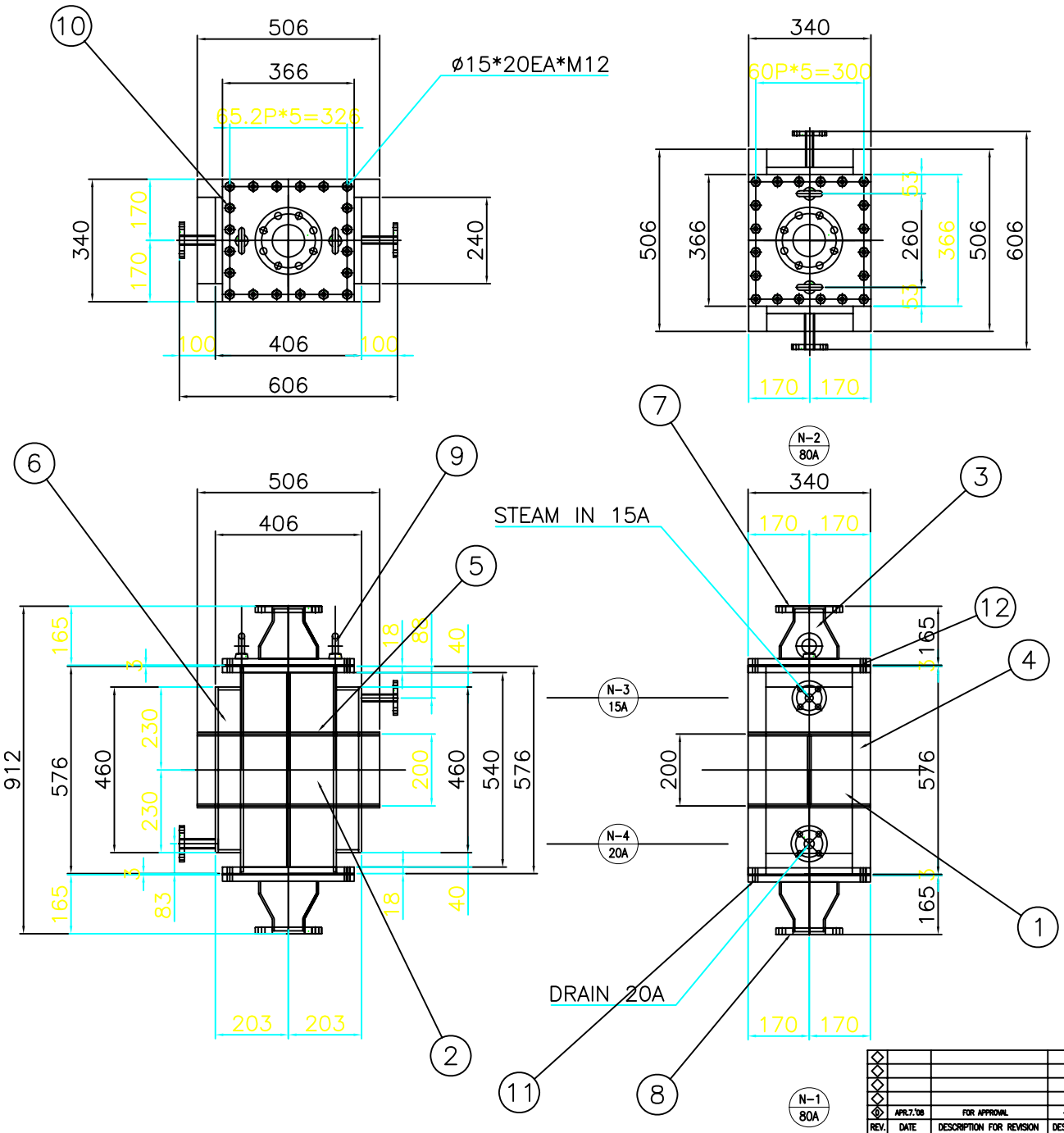

HEAT EXCHANGER DESIGN DATA

CODE: KS B 6231				STAMP ☐ req'd ☒ not req'd	
FLUID ALLOCATION	SHELL SIDE	TUBE SIDE	TYPE:	FIN TUBE TYPE	
FLUID NAME	N2	STEAM	SIZE:	–	
FLOW RATE	500 kg/Hr	33 kg/Hr	SURFACE AREA/SHELL:	– m²	
SURFACE AREA	11.99 M^2		FIN TUBE	SIZE : O.D 21.7 x THK 2.8	
DESIGN PRESSURE	0.12 kg/cm^2 G	8 kg/cm^2 G	SPEC.	FIN:t0.45xH10xD41.7x10F/IN.	
DESIGN TEMPERATURE	150 °C	180 °C	TUBE TO	SEAL WELDING	
OPERATING PRESSURE	0.1 kg/cm^2 G	7 kg/cm^2 G	T/S JOINT		
OPERATING TEMPERATURE (IN/OUT)	0/130 °C	169.6/169.6 °C			
TEST PRESSURE HYDROSTATIC	– kg/cm^2 G	12 kg/cm^2 G	WEIGHT		
TEST PRESSURE PNEUMATIC	– kg/cm^2 G	– kg/cm^2 G	TUBE BUNDLE	– kg	
NUMBER OF PASSES	1	1	EMPTY	– kg	
PRESSURE DROP	28.4 mmAq	– mmAq	OPERATING	– kg	
CAPACITY	16,185 kCAL/Hr		TEST	– kg	
RADIOGRAPHED (SHELL/HEAD)	–	–			
JOINT EFFICIENCY (SHELL/HEAD)	– %	– %			
P.W.H.T (OR STRESS RELIEF)	NO	NO			
CORROSION ALLOWANCE	0 mm	0			
INSULATION	– mm	– mm			

NOZZLE LIST

MARK	SIZE	REQ'D NO.	SCH. NO.	RATING	SERVICE	REMARKS	TO C.L PROJECTION
N-1	80A	1	20	10K*SOFF	N2 IN LET		–
N-2	80A	1	20	10K*SOFF	N2 OUT LET		–
N-3	15A	1	20	10K*SOFF	STEAM IMLET		
N-4	20A	1	20	10K*SOFF	DRAIN OUTLET		

NOTES

