

EXHAUST FANS

WE CLEAN THE WORLD'S AIR AND WATER

100% CORROSION-RESISTANT FUME EXHAUST FANS

Exhaust fans are a critical component of any air pollution control system. KCH Engineered Systems manufactures a complete line of centrifugal exhaust fans and blowers. Each is built of the highest quality materials to withstand corrosive fumes and gases. Our fans are AMCA Certified and independently tested for performance.



APPLICATIONS

- Municipal Odor Control
- Degasifiers/Aerators
- Corrosive Airstreams

BENEFITS

- Airflows to 70,000 CFM
- 100% Corrosion Resistance
- Quiet Operation
- Backwardly Inclined wheel for non-overloading operation
- POLYLAST®/POLYSTRONG®, FRP or Polypropylene Construction
- AMCA Licensed for Performance
- Dynamically Balanced for smooth operation

Additionally, our VFD Controlled, direct drive fans offer their own unique benefits including:

- Adjustable air flow control
- Smooth startup, ramp up and ramp down
- Elimination of motor starters
- No belts to maintain or replace
- Zero belt loss
- No pulley cost
- Extended bearing and motor life

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PRODUCT INFORMATION

KCH Engineered Systems manufactures both direct or v-belt drive fans and exhaust systems, available in twenty different sizes with airflows up to 70,000 CFM. Constructed of POLYLAST®, POLYSTRONG®, FRP, stainless steel and special alloys, our chemical resistant fans can be equipped with variable frequency drives to ramp down airflow when needed.

To better serve our customers, KCH Engineered Systems offers a complete line of replacement parts, including:

- Direct Drive
- Heavy Duty Bearings
- Vibration Isolators
- 316 Stainless Steel Wheels
- 316 Stainless Steel Shafts
- Motors
- Complete Housings
- Coated Steel, Stainless Steel, or Galvanized Frames
- Belt and Shaft Guards
- Flexible Inlet Connectors



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Additionally, our VFD Controlled, direct drive fans offer their own unique benefits including:

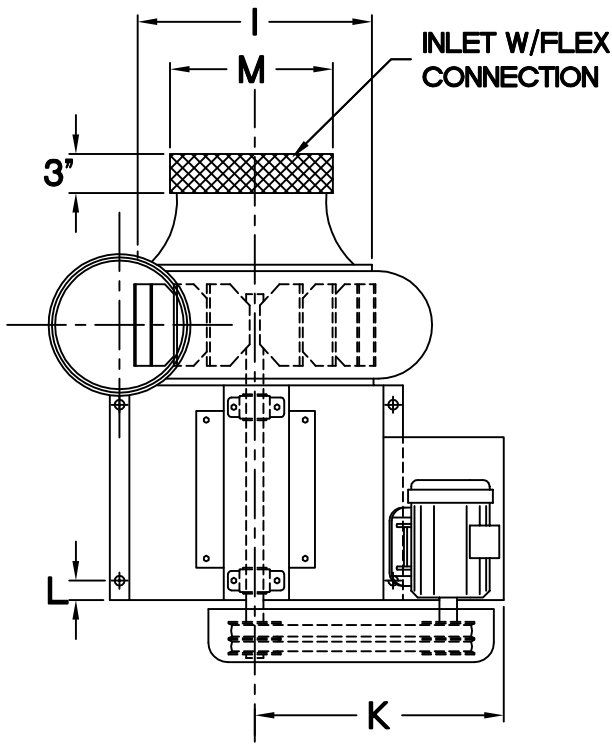
- Adjustable air flow control
- Smooth startup, ramp up and ramp down
- Elimination of motor starters
- No belts to maintain or replace
- Zero belt loss
- No pulley cost
- Extended bearing and motor life



CENTRIFUGAL CI BLOWER NO.

