Test Protocol 2349 Inspection Device

Burst Pressure Tester	2349-000				
BW-TEC	24.03.2021 06:44		Login: Admin		
-		Recipes: Crea	te new		
Main	Common recipe information				
·	balloon 10x25 V0		 Print Sav 	e Close	
🔻 Recipes					
Edit	Recipe parameters	_			
	Start Testing				
Create new				Zoom in	
Create from template	Test type				
	Burst pressure				
Delete	O Fatigue resistance				
Import	 Inflation/Deflation time 				
import	O Compliance				
Export	Name	Value Mod Mi	in Max		
Settings	Nominal burst pressure (bar)	5.00			
Jettings	Fill rate (ml/s)	2.0			
Control	Luer-Button	no			
	Total burst calculation	With k-factor			
General	Lower warning limit (bar)	3.00			
	Upper warning limit (bar)	10.00			
	Number of tests per order				
	Name	Value Mod Mi	in Max		
	Determination number of tests	per phase			
	Count: before order	2			
	Count: start order	5			
	Count: middle order	5			
	Count: end order	5			
)	

Burst Pressure Tester	2349-000							
BW-TEC		24.03.2021 06:45				Login: OP		Log off
				Main: Pro	ocess overview	v		
Process	Order overviev	v						
overview	Order no.	12345					F	Progress: Before 0/20
	Recipe	Production\balloon 10	x25					Start 0/5 Middle 0/5
Alarms and	Article no.	123		Examine	- 00	_		End 0/5
状 warnings	Article no.	123		Examine	r lor			
NH.	New order	Select order	Edit		Finish			urst pressure: 5.00 bar
Alarm history			·				Calculated	burst pressure:
	Finished tests		Compliance	Chart				Current process
💓 User settings	No. Burst	Crack Loc.	Druck [bar]					Temperature:
			[00.]					0 °C
	1							Pressure:
Protocol								0.00 bar
Order history								
Order history								
	1							
Control chart								Processing state:
								Prepare
Machine								Please insert product
U information								and press 'Start'
	i							button
🚽 Exit								
	1							
	Export	Edit Delete	 Compliand 	e Chart	Process Chart			
	LAPOIL	Luit Delete	C Compilant					

