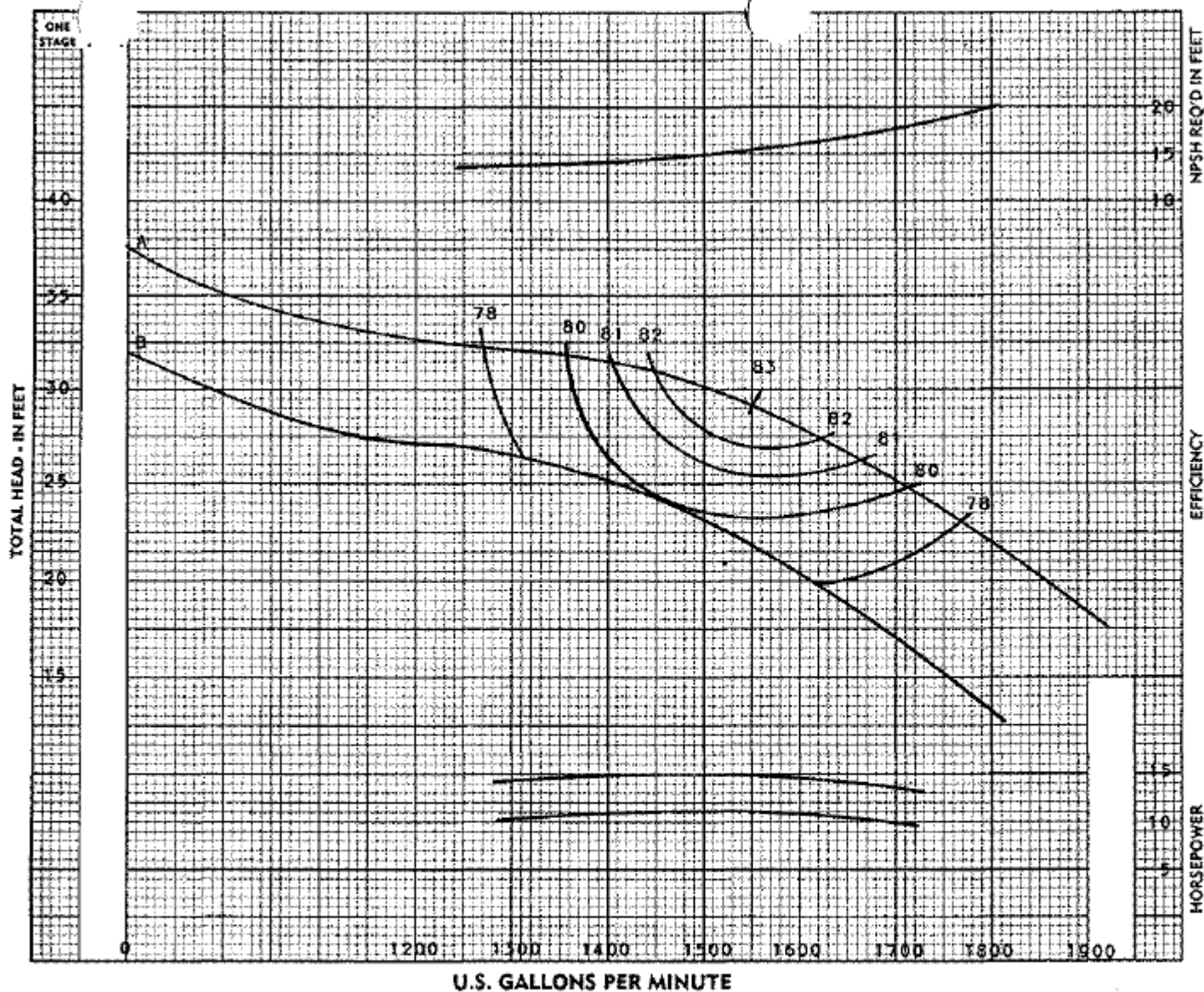


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I-E
"TOP-O-THE LINE"

10BH-1550
DESIGN

1770
R.P.M.

SECTION N
PAGE 120
DATE 12-21-90

IMPELLER DATA

TRIM DIAMETER: A 8.000 ", B 7.63 ", C -- ", -- ", -- ", -- "

One stage deduct 4 %, 2 stage deduct 2 %, 3 stage deduct 1 %

EFFICIENCY CORRECTION: 4 stage add 0 %, -- stage add -- %, -- stage add -- %

EFFECTIVE IMPELLER EYE AREA 29.2 sq. inches NUMBER OF IMPELLER VANES SEVEN

THRUST CONSTANT (K) 14.2 Lbs./Ft. WR_2 (See Note 6) .79 Lbs./Ft.² MAXIMUM SPHERE SIZE 1-1/4

IMPELLER EYE FLUID VELOCITY CONSTANT (K_v) 0.011 IMPELLER PERIPHERAL SPEED CONSTANT (N_1) 7.73 (Ft/Sec) -- (Ft/Min)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 9-3/4 ", MINIMUM DIAMETER = 9-1/2 ", BELL DIAMETER -- ", MIN. BELL DIAMETER -- "

MAXIMUM NO. STAGES (Std. Constr.) 20 MAXIMUM HEAD (Std. Constr.) 577 Ft

DIAMETER IMPELLER SHAFT 1-1/2 ", MINIMUM IMPELLER SHAFT THREADS 14 "

LATERAL (See explanation below) * NOMINAL -- ", MINIMUM -- ", STANDARD .375 ", MAXIMUM .600 "

WEAR RING CLEARANCE (Nominal) .015 ", SHAFT/BEARING CLEARANCE (Nominal) 0.010 "

FORMULAS: HYDRAULIC THRUST = K Factor x Laboratory Head in feet = 14.2 Lbs

IMPELLER PERIPHERAL SPEED (U_2) = N_1 Constant x Impeller Diameter 7.73 Ft/Sec or -- Ft/Min

IMPELLER EYE FLUID VELOCITY (V_1) = K_v Constant x GPM = .011 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	27-1/16	23-3/8	8-3/4	9-3/4	-	3-1/4	-	-	22	-	-	-	-	-	-

