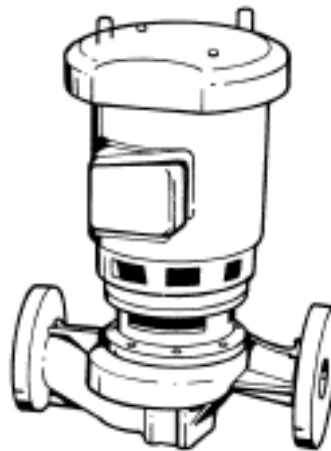
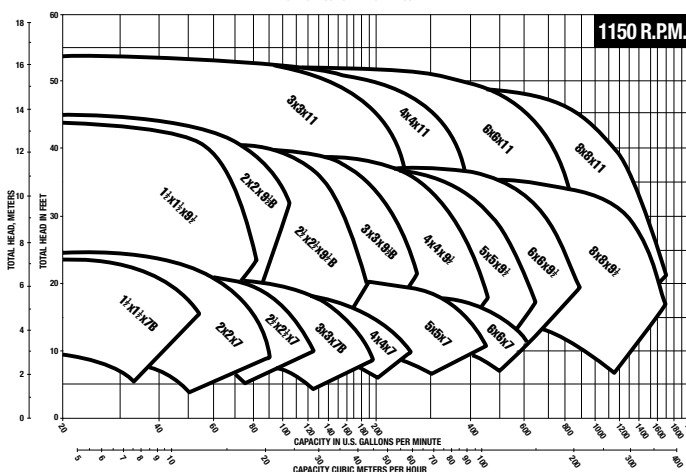
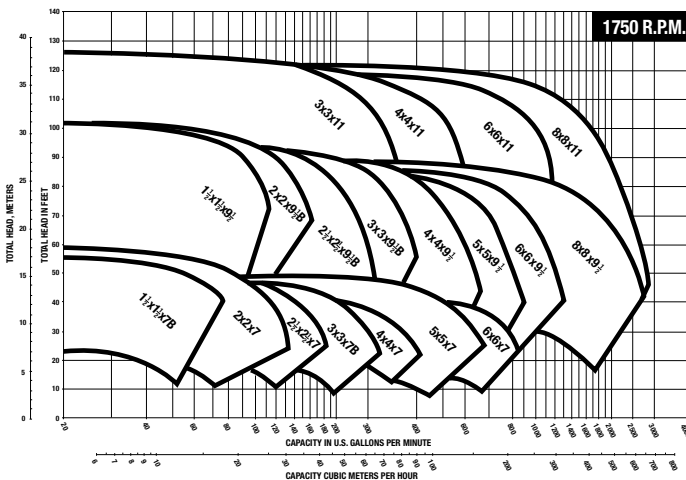
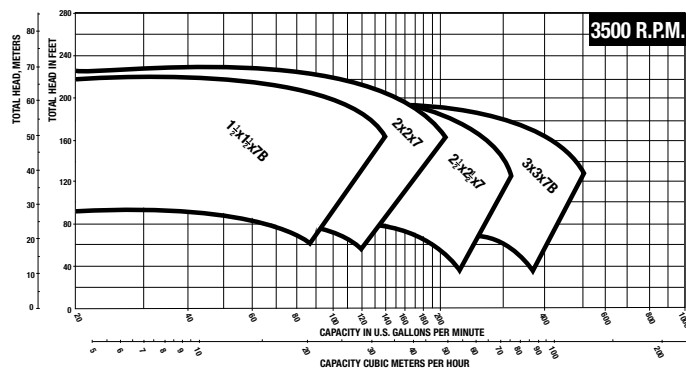


Marlow Series 580

In-Line Mounted Centrifugal Pump

PERFORMANCE CURVES



60 HERTZ PERFORMANCE CURVES

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USEFUL PUMP FORMULAS

$$\begin{aligned}
 \text{Pressure (PSI)} &= \frac{\text{Head (Feet)} \times \text{Specific Gravity}}{2.31} \\
 \text{Head (Feet)} &= \frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}} \\
 \text{Vacuum (Inches of Mercury)} &= \frac{\text{Dynamic Suction Lift (Feet)} \times .883}{\text{Specific Gravity}} \\
 \text{Horsepower (Brake)} &= \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}} \\
 \text{Horsepower (Water)} &= \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960} \\
 \text{Efficiency (Pump)} &= \frac{\text{Horsepower (Water)}}{\text{Horsepower (Brake)}} \times 100 \text{ Per Cent} \\
 \text{NPSH (Available)} &= \text{Positive Factors} - \text{Negative Factors}
 \end{aligned}$$

Affinity Laws: Effect of change of speed or impeller diameter on centrifugal pumps.