Burst Pressure Tester	2349-000						
BW-TEC	2	24.03.2021 06:46			Login: OP		Log off
			Ma	ain: Process overviev	v		
Process overview	Order overview Order no.	12345				F	Progress: Before 0/20
	Recipe	Production\balloon 10	x25				Start 0/5 Middle 0/5
Alarms and warnings	Article no.	123		kaminer OP			End 0/50
- Hornings	_	T	1	1		Nominal b	urst pressure: 5.00 bar
Alarm history	New order	Select order	Edit	Finish		Calculated	burst pressure:
	Finished tests	Finish process					Current process
🖉 User settings	No. Burst	Select order phase				Diameter [mm]	Temperature: 21 °C
		Before order	Start order	Middle order	Order end	15.00	Pressure:
Protocol		Select crack path				14.11 mm	0.00 bar
		Axial (A)	Radial (R)	Axial/Radial (A/R)	Other		Total time: 20 s
Order history		Select failure locati	ion				205
		Balloon Distal	Balloon Mitte	Balloon		10.00	
Control chart				Proximal			Processing state:
					_		Prepare
Machine information							Ready for start
					Apply	5.00	
🚽 Exit				/		5.00	
			0			0.00 bar	
				5.0 10.0	15.0	0 220.4 Time	
	_				15.0	2 <mark>202</mark> [\$]	
	Export	Edit Delete	O Compliance Char	rt 💿 Process Chart			
Burst Pressure Tester	2349-000						
		24.03.2021 06:53			Login: OP		
Burst Pressure Tester		24.03.2021 06:53	Ma	ain: Process overviev			Log off
BW-TEC	Order overview	·	Ma	ain: Process overviev			Log off
BW-TEC	Order overview Order no.	12345		ain: Process overviev		F	
BW-TEC Process overview Alarms and	Order overview Order no. Recipe	, 12345 Production\balloon 10;	x25			F	Log off Progress: Before 2 / 2 O Start 5 / 5 O Middle 5 / 5 O
BW-TEC Process overview	Order overview Order no. Recipe	12345	x25	ain: Process overviev			Log off Progress: Before 2 / 2 Start 5 / 5 Middle 5 / 5 End 5 / 5
BW-TEC Process overview Alarms and warnings	Order overview Order no. Recipe	, 12345 Production\balloon 10;	x25			Nominal b	Log off Progress: Before 2 / 2 O Start 5 / 5 O Middle 5 / 5 O
BW-TEC Process overview Alarms and	Order overview Order no. Recipe Article no.	12345 Production\balloon 10; 123	x25 Edit	kaminer OP Finish		Nominal b	Log off Progress: Before 2/20 Start 5/50 Middle 5/50 End 5/50 urst pressure: 5.00 bar burst pressure: 6.36 bar
Process overview Alarms and warnings Alarm history	Order overview Order no. Recipe Article no. New order	12345 Production\balloon 10; 123	x25	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 Start 5 / 5 Middle 5 / 5 End 5 / 5 urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature:
BW-TEC Process overview Alarms and warnings	Order overview Order no. Recipe Article no. New order Finished tests No. Burst O 1 9.69 b	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal –	x25 Edit Compliance Chart	kaminer OP Finish		Nominal b	Log off Progress: Before 2/20 Start 5/50 Middle 5/50 End 5/50 urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C
BW-TEC Process overview Alarms and warnings Alarm history User settings	Order overview Order no. Recipe Article no. New order Finished tests No. Burst ○ 1 9.69 b ○ 2 8.22 b	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal = ar R Distal =	x25 Edit Compliance Chart	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 Start 5 / 5 Middle 5 / 5 End 5 / 5 urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature:
Process overview Alarms and warnings Alarm history	Order overview Order no. Recipe Article no. New order Finished tests No. Burst 0 1 9.69 b 0 2 8.82 b 0 3	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal = ar R Distal = ar A Distal =	x25 Edit Compliance Chart	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 () Start 5 / 5 () Middle 5 / 5 () End 5 / 5 () urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21 ° () Pressure:
Process overview Image: Alarms and warnings Image: Alarm history Image: User settings Image: Protocol	Order overview Order no. Recipe Article no. New order Finished tests No. Burst ○ 1 9.69 b ○ 2 8.22 b	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal =	x25 Edit Compliance Chart Diameter [mm]	kaminer OP Finish		Nominal b	Log off Progress: Before 2/20 Start 5/50 Middle 5/50 End 5/50 urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s
BW-TEC Process overview Alarms and warnings Alarm history User settings	Order overview Order no. Recipe Article no. New order Finished tests No. Burst 0 1 9.69 b 0 2 8.88 b 0 4 9.14 b	12345 Production\balloon 10; 123 Select order ar A Distal = ar A Distal =	x25 Edit Compliance Chart Diameter [mm]	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 () Start 5 / 5 () Middle 5 / 5 () End 5 / 5 () urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21 ° () Pressure: 0.00 bar Total time:
BW-TEC Process overview Alarms and warnings Alarm history Muser settings Protocol Protocol Corder history	Order no. Recipe Article no. New order Image: state st	12345 Production\balloon 10: 123 Select order ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Prox. = ar R Distal =	x25 Edit Compliance Chart Diameter [mm]	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 () Start 5 / 5 () Middle 5 / 5 () End 5 / 5 () urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21 ° () Pressure: 0.00 bar Total time: 14 s Burst pressure:
Process overview Image: Alarms and warnings Image: Alarm history Image: User settings Image: Protocol	New Burst Article no. New New order Image: New order New order Image: New	12345 Production\balloon 10: 123 Select order (Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Distal = ar A Midd =	x25 Edit Compliance Chart Diameter [mm]	kaminer OP Finish		Nominal b	Log off Progress: Before 2/20 Start 5/50 Middle 5/50 End 5/50 urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar
BW-TEC Process overview Process overview Alarms and warnings Alarm history Image: Ala	New Berlein Article no. New New order Image: New order New order Image: New <th>12345 Production\balloon 10: 123 Select order (Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Distal = ar A Midd = ar A Distal = ar A Distal =</th> <th>x25 Edit Compliance Chart Diameter [mm]</th> <th>kaminer OP Finish</th> <th></th> <th>Nominal b</th> <th>Log off Progress: Before 2 / 2 () Start 5 / 5 () Middle 5 / 5 () End 5 / 5 () urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21 ° () Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result:</th>	12345 Production\balloon 10: 123 Select order (Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Distal = ar A Midd = ar A Distal = ar A Distal =	x25 Edit Compliance Chart Diameter [mm]	kaminer OP Finish		Nominal b	Log off Progress: Before 2 / 2 () Start 5 / 5 () Middle 5 / 5 () End 5 / 5 () urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21 ° () Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result:
Process overview Process overview Image: Alarm s and warnings Image: Alarm history	New Burst Article no. New New order Image: New order New order Image: New	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Midd = ar A Distal = ar A Midd = ar A Nidd = ar A Midd =	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state:
BW-TEC Process overview Image: Strain Strain Strain Image: Strain	No. Burst 0 1 9.69 b 1 9.69 b 2 8.22 b 3 8.88 b 4 9.14 b 5 9.45 b 6 8.54 b 6 8.54 b 7 8.27 b 8 8.30 b 9 8.07 b 9 8.07 b 10 8.66 b	12345 Production\balloon 10: 123 Select order Crack Loc. ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Midd = ar A Distal = ar A Midd = ar A Midd = ar A Midd = ar A Midd = ar A Distal = ar A Midd = ar A Distal = ar A Midd = ar A Distal = ar A Dista Distal = ar A Dista Distal = ar A Dista Dista Dista Dista Dist	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare
BW-TEC Process overview Process overview Alarms and warnings Alarm history Image: Ala	New Sector New order Article no. New order New order Image: Sector Sect	12345 Production\balloon 10: 123 Select order ar A	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● urst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state:
BW-TEC Process overview Image: Strain Strain Strain Image: Strain	Order overview Order no. Recipe Article no. New order Finished tests No. 0 1 9.69 b 2 3 4 5 6 7 8.30b 9 10 8.30b 11 8.30b 9 11 8.12 b 11 8.12 b 13 9.44 b 13 9.44 b	12345 Production\balloon 102 123 Select order ar A Distal = ar A Distal = ar A Distal = ar A Distal = ar A Midd = ar A Midd = ar A Distal = ar A Midd = ar A Midd = ar A Distal = ar A D	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare
BW-TEC Process overview Image: Strain Strain Strain Image: Strain	Order overview Order no. Recipe Article no. New order Finished tests No. 0 1 9.69 b 2 3 4 5 6 5 6 7 8.30 b 9 10 8.30 b 11 8.30 b 9 10 8.30 b 11 8.12 b 11 8.12 b 12 8.34 b 13 9.44 b 14 8.15	12345 Production\balloon 100 123 Select order 123 Select order 123 Image: Select order 123 Select order ar A ar A/R ar A/R ar A ar A ar A ar A	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare
BW-TEC Process overview Image: Stress of the stress of th	Order overview Order no. Recipe Article no. New order Finished tests No. Burst 0 1 9.69 b 2 3 4 5 6 7 8 9 10 8.66 b 11 8.12 b 12 13 9.44 b 15 8.19 b 16	12345 Production\balloon 100 123 Select order 123 I23 Select order ar A Distal ar A A Distal ar A A Distal ar A A Distal ar A A Prox. ar A ar A/R ar A ar A ar A/R ar A ar A ar A ar A <	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare
BW-TEC Process overview Image: Strain Strain Strain Image: Strain	Order overview Order no. Recipe Article no. New order Finished tests No. 0 1 9.69 b 2 3 4 5 6 5 6 7 8.30 b 9 10 8.30 b 11 8.30 b 9 10 8.30 b 11 8.12 b 11 8.12 b 12 8.34 b 13 9.44 b 14 8.15	12345 Production\balloon 100 123 Select order 123 I23 Select order ar A Distal ar A A bistal ar A bistal ar A bistal ar A bistal ar A bistal ar A <th>x25 Edit Compliance Chart Diameter [mm] 14.00</th> <th>kaminer OP Finish</th> <th></th> <th>Nominal b</th> <th>Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare</th>	x25 Edit Compliance Chart Diameter [mm] 14.00	kaminer OP Finish		Nominal b	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare
Process overview Image: Second stress Image: Second stres Image:	Order overview Order no. Recipe Article no. New order Finished tests No. Burst 0 1 9.69 b 2 3 4 5 6 7 8 9 10 8.66 b 11 8.12 b 12 13 9.44 b 15 8.19 b 16	12345 Production\balloon 100 123 Select order 123 I23 Select order ar A Distal ar A A Distal ar A A Distal ar A A Distal ar A A Prox. ar A ar A/R ar A ar A ar A/R ar A ar A ar A ar A <	x25 Edit Compliance Chart Diameter [mm] 14.00 13.00 12.00 2.00	xaminer OP Finish		Nominal b Calculated	Log off Progress: Before 2/2○ Start 5/5○ Middle 5/5○ End 5/5● curst pressure: 5.00 bar burst pressure: 6.36 bar Current process Temperature: 21°C Pressure: 0.00 bar Total time: 14 s Burst pressure: 9.34 bar Processing result: ✓ Succeeded Processing state: Prepare

