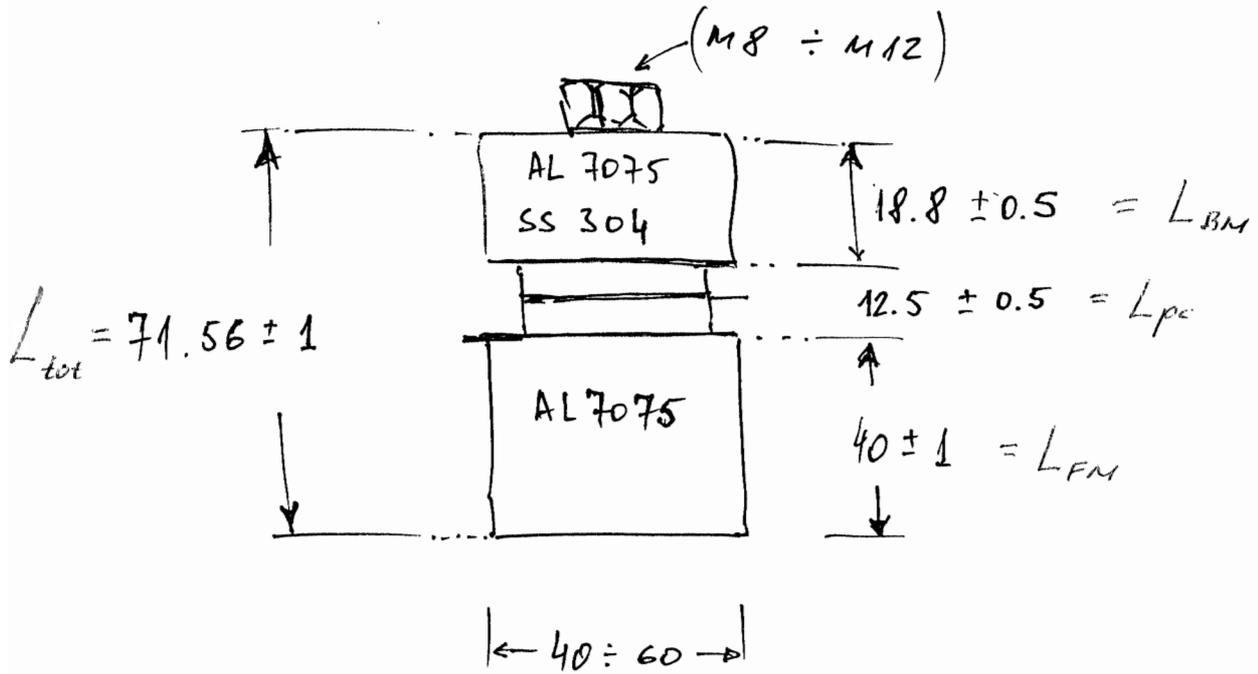


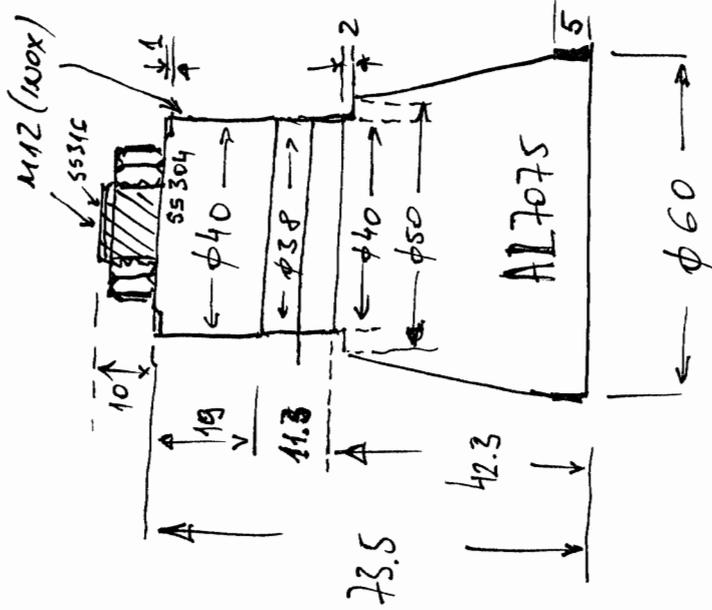
BLT Dimensions Extrapolated Tables

25 kHz transducers

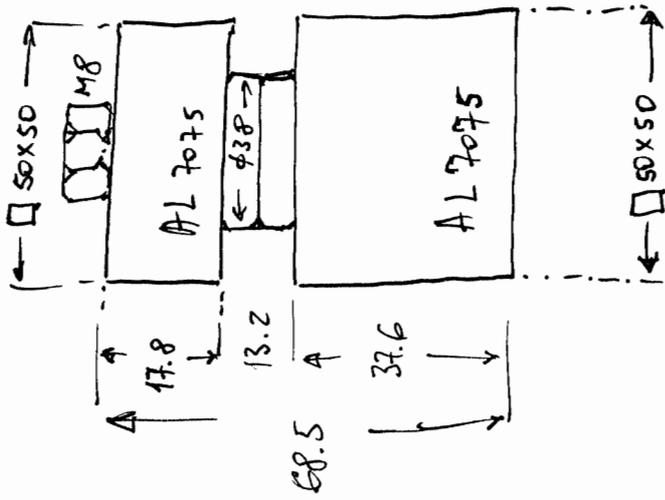


MP-INTERCONSULTING
Miodrag Prokic M.S. El. Eng.
Expert in ULTRASONICS
Consulting, Research, Applications
Marais 36, CH-2400 Le Locle, Switzerland
Tel./Fax: +41-32-931 40 45

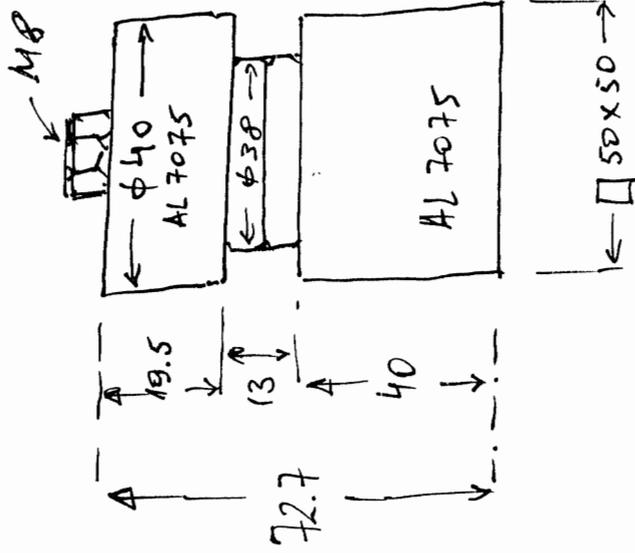
25 kHz transducers.



DATRON 25 kHz

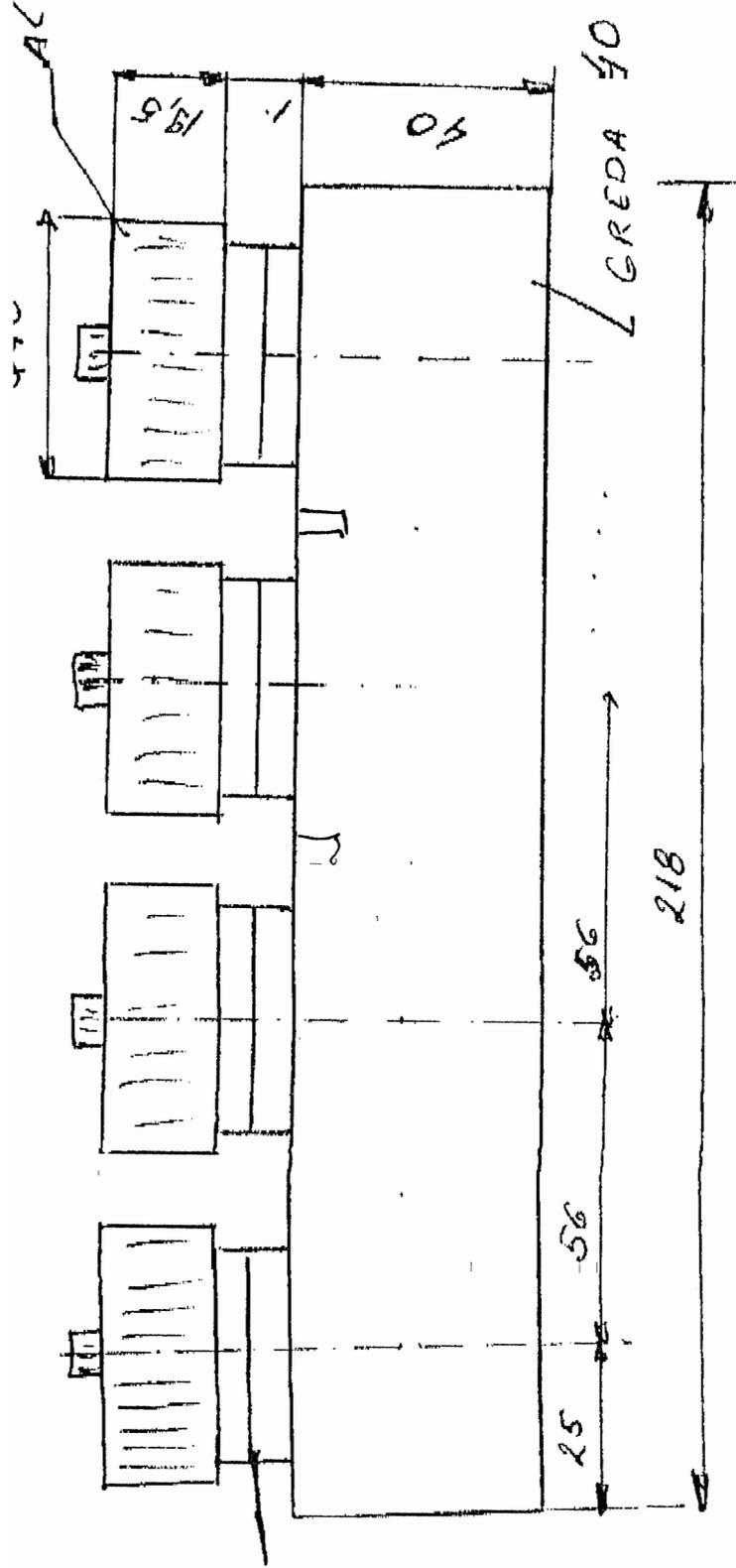


HAMO MODIFIED

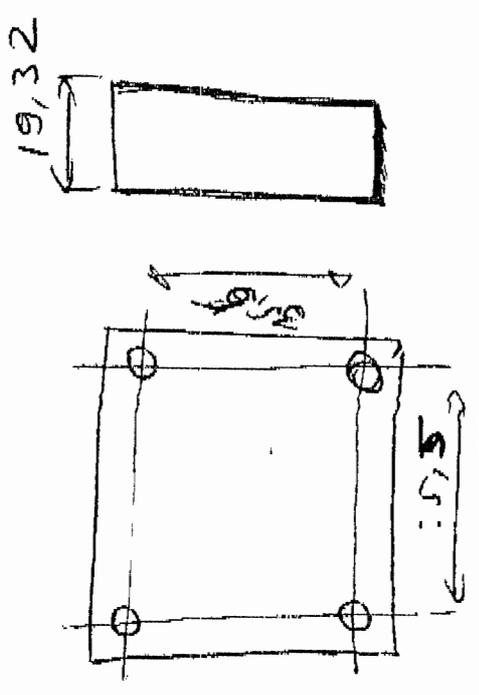


PETROVIC IVAN
(ITALIAN MODEL)

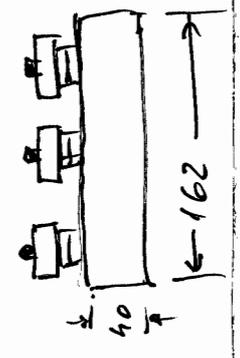
MP-INTERCONSULTING
 Miodrag Prokic M.S.Eng.
 Expert in ULTRASONICS
 Consulting, Research, Applications
 Marais 36, CH-2400 Le Locle, Switzerland
 Tel./Fax: +41-32-931 40 45



ORIGINAL ITALIJANSKI Vibrator je SA istim Emisionom A
 REFlektor je 50x50x19,32. Piezo KERAMIKA je bez rupe
 i ŠRAFI SE SA 4 ŠRAFA



JA RADIM i Vibratore SA 3 REFlektor
 tujuća DELA Dužina EMISIONOG DELA je
 162 mm.