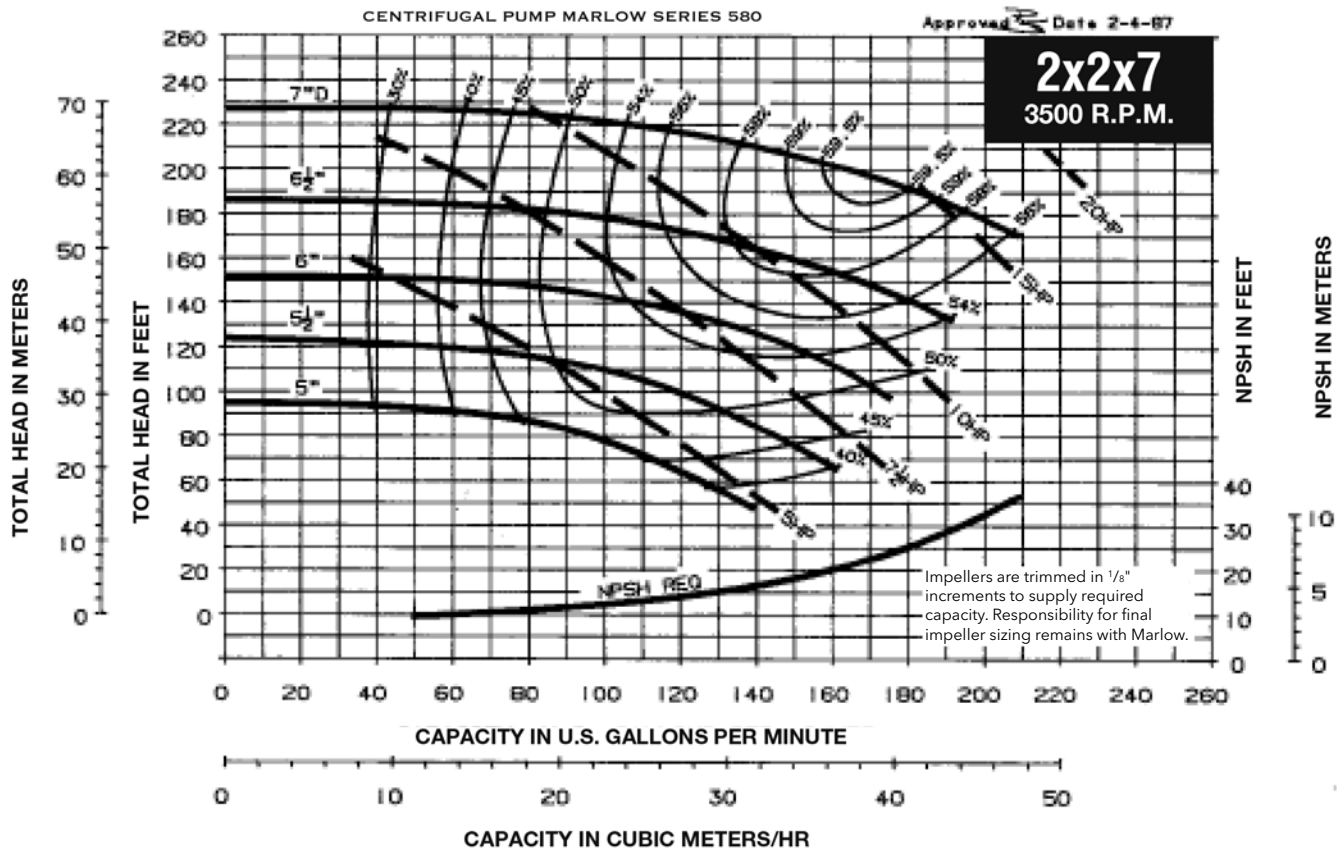
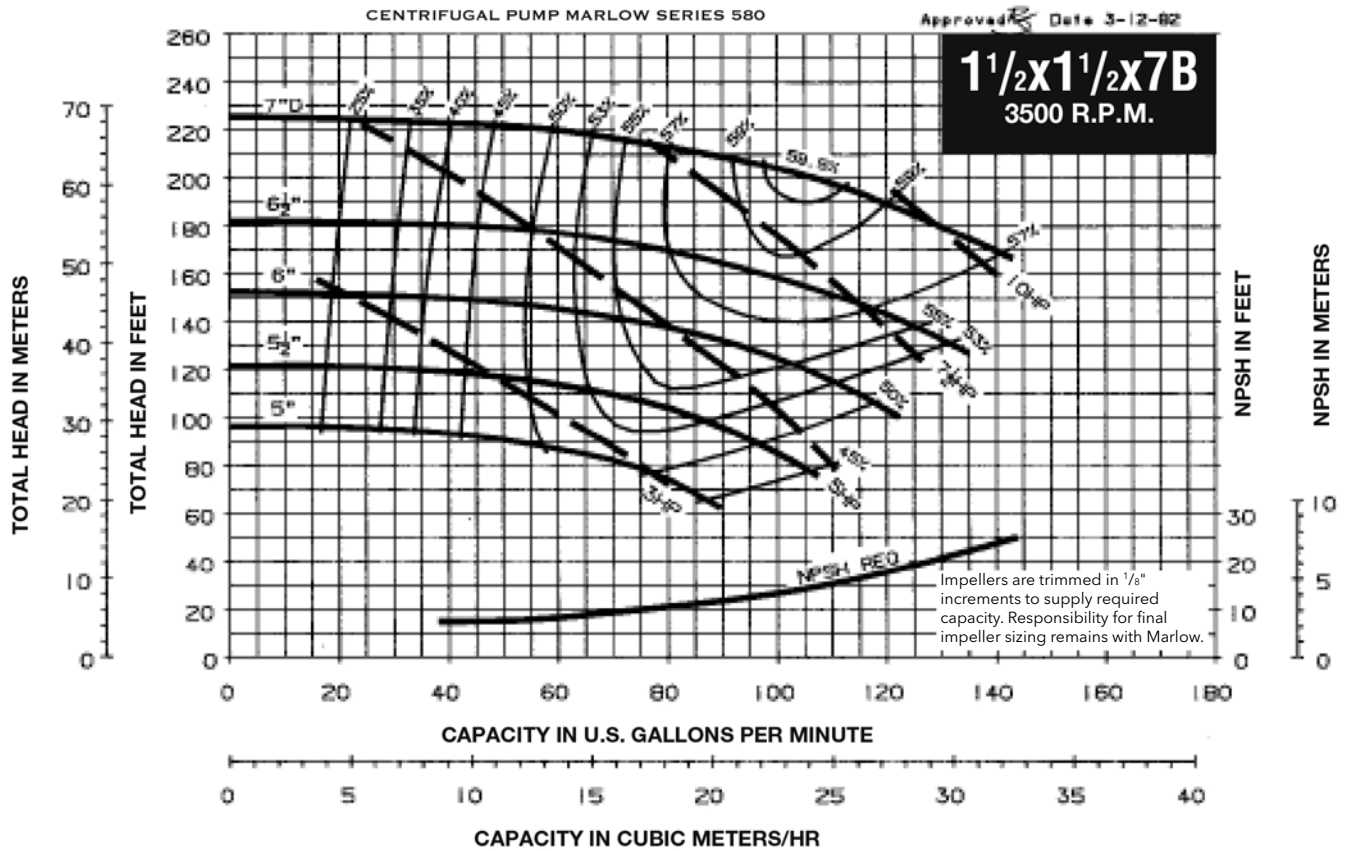
	GPM Capacity	Ft. Head	BHP
Impeller Diameter Change	$Q_2 = \frac{D_2}{D_1} Q_1$	$H_2 = \left(\frac{D_2}{D_1}\right)^2 