

# User Manual Version 11



www.PEWeldBank.com Info@PEWeldBank.com



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# Fusion Management System (FMS)

www.PEWeldBank.com



## How to Subscribe to *PEWeldBank* Fusion Management System (FMS) on your PC or Laptop



- 1. Go to PEWeldBank.com on your PC or Laptop
- 2. Click on Get Started



3. Click "Signue" Signue Signue Composition for proferred package Signue Composition for proferred package Signue Composition (Composition) Signue Signue Composition (Composition) Signue Sig

Sign ir

Info@PEWeldBank.com

Sign up



## **Subscription Rates**

Go to PEWeldBank.com for the current subscription features, details and prices.

# "Standard" - AUD 5

This allows the user to calculate Butt Weld Time and Pressure parameters and steps them through the welding process with active timers and alarms. It stores weld information for up to three months.

"Enterprise" - AUD15\* per user per month

This includes standard features and includes the ability to store Butt and Electrofusion weld data and connect to Bluetooth Sensor sets for active data recording.

This level also allows for multiple user reports to be stored together within a company database.



# How to log in to the Fusion Management System (FMS)

You must subscribe to "Enterprise Subscription" if you want to use sensors

- 1. Go to PEWeldBank.com on your PC or Laptop
- 2. Click on "Login to Fusion Management System"





# How to set up Company Details

Step 1, Click on Settings

Enter your Company Details. You can also insert a company logo here, this will be displayed on your reports

🙆 Dashboard Cor	mpany Pro	ofile	Package Inform	ation
Projects	Name	Your Company	Package :	PEWeldBank Fusion Logger (5 Users
H DW/Machines	Hume	Tour company	Payment Term :	Yearl
	Address	Your Address	Subscribed Date :	Monday 15th of April 201
			Account Status :	Active
	Phone	0410108101		Change your package
🗠 Reports	Email	info@peweldbank.com		
😃 Users	Manager Name	Your Managers Name	Payment Metho	od
Settings	Manager	0418108101	Card Number :	
	Priorie		Expiry Date :	
	Company			
(S	ize 200 x 200)			Edit Delete
		Drop Image here		



Note there are 3 levels of users access;

- <u>Super admin</u> This is the person that initially set the system up, they control company details, quantity of users, credit card etc. this user has access to all levels. To change Super admin user they must send an email to <u>info@peweldbank.com</u> and nominate the new Superadmin user from the user list, PEWeldBank will change this ASAP
- <u>Admin</u> Controls adding / deleting, Projects, Users, Butt and Electrofusion machinery, pairing of sensors, pipe manufacturers
- Welder Select projects, machines, pipe and welding standard, use of app to conduct welding

For more information regarding User Hierarchy, see Appendix 4

# Set up Users (welder / admin)

Step 2, Click on Users

Set Up User Details. You can allocate a User "Welder" or "Admin" rights

EWELDBANK   FMS						+	
🙆 Dashboard	Lisors						Home / Lise
T Projects	03613						Home / Os
븆 BW Machines	+ Add User	CSV Ex	cel ? Help	Refresh Data			
O Pipe Manufacturers						Soarch: Search	Kennerd
🗠 Reports	Uwelder Number	≑ First Name	⊜ Last Name	Username	Email	Phone	⊕ User Status
Users	PS001	Melissa	Poynton	info@polysmart.com.au	info@polysmart.com.au	0419108101	Active
📽 Settings	PS078	Darren	Poynton	Darren002	darren@polysmart.com.au	0418108101	Active
	PS833_old	David	Simons	sales3_old@fhs.com.au	sales3_old@fhs.com.au	0417361052	Active
	Showing 1 to 3 of 3 e	ntries			First	Previous 1	Next Las



# How to set up Butt Welding and Electrofusion Machines

Step 3, Click on BW Machines or EF Units Set Up your Butt Welding Machines or Electrofusion Control Units

PEWELDBANK	FMS									*			
2 Dashboard Projects		But	tt Weldin	g Mac	hines				Dashboard /	Butt W	eldin	g Mac	chine
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BW Machines									Search:	Search	Keyw	ord	
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			fusion		gater313		123	123	Inactive	۲	1	0	8
🐸 Users			Fusion		Gator 319	;	0441-T	RAD001	Active	۲	1	0	Û
🛠 Settings			МАКО		Mako 20	0	Makol	Makol	Inactive	۲	1	0	
Version 1.14		0	McElroy		412 MF		MC001	PS005	Active	۲	1	0	

# Set up Pipe & Fittings Manufacturers

Step 4, Click on Pipe Manufactures Set Up your Pipe and Fittings Library

n Dashboard	Dine Manu	facturors			Dachbase	d / Dim	- Mar		
🗣 Projects	Ріре Мани	lacturers			Destructer	u / Pipi	e men	Turrero	
븆 BW Machines	+ Add Manufact	urer 🖹 CSV 🖹 E	xcel ? Help 🖉 Refi	resh Data					
Pipe Manufacturers					Search:	Search P	Keywa	ord	
Reports	🗏 🥫 Manufac	turer Name	Created By	Manufacturer Status		Acti	ions		
🐉 Users	APS		David Simons	Active		۲	1	0	
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	Long Blac	sk Holes P/L	Darren Poynton	Active		۲	1	0	ŧ
			David Simons	A		-		0	-



# Set up Projects / Jobs

Step 5, Click on Projects Set Up Project Details

PEWELDBANK   FMS								-			
Dashboard	Pro	jects						Dashb	oard	/ Pr	ojects
Sensors	+ A	dd Project	CSV 🚦 Excel	? Help	🕈 Refresh Data						
<ul> <li>W Machines</li> </ul>							Search:	Search I	Keynn	ord	
🔩 EF Units	0 7	🕴 Project Name	e	Head Contr	actor	Project Owner	Project Status	Acti	ions		
O Pipe Manufacturers		Fault simulation	seaford	Darren		Darren	Inactive	۲	1	0	ŧ
▶ Reports		Filter Manifolds	Seaford	GoPoly		Irrigation Filters	Active	۲	1	0	8
🚢 Users		Mains upgrade 123	Westown	PE Pipe Eng	gineering	Mid West Water	Active	۲	1	0	Û
Settings						corporation					

# **Review active sensors**

Step 6, Click on Sensors

J

PEWELDBANK   FMS							💄 Darren Poynton 🔸
🙆 Dashboard	Sensors						Dashboard / Sensors
Projects	? Help 🔓 Refresh D	Data					
BW Machines						Search:	Search Sensor ID
EF Units	⇔Sensor ID	$_{\oplus}$ Calibration Date		⇔ Sensor Status	$_{\oplus}$ Created Time	Actions	
O Pipe Manufacturers	E3973310-44BD-195D- 9485-895D54C2DE16	30-10-2020	Pressure	Active	11-11-2020 14:44:15	۲	
🗠 Reports	BCF614A7-AAD0-DF45- A8FB-CE5F4778063B	05-10-2020	Temperature	Active	27-10-2020 13:23:32	۲	
🐸 Users	B4:E6:2D:8C:B6:EB	17-06-2020	Temperature	Active	26-07-2020 14:00:04	۲	
🗠 Reports 👛 Users	BCF614A7-AAD0-DF45- A8FB-CE5F4778063B B4:E6:2D:8C:B6:EB	05-10-2020 17-06-2020	Temperature Temperature	Active	27-10-2020 13:23:32 26-07-2020 14:00:04	•	



# FMS Reporting System

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# Reports

There are multiple reports and sort functions available, you can use one or multiple search features at the same time.