Burst Pressure Tester 2	2349-000							
BW-TEC	24.	03.2021 07:	:10			Login: Admin		Log off
Main	Select control cha	art Co	ntrol chart		neral: Control char	t		
<u> </u>	Name	Pres	ssure					
Recipes	233 Regelkarte1							
Settings	balloon		8.00	MY WAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	MAINA	Markil ah Malanda	WWWWW	MAL MALANA
Control			dille th	ULT VERY I VERY	han Will and AlMals.	n da Alla A. nali Arth	ulma, allabil	Albird Man Land Num
🖵 General								
Protocol								
Order history			6.00					
Control chart								
Process history								
Machine information			4.00					
Exit								
LAR								
			2.00					
					1			No.
		_			100000	2000		
	Include marked	l orders		Min:	Max: Nomin	al:		🔍 🕪 Export
Burst Pressure Tester 2	2349-000							
BW-TEC	24.	03.2021 06:	:50			Login: OP		Log off
	Order overview			Ma	in: Process overvie	W		
Overview	Order no.	2345						Progress: Before 2/20 Start 5/50
Alarms and			balloon 10:					Middle 3 / 5 End 0 / 5
warnings		23		1	aminer OP		Nominal b	ourst pressure: 5.00 bar
Alarm history	New order	Selec	ct order	Edit	Finish	J		burst pressure: 5.99 bar
	Finished tests No. Burst	Crack L	00	Process Chart			Diameter	Current process Temperature:
User settings	O 1 9.69 bar		Distal =	[bar]			[mm]	21 °C
Protocol	 2 8.22 bar 3 8.88 bar 		Distal = Distal =	8.00			-	Pressure: 0.00 bar
	• 4 9.14 bar		Distal =					Total time: 14 s
Order history	• 5 9.45 bar		Midd =	6.00				Burst pressure:
E	 6 8.54 bar 7 8.27 bar 		Prox. = Distal =					8.66 bar Processing result:
Control chart	🗢 8 8.30 bar		Midd =		/			Succeeded
Machine	 9 8.07 bar 10 8.66 bar 		Distal = Midd =	4.00				
U information							5.00	Processing state: Prepare
🚽 Exit				2.00	/			Ready for start
				0				
							0	
					5.0	10.0	Time [s]	
		dit	Delete	Compliance Chart	: 💿 Process Chart			