H_1$	$P_2 = \left(\frac{D_2}{D_1}\right)^3 P_1$
Speed Change	$Q_2 = \frac{RPM_2}{RPM_1} Q_1$	$H_2 = \left(\frac{RPM_2}{RPM_1}\right)^2 H_1$	$P_2 = \left(\frac{RPM_2}{RPM_1}\right)^3 P_1$

Where Q = GPM, H = Head, P = BHP, D = Impeller Dia., RPM = Pump Speed

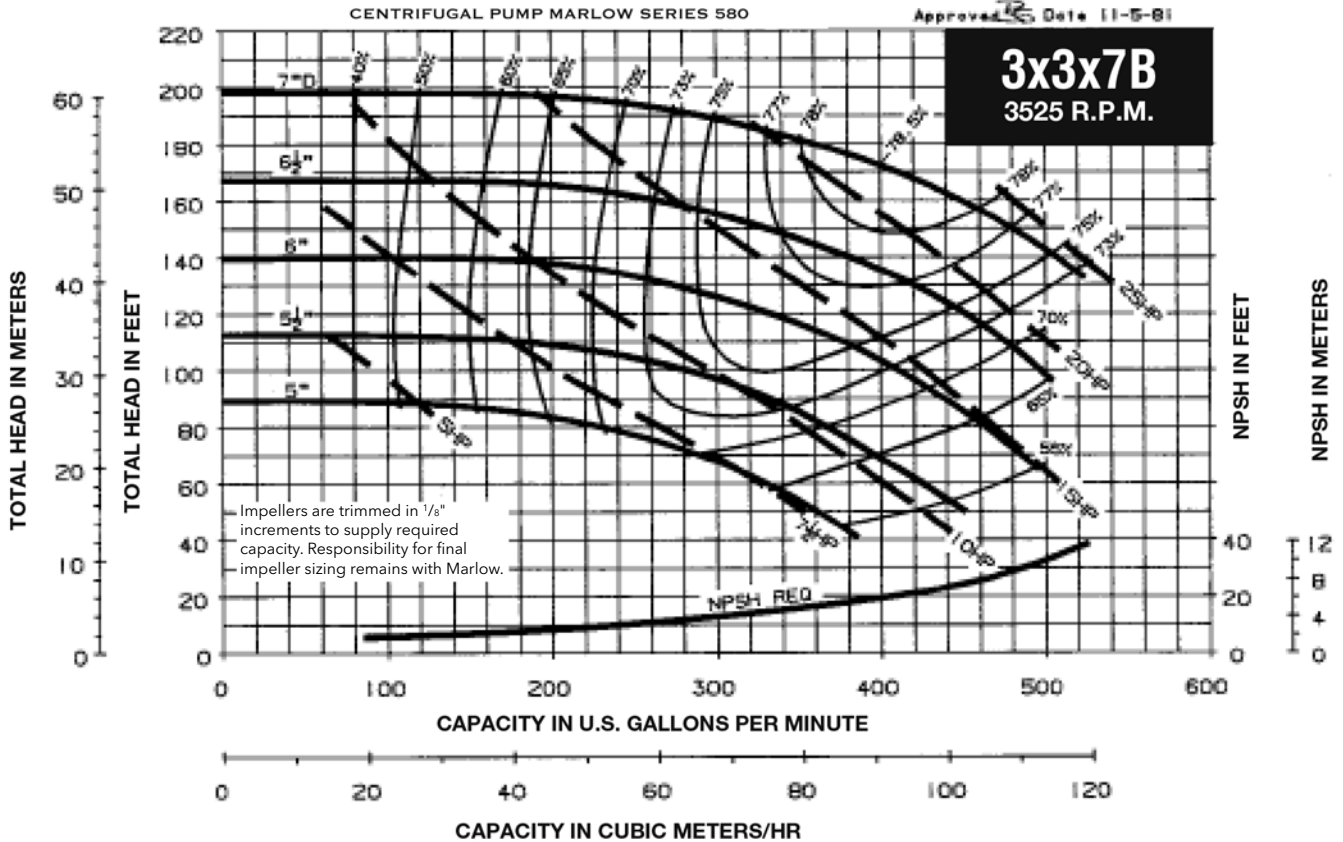
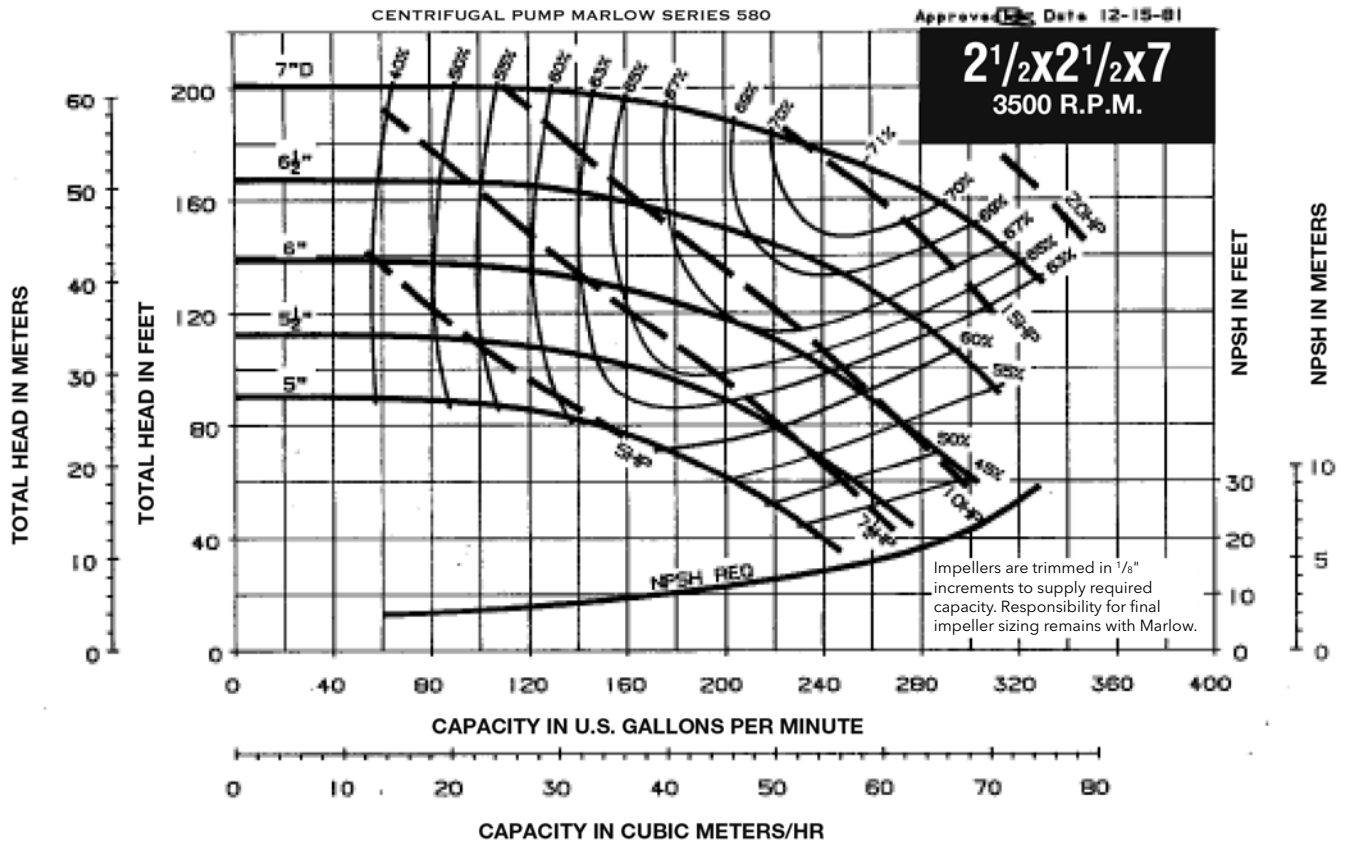
HOW TO USE THIS BOOKLET

- Determine the Pump Model number from the