PEWELDBANK   FMS																			🛔 Dener Poynton 🕞
Deshboard Projects	Welding Report	ts																	Dashboard / Reports
Barroos	Machipe Type			Project Select Proj Tags	iect Taos	<u>}</u>	ĥ		lachine Solect Machine	ſh	· Select Us	ĥ	)	*	Search ID/Spool1	2		ned Satus Al –	, Im
O Pipe Vanutecures	8 Stort Rep.	ng Report	<b>S</b>	h	2	8 En	al Report	?Hep	0 Refeet	Deta d	, Download Reports					)	(		
eff Settings	Total Welds For Review Rejected Reviewer Accepted FMS Accepted				1007 799 62 53 93														
	O Weld Number	Custom Weld Number	Start Time	¢ Operator	‡ Pipe Size	÷ SDR	Wall Thickness	Machine RAM	Project Name	Actions	ligs	р а П	hessure nd ime	Heater plate temperature	t5 Cooling time adjusted by user	Accepted: Rejected: Review	Operator Notes (fram A	(PP)	Reviewer Notes
	25-12-2022																		
	0 2022/225/25/188/16	76	1232	Poly Welder	0T mm	21	52mm	1947 mm <sup>2</sup>	SeCal Trials	8	*			•	No	•			
	0 20221223123016816	75	1230	Poly Welder	0T mm	2	52mm	194.7 mm²	SoCal Trials	8	+			4	No	4			
	30-11-2022																		
	202211301033888896	00749	13:41	Darren Poynton	03f mm	17	9.4mm	194.7 mm²	SoCal Trials	8		2	8 1	3	ΪĊ	Auto by FNS			NA



## Reports

There are multiple reports and sort functions available

PEWELDBANK   FMS					🛔 Danier Paymen +
🖨 Deshtowed	Welding Reports				Cathloard / Payers
<ul> <li>Sensors</li> <li>BVATAlachimes</li> <li>BF EF Links</li> </ul>	Machine Tope Browness Contractions Contracti	Project Naetwork Solect Droject * Solect Intel El View	Ning + Solari User	Reads D'Yourd Humber(Dawing Humber(Ure Hum	Veel fans -
D Ppe Hanulactures	🗈 Short Report 🔹 Long Report 🍺 Backup	B Dool 🗰 Dmail Report 🦻 Help 🖸 Helhesh-Deca			
🖶 Unen 60 Destroja	Saar Wede In Ennow Republic Revised Ford Accepted Statis Accepted				
	D Weld Humber Start Operator 3 Time	s Pipe s s Well Machine Project Name Scie SDR Triskness RM	Actions Pressure and Heater place Time Sergensure	15 Cauling Sine Accessed Operator Notes (from APR) a alguined by user Projected Review	Reviewer Hotse Fischerwed By Dates of Reviewer
	D 202205297558668 P53 Danen Foyman	El mm 1 57 mm 626 mm <sup>4</sup> Mains oppade 03	• • •	× 15 ·	
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Water TH	25-03-2022				
	D service reality for the service	the second without three second			

On the welding reports page the user can see a list of all welds and create a customised report by one or multiple search headings, then you can select a 4-5 page full report or "Short" or "Long" Reports or export all reports to your own back ups or excel, from this area you can send selected reports directly to you client.

Search Heading	Search Description
Machine Type	Butt Welder or Electrofusion
Project	Project Name
Machine	Make and Model of machine
Welder	The user or person doing the welding
Search	ID/ Spool Number / Drawing Number / Line Number
Weld Status	Status of weld i.e. Accepted, Rejected or waiting for Review
Welding Duration	Select time frame
Tags	Select tagged reports



# Reports – Full 4-5 page report

There are multiple reports and sort functions available within the FMS, below is an example of the full 4-5 page report.



N.B. Ambient Temperature. Please note that the ambient temperature sensor is within the Pressure Sensor case, This temperature may be influenced by external factors, such as proximity to hydraulic motor, direct sunlight and charging of battery.



# **Reports – Short, long and export to excel**

There are multiple reports and sort functions available within the FMS, below is an example of a short report and long report and below them is an example of an excel report



🗴 AutoSave 🔘 🖽 🗒	butt_welding_r	ecords_backup_30	032022_14	13917 - Pi	rotected Vi	ew - Repaire	2d *		_∕⊂ Sea	irch (Alt+Q)						J						Darren I	Poynton 📴	- U	-	O
File Home Insert Draw	Page Lavou	t Formulas	Data	Review	View	Help																				
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🖌 A   B   C																								AA		
1 Date Weld Nun Start Tin	ne Ambient 1 R	esult Cor P1 Min	Re P1 Ma	ax Re P1	Min Ac P	1 Max Ac T1	RequireT	1 Actual	P2 Min Re P	2 Max Re P	2 Min Ac P	2 Max Ac T	2 Min Re T	2 Max Re T2	Actual T3 I	Require T3 A	Actual T	14 Require T	4 Actual P	3 Min Re P	3 Max Re P3	Min Ac P3	Max Ac T5 R	equir(T5 /	Actual F	4 Min Re
2 29-03-202:20220329117:53	22 N	D	8.9	12.2	10.5	10.6	1	14	0	2	0	0.5	57	68	63	6	6	0	0	8.9	12.2	10.3	10.7	20	20	2.3
3 29-03-202 202203291 17:49	21 N	D	8.9	12.2	10.4	10.7	1	19	0	2	0.1	0.8	57	68	63	6	6	0	0	8.9	12.2	10.2	10.7	20	20	2.3
4 29-03-202 202203291 17:38	21 N	o 1	8.7	25.2	20.5	20.9	1	21	0	5	0.5	1.7	57	68	63	6	6	0	0	18.7	25.2	20.4	20.7	10	10	5.7
5 29-03-202 202203291 17:33	21 N	o 2	7.2	37.8	0.8	31.1	1	43	0	5	0	1.1	57	68	63	6	6	0	0	27.2	37.8	0.9	1.5 02:2	8 01:	30	6.2
6 29-03-202 202203291 17:25	20 N	o 2	7.2	37.8	32.1	33.2	1	17	0	5	0.1	1.8	57	68	63	6	6	0	0	27.2	37.8	32.1	33 02:2	8 00:1	19	6.2
7 29-03-202 202203291 17:20	18 N	0 2	7.2	37.8	29.3	30.1	1	24	0	5	0.1	1.7	57	68	63	6	6	0	0	27.2	37.8	29.2	29.8	10	10	6.2
8 28-03-202 202203281 16:58	22 Ye	es 4	2.8	51.9	46.3	47.8	1	50	0	8.5	0.4	2.9	112	141	127	8	8	7	7.8	42.8	51.9	45.7	47.1 12:2	5 12:	25	13.7
9 28-03-202 202203281 13:37	21 Ye	HS .	42	51.1	46.2	47.3	1	55	0	7.7	2.3	4.3	112	141	127	8	8	7	7.8	42	51.1	48	49.4 12:2	5 12:	25	12.9
10 27-03-202 202203271 12:01	- N	/A 3	9.2	48.4 -	-		1 -		0	5 -	-		113	141 -		8 -		0		39.2	48.4 -	-		15 -		10.2
11 27-03-202 202203270 08:53	- N	/A 3	6.2	45.4 -	-		1 -		0	2 -	-		113	141 -		8 -		0		36.2	45.4 -	-	12:2	5 -		7.2
25-03-202 202203250 09:04	- N	/A 3	9.2	48.4 -	-		1 -		0	5 -	-		112	141 -		8 -		0		39.2	48.4 -	-	12:2	5 -		10.2
18 22-03-202 202203221 10:37	25 N	o 4	3.1	52.8	44.8	47	1	95	0	6.8	1.5	3.9	120	150	135	8	8	7	7.8	43.1	52.8	45.9	46.7	10	10	12.3
4 21-03-202 202203212 20:23	- N	/A	44	56 -	-		0 -		0	5 -	-		30	30 -		8 -		0		44	56 -	-		20 -		0
5 18-03-202 20220318113:17	26 Ye	es 3	8.3	47.9	41.6	42.2	1	67	0	2	0.1	1.5	120	150	135	8	8	7	7.8	38.3	47.9	40.9	41.2	10	10	7.5
6 16-03-202 20220316111:15	25 N	p 3	9.2	48.4	44.3	45.2	1	41	0	5	0.6	2.9	113	141	127	8	8	7	7.8	39.2	48.4	32.7	45.2 01:0	0 01:/	00	10.2
17 16-03-202 202203160 09:47	23 Ye	rs 3	9.2	48.4	43.1	43.7	1	39	0	5	0.3	2.7	113	141	127	8	8	7	7.8	39.2	48.4	41.7	42.1 01:0	0 01:/	00	10.2
15-03-202 202203150 06:56	26 Ye	es 3	9.2	48.4	43.4	44.3	1	49	0	5	1.1	2.6	112	141	127	8	8	7	7.8	39.2	48,4	43	43.2	10	10	10.2
19 10-03-202 202203101 14:28	- N	/A 2	6.4	33.5 -	-		0 -		0	5 -	-		10	10 -		8 -		0		26.4	33.5 -	-		5 -		0
0 10-03-202 202203101 14:20	- N	/A 3	4.2	43.4 -	-		1 -		0	0 -	-		112	141 -		8 -		0		34.2	43.4 -	-	55:0	0 -		5.2
09-03-202 202203091 13:05	- N	/A	9.8	11.9 -	-		1 -		0	2 -	-		132	165 -		8 -		0		9.8	11.9 -	-		10 -		3.2
22 08-03-202 202203081 12:00	- N	/A	9.8	11.9 -	-		1 -		0	2 -	-		132	165 -		8 -		0		9.8	11.9 -	-		10 -		3.2
23 07-03-202 202203071 13:37	27 N	o 4	2.3	51.9	46.7	47.7	1	64	0	6	0	3.9	120	150	135	8	8	7	7.8	42.3	51.9	45.5	45.7 13:1	9 00:	12	11.5
4 07-03-202 202203071 13:25	- N	/A 4	3.3	52.9 -	-		1 -		0	7 -	-		120	150 -		8 -		0		43.3	52.9 -	-		10 -		12.5
5 04-03-202: 202203041 10:39	29 Ye	s 4	1.3	50.9	46.6	47.5	1	61	0	5	1	3.1	120	150	135	8	8	7	7.8	41.3	50.9	47	47.5	10	10	10.5
6 04-03-202 202203041 10:26	28 N	0 4	1.3	50.9	44.5	45.7	1	97	0	5	0.7	3	120	150	135	8	8	7	7.8	41.3	50.9	43.9	45.8	10	10	10.5
7 04-03-202 202203041 10:10	28 Ye	es 4	1.3	50.9	44.9	46.3	1	83	0	5	0.1	2.3	120	150	135	8	8	7	7.8	41.3	50.9	46.1	46.3	10	10	10.5
8 04-03-202 202203040 09:58	27 N	0 4	1.3	50.9	45	46.1	1	66	0	5	1.8	6	120	150	135	8	8	7	7.8	41.3	50.9	45	45.5	10	10	10.5
9 04-03-202 202203040 09:11	- N	/A 4	1.3	50.9 -	-		1 -		0	5 -	-		120	150 -		8 -		0		41.3	50.9 -	-		10 -		10.5
0 03-03-202 202203032 23:02	- N	/A 4	0.5	49.5 -	-		0 -		0	5 -	-		10	10 -		8 -		0		40.5	49.5 -	-		10 -		0
03-03-202 202203032 23:00	- N	/A 4	0.5	49.5 -	-		0 -		0	5 -	-		10	10 -		8 -		0		40.5	49.5 -	-		10 -		0
2 02-03-202 202203021 15:00	- N	/A 7	0.6 1	100.4 -	-		2 -		0	8 -	-		100	120 -		8 -		0		70.6	100.4 -	-		10 -		11.4
3 02-03-202 20220302114:51	- N	/A 7	0.6 1	100.4 -	-		2 -		0	8 -	-		100	120 -		8 -		0		70.6	100.4 -			10 -		11.4
													200	120												