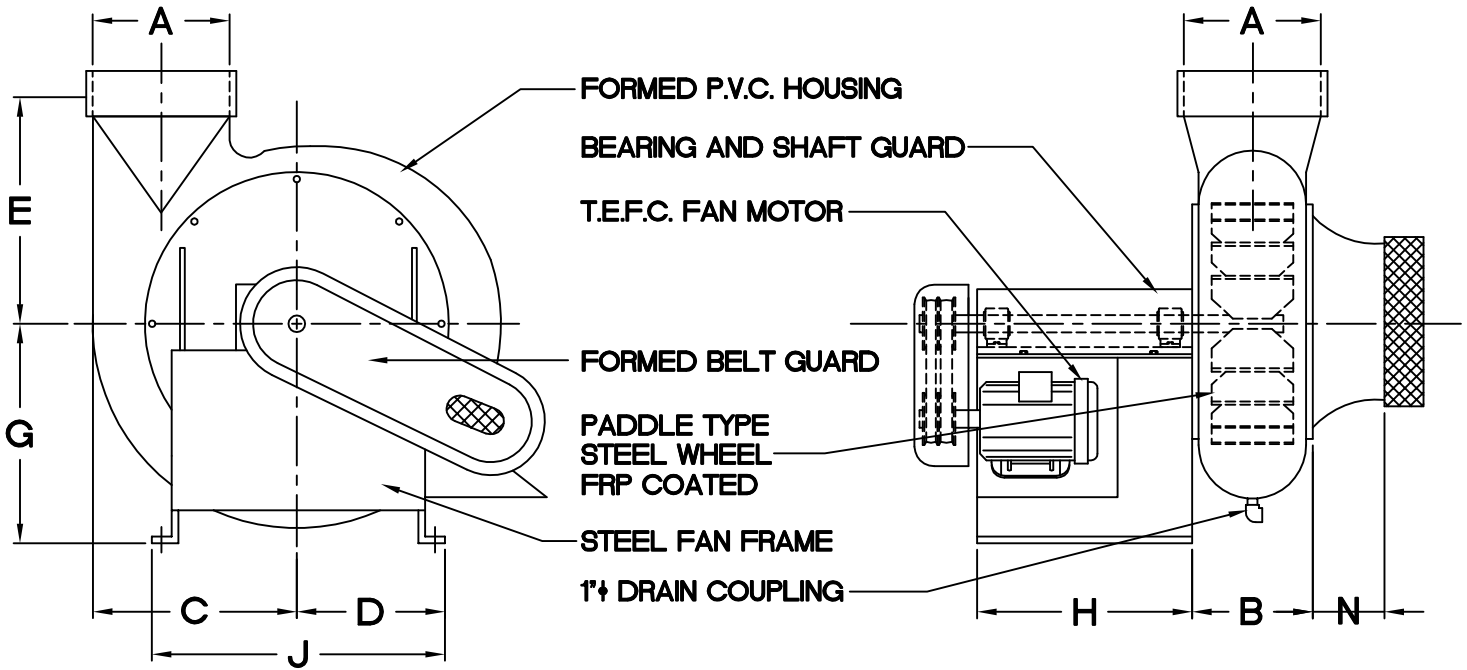


Forest City, N.C.



TOP VIEW

USER:	
PURCHASER:	
DATE:	JOB NUMBER:
<input type="checkbox"/> PROVIDING PUSH AIR	<input type="checkbox"/> PROVIDING EXHAUST
C.F.M.:	VENTING:
STATIC PRESSURE:	MAT. TYPE:
CLASS:	ARRANGMENT:
ROTATION:	DISCHARGE:
BHP:	FAN RPM:
MOTOR H.P.:	MOTOR RPM:
VOLTAGE:	
DRIVR SHV:	DRIVN SHV:
DRIVR BUSHNG:	DRIVN BUSHNG:
BELTS:	BEARINGS:
NOTE:	