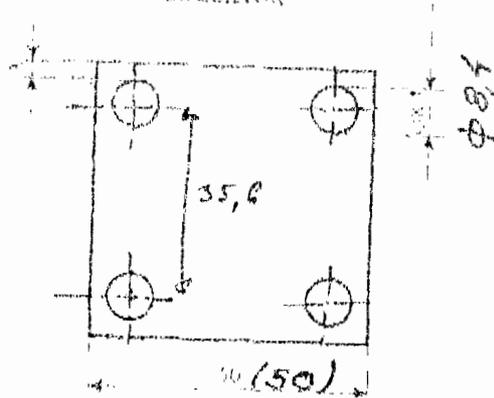


MP-INTERCONSULTING
 Miodrag Prokic M.Sc.Eng.
 Expert in ULTRASONICS
 Consulting, Research, Applications
 Marais 36, CH-2400 Le Locle, Switzerland
 Tel./Fax: +41-32-931 40 45

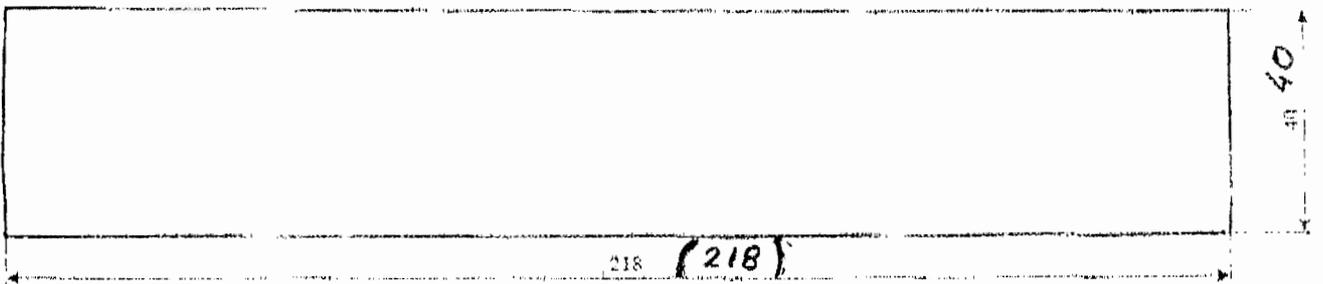
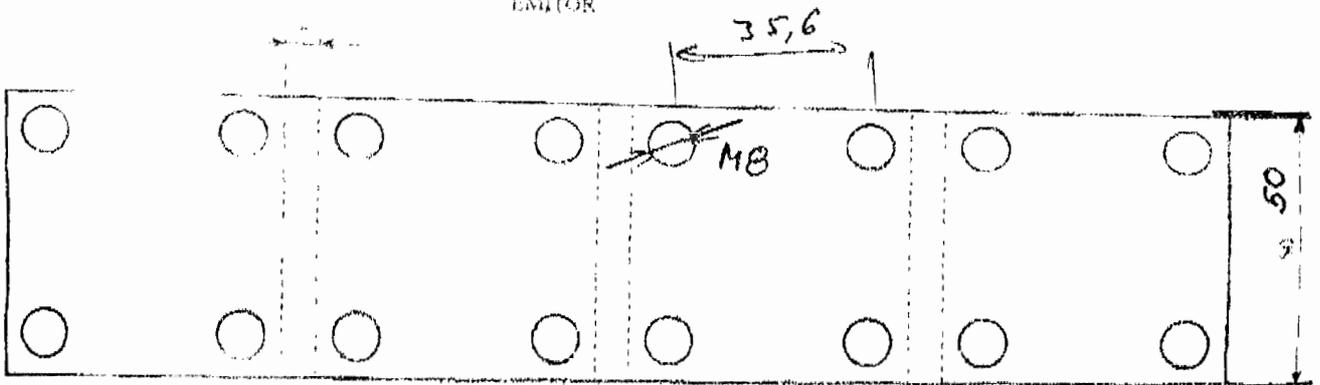
ITALIJANSKI PRETVARAČ (VELIKI SA 4 REFLEKTORA I JEDNIM EMITOROM)

№ 10090

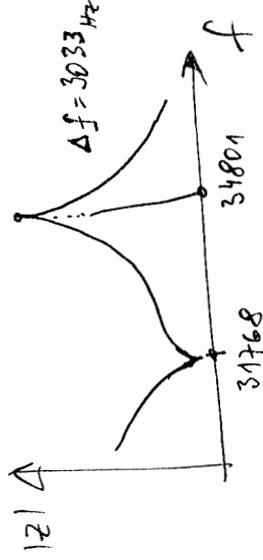
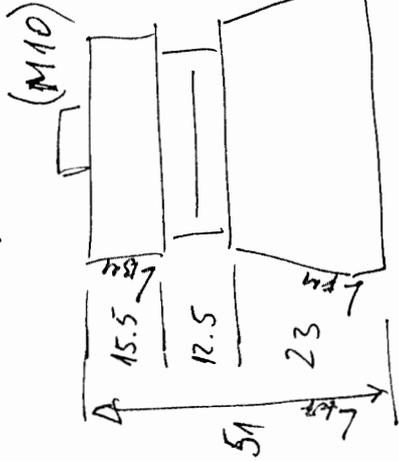
REFLEKTOR



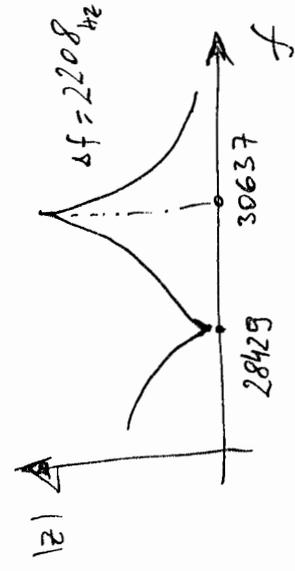
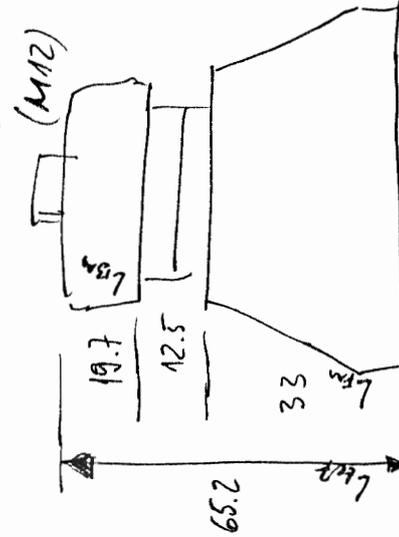
EMITOR



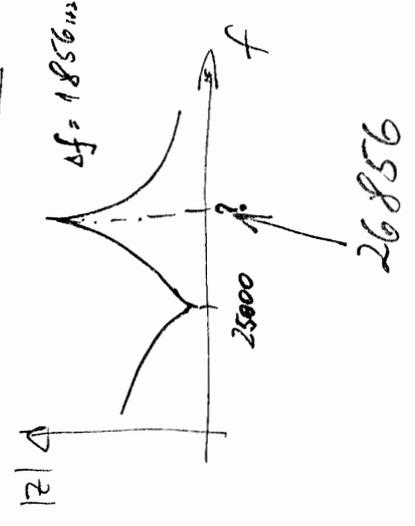
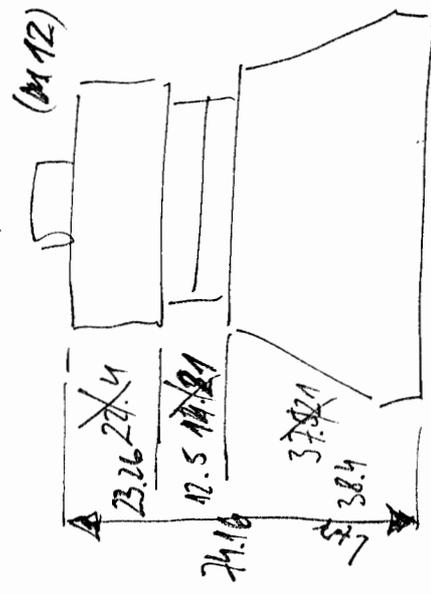
CBT 30



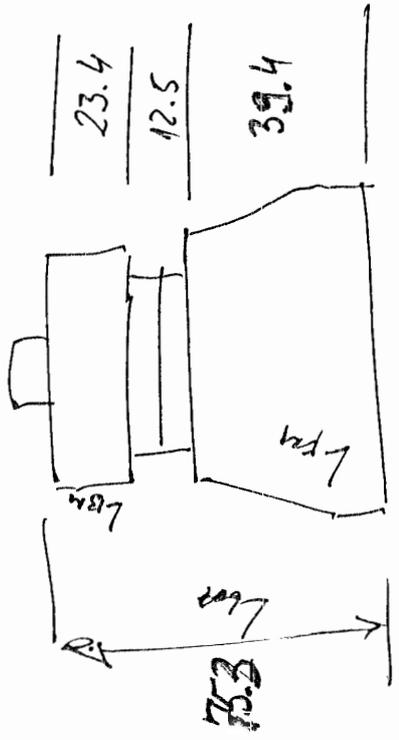
CBT 28

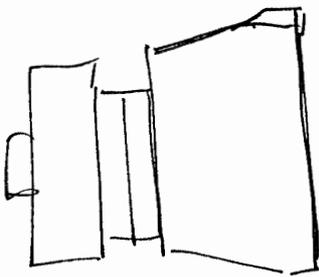


CBT 25



CBT 25





L of front mass

Rank 30 Eqn 1 $y=a+bx$

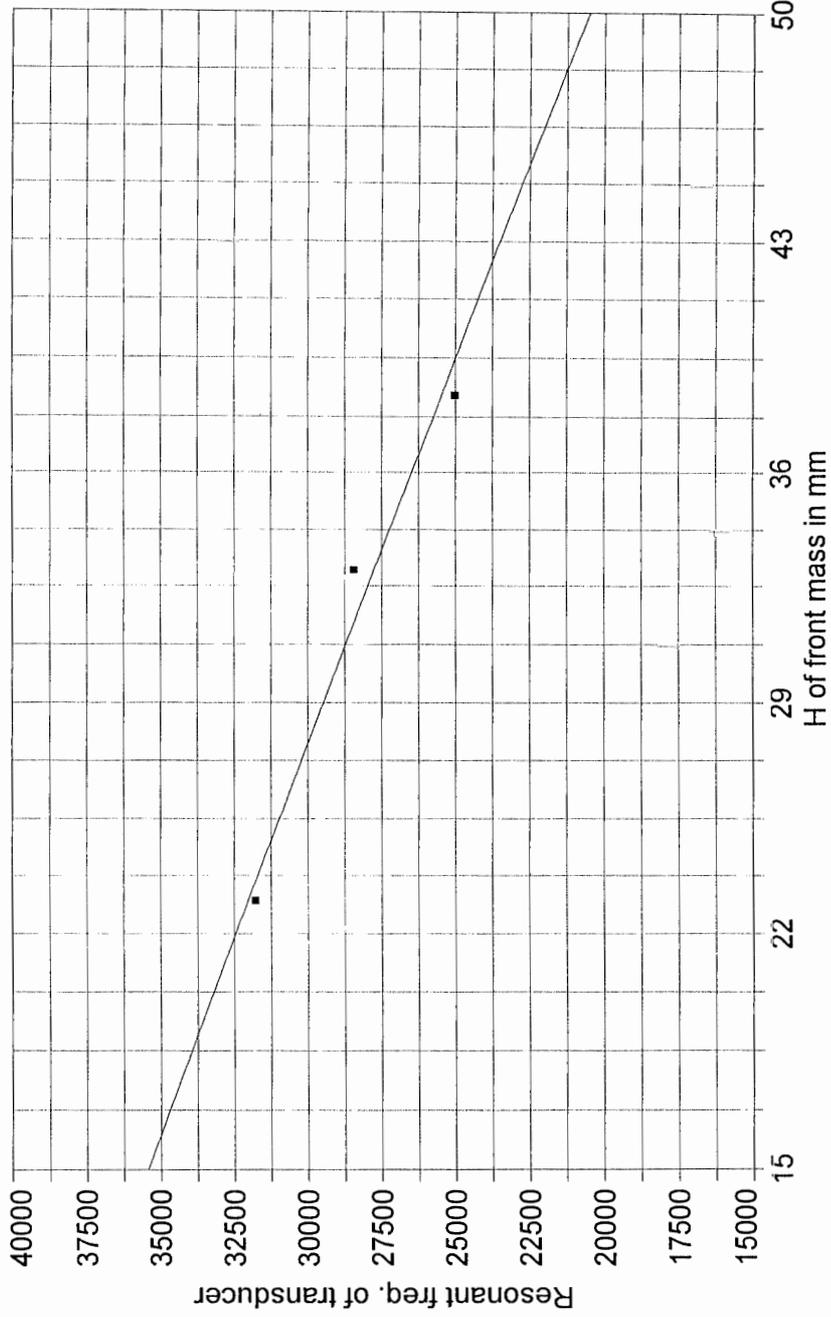
$r^2=0.96849118$ DF Adj $r^2=0.93698237$ FitStdErr=849.52116 Fstat=30.737148