# **Reports - Email directly to client**

The email report option allows you to select welds and then email them to your client. Please note these reports take a short while to generate, if it doesn't come through please ask your client to check their junk or spam box

	Email Weld Reports ×
	You can share a selected group of weld reports or all of the weld reports in the table. Enter the email addresses you want to share the weld reports with and click 'Send' button.
ject elect Project	Enable Downloading If this option is activated system will generate a zip file containing all the weld reports and send download link to given addresses after zip file is ready.
	Email(s):
View	demen@gopoly.com.au x Enter the email(s)
el 🖀 Email Report 📍 Help	C Refresh Data
66	

Your client will receive email similar to this, with 3 options for viewing reports



See 3 report options on next page



# **Reports - Email directly to client**

The first one is a summary.

GO poly	arren Poj oPoly Pty O BOX 50 atterson lic 3197	ynton r Ltd )9 Lakes					
d	arren@gi 4181081	opoly.com.au 01	1				
PEWeldBank P	EWeldB	ank Weld S	umma	ry (Em	clia		
							e7
			1 1				
Weld Number	Start	Operator	Pipe Size	SDR	Wall Thickness	Machine RAM	Project Name
Weld Number	Start Time	Operator	Pipe Size	SDR	Wall Thickness	Machine RAM	Project Name
Weld Number 29-03-2022 2022032917328668	Start Time 17:33	Operator Darren Poynton	Pipe Size 63 mm	SDR 11	Wall Thickness 5.7 mm	Machine RAM	Project Name Mains upgrade 12
Weld Number 29-03-2022 2022032917328668 28-03-2022	Start Time 17:33	Operator Darren Poynton	Pipe Size 63 mm	SDR 11	Wall Thickness 5.7 mm	Machine RAM 194.7 mm <sup>2</sup>	Project Name Mains upgrade 12
Weld Number 29-03-2022 2022032917328668 28-03-2022 2022032816588668	Start Time 17:33 16:58	Operator Darren Poynton Darren Poynton	63 mm 160 mm	SDR 11 17	Wall Thickness 5.7 mm 9.4 mm	Machine RAM 194.7 mm <sup>2</sup> 194.7 mm <sup>2</sup>	Project Name Mains upgrade 12 Mains upgrade 12

The second is a Zip file holding of each selected weld each PDF is a full 4-5 page report.



The third option gives your client a full report for each weld and access to the weld graph

< -}	C 🔒 pewe	Idbank.com/report/shared-weld-report/iAN	19W0hkXhsyceV5IonTOhYQfSU80Uswp	3Nyp8eDmEg					ie 🖈 🔲 🐲		
PEWELDBANK   FMS											
В	utt Weldir	ng Reports									
3	Help										
	Weld Number	Start Time	Operator	Pipe Size	SDR	Wall Thickness	Machine RAM	Project Name	Actions		
2	29-03-2022										
	202203291732866	в 17:33	Darren Poynton	63 mm	11	5.7 mm	194.7 mm <sup>2</sup>	Mains upgrade 123	<u>B</u> 🛏		
2	28-03-2022										
2	202203281658866	8 16:58	Darren Poynton	160 mm	17	9.4 mm	194.7 mm <sup>2</sup>	Mains upgrade 123	<u>B</u> 🖿		
								Marken and a star	B. 16		
2	202203281337866	8 13:37	Darren Poynton	160 mm	17	9.4 mm	194.7 mm*	Mains upgrade 125			

Info@PEWeldBank.com

![](_page_17_Picture_0.jpeg)

# Smartphone / Tablet User Guide

www.PEWeldBank.com Info@PEWeldBank.com

![](_page_18_Picture_0.jpeg)

# Download *PEWeldBank* app in your preferred store for FREE

Go to search on Google Play or Apple App store enter "peweldbank"

![](_page_18_Picture_3.jpeg)

![](_page_18_Picture_4.jpeg)

Once downloaded to your Smartphone or tablet, click on the *PEWeldBank* icon

![](_page_18_Picture_6.jpeg)

Use your Username and Password to log in, this will take you to the home screen.

![](_page_18_Picture_8.jpeg)

![](_page_19_Picture_0.jpeg)

# **Home Screen**

Operation is very easy to access via the Home Screen

![](_page_19_Picture_3.jpeg)

![](_page_20_Picture_0.jpeg)

# Smartphone / Tablet - Default System Settings

![](_page_20_Picture_2.jpeg)

Select **System Settings** to Edit Settings

![](_page_20_Picture_4.jpeg)

Click on menu item Click on menu item

![](_page_20_Picture_6.jpeg)

![](_page_21_Picture_0.jpeg)

# Smartphone / Tablet - Default System Settings

# Select your preferred defaults before welding

These changes can only be made by user with Superadmin or Admin level

< System Set	tings	山							
SYSTEM O	FMEASUREME	NT							
IMPERIAL DIPS	IMPERIAL IPS	METRIC	Cho						
TAKE F	TAKE FIVE CHECKLIST								
ENABLE	ENABLE DISABLE								
	100		sta						
CHECK HEATER	C								
Automatically	Automatically Manually								
Every Day	Every Weld	Off	int						
N. WIERSON									
TEMPERA	<b>3</b> 5	W							
ENABLE	DIS	ABLE	te						
MANUAL	OVERRIDE MOD	DE							
ENABLE	Thi								
This allows the use	r to initiate start 2 & 5	in Phases 1,							
Sys	tem Language								
	English		Ena						
CUSTON	M WELD NUMBE	R							
	Prefix		Set						
Sta	rting Number O								
	RESET								

#### SYSTEM OF MEASUREMENT

hoose preferred measurements

#### TAKE 5 CHECK LIST

By enabling this, the app will ask the user to complete Welding Safety questions at the start of a weld session

#### CHECK HEATER PLATE TEMPERATURE

By enabling this, the app will ask the user to check heater plate temperature at selected interviews or turn this feature off.