END VIEW

SIDE VIEW

SCHEDULE

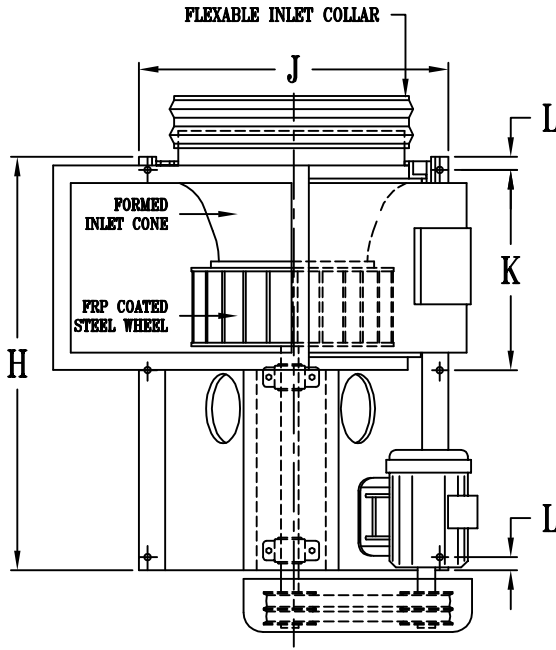
ALL DIMENSIONS IN INCHES

FAN NO.	A _{LD}	B _{OD}	C	D	E	G	H	I	J	K	L	M _{LD}	N	WEIGHT (LESS MOTOR)
CI- 6	6.625	5.00	9.750	8.938	10.500	11.0	14.5	11.0	15.0	14.500	1.00	6.625	4.00	13 0
CI- 8	8.625	7.00	13.125	10.938	14.250	14.0	16.0	14.5	17.0	16.250	1.25	8.625	5.00	17 0
CI- 10	10.750	8.25	16.000	13.625	17.250	17.0	17.0	18.0	20.5	18.750	2.00	10.750	6.00	21 0

CENTRIFUGAL NH FAN NO.



FOR ARRANGEMENT # 9-A

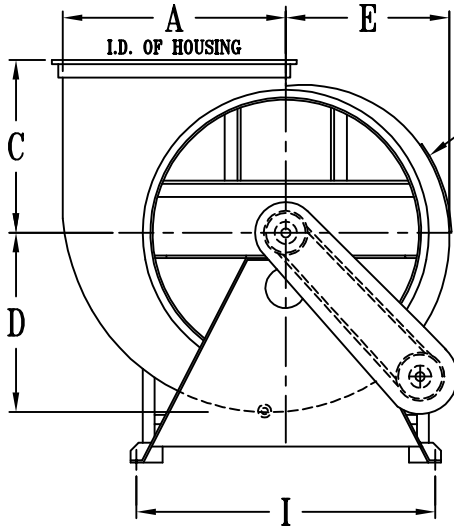


TOP VIEW

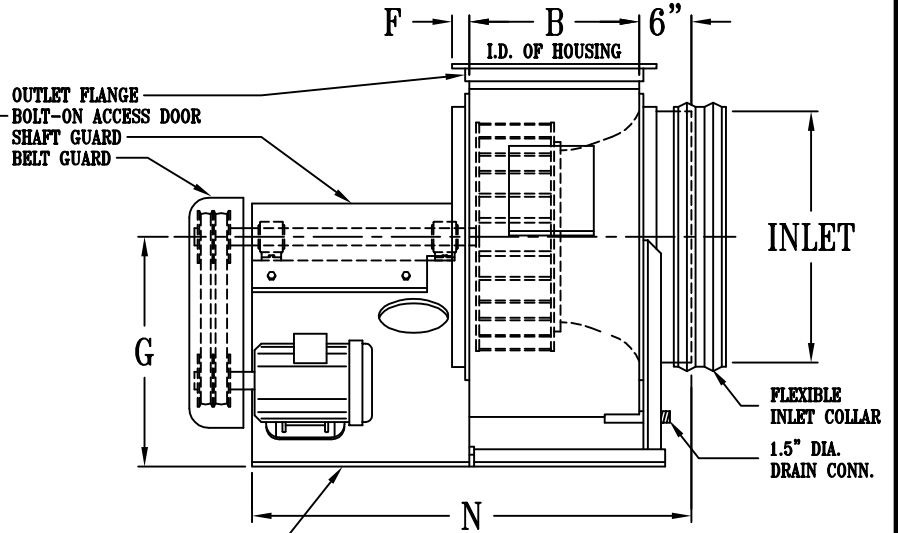
USER: _____
 PURCHASER: _____
 DATE: _____ JOB NUMBER: _____
 C.F.M.: _____ VENTING: _____
 STATIC PRESSURE: _____ MAT. TYPE: _____
 CLASS: _____ ARRANGEMENT: _____
 ROTATION: _____ DISCHARGE: _____
 B.H.P.: _____ FAN R.P.M.: _____
 MOTOR H.P.: _____ MOTOR R.P.M.: _____
 MOTOR VOLTAGE: _____
 DRIVER SHEAVE: _____ DRIVEN SHEAVE: _____
 DRIVER BUSHING: _____ DRIVEN BUSHING: _____
 BELT(S): _____ BEARINGS: _____
 NOTE: _____

NOTES:

1. USE ARRANGEMENT NO. 9-A ON 30 HP AND BELOW (THIS DRAWING).
2. USE ARRANGEMENT NO. 9-B ON 40 HP TO 100 HP MOTORS (SEE DRAWING NHCERT9B).
3. USE ARRANGEMENT NO. 1 ON MOTORS ABOVE 100 HP (SEE DRAWING NHCERT9B).
4. BOTTOM HORIZONTAL OR DOWNBLAST DISCHARGE REQUIRES STEEL MODIFICATIONS.