1. FLANGE BOLT HOLES SHALL BE STRADDLE THE NORTH-SOUTH PLAN AXIS OR HORIZONTAL AND VERTICAL AXIS OF HEAT EXCHANGER.
2. BASE LINE (B.L) INDICATES THE GASKET CONTACT SURFACE OF SHELL FLANGE.
3. DIMENSIONS TO BAFFLES ARE MEASURED TO C.L OF EACH PLATE.
4. GASKET CONTACT SURFACES FINISH.
   - GIRTH FLANGE & TUBE SHEET : 125~250 ? in AARH WITH SERRATED.
   - NOZZLE FLANGE : 125~250 ? in AARH WITH SERRATED.
5. PAINTING (ONLY C.S PART) : OWNER SPEC.

NO.	DESCRIPTION	MATERIAL	QTY / SHIP. UNIT QTY FOR 1 SET		SIZE	REMARK
17						
16						
15						
14						
13						
12	GASKET	NON-ASBESTOS	2		F.B 50 x t9	
11	HEX. BOLT/NUTS	SNB7/S45C	20	SETS	M16	
10	HEX. BOLT/NUTS	SNB7/S45C	20	SETS	M16	
9	LIFTING LUG	SS400	2		I-NUT M20	
8	FLANGE	SS400	1		80A*10K SOFF	
7	FLANGE	SS400	1		80A*10K SOFF	
6	HEADER	SS400	2		t12	
5	SUPPORT	SS400	2		t10*50	
4	SUPPORT	SS400	2		t10*50	
3	HOPPER	SS400	2		150A*80A	
2	FIN	AL	72	PCS	t0.45xHf10x10F/IN.	
	TUBE	STPG370F	72	PCS	ø17.3x2.3	
1	CASING PLATE	SS400	2		12t	

MODEL: WC-F-16

CLIENT:

CUSTOMER: WIN COOL CO,. LTD.

MANUFACTURER: –

REV.	DATE	DESCRIPTION FOR REVISION	DESIGN	CHECK	APP'D	AUTHO.	AUTHO
0	APR.7.'08	FOR APPROVAL	–	–	–	–	–

TITLE: N2 GAS HEATER ASSEMBLY & DETAIL

SCALE: 1/1

PROJECT NUMBER:

DRAWING NUMBER: –

DRAWN	CHECKED BY	REVIEWED BY	APPROVED	REV. NO.
				0