$a=41810.799$

$b=-426.22243$

CBT

L FM



Rank 30 Eqn 1 $y=a+bx$

L_{FM} $free$

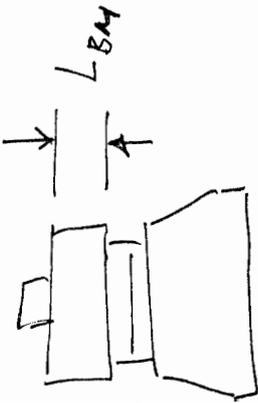
Mar 25, 1997 Page 1

1.	15.0000000000	35417.46265560	Y=F(X)
2.	15.2000000000	35332.21816991	Y=F(X)
3.	15.4000000000	35246.97368421	Y=F(X)
4.	15.6000000000	35161.72919851	Y=F(X)
5.	15.8000000000	35076.48471282	Y=F(X)
6.	16.0000000000	34991.24022712	Y=F(X)
7.	16.2000000000	34905.99574143	Y=F(X)
8.	16.4000000000	34820.75125573	Y=F(X)
9.	16.6000000000	34735.50677004	Y=F(X)
10.	16.8000000000	34650.26228434	Y=F(X)
11.	17.0000000000	34565.01779865	Y=F(X)
12.	17.2000000000	34479.77331295	Y=F(X)
13.	17.4000000000	34394.52882725	Y=F(X)
14.	17.6000000000	34309.28434156	Y=F(X)
15.	17.8000000000	34224.03985586	Y=F(X)
16.	18.0000000000	34138.79537017	Y=F(X)
17.	18.2000000000	34053.55088447	Y=F(X)
18.	18.4000000000	33968.30639878	Y=F(X)
19.	18.6000000000	33883.06191308	Y=F(X)
20.	18.8000000000	33797.81742739	Y=F(X)
21.	19.0000000000	33712.57294169	Y=F(X)
22.	19.2000000000	33627.32845599	Y=F(X)
23.	19.4000000000	33542.08397030	Y=F(X)
24.	19.6000000000	33456.83948460	Y=F(X)
25.	19.8000000000	33371.59499891	Y=F(X)
26.	20.0000000000	33286.35051321	Y=F(X)
27.	20.2000000000	33201.10602752	Y=F(X)
28.	20.4000000000	33115.86154182	Y=F(X)
29.	20.6000000000	33030.61705613	Y=F(X)
30.	20.8000000000	32945.37257043	Y=F(X)
31.	21.0000000000	32860.12808473	Y=F(X)
32.	21.2000000000	32774.88359904	Y=F(X)
33.	21.4000000000	32689.63911334	Y=F(X)
34.	21.6000000000	32604.39462765	Y=F(X)
35.	21.8000000000	32519.15014195	Y=F(X)
36.	22.0000000000	32433.90565626	Y=F(X)
37.	22.2000000000	32348.66117056	Y=F(X)
38.	22.4000000000	32263.41668487	Y=F(X)
39.	22.6000000000	32178.17219917	Y=F(X)
40.	22.8000000000	32092.92771347	Y=F(X)
41.	23.0000000000	32007.68322778	Y=F(X)
42.	23.2000000000	31922.43874208	Y=F(X)
43.	23.4000000000	31837.19425639	Y=F(X)
44.	23.6000000000	31751.94977069	Y=F(X)
45.	23.8000000000	31666.70528500	Y=F(X)
46.	24.0000000000	31581.46079930	Y=F(X)
47.	24.2000000000	31496.21631361	Y=F(X)
48.	24.4000000000	31410.97182791	Y=F(X)
49.	24.6000000000	31325.72734221	Y=F(X)
50.	24.8000000000	31240.48285652	Y=F(X)
51.	25.0000000000	31155.23837082	Y=F(X)
52.	25.2000000000	31069.99388513	Y=F(X)
53.	25.4000000000	30984.74939943	Y=F(X)
54.	25.6000000000	30899.50491374	Y=F(X)

55.	25.8000000000	30814.26042804	Y=F(X)
56.	26.0000000000	30729.01594235	Y=F(X)
57.	26.2000000000	30643.77145665	Y=F(X)
58.	26.4000000000	30558.52697095	Y=F(X)
59.	26.6000000000	30473.28248526	Y=F(X)
60.	26.8000000000	30388.03799956	Y=F(X)
61.	27.0000000000	30302.79351387	Y=F(X)
62.	27.2000000000	30217.54902817	Y=F(X)
63.	27.4000000000	30132.30454248	Y=F(X)
64.	27.6000000000	30047.06005678	Y=F(X)
65.	27.8000000000	29961.81557109	Y=F(X)
66.	28.0000000000	29876.57108539	Y=F(X)
67.	28.2000000000	29791.32659969	Y=F(X)
68.	28.4000000000	29706.08211400	Y=F(X)
69.	28.6000000000	29620.83762830	Y=F(X)
70.	28.8000000000	29535.59314261	Y=F(X)
71.	29.0000000000	29450.34865691	Y=F(X)
72.	29.2000000000	29365.10417122	Y=F(X)
73.	29.4000000000	29279.85968552	Y=F(X)
74.	29.6000000000	29194.61519983	Y=F(X)
75.	29.8000000000	29109.37071413	Y=F(X)
76.	30.0000000000	29024.12622843	Y=F(X)
77.	30.2000000000	28938.88174274	Y=F(X)
78.	30.4000000000	28853.63725704	Y=F(X)
79.	30.6000000000	28768.39277135	Y=F(X)
80.	30.8000000000	28683.14828565	Y=F(X)
81.	31.0000000000	28597.90379996	Y=F(X)
82.	31.2000000000	28512.65931426	Y=F(X)
83.	31.4000000000	28427.41482857	Y=F(X)
84.	31.6000000000	28342.17034287	Y=F(X)
85.	31.8000000000	28256.92585717	Y=F(X)
86.	32.0000000000	28171.68137148	Y=F(X)
87.	32.2000000000	28086.43688578	Y=F(X)
88.	32.4000000000	28001.19240009	Y=F(X)
89.	32.6000000000	27915.94791439	Y=F(X)
90.	32.8000000000	27830.70342870	Y=F(X)
91.	33.0000000000	27745.45894300	Y=F(X)
92.	33.2000000000	27660.21445731	Y=F(X)
93.	33.4000000000	27574.96997161	Y=F(X)
94.	33.6000000000	27489.72548591	Y=F(X)
95.	33.8000000000	27404.48100022	Y=F(X)
96.	34.0000000000	27319.23651452	Y=F(X)
97.	34.2000000000	27233.99202883	Y=F(X)
98.	34.4000000000	27148.74754313	Y=F(X)
99.	34.6000000000	27063.50305744	Y=F(X)
100.	34.8000000000	26978.25857174	Y=F(X)
101.	35.0000000000	26893.01408604	Y=F(X)
102.	35.2000000000	26807.76960035	Y=F(X)
103.	35.4000000000	26722.52511465	Y=F(X)
104.	35.6000000000	26637.28062896	Y=F(X)
105.	35.8000000000	26552.03614326	Y=F(X)
106.	36.0000000000	26466.79165757	Y=F(X)
107.	36.2000000000	26381.54717187	Y=F(X)
108.	36.4000000000	26296.30268618	Y=F(X)

109.	36.600000000000	26211.05820048	Y=F(X)
110.	36.800000000000	26125.81371478	Y=F(X)
111.	37.000000000000	26040.56922909	Y=F(X)
112.	37.200000000000	25955.32474339	Y=F(X)
113.	37.400000000000	25870.08025770	Y=F(X)
114.	37.600000000000	25784.83577200	Y=F(X)
115.	37.800000000000	25699.59128631	Y=F(X)
116.	38.000000000000	25614.34680061	Y=F(X)
117.	38.200000000000	25529.10231492	Y=F(X)
118.	38.400000000000	25443.85782922	Y=F(X)
119.	38.600000000000	25358.61334352	Y=F(X)
120.	38.800000000000	25273.36885783	Y=F(X)
121.	39.000000000000	25188.12437213	Y=F(X)
122.	39.200000000000	25102.87988644	Y=F(X)
123.	39.400000000000	25017.63540074	Y=F(X)
124.	39.600000000000	24932.39091505	Y=F(X)
125.	39.800000000000	24847.14642935	Y=F(X)
126.	40.000000000000	24761.90194366	Y=F(X)
127.	40.200000000000	24676.65745796	Y=F(X)
128.	40.400000000000	24591.41297226	Y=F(X)
129.	40.600000000000	24506.16848657	Y=F(X)
130.	40.800000000000	24420.92400087	Y=F(X)
131.	41.000000000000	24335.67951518	Y=F(X)
132.	41.200000000000	24250.43502948	Y=F(X)
133.	41.400000000000	24165.19054379	Y=F(X)
134.	41.600000000000	24079.94605809	Y=F(X)
135.	41.800000000000	23994.70157240	Y=F(X)
136.	42.000000000000	23909.45708670	Y=F(X)
137.	42.200000000000	23824.21260100	Y=F(X)
138.	42.400000000000	23738.96811531	Y=F(X)
139.	42.600000000000	23653.72362961	Y=F(X)
140.	42.800000000000	23568.47914392	Y=F(X)
141.	43.000000000000	23483.23465822	Y=F(X)
142.	43.200000000000	23397.99017253	Y=F(X)
143.	43.400000000000	23312.74568683	Y=F(X)
144.	43.600000000000	23227.50120114	Y=F(X)
145.	43.800000000000	23142.25671544	Y=F(X)
146.	44.000000000000	23057.01222974	Y=F(X)
147.	44.200000000000	22971.76774405	Y=F(X)
148.	44.400000000000	22886.52325835	Y=F(X)
149.	44.600000000000	22801.27877266	Y=F(X)
150.	44.800000000000	22716.03428696	Y=F(X)
151.	45.000000000000	22630.78980127	Y=F(X)
152.	45.200000000000	22545.54531557	Y=F(X)
153.	45.400000000000	22460.30082988	Y=F(X)
154.	45.600000000000	22375.05634418	Y=F(X)
155.	45.800000000000	22289.81185848	Y=F(X)
156.	46.000000000000	22204.56737279	Y=F(X)
157.	46.200000000000	22119.32288709	Y=F(X)
158.	46.400000000000	22034.07840140	Y=F(X)
159.	46.600000000000	21948.83391570	Y=F(X)
160.	46.800000000000	21863.58943001	Y=F(X)
161.	47.000000000000	21778.34494431	Y=F(X)
162.	47.200000000000	21693.10045862	Y=F(X)

163.	47.40000000000	21607.85597292	Y=F(X)
164.	47.60000000000	21522.61148722	Y=F(X)
165.	47.80000000000	21437.36700153	Y=F(X)
166.	48.00000000000	21352.12251583	Y=F(X)
167.	48.20000000000	21266.87803014	Y=F(X)
168.	48.40000000000	21181.63354444	Y=F(X)
169.	48.60000000000	21096.38905875	Y=F(X)
170.	48.80000000000	21011.14457305	Y=F(X)
171.	49.00000000000	20925.90008736	Y=F(X)
172.	49.20000000000	20840.65560166	Y=F(X)
173.	49.40000000000	20755.41111596	Y=F(X)
174.	49.60000000000	20670.16663027	Y=F(X)
175.	49.80000000000	20584.92214457	Y=F(X)
176.	50.00000000000	20499.67765888	Y=F(X)
177.	50.20000000000	20414.43317318	Y=F(X)
178.	50.40000000000	20329.18868749	Y=F(X)
179.	50.60000000000	20243.94420179	Y=F(X)
180.	50.80000000000	20158.69971610	Y=F(X)
181.	51.00000000000	20073.45523040	Y=F(X)
182.	51.20000000000	19988.21074470	Y=F(X)
183.	51.40000000000	19902.96625901	Y=F(X)
184.	51.60000000000	19817.72177331	Y=F(X)
185.	51.80000000000	19732.47728762	Y=F(X)
186.	52.00000000000	19647.23280192	Y=F(X)
187.	52.20000000000	19561.98831623	Y=F(X)
188.	52.40000000000	19476.74383053	Y=F(X)
189.	52.60000000000	19391.49934484	Y=F(X)
190.	52.80000000000	19306.25485914	Y=F(X)
191.	53.00000000000	19221.01037344	Y=F(X)
192.	53.20000000000	19135.76588775	Y=F(X)
193.	53.40000000000	19050.52140205	Y=F(X)
194.	53.60000000000	18965.27691636	Y=F(X)
195.	53.80000000000	18880.03243066	Y=F(X)
196.	54.00000000000	18794.78794497	Y=F(X)
197.	54.20000000000	18709.54345927	Y=F(X)
198.	54.40000000000	18624.29897358	Y=F(X)
199.	54.60000000000	18539.05448788	Y=F(X)
200.	54.80000000000	18453.81000218	Y=F(X)
201.	55.00000000000	18368.56551649	Y=F(X)