#### **TEMPERATURE WARNINGS**

When enabled user will be notified if temperature goes out of range

#### MANUAL OVERIDE MODE

This enables to initiate start in Phases 1, 2 & 3

#### SYSTEM LANGUAGE

Enables user to choose different languages

#### **CUSTOM WELD NUMBER**

Set smartphone custom weld number series

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![](_page_22_Picture_0.jpeg)

# Smartphone / Tablet - Settings

![](_page_22_Figure_2.jpeg)

All of these options except for Sensors, System Settings and some of the Operator Details can also be edited via the FMS

![](_page_23_Picture_0.jpeg)

# Smartphone / Tablet Menu Screens ADDING NEW PROJECT

![](_page_23_Picture_2.jpeg)

#### Select Projects to Edit or

#### Add New Projects ±۵ PEWeldBank trial project Seaford 76 12166 / 5 Leg manifold Seaford, Vic 3198 - Internet 2 12154 Seaford, Vic 3198 12048 Seaford, Vic 3198 12087 Seaford, Vic 3198 12015 Seaford, Vic 3198 10100 ш 0 <

Click on menu item

Click on menu item

![](_page_23_Picture_7.jpeg)

#### Select **Settings** to Edit Settings

![](_page_23_Picture_9.jpeg)

![](_page_24_Picture_0.jpeg)

# Smartphone / Tablet Menu Screens ADDING NEW MACHINE

![](_page_24_Picture_2.jpeg)

# Click on menu item

#### Select Butt welding Machines to Edit

![](_page_24_Picture_5.jpeg)

## Select ADD NEW to Edit or

![](_page_24_Figure_7.jpeg)

![](_page_25_Picture_0.jpeg)

# Connection to Hydraulic circuit

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![](_page_26_Picture_0.jpeg)

# Fitting Hydraulic Transmitter / Transducer to Machine

![](_page_26_Picture_2.jpeg)

![](_page_27_Picture_0.jpeg)

## **Hydraulic Connection**

![](_page_27_Picture_2.jpeg)

![](_page_27_Picture_3.jpeg)

Many machines have a test port already fitted.

If your machine does not have a test point, you will need to fit a tee with test point to **the closing side of your pressure circuit**.

A tee with connection point can be fitted to a machine where the hoses are fitted to the pressure control unit. Any hydraulic company should be able to fit one for you. See Appendix 1 for examples.

![](_page_27_Picture_7.jpeg)

#### Note:

This is the closing side of the hydraulic cylinder, follow this hose back to your controller. As we set up more machines we will keep a library of connections, please don't hesitate contacting us for assistance with initial set up.

![](_page_28_Picture_0.jpeg)

## **Bluetooth Pressure Sensor Setup**

How to connect pressure sensor to Butt welder See also "Appendix 1"

\*\*Before starting ensure both Sensors are fully charged\*\*

Plug charge cable into charging port and charge until the red light turns to green (6 hours)

#### **Pressure Sensor Components**

- 1 Bluetooth Pressure Sensor
- 2 Hydraulic Transducer
- 3 Orange or Black Hydraulic Sensor Connection cable
- 4 Charging Port
- 5 Charging Indicator Light (Red/Green)
- 6 Bluetooth Connection Status Light (Blue)
- 7 Hydraulic connection
- 8 Hydraulic Sensor Port 1
- 9 Hydraulic Sensor Port 2 (Spare)
- 10 QR code

![](_page_28_Picture_16.jpeg)

On the Rear of both Sensors there is a **QR Code** that you scan to enable sensor when prompted by phone or tablet or just select connect to nearest sensor.

![](_page_28_Picture_18.jpeg)

![](_page_28_Picture_19.jpeg)

![](_page_28_Picture_20.jpeg)

![](_page_29_Picture_0.jpeg)

# Hydraulic Connection Continued

![](_page_29_Picture_2.jpeg)

![](_page_29_Picture_3.jpeg)

Stauff 20 test point available from your local PEWeldBank reseller or hydraulics supplier

The PEWeldBank Transmitter This fits to the Stauff test point

Fit the PEWeldBank transmitter to the test point.

Now fit the Orange or Black cable supplied to the Bluetooth pressure sensor **Port 1** as shown below.

![](_page_29_Picture_8.jpeg)

![](_page_30_Picture_0.jpeg)

# **Connection to Heater Plate**

www.PEWeldBank.com

# **Temperature Sensors dated January 2020**

## **Bluetooth Temperature Sensor Setup**

How to use sensor with heater plate.

#### \*\*Before starting ensure Sensors are fully charged\*\*

Plug charge cable into charging port and charge until the red light turns to green (5 hours)

#### **Pressure Sensor Components**

- 1 Bluetooth Temperature Sensor
- 2 Surface Temperature Probe
- 3 Charging Port
- 4 Charging Indicator Light (Red/Green)
- 5 Bluetooth Connection Status Light (Blue)
- 6 Spare Port
- 7 Port for surface probe (marked Fixed)
- 8 QR code

On the Rear of both Sensors there is a **QR Code** that you scan to enable sensor when prompted by phone or tablet

![](_page_31_Picture_15.jpeg)

![](_page_31_Picture_16.jpeg)

![](_page_31_Picture_17.jpeg)

# Temperature Sensors dated March 2022 & later

## **Bluetooth Temperature Sensor Setup**

How to connect your Temperature Sensor to your heater plate. "See Appendix 3"

![](_page_32_Picture_3.jpeg)

#### \*\*Before starting ensure Sensors are fully charged\*\*

Plug charge cable into charging port and charge until the red light turns to green (5 hours)

#### **Pressure Sensor Components**

- 1 Bluetooth Temperature Sensor
- 2 Surface Temperature Probe
- 3 Charging Port
- 4 Charging Indicator Light (Red/Green)
- 5 Bluetooth Connection Status Light (Blue)
- 6 Port for Surface probe
- 7 Port for Fixed PT100 connection
- 8 QR code
- 9a PT100 connection cable for Ritmo\*
- 9b PT100 connection cable for others\*

On the Rear of both Sensors there is a **QR Code** that you scan to enable sensor when prompted by phone or tablet \*see appendix 3

![](_page_32_Picture_18.jpeg)

![](_page_32_Picture_19.jpeg)

![](_page_32_Picture_20.jpeg)

![](_page_32_Picture_21.jpeg)

![](_page_32_Picture_22.jpeg)

![](_page_33_Picture_0.jpeg)

# Pairing Sensors to Phone or Tablet

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![](_page_34_Picture_0.jpeg)

# **Bluetooth Setup & Pairing of Sensors**

![](_page_34_Picture_2.jpeg)

*N.B.* you can only use sensor set with **PEWeldBank Fusion Logger** subscription, For initial pairing you must also have administrator user level permission and connection to the internet

Ensure that Bluetooth is enabled on your smartphone / tablet. Follow the prompts

1. Click Dropdown Menu

![](_page_34_Picture_6.jpeg)

![](_page_34_Picture_7.jpeg)

3. Click Sensors

![](_page_34_Picture_9.jpeg)

4. Click Add New

![](_page_34_Picture_11.jpeg)

![](_page_35_Picture_0.jpeg)

# **Bluetooth Setup & Pairing of Sensors Continued**

#### Pairing of Sensors

- Connect Pressure sensor to pressure at least 2 bar.
- For the Temperature sensor holding the Surface Temperature Probe against heater plate (at least 80°c / 176°f) will activate the sensor.
- The status light will flash, enabling you to proceed with Bluetooth pairing.

#### Alternatively

- Remove and replace the battery from the sensor, this will activate and status light will flash for 2 minutes enabling you to proceed with Bluetooth pairing.
- Status light must be flashing fast before proceeding.

Follow instructions in Dropdown menu on smartphone or tablet [settings] [sensors] [add new] [save]

![](_page_35_Picture_10.jpeg)

![](_page_35_Picture_11.jpeg)

![](_page_35_Picture_12.jpeg)

#### Info@PEWeldBank.com

#### Scan QR code:


### **Bluetooth Setup & Pairing of Sensors Continued**



Pressure Data Logger

PEWeldBank

30AEA4F3A62E

V 1.3.3

Calibration Date

No recent welds

1

. . . .

