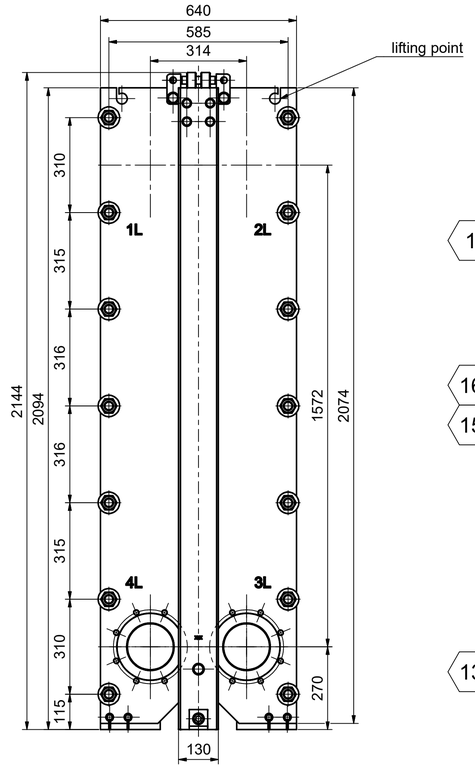
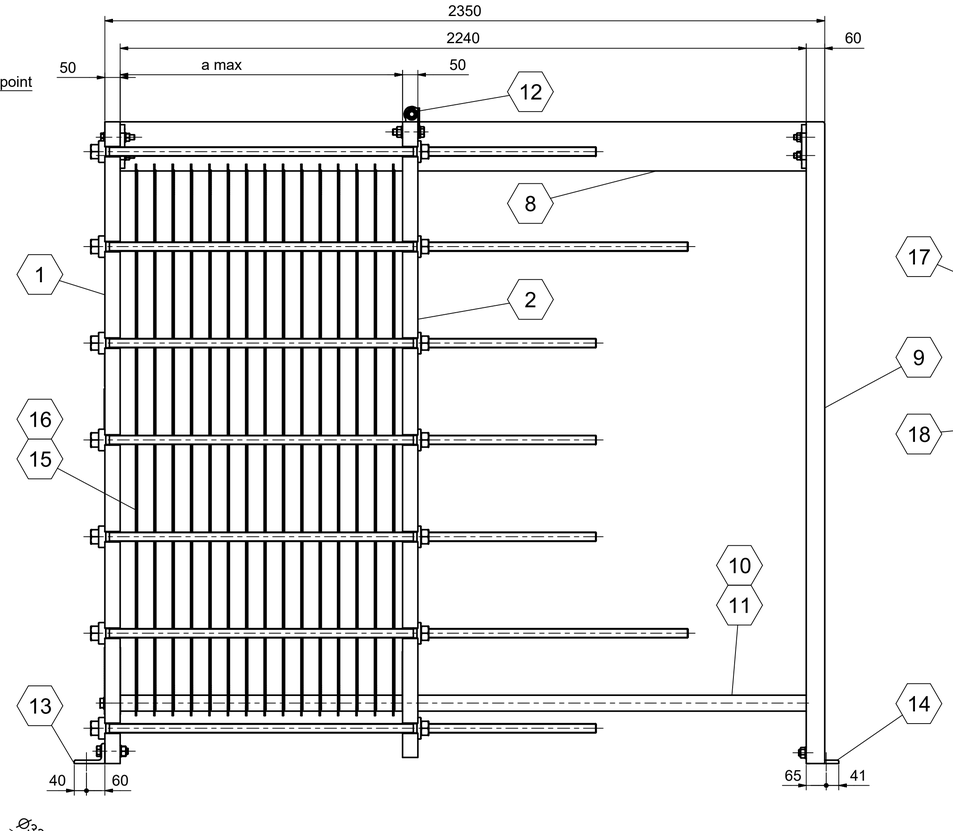
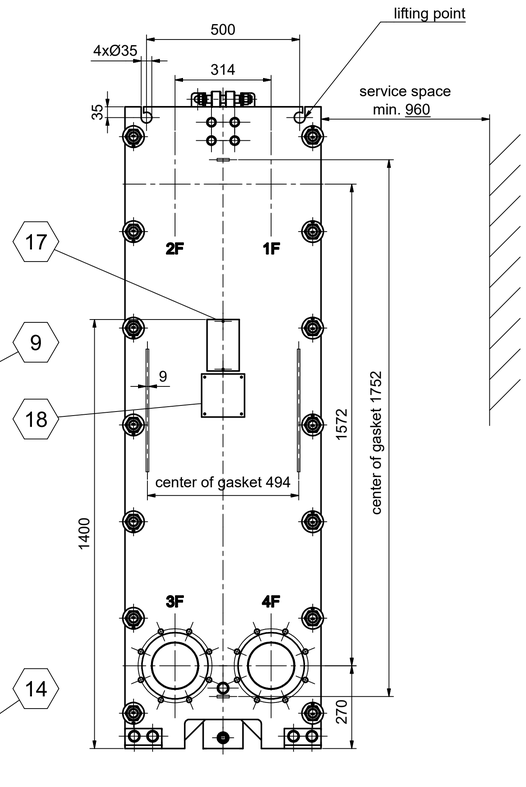