END VIEW



SIDE VIEW

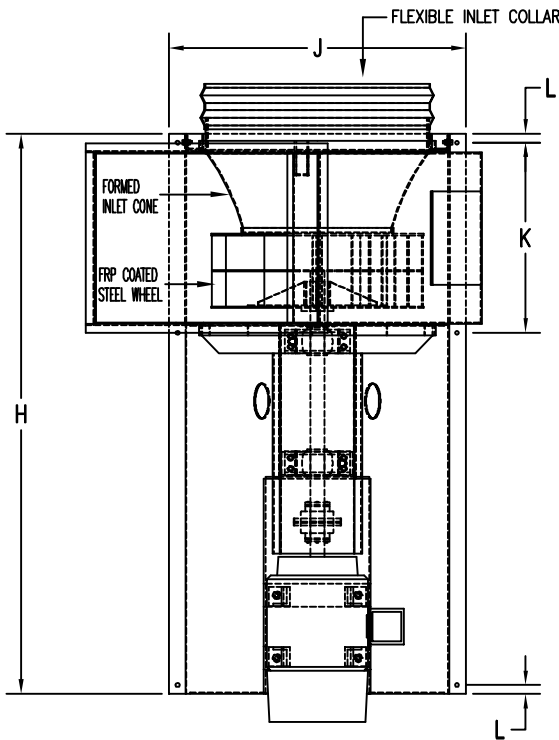
EPOXY COATED STEEL FRAME

FAN NO.	A	B	C	D	E	F	G	H	I	J	K	L	N	INLET	BOLT HOLES	SHAFT DIA.	KEYWAY IN SHAFT
12.25	12.750	9.750	10.375	11.297	9.750	1.500	14.500	26.063	19.250	21.250	12.188	1.000	30.063	13.250	.500	1.188	.250 X .125
13.5	14.000	10.750	11.063	12.359	10.625	1.500	16.000	27.063	20.250	22.250	13.313	1.000	31.063	14.625	.500	1.188	.250 X .125
15	15.625	11.750	11.875	13.703	11.688	1.500	17.500	35.000	22.000	24.000	14.313	1.000	39.000	16.250	.500	1.438	.375 X .188
16.5	17.125	13.125	12.500	14.969	12.625	1.500	19.500	38.875	23.375	25.375	15.688	1.000	42.875	17.875	.500	1.438	.375 X .188
18.25	19.000	14.500	13.687	16.609	14.031	1.500	20.500	39.750	25.000	27.000	17.063	1.000	43.750	19.750	.500	1.438	.375 X .188
20	20.875	15.875	14.813	18.188	15.375	1.500	23.500	43.125	27.500	30.000	18.938	1.250	46.625	21.625	.500	1.688	.375 X .188
22.25	23.250	17.625	16.188	20.234	17.094	1.500	25.000	45.000	31.000	33.500	20.813	1.250	48.500	24.125	.500	1.688	.375 X .188
24.5	25.500	19.500	17.563	22.281	18.813	1.500	27.000	47.500	33.125	35.625	22.563	1.250	51.000	26.500	.625	1.938	.500 X .250
27	28.125	21.500	19.500	24.594	20.750	1.500	30.000	49.500	36.250	38.750	24.563	1.250	53.000	29.250	.625	1.938	.500 X .250
30	31.250	23.750	21.000	27.594	23.031	1.500	33.000	51.875	40.000	42.500	26.938	1.250	55.375	32.500	.625	2.438	.625 X .313
33	34.375	26.250	22.813	30.000	25.313	1.500	36.000	55.500	44.000	47.000	29.938	1.500	58.500	35.625	.625	2.438	.625 X .313
36.5	38.000	29.000	25.063	33.156	28.000	1.500	40.000	59.250	48.000	51.000	32.688	1.500	62.250	38.500	.625	2.438	.625 X .313
40.25	42.000	32.000	27.938	36.594	30.875	2.000	43.750	63.000	53.000	56.000	35.750	1.500	66.000	42.500	.875	2.938	.750 X .375
44.5	46.500	35.375	30.688	40.484	34.156	2.000	44.750	66.875	58.000	61.000	39.125	1.500	69.875	47.000	.875	2.938	.750 X .375
49	51.125	39.000	34.000	44.563	37.625	2.000	48.000	77.500	64.000	67.000	41.750	1.500	80.500	51.625	.875	3.438	.875 X .438
54.25	56.500	43.125	37.188	49.313	41.625	2.000	52.000	81.500	69.000	72.000	46.875	1.500	84.500	57.250	.875	3.438	.875 X .438
60	62.500	47.750	41.188	54.594	46.063	2.000	57.750	86.000	75.000	78.000	51.500	1.500	89.000	63.250	1.000	3.938	1.000 X .500