quick selection charts on the cover of this Booklet. Required data: Pump Flow and Head and desired RPM. Use the Standard Pumps shown on this page when possible.
- Consult the individual pump curve for the desired pump model to determine the required motor horsepower, pump efficiency and NPSHR.
- For faster, computerized pump selections, consult your Marlow Representative about Marlow online Equipment Selection Program.

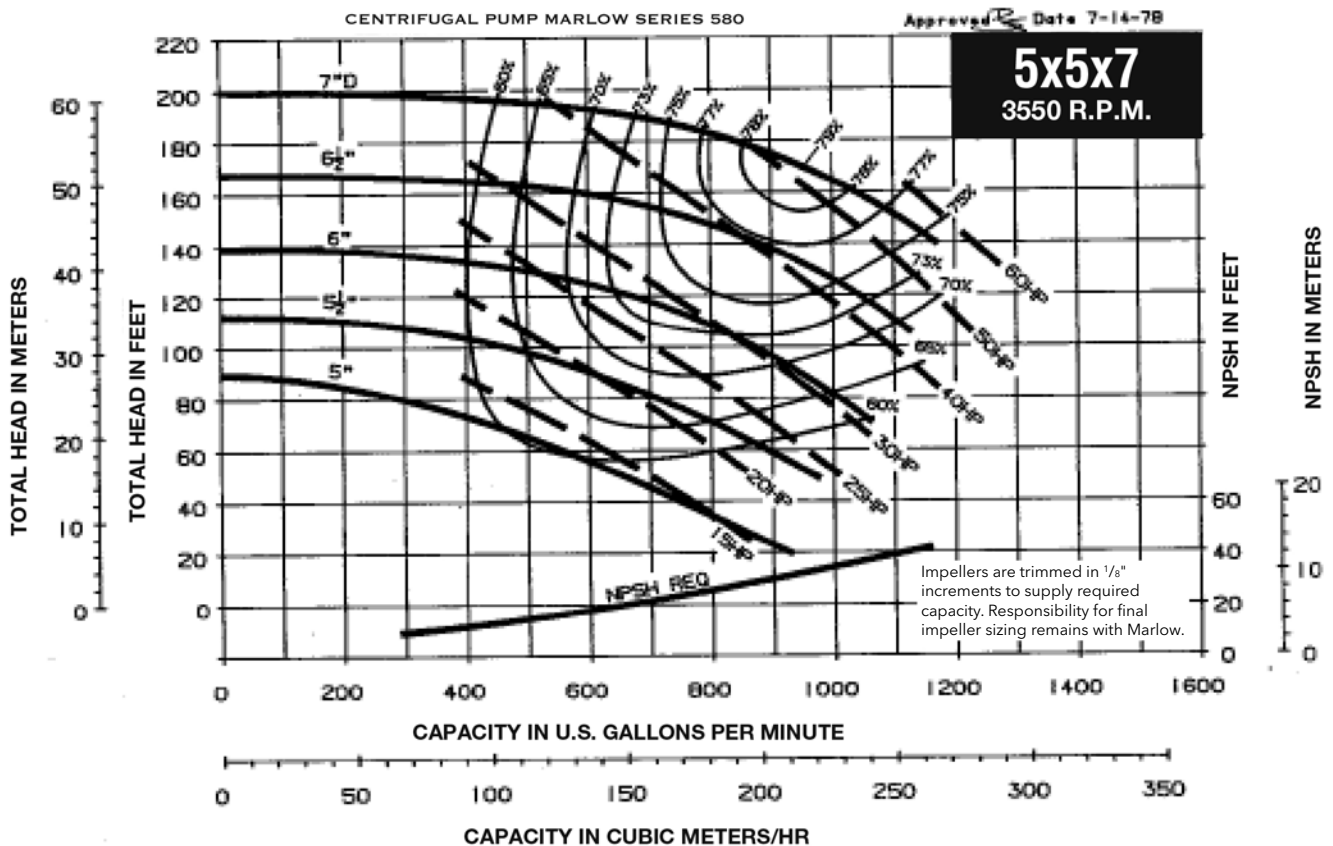
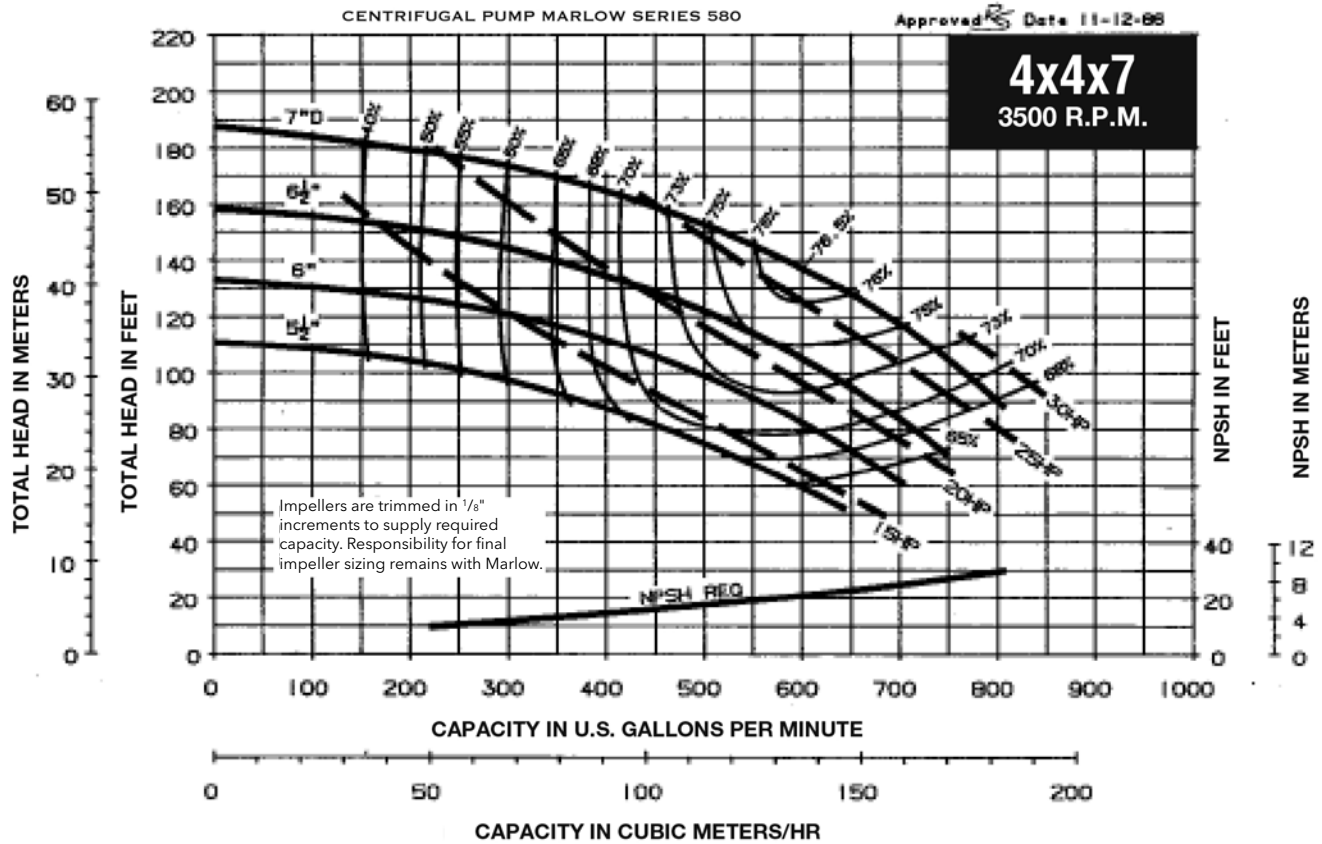
3500 RPM PUMP CURVES



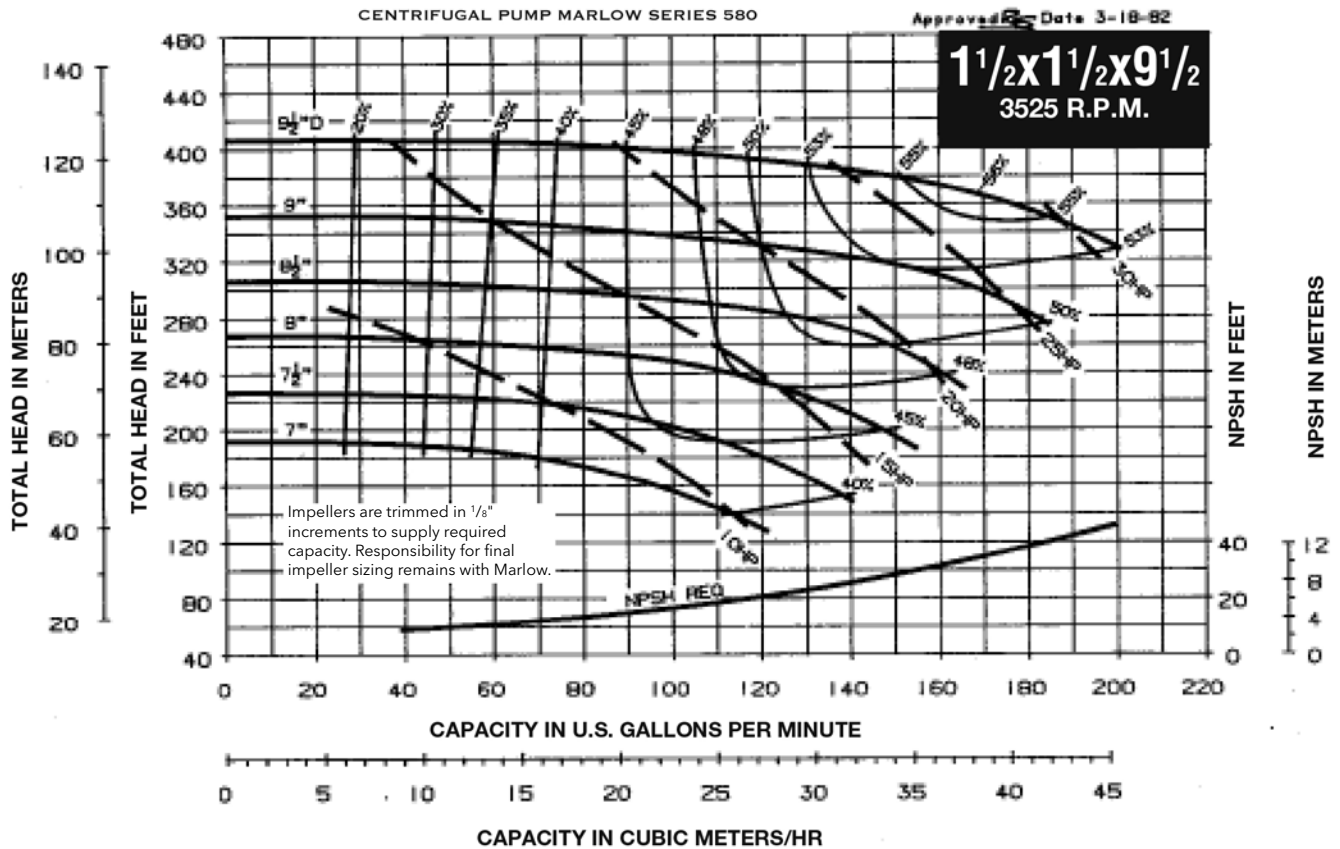
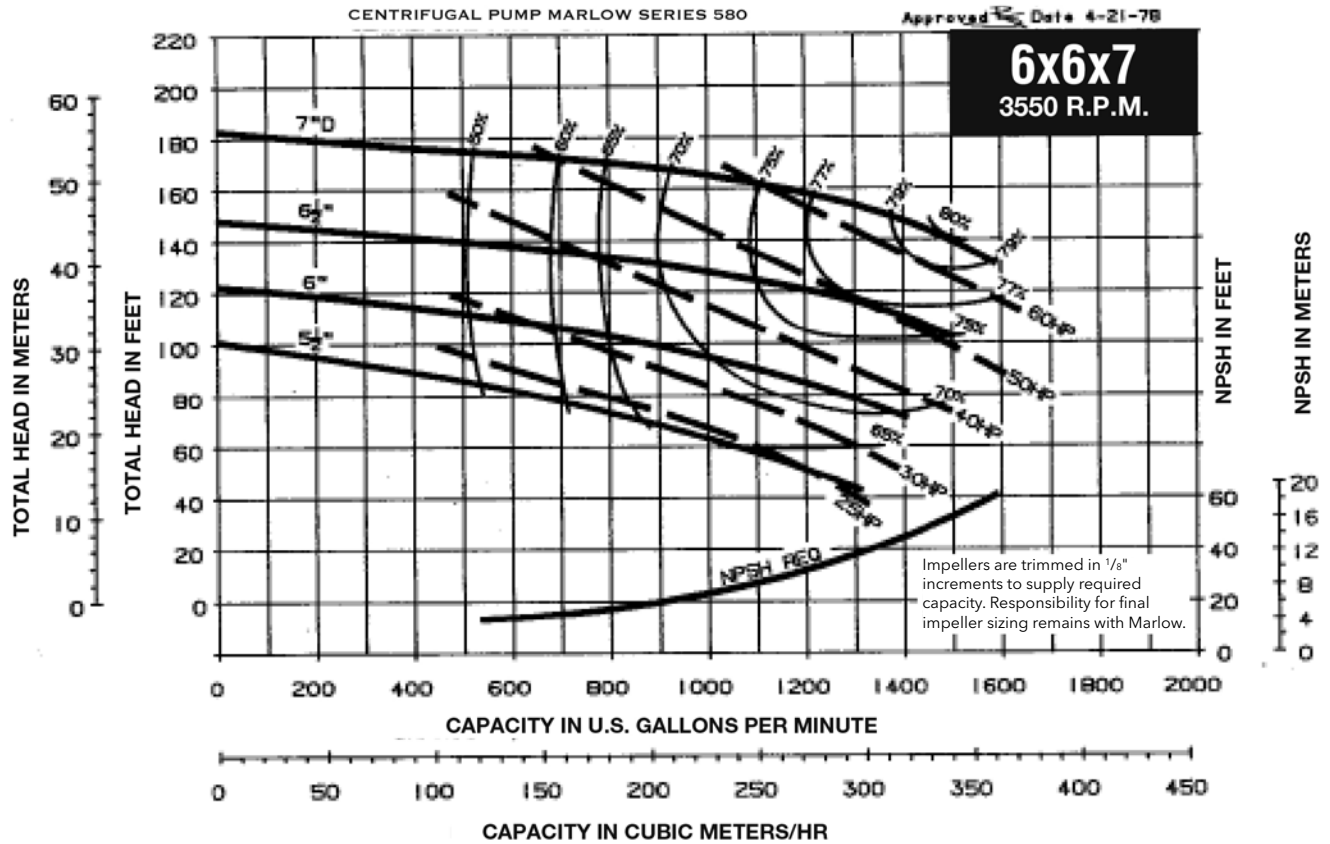