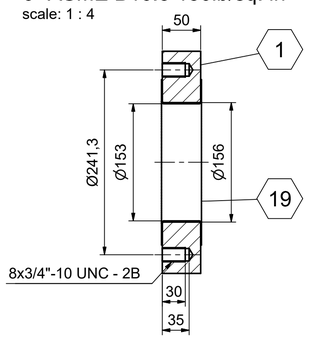


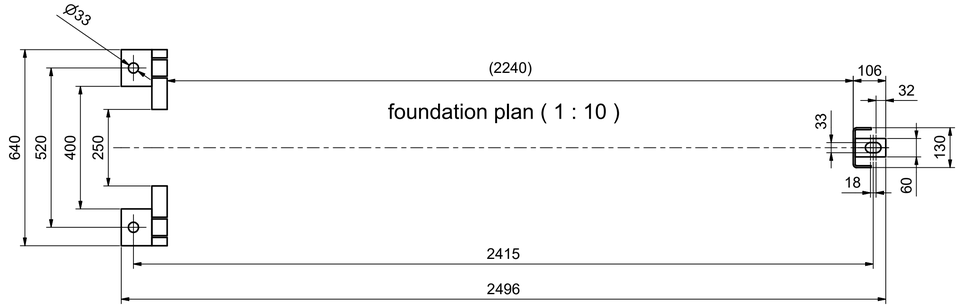
operating data		room 1-4	room 2-3
product		ETHYLENE GLYCOL	RAW MANURE
max. allowable working pressure / MAWP	psi g kPa g	145.0 1000.0	145.0 1000.0
hydrostatic test pressure	psi g kPa g	188.5 1300.0	188.5 1300.0
max. design temperature	°F	230.0	230.0
min. design metal temperature / MDMT	°F	32.0	32.0
volume (V)	gal	81.28	81.28
HE-surface	ft²	696.85	
weight gross/net	lb	5732.67 / 4338.42	
inlet temperature	°F	195.0	105.0
outlet temperature	°F	157.8	178.0

tests	drawing approved by		Kelvion PHE GmbH		
	approval of outward dimensions		LRQA Verification Limited		
	hydrostatic test		LRQA Verification Limited		
	design acc. to		ASME Section VIII Div. 1 Edition 2021 U-STAMP, National Board		
surface	sandblasting	7.096-230 4.1.A	length of pack	$a_{max.}$ = 36.309 inch 922 mm	
	primer	7.096-230 4.1.A			
	top coat	7.096-230 4.1.A		$a_{min.}$ = 35.640 inch 905 mm	
	colour	RAL 5002			

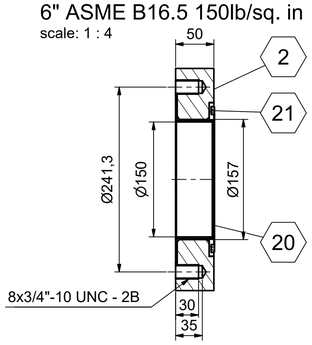
connections	1F	2F	3F	4F	1L	2L	3L	4L
6" ANSI B16.5 150 lb/sq. in	———	———	RAW MANURE -out-	ETHYLENE GLYCOL -in-	———	———	RAW MANURE -in-	ETHYLENE GLYCOL -out-

connection 3F + 4F
metal insert
6" ASME B16.5 150lb/sq. in
scale: 1 : 4

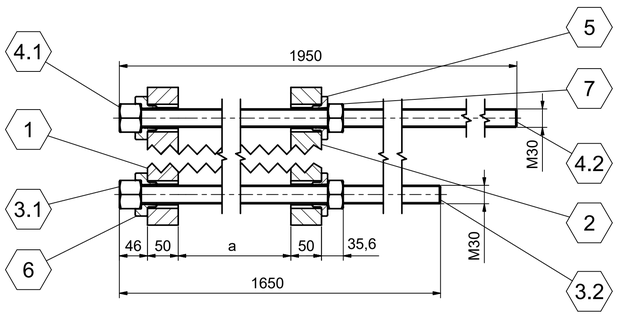




connection 3L + 4L
metal insert w. flange ring
6" ASME B16.5 150lb/sq. in
scale: 1 : 4