CENTRIFUGAL NH FAN NO.

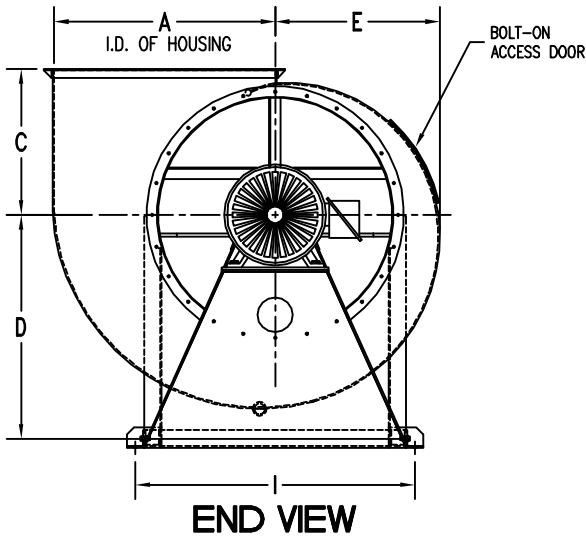


FOR DIRECT DRIVE ARR. 4

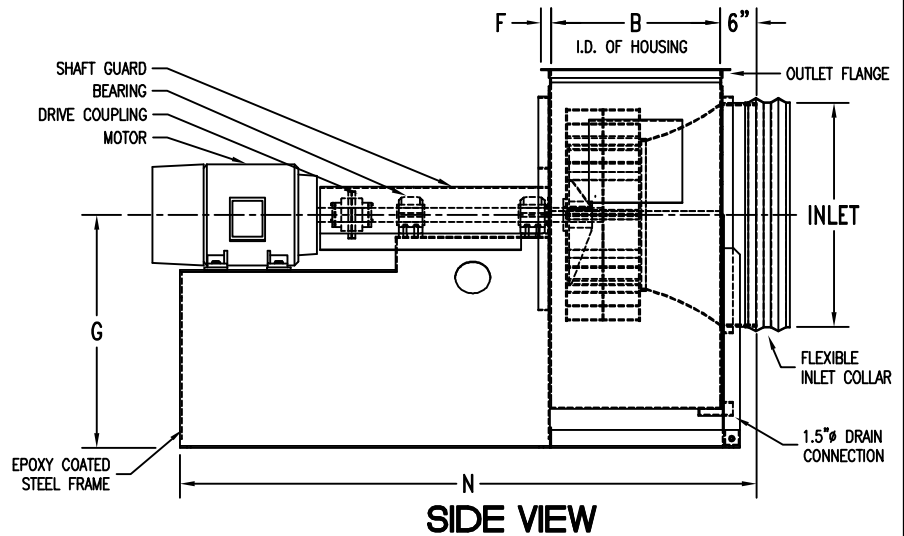


TOP VIEW

USER:	
PURCHASER:	
DATE:	JOB NUMBER:
C.F.M.:	VENTING:
STATIC PRESSURE:	MAT. TYPE:
CLASS:	ARRANGMENT: 4 DIRECT DRIVE
ROTATION:	DISCHARGE:
BHP:	FAN RPM:
MOTOR H.P.:	MOTOR RPM:
VOLTAGE:	SHAFT DIAMETER:
COUPLING:	BEARINGS:
NOTES:	



