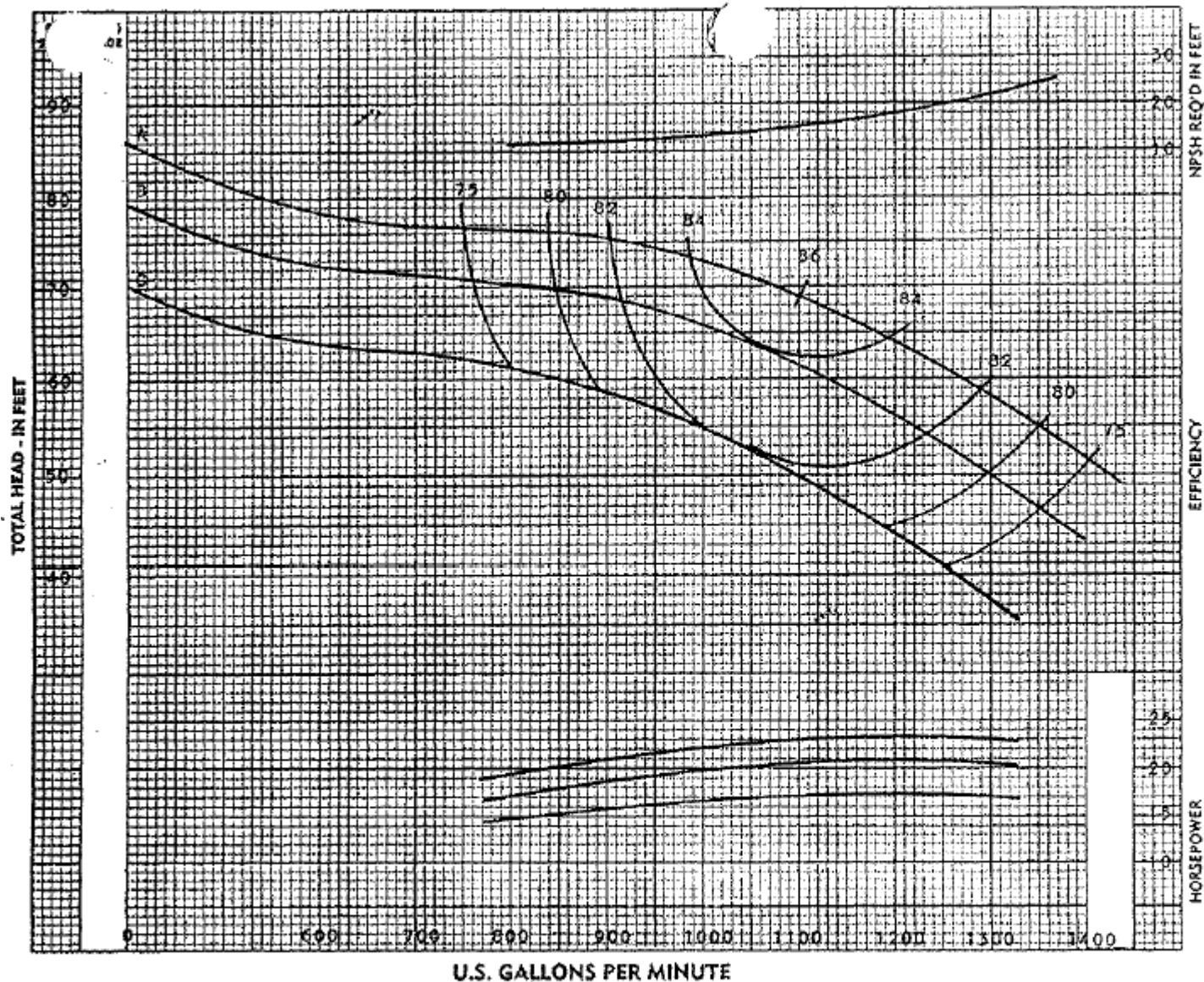




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I-E
"TOP-O-THE LINE"

PH
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DESIGN

1770
R.P.M.

SECTION N
PAGE 126
DATE 12-21-90

IMPELLER DATA

TRIM DIAMETER: A 9.18 ", B 8.80 ", C 8.44 ", — ", — ", — "

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

EFFICIENCY CORRECTION: — stage add — %, — stage add — %, — stage add — %

EFFECTIVE IMPELLER EYE AREA 15.95 sq. inches NUMBER OF IMPELLER VANES EIGHT

THRUST CONSTANT (K) 8.85 Lbs./Ft. WR₂ (See Note 6) 1.5 Lbs./Ft.2 MAXIMUM SPHERE SIZE .875

IMPELLER EYE FLUID VELOCITY CONSTANT (K_v) .020 IMPELLER PERIPHERAL SPEED CONSTANT (N₁) 7.68 (Ft/Sec) — (Ft/Min)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 11-5/8 ", MINIMUM DIAMETER = 11-5/8 ", BELL DIAMETER — ", MIN. BELL DIAMETER — "

MAXIMUM NO. STAGES (Std. Constr.) 8 MAXIMUM HEAD (Std. Constr.) 577 Ft

DIAMETER IMPELLER SHAFT 1-11/16 ", MINIMUM IMPELLER SHAFT THREADS 14 "

LATERAL (See explanation below) * NOMINAL — ", MINIMUM — ", STANDARD .375 ", MAXIMUM .750 "

WEAR RING CLEARANCE (Nominal) .015 ", SHAFT/BEARING CLEARANCE (Nominal) .010 "

FORMULAS: HYDRAULIC THRUST=K Factor x Laboratory Head in feet= 8.85 Lbs

IMPELLER PERIPHERAL SPEED (U₂)=N₁ Constant x Impeller Diameter 7.68 Ft/Sec or — Ft/Min

IMPELLER EYE FLUID VELOCITY (V_e)=K_v Constant x GPM= .020 Ft/Sec

NOTE: @ = per impeller. WR₂ 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	25-3/8	21-11/16	9-1/4	11-5/8	-	3-1/4	-	-	18	11	-	-	-	-	-

