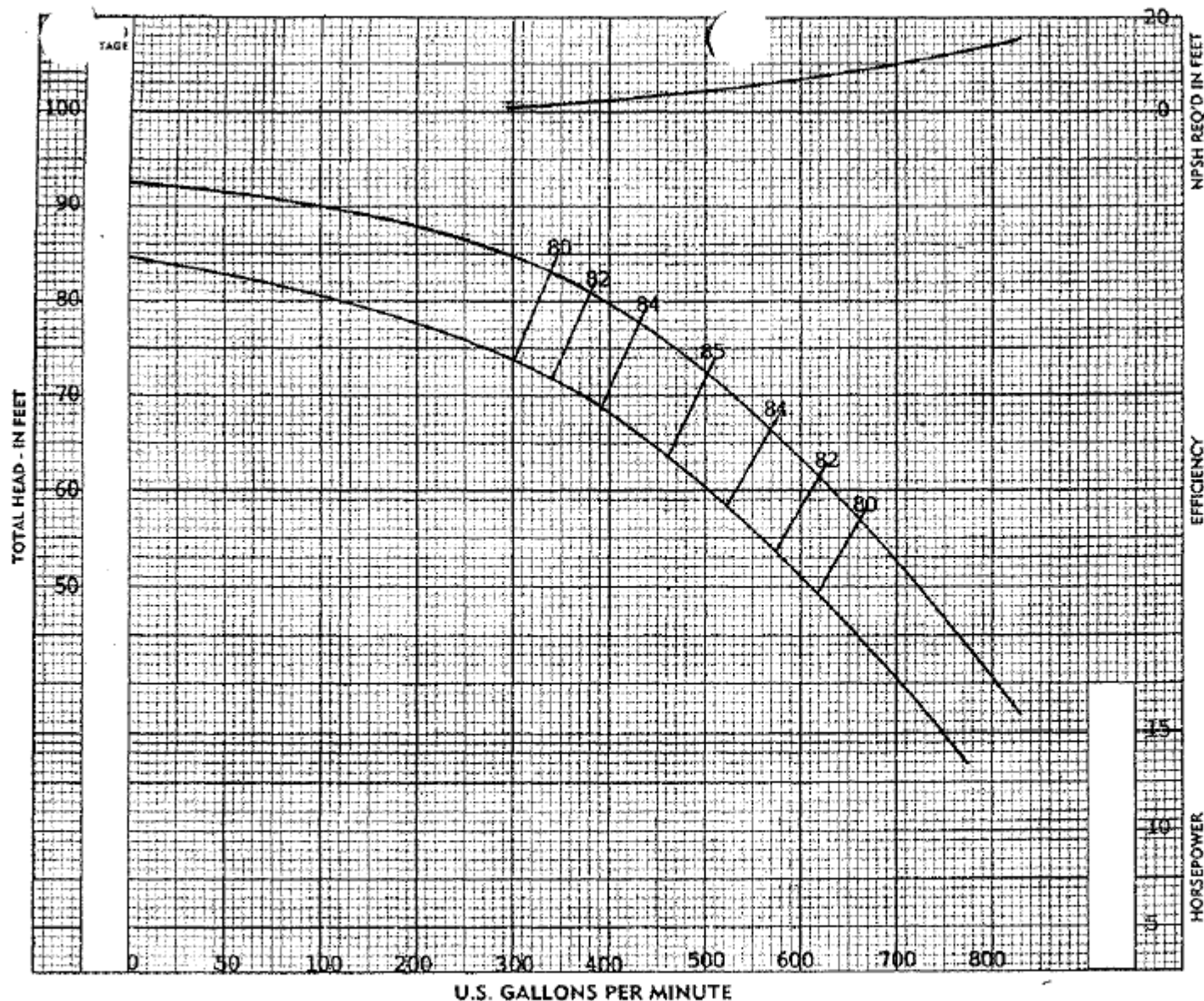




1567 E. HWY. 160
P.O. BOX 112
MONTE VISTA
COLORADO 81144

(719) 852-5174

I-E
"TOP-O-THE LINE"

12KM-500
DESIGN

1770
R.P.M.

SECTION N
PAGE 121
DATE 03-25-91

IMPELLER DATA

TRIM DIAMETER: A 9.325 " B 8.875 " 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 16.31 sq. inches NUMBER OF IMPELLER VANES

THRUST CONSTANT (K) 6.4 Lbs./Ft. WR^2 (See Note 4) .642 Lbs. Ft.² MAXIMUM SPHERE SIZE .656 "

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

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 11.625" , MINIMUM DIAMETER = 11.375" , BELL DIAMETER 11.375" , MIN. BELL DIAMETER 10.375"
 MAXIMUM NO. STAGES (Std. Constr.) 3 MAXIMUM HEAD (Std. Constr.) 587 Ft.
 DIAMETER IMPELLER SHAFT 1.6875" , MINIMUM IMPELLER SHAFT THREADS _____"
 LATERAL (See explanation below)* NOMINAL _____" , MINIMUM _____" , STANDARD .687" , MAXIMUM _____"
 WEAR RING CLEARANCE (Nominal) .012" , SHAFT / BEARING CLEARANCE (Nominal) .007"

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

IMPELLER PERIPHERAL SPEED (U_2) = N_1 Constant $\times$ Impeller Diameter _____ Ft./Sec. or _____ Ft./Min.

IMPELLER EYE FLUID VELOCITY (V) = K. Constant x GPM = _____ Ft./Sec.

NOTE @ = per impeller. WR^2 includes impeller, impeller collar, 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

[illegible]