CBT
→

→
L BM

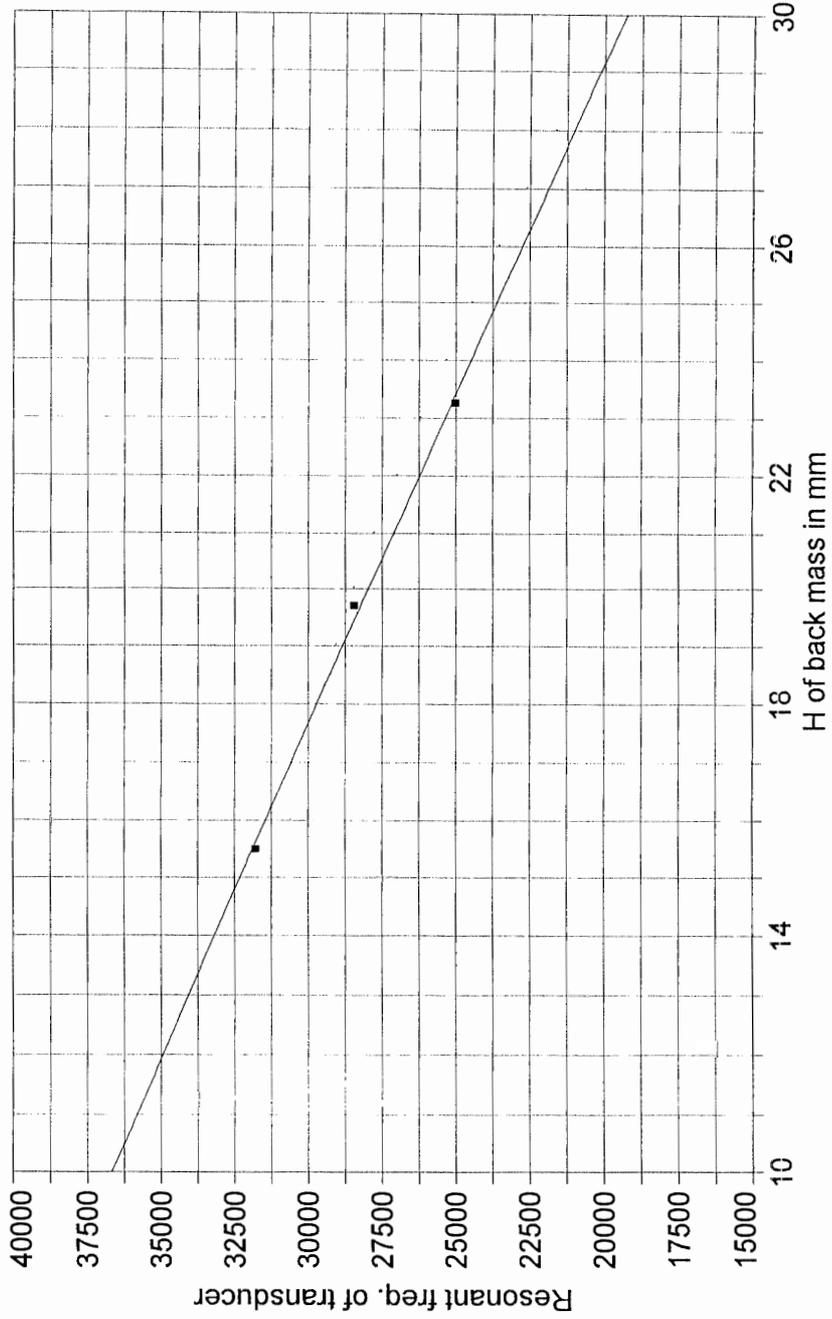
L of back mass

Rank 27 Eqn 1 $y=a+bx$

$r^2=0.99694966$ DF Adj $r^2=0.99389933$ FitStdErr=264.32117 Fstat=326.83281

$a=45349.941$

$b=-869.87381$



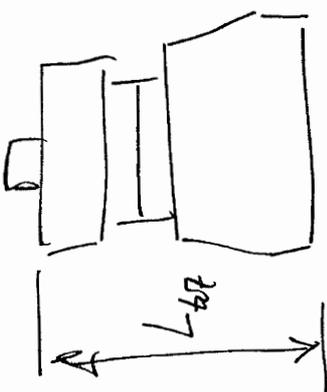
LBR

free
↓

1.	10.0000000000	36651.20289138	Y=F(X)
2.	10.2000000000	36477.22812909	Y=F(X)
3.	10.4000000000	36303.25336680	Y=F(X)
4.	10.6000000000	36129.27860450	Y=F(X)
5.	10.8000000000	35955.30384221	Y=F(X)
6.	11.0000000000	35781.32907992	Y=F(X)
7.	11.2000000000	35607.35431763	Y=F(X)
8.	11.4000000000	35433.37955534	Y=F(X)
9.	11.6000000000	35259.40479304	Y=F(X)
10.	11.8000000000	35085.43003075	Y=F(X)
11.	12.0000000000	34911.45526846	Y=F(X)
12.	12.2000000000	34737.48050617	Y=F(X)
13.	12.4000000000	34563.50574388	Y=F(X)
14.	12.6000000000	34389.53098158	Y=F(X)
15.	12.8000000000	34215.55621929	Y=F(X)
16.	13.0000000000	34041.58145700	Y=F(X)
17.	13.2000000000	33867.60669471	Y=F(X)
18.	13.4000000000	33693.63193242	Y=F(X)
19.	13.6000000000	33519.65717012	Y=F(X)
20.	13.8000000000	33345.68240783	Y=F(X)
21.	14.0000000000	33171.70764554	Y=F(X)
22.	14.2000000000	32997.73288325	Y=F(X)
23.	14.4000000000	32823.75812096	Y=F(X)
24.	14.6000000000	32649.78335867	Y=F(X)
25.	14.8000000000	32475.80859637	Y=F(X)
26.	15.0000000000	32301.83383408	Y=F(X)
27.	15.2000000000	32127.85907179	Y=F(X)
28.	15.4000000000	31953.88430950	Y=F(X)
29.	15.6000000000	31779.90954721	Y=F(X)
30.	15.8000000000	31605.93478491	Y=F(X)
31.	16.0000000000	31431.96002262	Y=F(X)
32.	16.2000000000	31257.98526033	Y=F(X)
33.	16.4000000000	31084.01049804	Y=F(X)
34.	16.6000000000	30910.03573575	Y=F(X)
35.	16.8000000000	30736.06097345	Y=F(X)
36.	17.0000000000	30562.08621116	Y=F(X)
37.	17.2000000000	30388.11144887	Y=F(X)
38.	17.4000000000	30214.13668658	Y=F(X)
→ 39.	17.6000000000	30040.16192429	Y=F(X)
40.	17.8000000000	29866.18716199	Y=F(X)
41.	18.0000000000	29692.21239970	Y=F(X)
42.	18.2000000000	29518.23763741	Y=F(X)
43.	18.4000000000	29344.26287512	Y=F(X)
44.	18.6000000000	29170.28811283	Y=F(X)
45.	18.8000000000	28996.31335054	Y=F(X)
46.	19.0000000000	28822.33858824	Y=F(X)
47.	19.2000000000	28648.36382595	Y=F(X)
48.	19.4000000000	28474.38906366	Y=F(X)
49.	19.6000000000	28300.41430137	Y=F(X)
50.	19.8000000000	28126.43953908	Y=F(X)
51.	20.0000000000	27952.46477678	Y=F(X)
52.	20.2000000000	27778.49001449	Y=F(X)
53.	20.4000000000	27604.51525220	Y=F(X)
54.	20.6000000000	27430.54048991	Y=F(X)

LOB *Free*

55.	20.8000000000	27256.56572762	Y=F(X)
56.	21.0000000000	27082.59096532	Y=F(X)
57.	21.2000000000	26908.61620303	Y=F(X)
58.	21.4000000000	26734.64144074	Y=F(X)
59.	21.6000000000	26560.66667845	Y=F(X)
60.	21.8000000000	26386.69191616	Y=F(X)
61.	22.0000000000	26212.71715387	Y=F(X)
62.	22.2000000000	26038.74239157	Y=F(X)
63.	22.4000000000	25864.76762928	Y=F(X)
64.	22.6000000000	25690.79286699	Y=F(X)
65.	22.8000000000	25516.81810470	Y=F(X)
66.	23.0000000000	25342.84334241	Y=F(X)
67.	23.2000000000	25168.86858011	Y=F(X)
68.	23.4000000000	24994.89381782	Y=F(X)
69.	23.6000000000	24820.91905553	Y=F(X)
70.	23.8000000000	24646.94429324	Y=F(X)
71.	24.0000000000	24472.96953095	Y=F(X)
72.	24.2000000000	24298.99476865	Y=F(X)
73.	24.4000000000	24125.02000636	Y=F(X)
74.	24.6000000000	23951.04524407	Y=F(X)
75.	24.8000000000	23777.07048178	Y=F(X)
76.	25.0000000000	23603.09571949	Y=F(X)
77.	25.2000000000	23429.12095719	Y=F(X)
78.	25.4000000000	23255.14619490	Y=F(X)
79.	25.6000000000	23081.17143261	Y=F(X)
80.	25.8000000000	22907.19667032	Y=F(X)
81.	26.0000000000	22733.22190803	Y=F(X)
82.	26.2000000000	22559.24714574	Y=F(X)
83.	26.4000000000	22385.27238344	Y=F(X)
84.	26.6000000000	22211.29762115	Y=F(X)
85.	26.8000000000	22037.32285886	Y=F(X)
86.	27.0000000000	21863.34809657	Y=F(X)
87.	27.2000000000	21689.37333428	Y=F(X)
88.	27.4000000000	21515.39857198	Y=F(X)
89.	27.6000000000	21341.42380969	Y=F(X)
90.	27.8000000000	21167.44904740	Y=F(X)
91.	28.0000000000	20993.47428511	Y=F(X)
92.	28.2000000000	20819.49952282	Y=F(X)
93.	28.4000000000	20645.52476052	Y=F(X)
94.	28.6000000000	20471.54999823	Y=F(X)
95.	28.8000000000	20297.57523594	Y=F(X)
96.	29.0000000000	20123.60047365	Y=F(X)
97.	29.2000000000	19949.62571136	Y=F(X)
98.	29.4000000000	19775.65094907	Y=F(X)
99.	29.6000000000	19601.67618677	Y=F(X)
100.	29.8000000000	19427.70142448	Y=F(X)
101.	30.0000000000	19253.72666219	Y=F(X)



Ltot of transducer

Rank 28 Eqn 1 $y=a+bx$

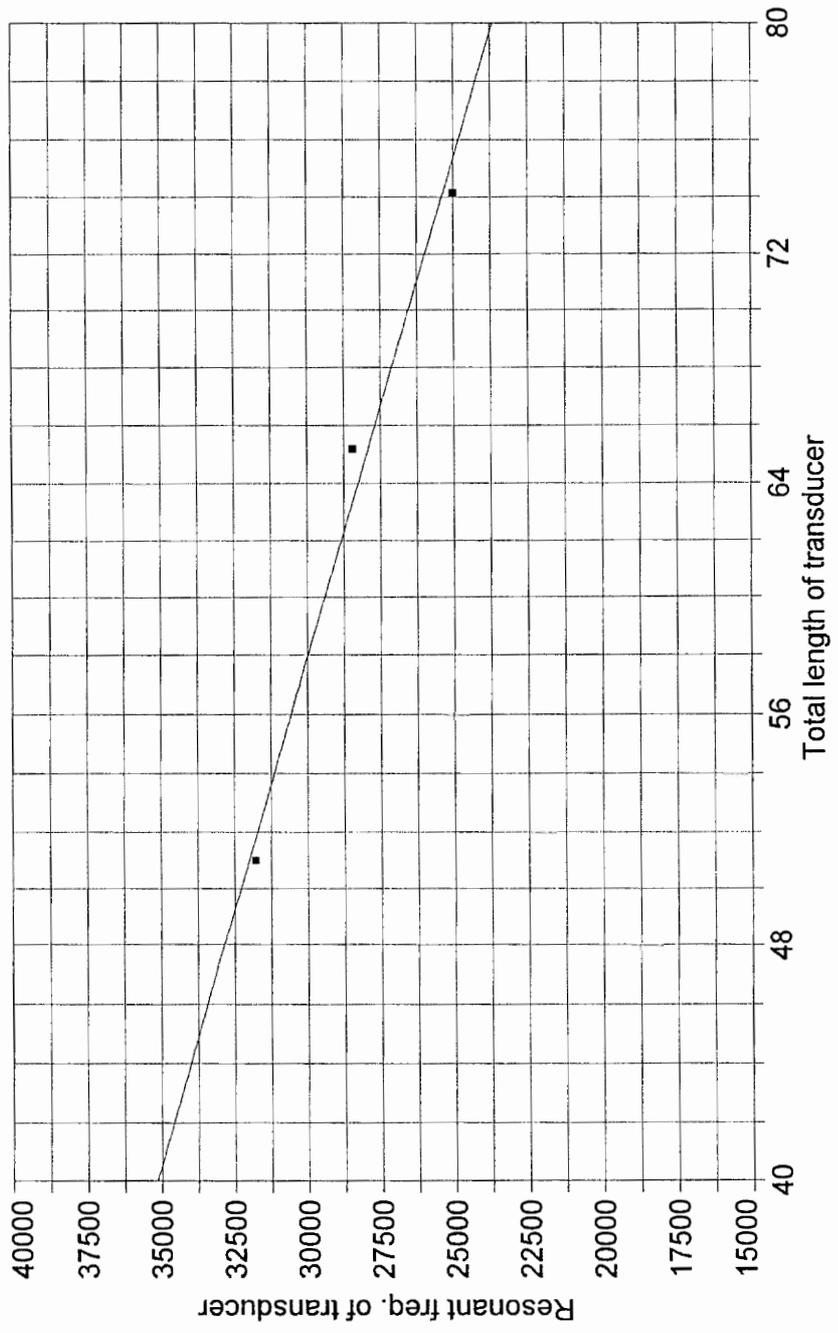
$r^2=0.98119395$ DF Adj $r^2=0.9623879$ FitStdErr=656.30688 Fstat=52.174375

$a=46612.46$

$b=-287.03709$

CBT →

Ltot →



Rank 28 Eqn 1 $y=a+bx$

L602

feet.

