs into back of Steritort - 18 surface connectors mounted on hub - 5’ wire attached to each connector - Hub comes with 18 S34 protective caps

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting

Heat Penetration Testing

with

Glass Jars/Bottles

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: <ul style="list-style-type: none"> - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: <ul style="list-style-type: none"> - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	<ul style="list-style-type: none"> - Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested <ul style="list-style-type: none"> - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Thermocouple Receptacles - SS	C5 / C9	12	Two Types. Depends on retort: <ul style="list-style-type: none"> - C9 Locking - for agitating retorts - C5 Non-Locking - for static retorts - Receptacle comes with a gasket
GASKETS			
Receptacle Gaskets	C16	1 bag 100	<ul style="list-style-type: none"> - Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Can Punch- Lever Type	C12	1	- Punches a 9/16” hole for Receptacle
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
End Wrench ¾”	C13	1	- For installing receptacle
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	<ul style="list-style-type: none"> - Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	<ul style="list-style-type: none"> - Gaskets will wear over time - Extra gasket material for future use

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting
Heat Penetration Testing
 with
Plastic Bowls/Trays

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	- Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Thermocouple Receptacles - Delrin Plastic	C5D / C9D	12	Two Types. Depends on retort: - C9D Locking - for agitating retorts - C5D Non-Locking - for static retorts - Receptacle comes with a gasket
GASKETS			
Receptacle Gaskets	C16	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Can Punch- Lever Type	C12	1	- Punches a 9/16” hole for Receptacle
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
End Wrench 3/4”	C13	1	- For installing receptacle
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	- Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	- Gaskets will wear over time - Extra gasket material for future use

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting
Heat Penetration Testing
 with
Flexible Pouches

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	- Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Pouch Thermocouples	PCH-TC	12	One size fits all pouches: - 36" flexible wire/Thermocouples - 12 thermocouples is 1 "set" - Consider 2 sets for HP testing
RECEPTACLES			
Pouch Thermocouple Receptacles - Brass	C5.2	12	Receptacle to accept pouch thermocouple: - Receptacle & packing nut - Comes with receptacle & packing gaskets
Pouch Spacer Post - Delrin Plastic	PCH-POST	12	- Thermocouple fits through spacer - Helps position tip in center of pouch
GASKETS			
Pouch Receptacle Gaskets	C26	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Pouch Packing Gaskets	C27	1 bag 100	
PUNCH			
Pouch Punch 3/8"	PCH-PUNCH	1	- Punches a 3/8" hole for pouch receptacle
TOOLS			
-- no special tools required			
REORT PACKING GLAND			
Retort Packing Gland- 1"	C24FL	1	- Allows for wires to install into retort - 1" diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12" x 12"	GSK-MAT	1 – 12"x12"	- Gaskets will wear over time - Extra gasket material for future use

WIRED DATA COLLECTION EQUIPMENT PACKAGE


Recommended Components for Conducting
Heat Penetration Testing
 with
Tetra ReCart
 (Retortable Cartons)

	SKU	QNTY	COMMENTS from TechniCAL
SOFTWARE			
CALSoft Software	CSF	1	Two versions available: - Collect – Conduct HP testing only - Full – Collect & evaluate/Ball Formula
DATALOGGER			
CALPlex Datalogger	CPLX / ROTARY	1	Two Versions. Depends on retort type: - Rotary CALPlex for rotary retorts - Standard CALPlex for static retorts
WIRES			
HP Lead Wires	HP-WIRE	12	- Choose wire type, length, & connectors - HP Wires connect to test cans - Free Leads measure retort temperature
Free Lead Wires	TD-WIRE	2	
THERMOCOUPLES			
Needle Thermocouples	CNS	12 (per size)	Sized for each container to be tested - 12 thermocouples is 1 “set” - Consider 2 sets for HP testing - Thermocouple comes with a gasket
RECEPTACLES			
Thermocouple Receptacles - SS	C5 / C9	12	Two Types. Depends on retort: - C9 Locking - for agitating retorts - C5 Non-Locking - for static retorts - Receptacle comes with a gasket
GASKETS			
Receptacle Gaskets	C16	1 bag 100	- Gaskets will wear out over time - Extra bags are for future use
Thermocouple Gaskets	C17	1 bag 100	
PUNCH			
Can Punch- Lever Type	C12	1	- Punches a 9/16” hole for Receptacle
TOOLS			
Thermocouple Spanner Wrench	C14S	1	- For installing needle thermocouple
End Wrench 3/4”	C13	1	- For installing receptacle
REORT PACKING GLAND			
Retort Packing Gland- 1”	C24FL	1	- Allows for wires to install into retort - 1” diameter pipe fitting - May require reducers/bushings
Extra Gasket Material 12” x 12”	GSK-MAT	1 – 12”x12”	- Gaskets will wear over time - Extra gasket material for future use