Connected Pressure Value : 0.0 Bar Ambient Temp : 21.77 °C Humidity : 39 %

nsor Type

Sensor Brand

nsor Model

Pressure Sensor Range

Serial Numbe

#### Check connected sensor

E Sensors	P: 1003
Conn	ection indicator
	Battery level
	ADD NEW

## When connected blue Light on the sensor will flash slowly



Click Drop down menu to return to home screen follow instructions again for second sensor



**To remove a sensor** from Phone or Tablet select sensor you want to remove and click and hold for 2 seconds then delete, for iOS swipe then delete



# Welding Procedure for App

Also see Basic Welding Machine Operating Procedure

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### Home Screen: Commence Butt welding or Electrofusion



From this screen you can commence Butt welding or Electrofusion. You can also review previous welds or allocate a second GPS location



### **Select Project**

Pre-Welding Setup	出
PROJECT	
OPERATOR NAME Darren	
A	
WELDING LOCATION DET/	lils
Pre-Welding Setup	田名
Pre-Welding Setup PROJECT Mains unprade 123	₩8
Pre-Welding Setup PROJECT Mains upgrade 123	₩8
Pre-Welding Setup PROJECT Mains upgrade 123 OPERATOR NAME Darren	<b>⊞</b> 8
Pre-Welding Setup PROJECT Mains upgrade 123 OPERATOR NAME Darren WELDING LOCATION DETAIL	±٤ s
Pre-Welding Setup PROJECT Mains upgrade 123 OPERATOR NAME Darren WELDING LOCATION DETAIL WESTOWN	шð s
Pre-Welding Setup PROJECT Mains upgrade 123 OPERATOR NAME Darren WELDING LOCATION DETAIL WELDING LOCATION DETAIL	шð. s
Pre-Welding Setup PROJECT Mains upgrade 123 OPERATOR NAME Darren WELDING LOCATION DETAIL WESTOWN	шð. s
	Pre-Welding Setup PROJECT OPERATOR NAME Darren WELDING LOCATION DETA

< Pre-Welding Setup	出品
PROJECT	
Filter Manifolds	E
Mains upgrade 123	
Mains Upgrade relining	$\mathcal{C}$
Mitchell Tests	
Polysmart Training	
test 1	
test2	
test3	
Weld Bead Testing	
Weld for testing	

From this screen you need to select a project.

The Projects can be set up from within this app or from the FMS.

Note: You must have Admin access to set up projects, however User or Admin may select a project to use.



### Safety "Take Five"

4:51 🖬 🖿 •			Q 🗟 🗎
≡ Safety 'Take 5'		<mark>⊞\$</mark>	P: 80%
STOP (Ask yourself)			
Am I aware of crushing points? (hydraulic movement)	YES	NO	NA
Am I aware of sharp objects? (facing blades)	YES	NO	NA
Am I aware of burning (heating plate)	YES	NO	NA
Have I protected myself from energy sources? (electrical, hydraulic, temperature)	YES	NO	NA
THINK		-	
If a procedure or work instruction exists for the job am I familiar with it?	YES	NO	NA
Am I trained, competent and authorised to do the job?	YES	NO	NA
Do I have fit for purpose tools, equipment and PPE?	YES	NO	NA
Can I control the risks associated with			

This is a 12 question OH&S assessment, these questions are asked of the user at the start of the welding session.

This information is collected and recorded within reports, available within FMS

By default this option is disabled, this option may be enabled within System Settings



#### **Machine selection**

51 🔛	0 0 ·			<b>२</b> कि ।
=	Machine		±۵	P: 80%
		Machine Brand		
		indonine brand		
		Model		
		40		
		Serial Number		
		Plant Number/Id		8
				111112
:51 🖭	D-03 ·			<b>२</b> दि।
	Pipe / Fitting			
_		Machine Brand		-
		Ritmo		
		Model Basic 160		
	13500001	Serial Number 3C, 135000013T, 135000013F	Ŧ	
		Plant Number/Id		8
		123		



From this screen you will need to select a Machine.

Machines can be added and edited from within this app or from the FMS. Note: You must have Admin access to set up projects, however User or Admin may select a machine to use. By selecting machine it will use stored hydraulic ram information for pressure calculations, and machine data in reports.



### **Pipe / Fitting selection**



From this screen you will need to select a Pipe size and SDR, pipe wall thickness is automatically calculated but can be adjusted manually.

Manufacturer, Type and Profile fields are optional.

Pipe data can be added and edited from within this app or from the FMS.

Note: You must have Admin access to set up projects, however User or Admin may select a machine to use.

By selecting machine it will use stored hydraulic ram information for pressure calculations, and machine data in reports.



### Pre weld check list



This check list has 7 optional questions, these questions default to NO and are included on reports, however you do not need to answer these to be able to move onto the next screen.

Upon selecting yes to the last question the camera will be activated to allow user to take a photo of pipe alignment and gap.



#### **Parameters**



The Parameters screen displays a review of pipe and machinery and asks user to enter preferred welding standard, this preference is set as a default until the start of a new session.

The drag also needs to be entered in this screen.

Note: The Pressure Gauge will be active only when sensor set is supplied and paired.



### **Check Heater plate**



When connected to temperature sensor set, this screen automatically logs temperature during Bead up and heat soak phases, also using the supplied surface temperature probe the user can accurately record the surface temperature at the start of the welding session or at the start of every weld or turn to manual entry,

This temperature recording options can be adjusted within system settings



### **Calculation and Pressure Pre set**



When connected to pressure sensor set, this screen automatically logs Ambient temperature and Humidity, if not connected to sensor set these can be added manually.

This screen also allows the user to manually adjust T5 cooling time to allow for Reduced cooling times or extending the time when allowance for rough handling is required. This adjustment is noted on weld reports!

Most importantly the user must set pressure for Phase 1 and Phase 5 at this point.



### Phase 1: Bead up



Phase 1 screen Instructs the user what to do and when to reduce pressure to Drag. Temperature can also be monitored during this Phase



### Phase 2: Heat Soak



After bead up as soon as user drops to Drag pressure or below the Heat soak timer begins count down (the pressure is recorded during this phase)



### Phase: 3. Heater Plate Removal



User is notified by a alarm to remove heater plate and bring ends back together within displayed time



### Phase 4: Pressure up

(for high Pressure welding this Phase is incorporated within Phase 3)



User is notified by a alarm to bring ends back up to weld pressure within displayed time.



### Phase 5 Cooling time in Machine under Pressure



Timer automatically starts for cooling time



### Weld Completed

5:13 🖬 I			•
	Mark Weld Number Near We	Id	
	2022 0328 1658 8	8668	
	Mark Operator Number Near W	/eld	
	PS0058		
	Distance Maldudia still is the		
	Photograph weid while still in the r	nachine	
	Weld Completed!		
	Press on stop button to stop the alarm.		
		STOP	
		-	
	Weld Chart		
Press	ure (bar)		
50			54
40			
30			
	NEYT		

Once weld is completed the user is prompted to mark the unique weld number and welder id onto the pipe next to the weld

The unique number is made up from the following information.

	Yeev			Mth	MOINT	Ĩ	лау	i i		Minito	ואווומרפ	Part of user ID		FMS created	from project	
2	0	2	2	0	3	2	8	1	3	3	7	8	6	6	8	-

The user is prompted to take a photo including the unique ID number of completed weld while still in machine.

The graph gives the user the opportunity to review the weld before progressing.



### Location, Notes and Reporting

5:16 🖬 🗗 🚥 •									<b>♀</b> 🖥 🗖
	$\equiv$ Location, Notes and Reporting								P: 80%
Weld L good we	Weld Location38.1122737, 145.1357532 good weld no issues								
Asset [	Asset Details								
	- Head - Lo			Draw	ing Nu G 46	mber 437	115		
Spool Number SPL 3577456									
Line Number LN 2443									
CLEAF	۲ U	INDO	RE	DO					
				F	INIS	н			
	÷		GIF	Tø		Ð	Ŷ	ŝ	*
1	2 *	3 ″	4 ′	5 *	6	7 *	8	9 (	) Del
Q	w	Е	R	т	Υ	U	T	0 F	×
А	S	D	F	G		н	JK	L	Done
+	z	x	С	V	В	N	м	, .	?
Ctrl	!#1			Enç	glish (.	AU)			1

The GPS is automatically recorded and displayed in this screen The User can also enter comments And further Asset details including : Drawing Number Spool Number Line number There is an area here to include a ; Sketch Operator Identification Photo Operator Signature The information here is not compulsory except for the signature.



### Do you wish to start another weld



At this point the user can choose to finish the session or continue to another weld, if they choose to continue they are taken back to the check list screen and all other data parameters are still set to the same as previous weld.

If the user choses No the system returns to the Home screen



# Basic Welding Machine Operating Procedure

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## Hydraulic Valve Control Sequence when using PEWeldBank (On demand flow)

Pressure	Pressure	Direction	Pressure
Release Valve	Set Valve	Lever	Gauge
	0	Close	$\bigcirc$

Generic Pressure control unit. Most basic units run similarly but valves may be arranged differently.