Mar 25, 1997 Page 1

1.	40.0000000000	35130.97662492	Y=F(X)
2.	40.2000000000	35073.56920628	Y=F(X)
3.	40.4000000000	35016.16178765	Y=F(X)
4.	40.6000000000	34958.75436902	Y=F(X)
5.	40.8000000000	34901.34695039	Y=F(X)
6.	41.0000000000	34843.93953176	Y=F(X)
7.	41.2000000000	34786.53211312	Y=F(X)
8.	41.4000000000	34729.12469449	Y=F(X)
9.	41.6000000000	34671.71727586	Y=F(X)
10.	41.8000000000	34614.30985723	Y=F(X)
11.	42.0000000000	34556.90243860	Y=F(X)
12.	42.2000000000	34499.49501996	Y=F(X)
13.	42.4000000000	34442.08760133	Y=F(X)
14.	42.6000000000	34384.68018270	Y=F(X)
15.	42.8000000000	34327.27276407	Y=F(X)
16.	43.0000000000	34269.86534544	Y=F(X)
17.	43.2000000000	34212.45792680	Y=F(X)
18.	43.4000000000	34155.05050817	Y=F(X)
19.	43.6000000000	34097.64308954	Y=F(X)
20.	43.8000000000	34040.23567091	Y=F(X)
21.	44.0000000000	33982.82825227	Y=F(X)
22.	44.2000000000	33925.42083364	Y=F(X)
23.	44.4000000000	33868.01341501	Y=F(X)
24.	44.6000000000	33810.60599638	Y=F(X)
25.	44.8000000000	33753.19857775	Y=F(X)
26.	45.0000000000	33695.79115911	Y=F(X)
27.	45.2000000000	33638.38374048	Y=F(X)
28.	45.4000000000	33580.97632185	Y=F(X)
29.	45.6000000000	33523.56890322	Y=F(X)
30.	45.8000000000	33466.16148459	Y=F(X)
31.	46.0000000000	33408.75406595	Y=F(X)
32.	46.2000000000	33351.34664732	Y=F(X)
33.	46.4000000000	33293.93922869	Y=F(X)
34.	46.6000000000	33236.53181006	Y=F(X)
35.	46.8000000000	33179.12439143	Y=F(X)
36.	47.0000000000	33121.71697279	Y=F(X)
37.	47.2000000000	33064.30955416	Y=F(X)
38.	47.4000000000	33006.90213553	Y=F(X)
39.	47.6000000000	32949.49471690	Y=F(X)
40.	47.8000000000	32892.08729827	Y=F(X)
41.	48.0000000000	32834.67987963	Y=F(X)
42.	48.2000000000	32777.27246100	Y=F(X)
43.	48.4000000000	32719.86504237	Y=F(X)
44.	48.6000000000	32662.45762374	Y=F(X)
45.	48.8000000000	32605.05020511	Y=F(X)
46.	49.0000000000	32547.64278647	Y=F(X)
47.	49.2000000000	32490.23536784	Y=F(X)
48.	49.4000000000	32432.82794921	Y=F(X)
49.	49.6000000000	32375.42053058	Y=F(X)
50.	49.8000000000	32318.01311195	Y=F(X)
51.	50.0000000000	32260.60569331	Y=F(X)
52.	50.2000000000	32203.19827468	Y=F(X)
53.	50.4000000000	32145.79085605	Y=F(X)
54.	50.6000000000	32088.38343742	Y=F(X)

55.	50.8000000000	32030.97601879	Y=F(X)
56.	51.0000000000	31973.56860015	Y=F(X)
57.	51.2000000000	31916.16118152	Y=F(X)
58.	51.4000000000	31858.75376289	Y=F(X)
59.	51.6000000000	31801.34634426	Y=F(X)
60.	51.8000000000	31743.93892563	Y=F(X)
61.	52.0000000000	31686.53150699	Y=F(X)
62.	52.2000000000	31629.12408836	Y=F(X)
63.	52.4000000000	31571.71666973	Y=F(X)
64.	52.6000000000	31514.30925110	Y=F(X)
65.	52.8000000000	31456.90183247	Y=F(X)
66.	53.0000000000	31399.49441383	Y=F(X)
67.	53.2000000000	31342.08699520	Y=F(X)
68.	53.4000000000	31284.67957657	Y=F(X)
69.	53.6000000000	31227.27215794	Y=F(X)
70.	53.8000000000	31169.86473931	Y=F(X)
71.	54.0000000000	31112.45732067	Y=F(X)
72.	54.2000000000	31055.04990204	Y=F(X)
73.	54.4000000000	30997.64248341	Y=F(X)
74.	54.6000000000	30940.23506478	Y=F(X)
75.	54.8000000000	30882.82764615	Y=F(X)
76.	55.0000000000	30825.42022751	Y=F(X)
77.	55.2000000000	30768.01280888	Y=F(X)
78.	55.4000000000	30710.60539025	Y=F(X)
79.	55.6000000000	30653.19797162	Y=F(X)
80.	55.8000000000	30595.79055299	Y=F(X)
81.	56.0000000000	30538.38313435	Y=F(X)
82.	56.2000000000	30480.97571572	Y=F(X)
83.	56.4000000000	30423.56829709	Y=F(X)
84.	56.6000000000	30366.16087846	Y=F(X)
85.	56.8000000000	30308.75345983	Y=F(X)
86.	57.0000000000	30251.34604119	Y=F(X)
87.	57.2000000000	30193.93862256	Y=F(X)
88.	57.4000000000	30136.53120393	Y=F(X)
89.	57.6000000000	30079.12378530	Y=F(X)
90.	57.8000000000	30021.71636667	Y=F(X)
91.	58.0000000000	29964.30894803	Y=F(X)
92.	58.2000000000	29906.90152940	Y=F(X)
93.	58.4000000000	29849.49411077	Y=F(X)
94.	58.6000000000	29792.08669214	Y=F(X)
95.	58.8000000000	29734.67927351	Y=F(X)
96.	59.0000000000	29677.27185487	Y=F(X)
97.	59.2000000000	29619.86443624	Y=F(X)
98.	59.4000000000	29562.45701761	Y=F(X)
99.	59.6000000000	29505.04959898	Y=F(X)
100.	59.8000000000	29447.64218034	Y=F(X)
101.	60.0000000000	29390.23476171	Y=F(X)
102.	60.2000000000	29332.82734308	Y=F(X)
103.	60.4000000000	29275.41992445	Y=F(X)
104.	60.6000000000	29218.01250582	Y=F(X)
105.	60.8000000000	29160.60508718	Y=F(X)
106.	61.0000000000	29103.19766855	Y=F(X)
107.	61.2000000000	29045.79024992	Y=F(X)
108.	61.4000000000	28988.38283129	Y=F(X)

109.	61.6000000000	28930.97541266	Y=F(X)
110.	61.8000000000	28873.56799402	Y=F(X)
111.	62.0000000000	28816.16057539	Y=F(X)
112.	62.2000000000	28758.75315676	Y=F(X)
113.	62.4000000000	28701.34573813	Y=F(X)
114.	62.6000000000	28643.93831950	Y=F(X)
115.	62.8000000000	28586.53090086	Y=F(X)
116.	63.0000000000	28529.12348223	Y=F(X)
117.	63.2000000000	28471.71606360	Y=F(X)
118.	63.4000000000	28414.30864497	Y=F(X)
119.	63.6000000000	28356.90122634	Y=F(X)
120.	63.8000000000	28299.49380770	Y=F(X)
121.	64.0000000000	28242.08638907	Y=F(X)
122.	64.2000000000	28184.67897044	Y=F(X)
123.	64.4000000000	28127.27155181	Y=F(X)
124.	64.6000000000	28069.86413318	Y=F(X)
125.	64.8000000000	28012.45671454	Y=F(X)
126.	65.0000000000	27955.04929591	Y=F(X)
127.	65.2000000000	27897.64187728	Y=F(X)
128.	65.4000000000	27840.23445865	Y=F(X)
129.	65.6000000000	27782.82704002	Y=F(X)
130.	65.8000000000	27725.41962138	Y=F(X)
131.	66.0000000000	27668.01220275	Y=F(X)
132.	66.2000000000	27610.60478412	Y=F(X)
133.	66.4000000000	27553.19736549	Y=F(X)
134.	66.6000000000	27495.78994686	Y=F(X)
135.	66.8000000000	27438.38252822	Y=F(X)
136.	67.0000000000	27380.97510959	Y=F(X)
137.	67.2000000000	27323.56769096	Y=F(X)
138.	67.4000000000	27266.16027233	Y=F(X)
139.	67.6000000000	27208.75285370	Y=F(X)
140.	67.8000000000	27151.34543506	Y=F(X)
141.	68.0000000000	27093.93801643	Y=F(X)
142.	68.2000000000	27036.53059780	Y=F(X)
143.	68.4000000000	26979.12317917	Y=F(X)
144.	68.6000000000	26921.71576054	Y=F(X)
145.	68.8000000000	26864.30834190	Y=F(X)
146.	69.0000000000	26806.90092327	Y=F(X)
147.	69.2000000000	26749.49350464	Y=F(X)
148.	69.4000000000	26692.08608601	Y=F(X)
149.	69.6000000000	26634.67866738	Y=F(X)
150.	69.8000000000	26577.27124874	Y=F(X)
151.	70.0000000000	26519.86383011	Y=F(X)
152.	70.2000000000	26462.45641148	Y=F(X)
153.	70.4000000000	26405.04899285	Y=F(X)
154.	70.6000000000	26347.64157422	Y=F(X)
155.	70.8000000000	26290.23415558	Y=F(X)
156.	71.0000000000	26232.82673695	Y=F(X)
157.	71.2000000000	26175.41931832	Y=F(X)
158.	71.4000000000	26118.01189969	Y=F(X)
159.	71.6000000000	26060.60448106	Y=F(X)
160.	71.8000000000	26003.19706242	Y=F(X)
161.	72.0000000000	25945.78964379	Y=F(X)
162.	72.2000000000	25888.38222516	Y=F(X)

163.	72.40000000000	25830.97480653	Y=F(X)
164.	72.60000000000	25773.56738790	Y=F(X)
165.	72.80000000000	25716.15996926	Y=F(X)
166.	73.00000000000	25658.75255063	Y=F(X)
167.	73.20000000000	25601.34513200	Y=F(X)
168.	73.40000000000	25543.93771337	Y=F(X)
169.	73.60000000000	25486.53029474	Y=F(X)
170.	73.80000000000	25429.12287610	Y=F(X)
171.	74.00000000000	25371.71545747	Y=F(X)
172.	74.20000000000	25314.30803884	Y=F(X)
173.	74.40000000000	25256.90062021	Y=F(X)
174.	74.60000000000	25199.49320158	Y=F(X)
175.	74.80000000000	25142.08578294	Y=F(X)
176.	75.00000000000	25084.67836431	Y=F(X)
177.	75.20000000000	25027.27094568	Y=F(X)
178.	75.40000000000	24969.86352705	Y=F(X)
179.	75.60000000000	24912.45610842	Y=F(X)
180.	75.80000000000	24855.04868978	Y=F(X)
181.	76.00000000000	24797.64127115	Y=F(X)
182.	76.20000000000	24740.23385252	Y=F(X)
183.	76.40000000000	24682.82643389	Y=F(X)
184.	76.60000000000	24625.41901525	Y=F(X)
185.	76.80000000000	24568.01159662	Y=F(X)
186.	77.00000000000	24510.60417799	Y=F(X)
187.	77.20000000000	24453.19675936	Y=F(X)
188.	77.40000000000	24395.78934073	Y=F(X)
189.	77.60000000000	24338.38192209	Y=F(X)
190.	77.80000000000	24280.97450346	Y=F(X)
191.	78.00000000000	24223.56708483	Y=F(X)
192.	78.20000000000	24166.15966620	Y=F(X)
193.	78.40000000000	24108.75224757	Y=F(X)
194.	78.60000000000	24051.34482893	Y=F(X)
195.	78.80000000000	23993.93741030	Y=F(X)
196.	79.00000000000	23936.52999167	Y=F(X)
197.	79.20000000000	23879.12257304	Y=F(X)
198.	79.40000000000	23821.71515441	Y=F(X)
199.	79.60000000000	23764.30773577	Y=F(X)
200.	79.80000000000	23706.90031714	Y=F(X)
201.	80.00000000000	23649.49289851	Y=F(X)
202.	80.20000000000	23592.08547988	Y=F(X)
203.	80.40000000000	23534.67806125	Y=F(X)
204.	80.60000000000	23477.27064261	Y=F(X)
205.	80.80000000000	23419.86322398	Y=F(X)
206.	81.00000000000	23362.45580535	Y=F(X)
207.	81.20000000000	23305.04838672	Y=F(X)
208.	81.40000000000	23247.64096809	Y=F(X)
209.	81.60000000000	23190.23354945	Y=F(X)
210.	81.80000000000	23132.82613082	Y=F(X)
211.	82.00000000000	23075.41871219	Y=F(X)
212.	82.20000000000	23018.01129356	Y=F(X)
213.	82.40000000000	22960.60387493	Y=F(X)
214.	82.60000000000	22903.19645629	Y=F(X)
215.	82.80000000000	22845.78903766	Y=F(X)
216.	83.00000000000	22788.38161903	Y=F(X)