BW-TEC

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Test protocol

Order no.: 12345 Finished on: 24.03.2021 06:53:36 Nominal burst pressure:: 5.00 bar

Article no.: 123 Comment: OK Calculated burst pressure:: 6.36 bar Result: Succeeded

Recipe: Production/balloon 10x25

Diameter [mm] 14.00 13.00 12.00 Ø

	2.	00	4.00	6.	00	8.00	Pressure [bar]
	Phase	Crack	Location	Burst	Examiner	Comment	
1	Before order	A	Distal	9.69 bar	OP		
2	Before order	R	Distal	8.22 bar	OP		
3	Start order	A	Distal	8.88 bar	OP		
4	Start order	A	Distal	9.14 bar	OP		
5	Start order	A	Middle	9.45 bar	OP		
6	Start order	A	Prox.	8.54 bar	OP		
7	Start order	R	Distal	8.27 bar	OP		
8	Middle order	A	Middle	8.30 bar	OP		
9	Middle order	A	Distal	8.07 bar	OP		
10	Middle order	R	Middle	8.66 bar	OP		
11	Middle order	A/R	Distal	8.12 bar	OP		
12	Middle order	R	Distal	8.77 bar	OP		
13	Order end	A	Distal	9.44 bar	OP		
14	Order end	A	Distal	8.91 bar	OP		
15	Order end	A	Middle	8.19 bar	OP		
16	Order end	R	Distal	9.63 bar	OP		
17	Order end	A/R	Prox.	9.34 bar	OP		

Test Protocol Compliance Test

Overview

Common	
Machine	2349-000
Machine ID	
Recipe name	Production\compliance V5
Operator	Admin
Process start-time	24.03.2021 07:01
Process end-time	24.03.2021 07:01
Result	Succeeded
Others	
Total time (s)	10
Article	
Article no.	
Lot	
Comment	
Max. pressure diff. (bar)	0.00
Max. pressure diff. (kPa)	0

Recipe details

Dwell time (s)

Deflate rate (ml/s) Pressure increase (bar)

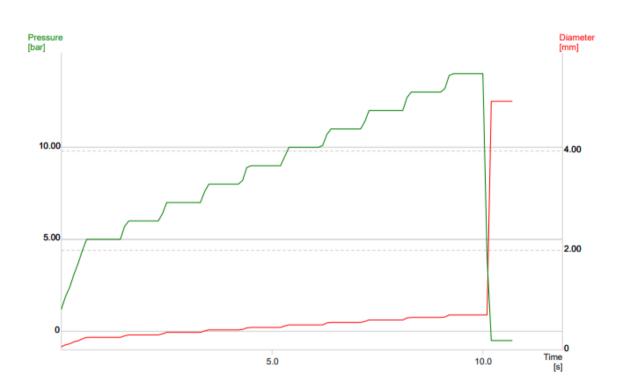
No. of measurements

Start	
Connection	Luer
Origin pressure (bar)	1.00
Pressure ctr. amplification	0.20
Diameter (mm)	1.00
Approx. volume (ml)	0.0
Offset Position (mm)	0.0
Delay time (s)	0
With balloon protective cover	no
No. of bleeding cycles	1
Duration of vacuum	1.0
Testing	
Test type	Compliance
Maintain pressure	no
Pressure (bar)	5.00
Tolerance (bar)	0.10
Fill rate (ml/s)	1.0
Pressure ctr. amplification	0.20

5.0

8.0 1.00

10



Data points after increase

Measurement	Pressure (bar)Press	sure (kPa)	Diameter (mm)
Measurement 1	5.00	500	0.25
Measurement 2	6.00	600	0.30
Measurement 3	7.00	700	0.35
Measurement 4	8.00	800	0.40
Measurement 5	9.00	900	0.45
Measurement 6	10.00	1000	0.50
Measurement 7	11.00	1100	0.55
Measurement 8	12.00	1200	0.60
Measurement 9	13.00	1300	0.65
Measurement 10	14.00	1400	0.70