After Facing, cleaning, alignment and Recording Drag pressure

- 1. Close Pressure Release Valve ①
- Close carriage and set Pressure Set Valve (2) to XX bar
- 3. Press [NEXT] on PEWeldBank.
- 4. Open carriage this will drop pressure to drag or less.
- 5. Insert Heater Plate.
- Bring Pipe up to heater plate to <u>XX bar</u> pressure and hold Direction Lever for several seconds.
- 7. When you have bead up size
- Reduce to 0-Drag Using Pressure Release Valve (1) And Wait for Heat Soak Time.
- 8. Open Carriage: Just enough to remove heater plate.
- Remove Heater Plate and Close carriage, hold Direction Lever for several seconds.

(Continual flow:- Hydraulic pump runs continually, On demand flow :- Hydraulic pump only runs when lever activated) Info@PEWeldBank.com



## Valve Control Sequence when using PEWeldBank (Continual flow)



After Facing, cleaning, alignment and setting Heating / Drag pressure.

- Close carriage and set Fusing pressure valve (3) to XX bar
- 2. Press [NEXT] on PEWeldBank
- 3. Open carriage ALL THE WAY this will drop pressure to drag or less.
- 4. Insert Heater Plate
- 5. Bring Pipe up to heater plate to XX bar pressure
- 6. When you have bead up size
- 7. Reduce to 0-Drag

To do this correctly you must move "Valve Selector" to 2 position and wait for pressure to drop to below drag, then move "Direction Lever" to neutral. And Wait for Heat Soak Time

- Open Carriage:, move "Valve Selector" down to Fusion Position 3, move "Direction Lever" to the right, just enough to remove heater plate.
- 9. Remove Heater Plate and Close carriage.
- 10. To avoid pressure spike, slow carriage speed just before closure.

(Continual flow:- Hydraulic pump runs continually, On demand flow :- Hydraulic pump only runs when lever activated)



# Review welds and add second GPS location

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### How to Review Welds on Smartphone or Tablet





### How to Review Welds - Insert 2nd GPS Location

A valuable feature of **PEWeldBank** is the ability to add a 2nd GPS location. This is particularly useful where the installation location is different to where the welding was undertaken.

From the Review Welds screen (see previous page), select a weld you want to review or add the second GPS location.



The on-screen Report shows all information about this weld

Zoom into graph to see finer detail

Scroll down further to find the GPS location.

Click here to update weld location, this does not change original information it simply adds a second GPS location for this weld which will be available on reports.



Weld Jobs

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## **Trouble shooting**

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### Troubleshooting

Pressure Sensor								
Problem	Reason	Solution						
	Sensor connected to	Make sure it is connected to closing side of						
	wrong side of	hydraulics (this is generally the cylinder inlet						
	hydraulics	closest to middle of machine see photo)						
	Sensor not	Connect transducer cable to transducer and						
	connected to	sensor and increase pressure, fast flashing						
	hydraulic with	should start within 10 seconds						
No fast flashing	Orange transducer	Connect transducer cable to Port "1" on						
blue status light	connected to wrong	sensor						
on sensor	port on sensor							
	Battery low or flat on	Charge sensor until Charging light shines						
	sensor	green						
		Check operation of sensor by momentarily						
		removing and replacing battery, Blue Status						
		light should flash fast						
Zero pressure								
reading on		Check above information						
smartphone	<b>D</b> I 1 1 4							
	Bluetooth turned off	Turn Bluetooth to on in smartphone						
	in smartphone							
		Smartphone must be connected to internet						
		for initial pairing						
	Camera disabled	Allow camera settings in smartphone						
		Try connecting to nearest sensor rather than						
I have fast		scanning qr code						
flashing blue		Check in PE weldbank on smartphone						
light but wont	No i	settings > sensors, your sensor should be						
connect to	Not paired	listed here (check that the humber matches						
smartphone		number on sensor) delete any sensor not						
	Batterulow or flat on	Currentiy required Charge sensor until Charging light shines						
	sensor	charge sensor until charging light shines						
	Battery low or flat on	green						
	smartphone	Charge smartphone						
	Sensor not							
	connected to	Check above information						
Zero pressure								
reading on		Check above information						
smartphone								
Pressure								
reading on	Maabina Gawaa ia	All PEWeldBank transducers are highly						
Machine Gauge	probably incorrect	accurate and calibrated when packed, if						
is different to	probably incorrect	concerned have your gauge tested.						
smartphone								



### Troubleshooting

	Tempera	ature Sensor
Problem	Reason	Solution
	Surface Probe not in contact with Hot heater plate	Hold Surface Probe against Hot heater plate for at least 10 seconds this will activate sensor
No fast flashing	Battery low or flat on sensor	Charge sensor until Charging light shines green
blue status light on sensor	Surface Probe not connected to correct port on sensor	Connect Surface probe to "Fixed" port on sensor
		Check operation of sensor by temporally removing and replacing battery, Blue Status light should flash fast
	Bluetooth turned off in smartphone	Turn Bluetooth to on in smartphone
		Smartphone must be connected to internet for initial pairing
	Camera disabled	Allow camera settings in smartphone
		Try connecting to nearest sensor rather than scanning qr code
I have fast flashing blue light but wont connect to	Not paired	Check in PEWeldBank on smartphone settings > sensors, your sensor should be listed here (check that the number matches number on sensor) delete any sensor not currently required
sinartpriorie	Battery low or flat on sensor	Charge sensor until Charging light shines green
	Battery low or flat on smartphone	Charge smartphone
	Surface probe must be held against heater plate	Hold Surface Probe against Hot heater plate for at least 10 seconds this will activate sensor
Temperature reading on heater plate controller is different to smartphone	Temperature reading is possibly incorrect or reading core temperature, not surface temperature	All PEWeldBank surface probes are accurate and calibrated when packed, if concerned have your heater plate independently tested.



### **Calibration Details**

In accordance with <u>ASTM F3124-15. Standard Practice for</u> <u>Data Recording the Procedure used to Produce Heat Butt Fusion Joints in</u> <u>Plastic Piping Systems or Fittings.</u>

GOPOLY Pty Ltd (the manufacturer of the PEWeldBank sensor set) recommends bi-annual calibration. However, local governance may have different requirements, so we suggest that you check with the relevant authorities in your area.

<u>**Pressure Transducers</u>** come with a 5-year performance guarantee from the instrument manufacturer, the Pressure Transducers can be tested / compared against qualified instruments.</u>

<u>Surface Temperature Probes</u> come with a 2-year performance guarantee from the instrument manufacturer. The Surface Temperature Probes can be tested / compared against qualified instruments.

Independent Laboratory Testing / Calibration may be requested in some cases. If so, we recommend that you contact your local PE Weld Bank reseller or a local testing / calibration laboratory to calibrate Pressure Sensor /Transducer and Temperature Sensor / Surface Temperature Probe, or return to GOPOLY for this service.



# Appendix 1 Connection of Hydraulic test point

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### Appendix 1a Ritmo Basic with steel case

N.B. first ensure that the power is disconnected & there is no pressure in system. Remove hydraulic hose from control box (Closing pressure side) Fit "Stauff Swivel run tee" Fit hydraulic hose to "Stauff Swivel run tee" Fit "Stauff Test point" Fit PEWeldBank Transducer to Stauff test point 20.