217.	83.200000000000	22730.97420040	Y=F(X)
218.	83.400000000000	22673.56678177	Y=F(X)
219.	83.600000000000	22616.15936313	Y=F(X)
220.	83.800000000000	22558.75194450	Y=F(X)
221.	84.000000000000	22501.34452587	Y=F(X)
222.	84.200000000000	22443.93710724	Y=F(X)
223.	84.400000000000	22386.52968861	Y=F(X)
224.	84.600000000000	22329.12226997	Y=F(X)
225.	84.800000000000	22271.71485134	Y=F(X)
226.	85.000000000000	22214.30743271	Y=F(X)
227.	85.200000000000	22156.90001408	Y=F(X)
228.	85.400000000000	22099.49259545	Y=F(X)
229.	85.600000000000	22042.08517681	Y=F(X)
230.	85.800000000000	21984.67775818	Y=F(X)
231.	86.000000000000	21927.27033955	Y=F(X)
232.	86.200000000000	21869.86292092	Y=F(X)
233.	86.400000000000	21812.45550229	Y=F(X)
234.	86.600000000000	21755.04808365	Y=F(X)
235.	86.800000000000	21697.64066502	Y=F(X)
236.	87.000000000000	21640.23324639	Y=F(X)
237.	87.200000000000	21582.82582776	Y=F(X)
238.	87.400000000000	21525.41840913	Y=F(X)
239.	87.600000000000	21468.01099049	Y=F(X)
240.	87.800000000000	21410.60357186	Y=F(X)
241.	88.000000000000	21353.19615323	Y=F(X)
242.	88.200000000000	21295.78873460	Y=F(X)
243.	88.400000000000	21238.38131597	Y=F(X)
244.	88.600000000000	21180.97389733	Y=F(X)
245.	88.800000000000	21123.56647870	Y=F(X)
246.	89.000000000000	21066.15906007	Y=F(X)
247.	89.200000000000	21008.75164144	Y=F(X)
248.	89.400000000000	20951.34422281	Y=F(X)
249.	89.600000000000	20893.93680417	Y=F(X)
250.	89.800000000000	20836.52938554	Y=F(X)
251.	90.000000000000	20779.12196691	Y=F(X)

CBT

L_{tot} →

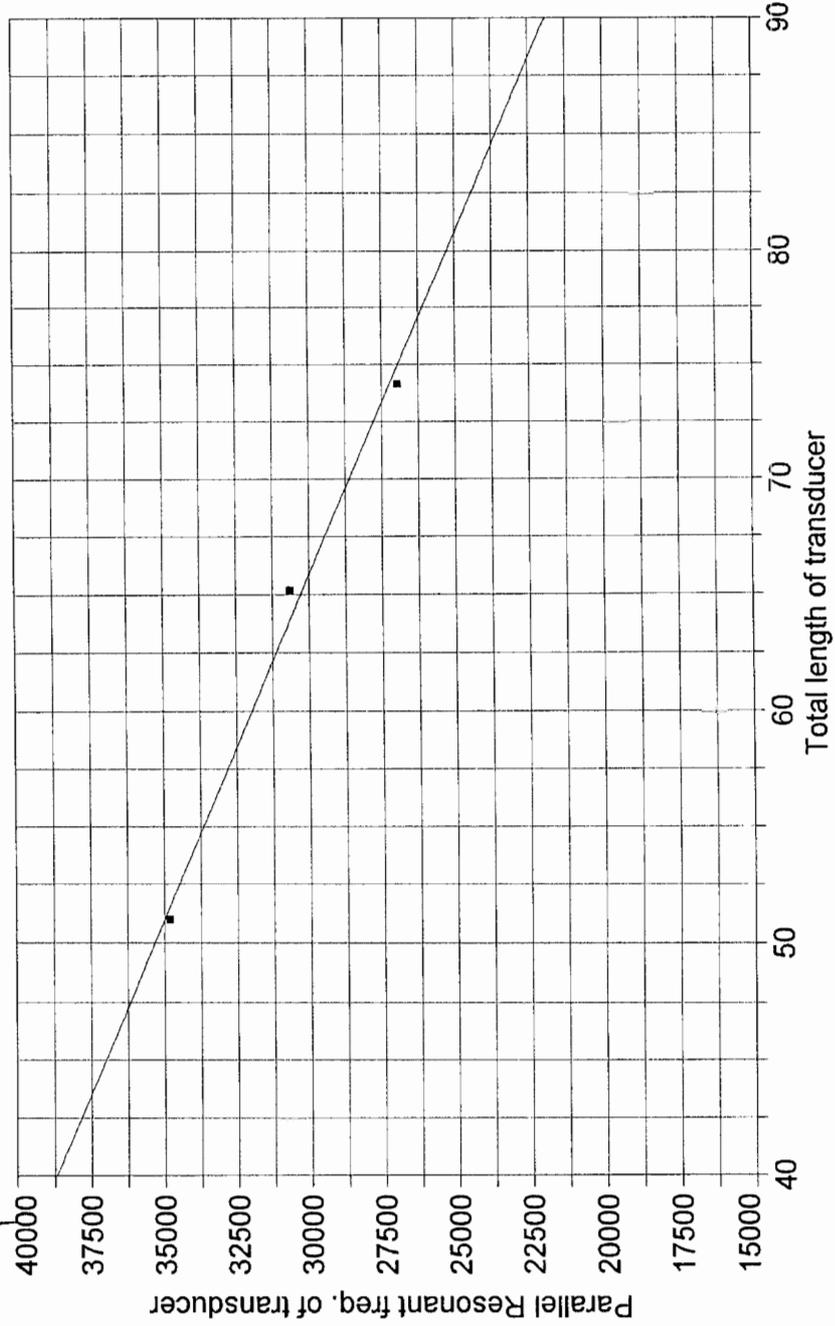
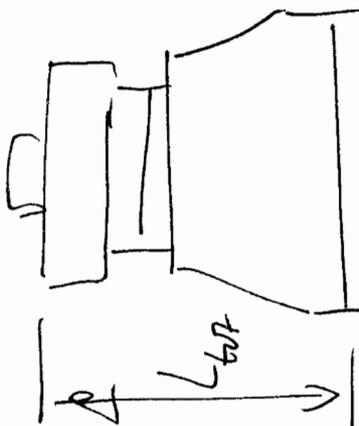
Ltot of transducer

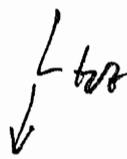
Rank 28 Eqn 1 $y=a+bx$

$r^2=0.99091211$ DF Adj $r^2=0.98182421$ FitStdErr=530.10129 Fstat=109.03651

$a=52060.005$

$b=-335.15621$



 \swarrow top \searrow par.

1.	40.0000000000	38653.75679481	Y=F(X)
2.	40.2000000000	38586.72555230	Y=F(X)
3.	40.4000000000	38519.69430979	Y=F(X)
4.	40.6000000000	38452.66306729	Y=F(X)
5.	40.8000000000	38385.63182478	Y=F(X)
6.	41.0000000000	38318.60058227	Y=F(X)
7.	41.2000000000	38251.56933976	Y=F(X)
8.	41.4000000000	38184.53809725	Y=F(X)
9.	41.6000000000	38117.50685474	Y=F(X)
10.	41.8000000000	38050.47561224	Y=F(X)
11.	42.0000000000	37983.44436973	Y=F(X)
12.	42.2000000000	37916.41312722	Y=F(X)
13.	42.4000000000	37849.38188471	Y=F(X)
14.	42.6000000000	37782.35064220	Y=F(X)
15.	42.8000000000	37715.31939969	Y=F(X)
16.	43.0000000000	37648.28815719	Y=F(X)
17.	43.2000000000	37581.25691468	Y=F(X)
18.	43.4000000000	37514.22567217	Y=F(X)
19.	43.6000000000	37447.19442966	Y=F(X)
20.	43.8000000000	37380.16318715	Y=F(X)
21.	44.0000000000	37313.13194464	Y=F(X)
22.	44.2000000000	37246.10070214	Y=F(X)
23.	44.4000000000	37179.06945963	Y=F(X)
24.	44.6000000000	37112.03821712	Y=F(X)
25.	44.8000000000	37045.00697461	Y=F(X)
26.	45.0000000000	36977.97573210	Y=F(X)
27.	45.2000000000	36910.94448959	Y=F(X)
28.	45.4000000000	36843.91324709	Y=F(X)
29.	45.6000000000	36776.88200458	Y=F(X)
30.	45.8000000000	36709.85076207	Y=F(X)
31.	46.0000000000	36642.81951956	Y=F(X)
32.	46.2000000000	36575.78827705	Y=F(X)
33.	46.4000000000	36508.75703454	Y=F(X)
34.	46.6000000000	36441.72579204	Y=F(X)
35.	46.8000000000	36374.69454953	Y=F(X)
36.	47.0000000000	36307.66330702	Y=F(X)
37.	47.2000000000	36240.63206451	Y=F(X)
38.	47.4000000000	36173.60082200	Y=F(X)
39.	47.6000000000	36106.56957949	Y=F(X)
40.	47.8000000000	36039.53833699	Y=F(X)
41.	48.0000000000	35972.50709448	Y=F(X)
42.	48.2000000000	35905.47585197	Y=F(X)
43.	48.4000000000	35838.44460946	Y=F(X)
44.	48.6000000000	35771.41336695	Y=F(X)
45.	48.8000000000	35704.38212444	Y=F(X)
46.	49.0000000000	35637.35088194	Y=F(X)
47.	49.2000000000	35570.31963943	Y=F(X)
48.	49.4000000000	35503.28839692	Y=F(X)
49.	49.6000000000	35436.25715441	Y=F(X)
50.	49.8000000000	35369.22591190	Y=F(X)
51.	50.0000000000	35302.19466939	Y=F(X)
52.	50.2000000000	35235.16342689	Y=F(X)
53.	50.4000000000	35168.13218438	Y=F(X)
54.	50.6000000000	35101.10094187	Y=F(X)

55.	50.8000000000	35034.06969936	Y=F(X)
56.	51.0000000000	34967.03845685	Y=F(X)
57.	51.2000000000	34900.00721434	Y=F(X)
58.	51.4000000000	34832.97597184	Y=F(X)
59.	51.6000000000	34765.94472933	Y=F(X)
60.	51.8000000000	34698.91348682	Y=F(X)
61.	52.0000000000	34631.88224431	Y=F(X)
62.	52.2000000000	34564.85100180	Y=F(X)
63.	52.4000000000	34497.81975929	Y=F(X)
64.	52.6000000000	34430.78851679	Y=F(X)
65.	52.8000000000	34363.75727428	Y=F(X)
66.	53.0000000000	34296.72603177	Y=F(X)
67.	53.2000000000	34229.69478926	Y=F(X)
68.	53.4000000000	34162.66354675	Y=F(X)
69.	53.6000000000	34095.63230424	Y=F(X)
70.	53.8000000000	34028.60106174	Y=F(X)
71.	54.0000000000	33961.56981923	Y=F(X)
72.	54.2000000000	33894.53857672	Y=F(X)
73.	54.4000000000	33827.50733421	Y=F(X)
74.	54.6000000000	33760.47609170	Y=F(X)
75.	54.8000000000	33693.44484919	Y=F(X)
76.	55.0000000000	33626.41360669	Y=F(X)
77.	55.2000000000	33559.38236418	Y=F(X)
78.	55.4000000000	33492.35112167	Y=F(X)
79.	55.6000000000	33425.31987916	Y=F(X)
80.	55.8000000000	33358.28863665	Y=F(X)
81.	56.0000000000	33291.25739414	Y=F(X)
82.	56.2000000000	33224.22615164	Y=F(X)
83.	56.4000000000	33157.19490913	Y=F(X)
84.	56.6000000000	33090.16366662	Y=F(X)
85.	56.8000000000	33023.13242411	Y=F(X)
86.	57.0000000000	32956.10118160	Y=F(X)
87.	57.2000000000	32889.06993909	Y=F(X)
88.	57.4000000000	32822.03869659	Y=F(X)
89.	57.6000000000	32755.00745408	Y=F(X)
90.	57.8000000000	32687.97621157	Y=F(X)
91.	58.0000000000	32620.94496906	Y=F(X)
92.	58.2000000000	32553.91372655	Y=F(X)
93.	58.4000000000	32486.88248404	Y=F(X)
94.	58.6000000000	32419.85124154	Y=F(X)
95.	58.8000000000	32352.81999903	Y=F(X)
96.	59.0000000000	32285.78875652	Y=F(X)
97.	59.2000000000	32218.75751401	Y=F(X)
98.	59.4000000000	32151.72627150	Y=F(X)
99.	59.6000000000	32084.69502899	Y=F(X)
100.	59.8000000000	32017.66378649	Y=F(X)
101.	60.0000000000	31950.63254398	Y=F(X)
102.	60.2000000000	31883.60130147	Y=F(X)
103.	60.4000000000	31816.57005896	Y=F(X)
104.	60.6000000000	31749.53881645	Y=F(X)
105.	60.8000000000	31682.50757394	Y=F(X)
106.	61.0000000000	31615.47633144	Y=F(X)
107.	61.2000000000	31548.44508893	Y=F(X)
108.	61.4000000000	31481.41384642	Y=F(X)

