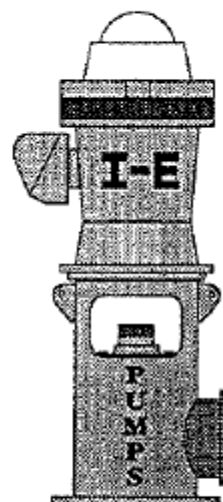
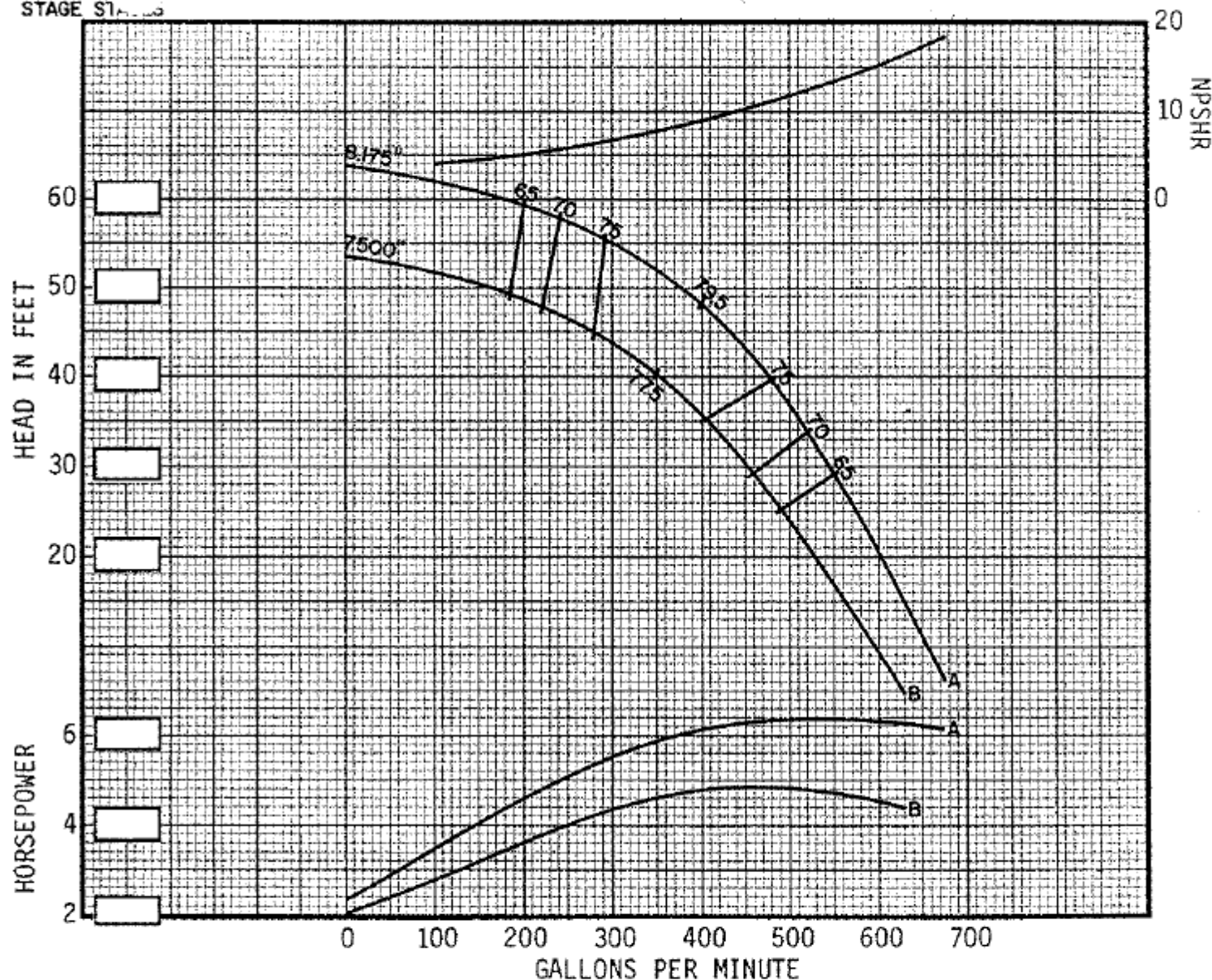


ONE
STAGE ST



1567 E. HWY. 160
P.O. BOX 112
MONTE VISTA
COLORADO 81144

(719) 852-5174

I-E
"TOP-O-THE LINE"

10DM-400
DESIGN

1770
R.P.M.

SECTION N
PAGE 210
DATE 10-11-90

IMPELLER DATA

TRIM DIAMETER: A 8.175 " B 7.500 " C " " " " "

One stage deduct -3 % 2 stage deduct -2 % 3 stage deduct -1 %

EFFICIENCY CORRECTION: stage add % stage add % stage add %

EFFECTIVE IMPELLER EYE AREA 9.21 sq. inches NUMBER OF IMPELLER VANES

THRUST CONSTANT (K) 5.1 Lbs./Ft. WR^2 (See Note #) 324 Lbs. Ft.² MAXIMUM SPHERE SIZE .500 "

IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) IMPELLER PERIPHERAL SPEED CONSTANT (N_1) (Ft./Sec.) (Ft./Min.)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 10.1875 " MINIMUM DIAMETER = 9.9375 " BELL DIAMETER 11.375 " MIN. BELL DIAMETER 10.375 "

MAXIMUM NO. STAGES (Std. Constr.) 10 MAXIMUM HEAD (Std. Constr.) 1086 Ft.

DIAMETER IMPELLER SHAFT " MINIMUM IMPELLER SHAFT THREADS "

LATERAL (See explanation below)* NOMINAL " MINIMUM " STANDARD 1.156 " MAXIMUM "

WEAR RING CLEARANCE (Nominal) .012 " SHAFT / BEARING CLEARANCE (Nominal) .007 "

FORMULAS: HYDRAULIC THRUST = K Factor x Laboratory Head in feet = 470 Lbs.

IMPELLER PERIPHERAL SPEED (U_2) = N_1 Constant x Impeller Diameter Ft./Sec. or Ft./Min.

IMPELLER EYE FLUID VELOCITY (V_e) = K_e Constant x GPM = Ft./Sec.

NOTE # = per impeller. WR^2 includes impeller, impeller collet, and a stage length of impeller shaft

NOTE * = see lateral definition on Page 8.1, Section 2.1, dated 2/15/63.

NOTE - NOMINAL PROJECTIONS ARE: SHAFT = 14 " Tube = 6 "

(referenced pipe butt or flange face)

- A - Length one-stage assembly / threaded suction
- B - Length one-stage assembly / bell suction
- C - Additional stage length
- D - Bowl diameter
- E - Bell diameter
- F - Projection of bearing hub / bell suction
- G - O.D. bell suction basket strainer
- J - Basket length below bell suction lip
- K - Minimum required submergence, above bottom of bearing hub
- L - Bottom of bearing hub to impeller eye
- M - Pipe butt to top bowl flange
- N - Column pipe flange to bowl flange
- P - Suction case (or coupling) thread engagement
- R - Suction case flange diameter
- S - Flange to flange / bowl to column

APPLICABLE DIMENSIONS

DIMENSION	A	B	C	D	E	F	G	J	K	L	M	N	P	R	S
INCHES	23.750	27.25	7.25	10.1875	11.375										