Line item "1"

PEWeldBank Transducer (supplied)







### Appendix 1b Ritmo Basic with Plastic case

N.B. first ensure that the power is disconnected & there is no pressure in system. You will need to remove top cover from control box. Remove hydraulic hose from control box Fit item "1" Fit hydraulic hose to item "1" Fit item "19 to 1" Drill hole into plastic case and fit item "23" Connect Line item 24 to item 19 and Line item "23 Fit PEWeldBank Transducer to item "23"



Line item "1"





### Appendix 1c Dixon EHF 225 & 350

N.B. first ensure that the power is disconnected &there is no pressure in system. Remove male quick connect fitting and washer leaving the hex nipple in the

block (Hava a rag handy as there may be an amount of hydraulic oils leackage) — Fit assembly

Refit washer and quick male connect fitting

Fit PEWeldBank Transducer









Assembly available from PE Weld Bank reseller



### Appendix 1d +GF+ TM Series

N.B. first ensure that there is no pressure in system. Remove male quick connect hydraulic coupling from control box Fit TBC Re-Fit male coupling to "TBC" Fit "TBC

Fit PEWeldBank Transducer to TBC









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### Appendix 1e Technodue PT 160-500 N.B. first ensure that the power is disconnected & there is no pressure in system. Remove lever from valve Remove top cover plate Remove lower cover plate Remove hydraulic hose from port "A" . (Have a rag handy as a little oil may escape.) Fit assembly into Port "A" Replace hydraulic hose to Assembly Fit a cable tie to frame Replace lower cover plate Replace top cover plate Replace lever to valve



Assembly available from PE Weld Bank reseller



### Appendix 1f Dixon EHF 450 & 630

N.B. first ensure that the power is disconnected there is no pressure in system. Remove 1/4" plug (have a rag handy as there may be an amount of hydraulic oil leakage) Fit Test point 20 assembly with 1/4" male tapered fitting,. Use Teflon or hydraulic thread sealant thread sealant.





ank reseller

Test 20 with 1/4" BSPT adaptor


### Appendix 1g Worldpoly WHD Control box

N.B. first ensure that the power is disconnected there is no pressure in system.

Remove 1/4" plug or transducer (have a rag handy as there may be an amount of hydraulic oil leakage) Fit Test point 20 assembly with 1/4" male tapered fitting,. Use Teflon or hydraulic thread sealant.







ssembly available from PE eld Bank reseller

Test 20 with 1/4" BSPT adaptor (Item # Test Point 002)



Please contact your local hydraulics company or PEWeldBank reseller for fittings.

The following is a guide, we will add to this as more information becomes available.

	Hydraulic Test Port Te	e Identification			
				Internal	<u></u>
				Taper	
_	"BSPT" Male x BSP	P Female Swivel BSPP Test P	Port Tee		
ž					
E.		<b>-</b>	UUmm	<b>.</b>	
Ξ.	Part Number	Description	(a)	Price	[332
1	BIM-BSF-BPF-0404	1/4 BSPT M/F Test 1/8 BSPP	13.03±		percent and a second
2	BIM-BSF-BPF-0608	3/8 BSPT M/F Test 1/8 BSPH	16.50±		
3	BIM-BSF-BPF-0808	1/2 BSPT M/F Test 1/8 BSPP	20.59±		
4	BTM-BSF-BPF-12120	3/4 BSPT M/F Test 1/8 BSPP	F		
5	B1M-B3F-BPF-10100	IDOPTIMIE Test I/0 DOPPE			
					<u>(a)</u>
	" IIC" Mala a IIC F		<b>T</b>	E	
	JIC Malexuich	emale owivel DOPP Test Por	: Tee	T	aper
		<b>B</b>	UUmm		aper and a
	Part Number	Description	la)		
6	JIM-JIF-BPF-070702	7/16 JIC M/F Test 1/8 BSPPF	10.97±		
	JIM-JIF-BPF-090902	3/16 JIC M/F Test 1/8 BSPPF	14.13±		
8	JIM-JIF-BPF-121202	3/4 JIC M/F Test 1/8 BSPPF			
-9	JIM-JIF-BPF-141402	7/8 JIC M/F Test 1/8 BSPPF	-		
10	JIM-JIF-BPF-1/1/UZ	1-1/16 JIC M/F Test 1/8 BSPPI	-		
11	JIM-JIF-BPF-212102	1-57 ID JIC M/F Test 1/8 BSPP	F		
		Family Sector I BSDD Taint Day	. T	Flat face	
	URFOMaleXUU	remale owivel bopp Test Pol		with o	(a)
	D . N .	<b>D</b>		ring	
10	Part Number	Description	(a) DE		_ 10
10		JIN URFOMIT Test IrobOP	-r		
14	C-M0914				1000
10	0-14 0-1-0609		NE		
17	A-0-0000	ADAPTON DOPT A SHOULT			phone ling.
18					
10					
					-
	BSP	P Male v Test 20 Male			u u u u u u u u u u u u u u u u u u u
		Thate A rest zonnale	00 mm		
	Part Number	Description	(a)		
19	BPM-TEST-0220	**1/8 BSPPM v TEST 20 M	(a) 9.60+		dimensional C
20	BPM-TEST-0420	1/4 BSPPM v TEST 20 M	10.90+		Y
21	BPM-TEST-0620	3/8 BSPPM v TEST 20 M	13.05+		
22	BPM-TEST-0820	1/2 BSPPM v TEST 20 M	10.002		8
	" Suits above Test Po	In Born Man Lon 2014			- Care
					atom to the second
	Test 20 E	Bulk Head Coupling & hose			
	Part Number	Description			
23	432-5612	Test 20 Bulk Head Coupling			8
24	Test 20 hose x 400mn	Test 20 hose x 400mm			
- ·					
		Misc			
25	BTM-BTM-0404	1/4" BSPTM x 1/4" BSPTM N	pple		All and a
26	BTF-BTF-BTF-04040	1/4" BSPT Female Tee	TPT		- C -
		"branch tapped 1/4" Parallel			



Please contact your local hydraulics company or PEWeldBank reseller for fittings.

The following is a guide, we will add to this as more information becomes available.

			Price	
1	Ritmo Basic 160-315	BTM-BSF-BPF-040402		Pomouo hoso from prossure side of
19	in steel case	BPM-TEST-0220		block and install these fittings
				block and install these fittings
1		BTM-BSF-BPF-040402		Demous tes from a secimetall tes
19	Ritmo Basic 160-315	BPM-TEST-0220		Remove top from case install tee
23	in Plastic case	432-5612		between hose and block, drill hole in
24		Test 20 hose x 400mm		case install 432-30 i2 ritting then
				connect with supplied hose
1	Omisa Whiteline	BTM-BSF-BPF-040402		Demous have from excession side of
19	Basic 160-315 in	BPM-TEST-0220		Remove hose from pressure side of
				block and install these fittings
15	Riyang (OLD)	G-M0914		
16	Silver machine	A-J-0609		Remove original nipple and Fit these
-7		JIM-JIF-BPF-090902		fittings under accumulator and swing
19		BPM-TEST-0220		down on 45 degrees
-7	Worldpoly	JIM-JIF-090902		Persona has a that connects to block
19	160-315 WHD160/315	BPM-TEST-0220		from apuras and install those fittings
				nom gauge and install mese hungs
21	Dixon	BPM-TEST-0420		Bernoue Male Quick connect and
25	EHF225 & 355	1/4" BSPTM x 1/4" BSPTM N		install these fittings refit male quick
26		1/4" BSPT Female Tee TPT		anstantinese nitings felit male quick
				connect
				•

Technodue



# Appendix 2 Updating Sensor Firmware

www.PEWeldBank.com



# **Updating Sensors Firmware**

Temperature Sensors V 1.0.9 and Pressure Sensors V 1.3.9 or earlier cannot be updated and must be returned to Flowlogix Pty Ltd for update.

Ensure that Bluetooth is enabled on your smartphone / tablet. Follow the prompts

1. Click Dropdown Menu

#### 2. Click Settings







# **Updating Sensors Firmware**

#### 3. Click Sensors



#### 5 Click Update Firmware

Pressure Value : 0.00 Bar Ambient Temp : 19.57 °C Humidity : 55 % Sensor type	
Ambient Temp : 19.57 °C Humidity : 55 % Sensor type	
Humidity : 55 % Sensor type	
Sensor type	
Pressure Data Recorder	
Sensor Brand	
PEWeldBank	
Sensor Model	
PWB-P133	
Searial Number	
30:AE:A4:F3:A6:DE	
Firmware Version	
1.3.8	
Calibration Date	
10-11-2021	

#### 4. Click sensor



#### 6 Click Start Update





# **Updating Sensor Firmware**



#### 7. Firmware updated



#### 5 Click Finish





# Appendix 3 Connection to Heater Plate via PT100 internal sensor

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The Sensors dated March 2022 and later allow for connection to the Butt welding machines heater plate internal PT100 probe (where available)

Many machines have provision to plug in a data logger or temperature sensor. i.e. Ritmo, Worldpoly and GF, in most cases this may be used to connect to PE Weld Bank

#### McElroy and Dixon

Many McElroy and Dixon heater plates have a small temperature gauge inserted into the heater plate this can be removed and a PT100 probe inserted for connection directly to PEWeldBank



Please note:

The sensor probe (PT100) for the "Fixed Point Sensor" is located internally, close to the centre of the heater plate.

It is normal for it to read at a higher temperature than the "Surface Temperature Probe".

Zone 1 to 4, Front and Back represent Surface Temperature including the Average.