$f_{res} = 30.247$

$- f_{pr} = 32.68744$

109.	61.600000000000	31414.38260391	Y=F(X)
110.	61.800000000000	31347.35136140	Y=F(X)
111.	62.000000000000	31280.32011889	Y=F(X)
112.	62.200000000000	31213.28887639	Y=F(X)
113.	62.400000000000	31146.25763388	Y=F(X)
114.	62.600000000000	31079.22639137	Y=F(X)
115.	62.800000000000	31012.19514886	Y=F(X)
116.	63.000000000000	30945.16390635	Y=F(X)
117.	63.200000000000	30878.13266384	Y=F(X)
118.	63.400000000000	30811.10142134	Y=F(X)
119.	63.600000000000	30744.07017883	Y=F(X)
120.	63.800000000000	30677.03893632	Y=F(X)
121.	64.000000000000	30610.00769381	Y=F(X)
122.	64.200000000000	30542.97645130	Y=F(X)
123.	64.400000000000	30475.94520879	Y=F(X)
124.	64.600000000000	30408.91396629	Y=F(X)
125.	64.800000000000	30341.88272378	Y=F(X)
126.	65.000000000000	30274.85148127	Y=F(X)
127.	65.200000000000	30207.82023876	Y=F(X)
128.	65.400000000000	30140.78899625	Y=F(X)
129.	65.600000000000	30073.75775374	Y=F(X)
130.	65.800000000000	30006.72651124	Y=F(X)
131.	66.000000000000	29939.69526873	Y=F(X)
132.	66.200000000000	29872.66402622	Y=F(X)
133.	66.400000000000	29805.63278371	Y=F(X)
134.	66.600000000000	29738.60154120	Y=F(X)
135.	66.800000000000	29671.57029869	Y=F(X)
136.	67.000000000000	29604.53905619	Y=F(X)
137.	67.200000000000	29537.50781368	Y=F(X)
138.	67.400000000000	29470.47657117	Y=F(X)
139.	67.600000000000	29403.44532866	Y=F(X)
140.	67.800000000000	29336.41408615	Y=F(X)
141.	68.000000000000	29269.38284364	Y=F(X)
142.	68.200000000000	29202.35160114	Y=F(X)
143.	68.400000000000	29135.32035863	Y=F(X)
144.	68.600000000000	29068.28911612	Y=F(X)
145.	68.800000000000	29001.25787361	Y=F(X)
146.	69.000000000000	28934.22663110	Y=F(X)
147.	69.200000000000	28867.19538859	Y=F(X)
148.	69.400000000000	28800.16414609	Y=F(X)
149.	69.600000000000	28733.13290358	Y=F(X)
150.	69.800000000000	28666.10166107	Y=F(X)
151.	70.000000000000	28599.07041856	Y=F(X)
152.	70.200000000000	28532.03917605	Y=F(X)
153.	70.400000000000	28465.00793354	Y=F(X)
154.	70.600000000000	28397.97669104	Y=F(X)
155.	70.800000000000	28330.94544853	Y=F(X)
156.	71.000000000000	28263.91420602	Y=F(X)
157.	71.200000000000	28196.88296351	Y=F(X)
158.	71.400000000000	28129.85172100	Y=F(X)
159.	71.600000000000	28062.82047849	Y=F(X)
160.	71.800000000000	27995.78923599	Y=F(X)
161.	72.000000000000	27928.75799348	Y=F(X)
162.	72.200000000000	27861.72675097	Y=F(X)

163.	72.40000000000	27794.69550846	Y=F(X)
164.	72.60000000000	27727.66426595	Y=F(X)
165.	72.80000000000	27660.63302344	Y=F(X)
166.	73.00000000000	27593.60178094	Y=F(X)
167.	73.20000000000	27526.57053843	Y=F(X)
168.	73.40000000000	27459.53929592	Y=F(X)
169.	73.60000000000	27392.50805341	Y=F(X)
170.	73.80000000000	27325.47681090	Y=F(X)
171.	74.00000000000	27258.44556839	Y=F(X)
172.	74.20000000000	27191.41432589	Y=F(X)
173.	74.40000000000	27124.38308338	Y=F(X)
174.	74.60000000000	27057.35184087	Y=F(X)
175.	74.80000000000	26990.32059836	Y=F(X)
176.	75.00000000000	26923.28935585	Y=F(X)
177.	75.20000000000	26856.25811334	Y=F(X)
178.	75.40000000000	26789.22687084	Y=F(X)
179.	75.60000000000	26722.19562833	Y=F(X)
180.	75.80000000000	26655.16438582	Y=F(X)
181.	76.00000000000	26588.13314331	Y=F(X)
182.	76.20000000000	26521.10190080	Y=F(X)
183.	76.40000000000	26454.07065829	Y=F(X)
184.	76.60000000000	26387.03941579	Y=F(X)
185.	76.80000000000	26320.00817328	Y=F(X)
186.	77.00000000000	26252.97693077	Y=F(X)
187.	77.20000000000	26185.94568826	Y=F(X)
188.	77.40000000000	26118.91444575	Y=F(X)
189.	77.60000000000	26051.88320324	Y=F(X)
190.	77.80000000000	25984.85196074	Y=F(X)
191.	78.00000000000	25917.82071823	Y=F(X)
192.	78.20000000000	25850.78947572	Y=F(X)
193.	78.40000000000	25783.75823321	Y=F(X)
194.	78.60000000000	25716.72699070	Y=F(X)
195.	78.80000000000	25649.69574819	Y=F(X)
196.	79.00000000000	25582.66450569	Y=F(X)
197.	79.20000000000	25515.63326318	Y=F(X)
198.	79.40000000000	25448.60202067	Y=F(X)
199.	79.60000000000	25381.57077816	Y=F(X)
200.	79.80000000000	25314.53953565	Y=F(X)
201.	80.00000000000	25247.50829314	Y=F(X)
202.	80.20000000000	25180.47705064	Y=F(X)
203.	80.40000000000	25113.44580813	Y=F(X)
204.	80.60000000000	25046.41456562	Y=F(X)
205.	80.80000000000	24979.38332311	Y=F(X)
206.	81.00000000000	24912.35208060	Y=F(X)
207.	81.20000000000	24845.32083809	Y=F(X)
208.	81.40000000000	24778.28959559	Y=F(X)
209.	81.60000000000	24711.25835308	Y=F(X)
210.	81.80000000000	24644.22711057	Y=F(X)
211.	82.00000000000	24577.19586806	Y=F(X)
212.	82.20000000000	24510.16462555	Y=F(X)
213.	82.40000000000	24443.13338304	Y=F(X)
214.	82.60000000000	24376.10214053	Y=F(X)
215.	82.80000000000	24309.07089803	Y=F(X)
216.	83.00000000000	24242.03965552	Y=F(X)

$f_{res} = 25 \text{ kN}$

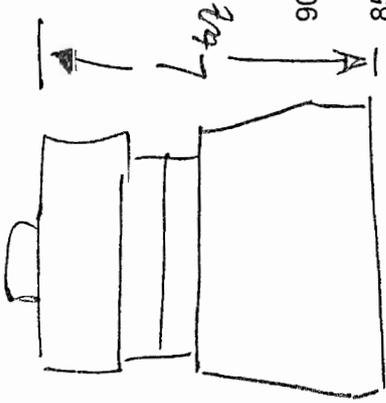
$-f_{pr} = 26.856 \text{ kN}$

217.	83.200000000000	24175.00841301	Y=F(X)
218.	83.400000000000	24107.97717050	Y=F(X)
219.	83.600000000000	24040.94592799	Y=F(X)
220.	83.800000000000	23973.91468548	Y=F(X)
221.	84.000000000000	23906.88344298	Y=F(X)
222.	84.200000000000	23839.85220047	Y=F(X)
223.	84.400000000000	23772.82095796	Y=F(X)
224.	84.600000000000	23705.78971545	Y=F(X)
225.	84.800000000000	23638.75847294	Y=F(X)
226.	85.000000000000	23571.72723043	Y=F(X)
227.	85.200000000000	23504.69598793	Y=F(X)
228.	85.400000000000	23437.66474542	Y=F(X)
229.	85.600000000000	23370.63350291	Y=F(X)
230.	85.800000000000	23303.60226040	Y=F(X)
231.	86.000000000000	23236.57101789	Y=F(X)
232.	86.200000000000	23169.53977538	Y=F(X)
233.	86.400000000000	23102.50853288	Y=F(X)
234.	86.600000000000	23035.47729037	Y=F(X)
235.	86.800000000000	22968.44604786	Y=F(X)
236.	87.000000000000	22901.41480535	Y=F(X)
237.	87.200000000000	22834.38356284	Y=F(X)
238.	87.400000000000	22767.35232033	Y=F(X)
239.	87.600000000000	22700.32107783	Y=F(X)
240.	87.800000000000	22633.28983532	Y=F(X)
241.	88.000000000000	22566.25859281	Y=F(X)
242.	88.200000000000	22499.22735030	Y=F(X)
243.	88.400000000000	22432.19610779	Y=F(X)
244.	88.600000000000	22365.16486528	Y=F(X)
245.	88.800000000000	22298.13362278	Y=F(X)
246.	89.000000000000	22231.10238027	Y=F(X)
247.	89.200000000000	22164.07113776	Y=F(X)
248.	89.400000000000	22097.03989525	Y=F(X)
249.	89.600000000000	22030.00865274	Y=F(X)
250.	89.800000000000	21962.97741023	Y=F(X)
251.	90.000000000000	21895.94616773	Y=F(X)
252.	90.200000000000	21828.91492522	Y=F(X)
253.	90.400000000000	21761.88368271	Y=F(X)
254.	90.600000000000	21694.85244020	Y=F(X)
255.	90.800000000000	21627.82119769	Y=F(X)
256.	91.000000000000	21560.78995518	Y=F(X)
257.	91.200000000000	21493.75871268	Y=F(X)
258.	91.400000000000	21426.72747017	Y=F(X)
259.	91.600000000000	21359.69622766	Y=F(X)
260.	91.800000000000	21292.66498515	Y=F(X)
261.	92.000000000000	21225.63374264	Y=F(X)
262.	92.200000000000	21158.60250013	Y=F(X)
263.	92.400000000000	21091.57125763	Y=F(X)
264.	92.600000000000	21024.54001512	Y=F(X)
265.	92.800000000000	20957.50877261	Y=F(X)
266.	93.000000000000	20890.47753010	Y=F(X)
267.	93.200000000000	20823.44628759	Y=F(X)
268.	93.400000000000	20756.41504508	Y=F(X)
269.	93.600000000000	20689.38380258	Y=F(X)
270.	93.800000000000	20622.35256007	Y=F(X)

$f_{\text{res}} = 20779_{12}$

$f_{\text{res}} = 21895$

271.	94.0000000000	20555.32131756	Y=F(X)
272.	94.2000000000	20488.29007505	Y=F(X)
273.	94.4000000000	20421.25883254	Y=F(X)
274.	94.6000000000	20354.22759003	Y=F(X)
275.	94.8000000000	20287.19634753	Y=F(X)
276.	95.0000000000	20220.16510502	Y=F(X)
277.	95.2000000000	20153.13386251	Y=F(X)
278.	95.4000000000	20086.10262000	Y=F(X)
279.	95.6000000000	20019.07137749	Y=F(X)
280.	95.8000000000	19952.04013498	Y=F(X)
281.	96.0000000000	19885.00889248	Y=F(X)
282.	96.2000000000	19817.97764997	Y=F(X)
283.	96.4000000000	19750.94640746	Y=F(X)
284.	96.6000000000	19683.91516495	Y=F(X)
285.	96.8000000000	19616.88392244	Y=F(X)
286.	97.0000000000	19549.85267993	Y=F(X)
287.	97.2000000000	19482.82143743	Y=F(X)
288.	97.4000000000	19415.79019492	Y=F(X)
289.	97.6000000000	19348.75895241	Y=F(X)
290.	97.8000000000	19281.72770990	Y=F(X)
291.	98.0000000000	19214.69646739	Y=F(X)
292.	98.2000000000	19147.66522488	Y=F(X)
293.	98.4000000000	19080.63398238	Y=F(X)
294.	98.6000000000	19013.60273987	Y=F(X)
295.	98.8000000000	18946.57149736	Y=F(X)
296.	99.0000000000	18879.54025485	Y=F(X)
297.	99.2000000000	18812.50901234	Y=F(X)
298.	99.4000000000	18745.47776983	Y=F(X)
299.	99.6000000000	18678.44652733	Y=F(X)
300.	99.8000000000	18611.41528482	Y=F(X)
301.	100.0000000000	18544.38404231	Y=F(X)



