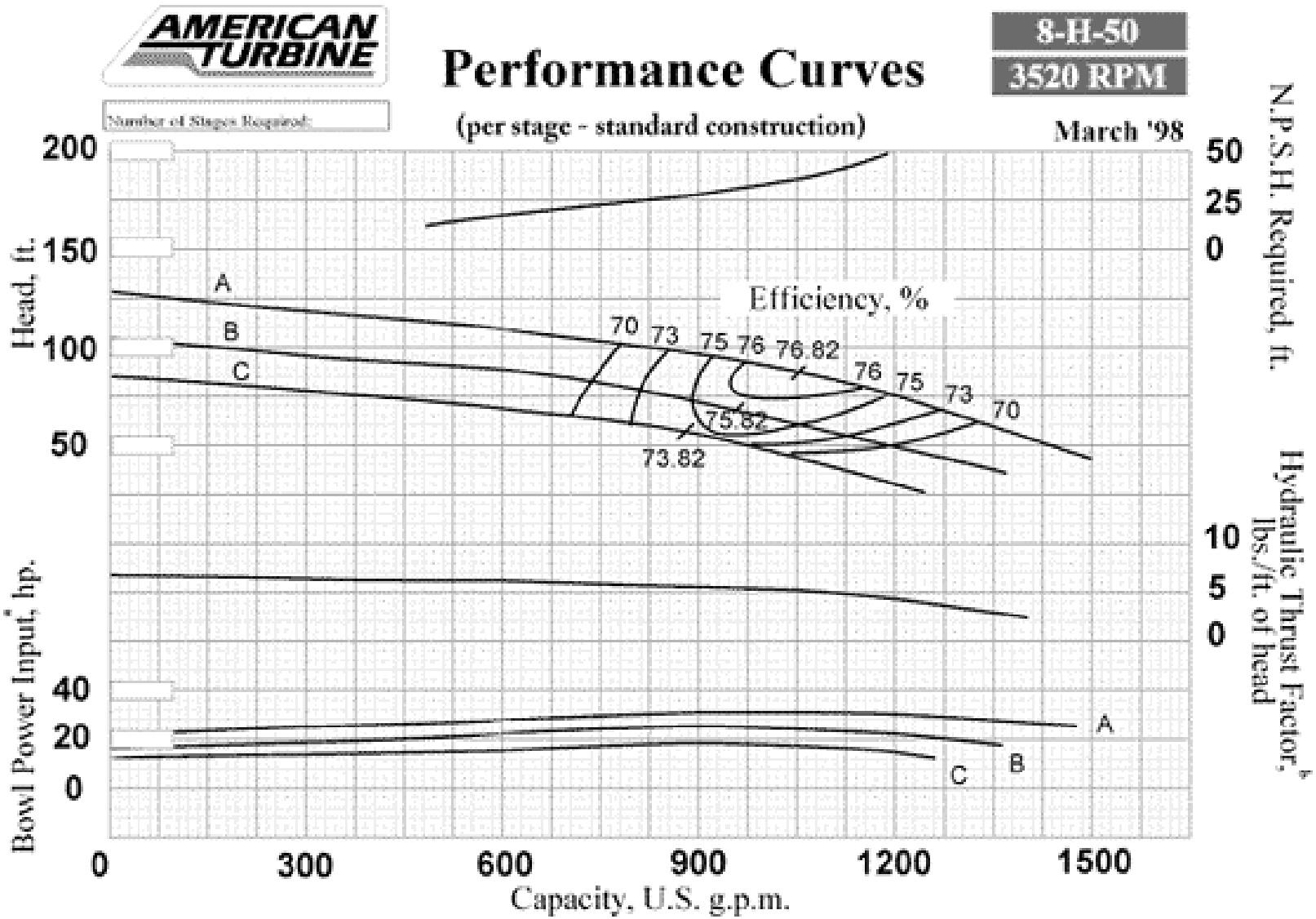
AMERICAN TURBINE
Performance Curves
8-H-50
3520 RPM
(per stage - standard construction)
March '98
Number of Stages Required:
Head, ft.
200
150
100
50
A
B
C
Efficiency, %
70
73
75
76
76.82
76
75
73
70
75.82
73.82
N.P.S.H. Required, ft.
50
25
0
Hydraulic Thrust Factor, lbs./ft. of head
10
5
0
Bowl Power Input*, hp.
40
20
0
A
B
C
0
300
600
900
1200
1500
Capacity, U.S. g.p.m.

8-H-50 3520 RPM

Impeller Data						Bowl Data	
Impeller Model	8-H-50					Bowl Model	8-H
Type	Enclosed					Connection Type	Threaded
Diameter: A=	6.145"					Outside Diameter: nominal	7.875"
B=	5.745"					minimum	7.500"
C=	5.345"					Column Pipe Size: minimum	6"
Hydraulic Thrust Factor	5.2 lbs/ft of head @ peak efficiency					maximum	8"
Impeller Weight	5.3#					Suction Pipe Size	6"
Number of Vanes	7					Shaft Size: standard	1.250"
Specific Speed (Ns)	3874					maximum	Consult Factory
Effective Eye Area	12.79 in²					Lateral: standard	.625"
W (r sq.)	0.201 lbs -ft²					maximum	Consult Factory
Eye Fluid Velocity	0.03 ft/sec/gpm					Shaft Bearing Clearance	0.010"
Peripheral Velocity	15.36 ft/sec/inch of impeller diameter					Impeller Skirt Clearance	0.015"
						Maximum Sphere Size	0.500"
Efficiency Correction for Impeller Data						*Maximum Head @ 1.0 s.g.:	
Number of Stages	1	2	3	4	5+	with nominal outside dia.	868 ft
Deduct No. Points	4	3	2	1	0	with minimum outside dia.	524 ft

Lengths		Operational	
Column Adapter	1.625"	Minimum Required Submergence	Consult Factory
Discharge Case	3.937"	**Standard Construction Materials**	
Bowl	7.125"	Bowl	A48-30 c.i. (porcelain)
Suction Case	8.125"	Impeller	C83800 br.
Suction Bell	6.750"	Bowl Shaft	416 stainless steel
Submersible Motor Adapter	Consult Factory	Shaft Coupling	C1215 steel
Approximate Shipping Weights		Lock Collet	C1215 steel
First Stage	108#	Cap Screw	grade 5
Additional Stage	38#	Bowl Bearing	C93200 br./buna-N A40
		Suction/Submersible Motor Adapter Bearing	C93200 br.
Miscellaneous		Throttle Bearing	C93200 br.
Hub Projection on Bell Suction	0.000"	Sand Collar	C93200 br.
Cable Guard Height	0.500"	Column Adapter/Discharge Case/Suction Case	A48-30 c.i.
Distance from Impeller Eye to Bottom of Bell Suction	7.500"	Submersible Motor Adapter	A48-30 c.i.
		Tube Adapter	cl. 65-45-12 ductile iron

* Not valid for submersible applications -- o-rings required if the maximum operating head will exceed 500'