END VIEW



SIDE VIEW

NH SERIES DIRECT DRIVE EXHAUST FANS 1-25 HORSEPOWER

FAN NO.	A	B	C	D	E	F	G	H = BASED ON MOTOR HORSEPOWER			I	J	K	L	N = BASED ON MOTOR HORSEPOWER			INLET	BOLT HOLES	SHAFT DIA.	KEYWAY IN SHAFT
								1-3	5-15	20-25					1-3	5-15	20-25				
12.25	12.750	9.750	10.375	11.297	9.750	1.500	14.500	42.188	49.188	N/A	19.250	21.250	12.188	1.000	46.188	53.188	N/A	13.250	.500	1.188	0.250 x 0.125
13.5	14.000	10.750	11.063	12.359	10.625	1.500	16.000	43.313	50.313	N/A	20.250	22.250	13.313	1.000	47.313	54.313	N/A	14.625	.500	1.188	0.250 x 0.125
15	15.625	11.750	11.875	13.703	11.688	1.500	17.500	50.313	57.313	60.313	22.000	24.000	14.313	1.000	54.313	61.313	64.313	16.250	.500	1.438	0.375 x 0.188
16.5	17.125	13.125	12.500	14.969	12.625	1.500	19.500	53.688	60.688	63.688	23.375	25.375	15.688	1.000	57.688	64.688	67.688	17.875	.500	1.438	0.375 x 0.188
18.25	19.000	14.500	13.687	16.609	14.031	1.500	20.500	55.063	62.063	65.063	25.000	27.000	17.063	1.000	59.063	66.063	69.063	19.750	.500	1.438	0.375 x 0.188
20	20.875	15.875	14.813	18.188	15.375	1.500	23.500	56.938	63.938	66.938	27.500	30.000	18.938	1.250	59.938	66.938	69.938	21.625	.500	1.688	0.375 x 0.188
22.25	23.250	17.625	16.188	20.234	17.094	1.500	25.000	60.750	67.750	70.750	31.000	33.500	20.813	1.250	64.250	71.250	74.250	24.125	.500	1.688	0.375 x 0.188
24.5	25.500	19.500	17.563	22.281	18.813	1.500	27.000	62.563	69.563	73.563	33.125	35.625	22.563	1.250	66.063	73.063	77.063	26.500	.625	1.938	0.500 x 0.250
27	28.125	21.500	19.500	24.594	20.750	1.500	30.000	64.563	71.563	74.563	36.250	38.750	24.563	1.250	68.063	75.063	78.063	29.250	.625	1.938	0.500 x 0.250
30	31.250	23.750	21.000	27.594	23.031	1.500	33.000	66.938	73.938	76.938	40.000	42.500	26.938	1.250	70.438	77.438	80.438	32.500	.625	2.438	0.625 x 0.313
33	34.375	26.250	22.813	30.000	25.313	1.500	36.000	69.938	76.938	79.938	44.000	47.000	29.938	1.500	72.938	79.938	82.938	35.625	.625	2.438	0.625 x 0.313
36.5	38.000	29.000	25.063	33.156	28.000	1.500	40.000	74.688	81.688	84.688	48.000	51.000	32.688	1.500	77.688	84.688	87.688	38.500	.625	2.438	0.625 x 0.313
40.25	42.000	32.000	27.938	36.594	30.875	2.000	43.750	77.750	84.750	87.750	53.000	56.000	35.750	1.500	80.750	87.750	90.750	42.500	.875	2.938	0.750 x 0.375
44.5	46.500	35.375	30.688	40.484	34.156	2.000	44.750	81.125	88.125	91.125	58.000	61.000	39.125	1.500	84.125	91.125	94.125	47.000	.875	2.938	0.750 x 0.375
49	51.125	39.000	34.000	44.563	37.625	2.000	48.000	90.750	97.750	100.750	64.000	67.000	41.750	1.500	93.750	100.750	103.750	51.625	.875	3.438	0.875 x 0.438
54.25	56.500	43.125	37.188	49.313	41.625	2.000	52.000	94.875	101.875	104.875	69.000	72.000	46.875	1.500	97.875	104.875	107.875	57.250	.875	3.438	0.875 x 0.438
60	62.500	47.750	41.188	54.594	46.063	2.000	57.750	99.500	106.500	109.500	75.000	78.000	51.500	1.500	102.500	109.500	112.500	63.250	1.000	3.938	1.000 x 0.500