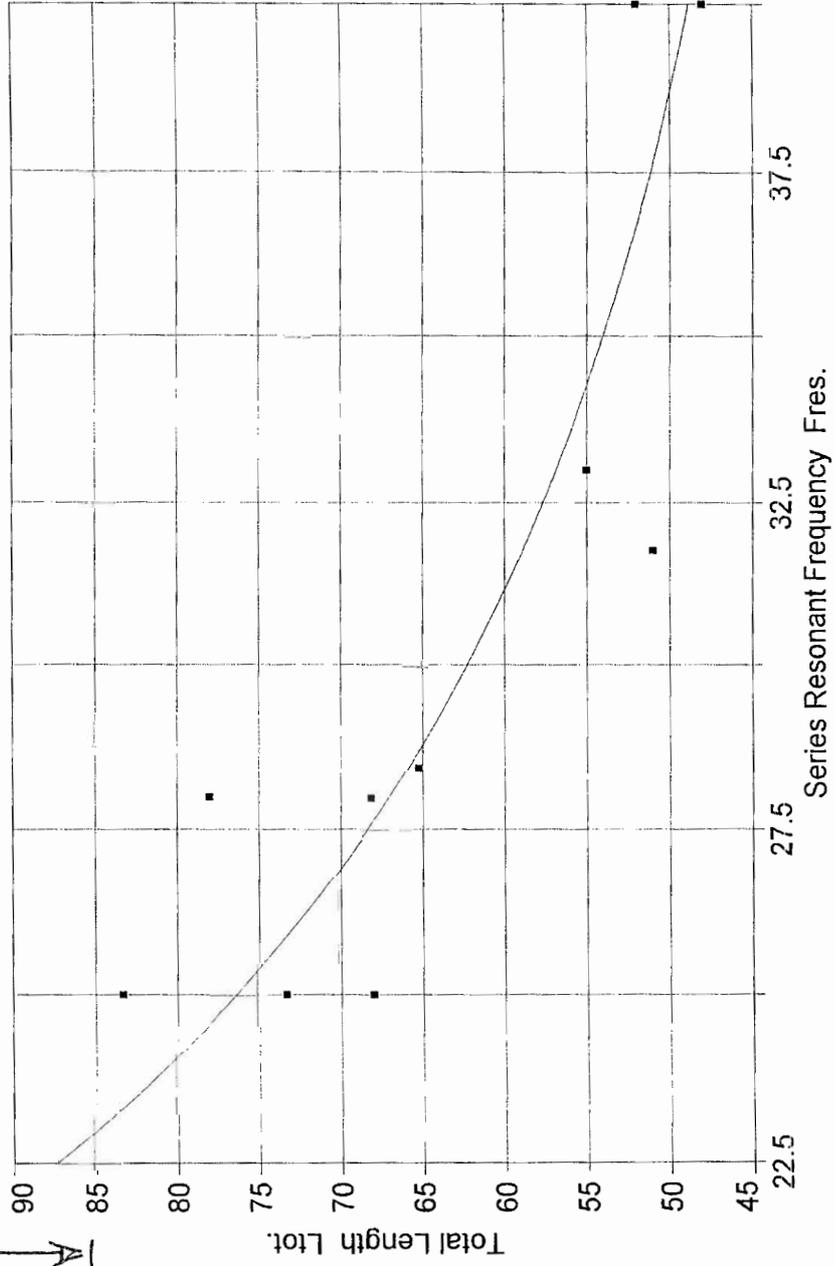
Total length of sandwich transducer

Rank 2806 Eqn 1203 $y=a+b/x+c/x^2$

$r^2=0.75565943$ DF Adj $r^2=0.63348915$ FitStdErr=6.8342743 Fstat=10.824269

$a=35.95638$ $b=-308.46904$

$c=32910.686$



f_{res}
 L_{60}

1.	15.0000000000	161.6614947124	Y=F(X)
2.	15.2000000000	158.1082022175	Y=F(X)
3.	15.4000000000	154.6958942521	Y=F(X)
4.	15.6000000000	151.4172996046	Y=F(X)
5.	15.8000000000	148.2656076475	Y=F(X)
6.	16.0000000000	145.2344338474	Y=F(X)
7.	16.2000000000	142.3177882456	Y=F(X)
8.	16.4000000000	139.5100466235	Y=F(X)
9.	16.6000000000	136.8059240926	Y=F(X)
10.	16.8000000000	134.2004508805	Y=F(X)
11.	17.0000000000	131.6889501055	Y=F(X)
12.	17.2000000000	129.2670173570	Y=F(X)
13.	17.4000000000	126.9305019149	Y=F(X)
14.	17.6000000000	124.6754894598	Y=F(X)
15.	17.8000000000	122.4982861406	Y=F(X)
16.	18.0000000000	120.3954038795	Y=F(X)
17.	18.2000000000	118.3635468046	Y=F(X)
18.	18.4000000000	116.3995987139	Y=F(X)
19.	18.6000000000	114.5006114813	Y=F(X)
20.	18.8000000000	112.6637943243	Y=F(X)
21.	19.0000000000	110.8865038624	Y=F(X)
22.	19.2000000000	109.1662348988	Y=F(X)
23.	19.4000000000	107.5006118671	Y=F(X)
24.	19.6000000000	105.8873808881	Y=F(X)
25.	19.8000000000	104.3244023877	Y=F(X)
26.	20.0000000000	102.8096442315	Y=F(X)
27.	20.2000000000	101.3411753346	Y=F(X)
28.	20.4000000000	99.91715971008	Y=F(X)
29.	20.6000000000	98.53585092087	Y=F(X)
30.	20.8000000000	97.19558690609	Y=F(X)
31.	21.0000000000	95.89478515138	Y=F(X)
32.	21.2000000000	94.63193817841	Y=F(X)
33.	21.4000000000	93.40560932938	Y=F(X)
34.	21.6000000000	92.21442882480	Y=F(X)
35.	21.8000000000	91.05709007438	Y=F(X)
36.	22.0000000000	89.93234622281	Y=F(X)
37.	22.2000000000	88.83900691332	Y=F(X)
38.	22.4000000000	87.77593525375	Y=F(X)
39.	22.6000000000	86.74204497047	Y=F(X)
40.	22.8000000000	85.73629773729	Y=F(X)
41.	23.0000000000	84.75770066696	Y=F(X)
42.	23.2000000000	83.80530395423	Y=F(X)
43.	23.4000000000	82.87819866000	Y=F(X)
44.	23.6000000000	81.97551462698	Y=F(X)
45.	23.8000000000	81.09641851822	Y=F(X)
46.	24.0000000000	80.24011196998	Y=F(X)
47.	24.2000000000	79.40582985178	Y=F(X)
48.	24.4000000000	78.59283862624	Y=F(X)
49.	24.6000000000	77.80043480249	Y=F(X)
50.	24.8000000000	77.02794347696	Y=F(X)
51.	25.0000000000	76.27471695600	Y=F(X)
52.	25.2000000000	75.54013345517	Y=F(X)
53.	25.4000000000	74.82359587028	Y=F(X)
54.	25.6000000000	74.12453061586	Y=F(X)

55.	25.800000000000	73.44238652663	Y=F(X)
56.	26.000000000000	72.77663381834	Y=F(X)
57.	26.200000000000	72.12676310420	Y=F(X)
58.	26.400000000000	71.49228446357	Y=F(X)
59.	26.600000000000	70.87272655980	Y=F(X)
60.	26.800000000000	70.26763580420	Y=F(X)
61.	27.000000000000	69.67657556351	Y=F(X)
62.	27.200000000000	69.09912540823	Y=F(X)
63.	27.400000000000	68.53488039945	Y=F(X)
64.	27.600000000000	67.98345041193	Y=F(X)
65.	27.800000000000	67.44445949140	Y=F(X)
66.	28.000000000000	66.91754524401	Y=F(X)
67.	28.200000000000	66.40235825627	Y=F(X)
68.	28.400000000000	65.89856154354	Y=F(X)
69.	28.600000000000	65.40583002572	Y=F(X)
70.	28.800000000000	64.92385002840	Y=F(X)
71.	29.000000000000	64.45231880822	Y=F(X)
72.	29.200000000000	63.99094410103	Y=F(X)
73.	29.400000000000	63.53944369167	Y=F(X)
74.	29.600000000000	63.09754500410	Y=F(X)
75.	29.800000000000	62.66498471093	Y=F(X)
76.	30.000000000000	62.24150836114	Y=F(X)
77.	30.200000000000	61.82687002522	Y=F(X)
78.	30.400000000000	61.42083195660	Y=F(X)
79.	30.600000000000	61.02316426871	Y=F(X)
80.	30.800000000000	60.63364462676	Y=F(X)
81.	31.000000000000	60.25205795343	Y=F(X)
82.	31.200000000000	59.87819614789	Y=F(X)
83.	31.400000000000	59.51185781734	Y=F(X)
84.	31.600000000000	59.15284802056	Y=F(X)
85.	31.800000000000	58.80097802270	Y=F(X)
86.	32.000000000000	58.45606506091	Y=F(X)
87.	32.200000000000	58.11793212020	Y=F(X)
88.	32.400000000000	57.78640771898	Y=F(X)
89.	32.600000000000	57.46132570390	Y=F(X)
90.	32.800000000000	57.14252505347	Y=F(X)
91.	33.000000000000	56.82984968999	Y=F(X)
92.	33.200000000000	56.52314829957	Y=F(X)
93.	33.400000000000	56.22227415958	Y=F(X)
94.	33.600000000000	55.92708497347	Y=F(X)
95.	33.800000000000	55.63744271233	Y=F(X)
96.	34.000000000000	55.35321346309	Y=F(X)
97.	34.200000000000	55.07426728295	Y=F(X)
98.	34.400000000000	54.80047805973	Y=F(X)
99.	34.600000000000	54.53172337793	Y=F(X)
100.	34.800000000000	54.26788439022	Y=F(X)
101.	35.000000000000	54.00884569401	Y=F(X)
102.	35.200000000000	53.75449521310	Y=F(X)
103.	35.400000000000	53.50472408388	Y=F(X)
104.	35.600000000000	53.25942654613	Y=F(X)
105.	35.800000000000	53.01849983809	Y=F(X)
106.	36.000000000000	52.78184409561	Y=F(X)
107.	36.200000000000	52.54936225525	Y=F(X)
108.	36.400000000000	52.32095996110	Y=F(X)

109.	36.600000000000	52.09654547522	Y=F(X)
110.	36.800000000000	51.87602959147	Y=F(X)
111.	37.000000000000	51.65932555263	Y=F(X)
112.	37.200000000000	51.44634897068	Y=F(X)
113.	37.400000000000	51.23701775005	Y=F(X)
114.	37.600000000000	51.03125201376	Y=F(X)
115.	37.800000000000	50.82897403231	Y=F(X)
116.	38.000000000000	50.63010815520	Y=F(X)
117.	38.200000000000	50.43458074499	Y=F(X)
118.	38.400000000000	50.24232011378	Y=F(X)
119.	38.600000000000	50.05325646196	Y=F(X)
120.	38.800000000000	49.86732181927	Y=F(X)
121.	39.000000000000	49.68444998788	Y=F(X)
122.	39.200000000000	49.50457648763	Y=F(X)
123.	39.400000000000	49.32763850318	Y=F(X)
124.	39.600000000000	49.15357483297	Y=F(X)
125.	39.800000000000	48.98232584011	Y=F(X)
126.	40.000000000000	48.81383340495	Y=F(X)
127.	40.200000000000	48.64804087925	Y=F(X)
128.	40.400000000000	48.48489304205	Y=F(X)
129.	40.600000000000	48.32433605703	Y=F(X)
130.	40.800000000000	48.16631743131	Y=F(X)
131.	41.000000000000	48.01078597572	Y=F(X)
132.	41.200000000000	47.85769176639	Y=F(X)
133.	41.400000000000	47.70698610769	Y=F(X)
134.	41.600000000000	47.55862149638	Y=F(X)
135.	41.800000000000	47.41255158698	Y=F(X)
136.	42.000000000000	47.26873115836	Y=F(X)
137.	42.200000000000	47.12711608134	Y=F(X)
138.	42.400000000000	46.98766328746	Y=F(X)
139.	42.600000000000	46.85033073877	Y=F(X)
140.	42.800000000000	46.71507739854	Y=F(X)
141.	43.000000000000	46.58186320304	Y=F(X)
142.	43.200000000000	46.45064903418	Y=F(X)
143.	43.400000000000	46.32139669302	Y=F(X)
144.	43.600000000000	46.19406887420	Y=F(X)
145.	43.800000000000	46.06862914114	Y=F(X)
146.	44.000000000000	45.94504190207	Y=F(X)
147.	44.200000000000	45.82327238678	Y=F(X)
148.	44.400000000000	45.70328662418	Y=F(X)
149.	44.600000000000	45.58505142051	Y=F(X)
150.	44.800000000000	45.46853433824	Y=F(X)
151.	45.000000000000	45.35370367569	Y=F(X)

fres.	$\phi D1$	$\phi D2$	L_{DN1}	L_{FM}	L_c	L_{WZ}
20						
25	42 40	64 60	21	42		68 73.3/83.3
30						
35						
40	40	50	16	27	11	48 52
28	35	45	17	40	12	68/78
33	38	54				55
34	51	64	15.5	23	12.5	59
28.429	51	64	19.7	33	12.5	65.2