A-A (1 : 5)



N.B.: XXX

CERTIFIED BY

Kelvion PHE GmbH

145.0 PSI AT 230.0 °F
145.0 PSI AT 230.0 °F
MAWP

32.0 °F AT 145.0 PSI
32.0 °F AT 145.0 PSI
MDMT

U

152/1011*
S/N

2022
YEAR BUILT

Kelvion

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Fax +49 5066 601 105
www.kelvion.com

Name Plate
Leistungsschild für Wärmetauscher
Plaque d'identification de l'échangeur de chaleur

Plate Heat Exchanger Type Wärmetauscher Echangeur de chaleur	NF150L BA-150		
Serial no. Fabrik-Nr. No de fabr.	152/1011*		
min./max. allowable pressure min./max. zul. Druck (PS) P min/max de service psig	0.0 / 145.0 (1)	0.0 / 145.0 (2)	
min./max. allowable temp. min./max. zul. Temp. (TS) T min/max de service °F	32.0 / 230.0	32.0 / 230.0	
Test pressure Prüfdruck (PT) Pression d'épreuve psig	188.5	188.5	
Volume Volumen (V) Contenu US gal	81.28	81.28	
Net weight Leergewicht Poids à vide	4338.42 lb		
Year of constr. Herstellungsjahr Année de fabr.	2022		
"s" max	36.309 inch		
"s" min	35.640 inch		

a

no.	quant	denomination	material ASME	pr-product	material DIN	cert	remark
21	2	seal ring	-	-	NBR	-	
20	2	metal insert w. flange ring	-	Bl. 2/6 DIN EN 10131	1.4404/1.4571	3.1	
19	2	metal insert	-	Bl. 1 DIN EN 10131	1.4404	3.1	
18	1	U-STAMP plate	-	Bl. 2 DIN EN 10131	1.4571	-	
17	1	name plate	-	Bl. 0,8 DIN EN 10131	1.4301	-	
16	85	gasket	-	-	NBR	-	
15	85	HE-plate	SA-240Gr316L	Bl. 1 austenitic steel	1.4404	3.1	
14	1	foot support	-	L 100x65x11 DIN 1029	S235JR	-	
13	2	foot fixed plate	-	L 100x65x11 DIN 1029	S235JR	-	
12	1	suspension	-	Bl. 5 DIN EN 10029 / Rd.50	1.4301/ Delrin	-	
11	1	cladding pipe	-	Rohr DIN EN 10220	1.4301	-	
10	1	connection rod	-	Rd. 48 h11 DIN EN 10278	S235JRG2C+C	-	
9	1	support	-	-	S235JR	-	
8	1	beam cpl.	-	INP 160 - DIN 1025-1 / Bl. 15 DIN EN 10029	S235JR	-	
7	14	hexagon nut	SA-194Gr7	M30 DIN EN ISO 4032	-	3.1	*
6	14	disc	-	round steel DIN EN 10060	C45 DIN EN 10083-2	2.2	
5	14	disc	-	round steel DIN EN 10060	C45 DIN EN 10083-2	2.2	
4.2	1	threaded bolt	SA-193GrB7	M30x1950	-	3.1	*
4.1	1	hexagon nut	SA-194Gr7	M30 DIN EN ISO 4032 m=1,2d	-	3.1	*
4	4	tightening bolt	SA-193GrB7	-	-	-	
3.2	1	threaded bolt	SA-193GrB7	M30x1650	-	3.1	*
3.1	1	hexagon nut	SA-194Gr7	M30 DIN EN ISO 4032 m=1,2d	-	3.1	*
3	10	tightening bolt	SA-193GrB7	-	-	-	
2	1	flame cut loose plate	SA-516Gr60	Bl.50 carbon steel, normalized	-	3.1	*,**
1	1	fixed plate	SA-516Gr60	Bl.50 carbon steel, normalized	-	3.1	*,**

* ASME section II part A valid edition, ** SA-20

152/10114+10115	S152/10114	Lost Creek Dairy, LLC, Roggen, CO 80652 / 0200505343	
serial-no.	flow diagram-no.	customer / order-no.	project

no.	changes	drawn	date	checked	date
01					
02					
03					
04					
05					

dimensions without tolerances DIN ISO 2768 - m
welded structures DIN EN ISO 13920 - CF

size	scale	sheet
A1	1 : 10	1 / 1

	name	date
drawn	O.Kulchenko	03.03.2022
checked	S.Pech	03.03.2022

ASME U-STAMP

Kelvion
Kelvion PHE GmbH
Karl-Schiller-Str. 1-3
31157 Sarstedt

description
plate heat exchanger NF150L BA-150

drawing-no. Z152/10114 rev. 00
item-no. -

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