Fixed Point Sensor represents heater plate internal temperature.

Heater Plate T	arget (° C)	215-235	
	Front	Back	
Zone 1	226	226	
Zone 2	226	228	7
Zone 3	227	228	
Zone 4	226	228	
Average 2		6.81	At commencement of weld
Fixed Point Sensor		240-242	Measured during Phase 1 and 2

The PEWeldBank App allows the user to test the surface temperature at the start of "Every Day" or before "Every Weld"

If the user selects "Every Day" the app will ask for acceptance of previous check before allowing the user to continue the weld process.





This 1m long lead is included. One end is to plug into the Fixed sensor port (3.5mm 4 pole) the other end will plug into most Ritmo Basic and Delta model machines (5.5 x 2.1mm DC Barrel plug).





This 1m long lead is included. One end is to plug into the Fixed sensor port (3.5mm 4 pole) the other end has 4 wires allowing fitment of you own plug to suit your machine. (Red = FORCE — , White = RTD —, Green = RTD +, Black = FORCE +. For connection to 2 wire probe join [Red+White] & [Green+Black]

For connection to your machine, plugs can be purchased from your local electronics supplier, these are examples of plugs that are compatible to many Worldpoly and GF machines, you will need to contact your machine supplier for wiring diagrams







Worldpoly example





### Appendix 4

### User Hierarchy:

PE Weld Bank User Heirarchy			
	SUPER ADMIN* / WELDER	ADMIN / WELDER	WELDER
Person that initially set up system	Yes	No	No
Edit Company Details	Yes	No	No
Maintain Credit Card Details	Yes	No	No
Adding / Deleting / Pairing Sensors	Yes	Yes	Yes
Adding / Deleting / Editing: - Users - Projects - Butt Welding Machinery - Electrofusion Machinery - Setting preferances for: - OH&S check list - Heater Plate Temperture Recording - Custom Weld Number	Yes	Yes	No
Reviewer: - Approve / Reject Welds	Yes	Yes	No
Select: - Projects - Machines - Welding Standards - Conduct Welding	Yes	Yes	Yes

N.B. App system settings are device based not user based,

i.e. if user was to log into a different device the settings may not be correct for this user.

\*To change Super admin user the Super admin must send an email to info@peweldbank.com and nominate the new Superadmin user from the user list

Note: If a user's Level is changed they MUST logout and log back into app for changes to take place.



# Appendix 5 Unsubscribe or Resubscribe PE Weld Bank FMS

www.PEWeldBank.com Info@PEWeldBank.com



# To unsubscribe from PE Weld Bank FMS

Log onto PEWeldBank .com



Forgotten your username? send an email to info@peweldbank including your first and last name requesting your username.

Forgotten you password ? Click on forgot password, you will be sent a temporary password to your email address (check spam folder)

When you have this information Sign in

	Products How It Works	Pricing Resources $\vee$	Resellers Login to Fusio	n Management System
	Sign in		Sign up	
Sign In				
Username				
Username				
Username  Password				
Password  Password				ŵ
Password Password Remember me				کې Forgot password



### **Click on Settings**

PEWELDBANK   FMS	💄 Demo2222 Perera
Dashboard	
T Projects	
. Sensors	
💙 BW Machines	
📴 EF Units	Generate Reports
O Pipe Manufacturers	
🗠 Reports	
🛎 Users	
🗱 Settings	
Version 1.21	

Click on Cancel Subscription This will immediately unsubscribe your account.

To renew again simply click on this button again and you will be able to re access your account.

PEWELDBANK   FMS			Demo2222 Perera
🔁 Dashboard	Company Pro	file	System Settings
<b>T</b> Projects	Name		Enable Auto Weld Assessment
Sensors	Address		<ul> <li>Enable Warnings During the Weld Process</li> <li>Allow Skipping Electrofusion Timers</li> </ul>
븆 BW Machines	Country		* Accounts Emails
🛂 EF Units	Phone	Enter the company phone	Add Account Emails
O Pipe Manufacturers	Email	Enter the company_email	Save
107 Departs	Manager Name	Enter the company manager name	
	Manager Phone	Enter the company manager phone	Package information
📽 Users	Company Logo (Size 200 x 200)	Drop Image here	Package : PEWeldBank Enterprise Multi User Estimated upcoming bill on 1st of July 2025 : AUD 15 Subscribed Date : Wednesday 28th of May 2025 Account Status : Active
Version 121			Cancel Subscription



# Appendix 6 Re Subscribing or Changing Credit Card Details

www.PEWeldBank.com

Info@PEWeldBank.com



### To Change Credit Card Details in PE Weld Bank FMS

Log onto PEWeldBank.com



Forgotten your username? send an email to info@peweldbank including your first and last name requesting your username.

Forgotten you password ? Click on forgot password, you will be sent a temporary password to your email address (check spam folder)

When you have this information Sign in

	Products How It Wo	rks Pricing R	Resources ~	Resellers	Login to Fusion Ma	nagement System
	Sign in				Sign up	
Sign In						
Username						
Username						
Password						
						S.
Password						E
Password  Remember me						Forgot password



#### **Click on Settings**

PEWELDBANK   FMS	<b>4</b> D	erno2222 Perera 👻
① Dashboard		
Projects		
Sensors		
븆 BW Machines		
💁 EF Units	Generate Reports	
O Pipe Manufacturers		
Reports		
😩 Users		
Settings		
Version 1.21		

Click on Re Subscribe or Edit Here you will be able to re subscribe or change card details.

PEWELDBANK   FMS			💄 Demo2222 Perera 👻
🔁 Dashboard	Phone	Enter the company phone	Add Account Emails
T Projects	Email	Enter the company_email	Save
. Sensors	Manager Name	Enter the company manager name	
븆 BW Machines	Manager Phone	Enter the company manager phone	Package Information
🔩 EF Units	Company Logo (Size 200 x 200)		Package : PEWeldBank Enterprise Multi User Estimated upcoming bill on 1st of July ::025 :
O Pipe Manufacturers		Drop Image here	Subscribed Date : Account Status : Active
🗠 Reports			Cancel Subscription
🗳 Users		L	Downent Mathed
😂 Settings		Sa	ave Payment Method
			Card Number: Expiry Date:
Version 1.21			



# Appendix 7 Reviewing welds

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### Welds Flagged as "For Review"

PEWeldBank does not reject any welds, it simply asks for the reviewer to carry out further inspection of the weld. Some welds may not be FMS Accepted due to time, pressure or temperature variations, see examples below. Please also note where heat soak pressure is dropped to ZERO, PEWeldBank cannot always detect a change in pressure when the

PEWeldBank cannot always detect a change in pressure when the heater plate is removed, therefore not allowing accurate timing, in this case it must rely on verification by the reviewer to inspect and decide whether to accept the weld or reject it.



# **Reviewing welds not FMS approved**



#### PEWeldBank PEWeldBank Individual Weld Report

Date	Weld Number	Custom Weld Number	Start Time	Ambient Temp	Status
03-05-2024	202405031154812386	1134	11:54	24.4° C	For Review

**Project Details** 

Project Name	Job Number	Project Contact Details	
	JB1061		

Weld Details	Required	Actual	
P1 bead-up pressure	14-18.8	15-16.7	bar
t1 bead-up size	Until indication of bead	23.00	mm / Seconds
P2 heat soak pressure	0.0-4.0	0.0-0.7	bar
t2 heat soak time	57-69	~63	Seconds
t3 heater plate removal time	≤6	≤6	Seconds
t4 time to achieve fusion jointing pressure	Not Specified	Not Specified	Seconds
P3 fusion jointing pressure	14-18.8	0-16.9	bar
t5 cooling time in machine under pressure	≥02:28	02:28	Min:Sec





#### **Reviewing welds not FMS approved**

Using the weld chart feature, measure the heat soak time by moving you cursor over the start and finish of heat soak. In this example it is 84s, whereas in the weld details it allows up to 69 seconds plus 6s for heater plate removal equals 75s therefore the heat soak was approximately 9s too long (s = seconds)





#### Weather resistant modification

If you are experiencing extreme weather conditions a simple modification may help.

Drill a 5.5mm hole in the sensor set case and leave the sensor inside, this will further protect the unit from dust , snow etc.









### For further information:

Please contact PEWeldBank:

Email: info@PEWeldBank.com

Please note that our sales and support office is based in Melbourne Australia, we will respond to all enquiries as soon as possible, however we have a number of resellers worldwide that may be able to assist you. See our website for your nearest reseller.

www.peweldbank.com/reseller