3500 RPM PUMP CURVES



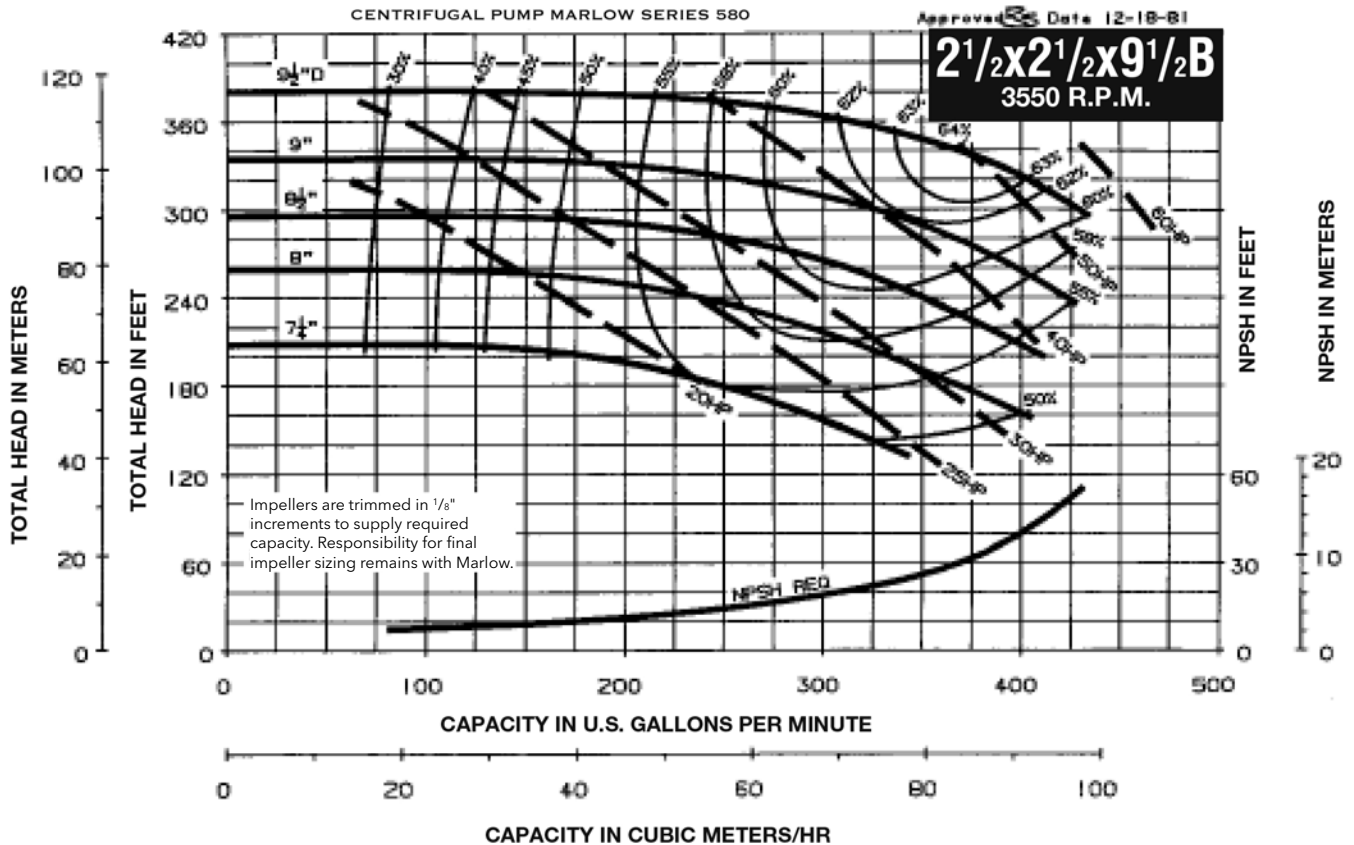
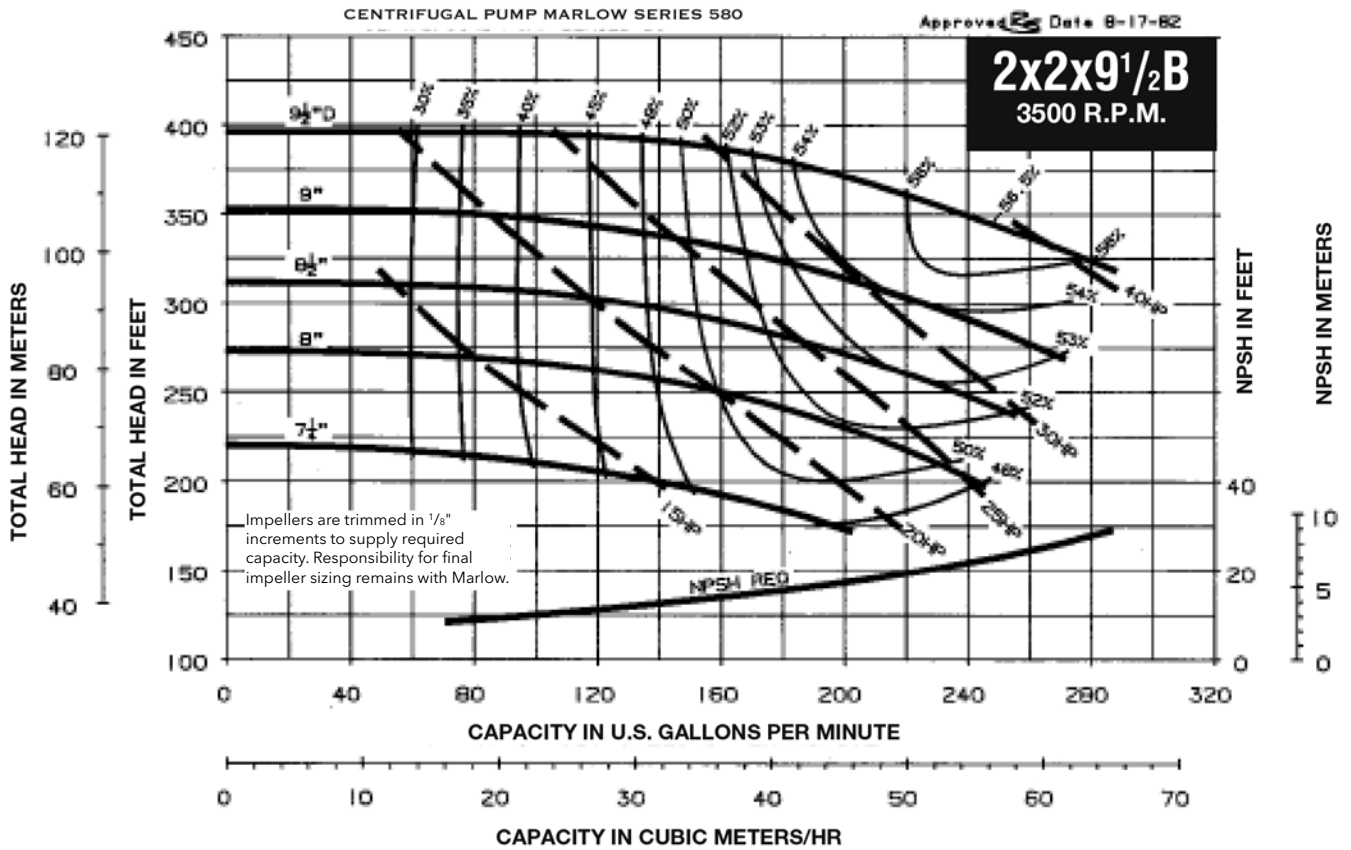
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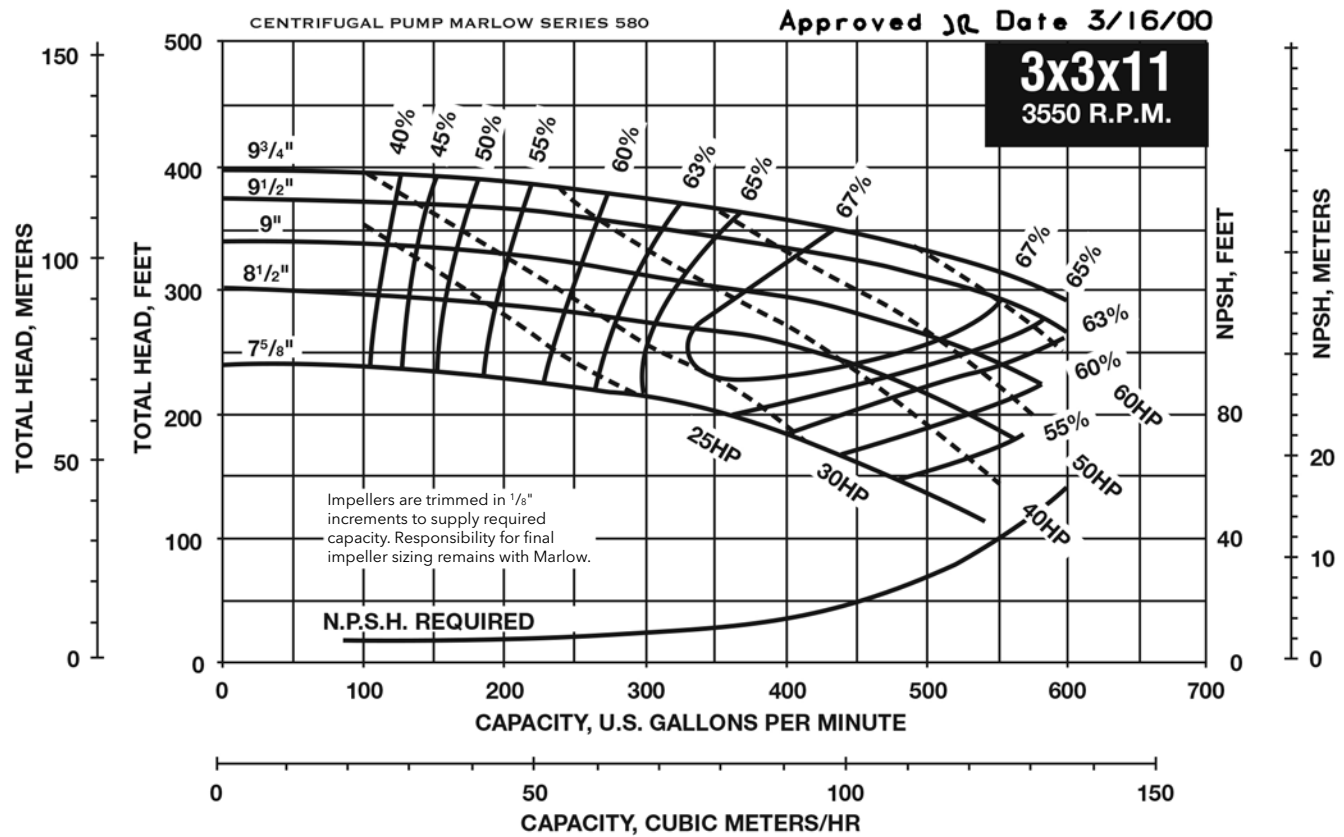
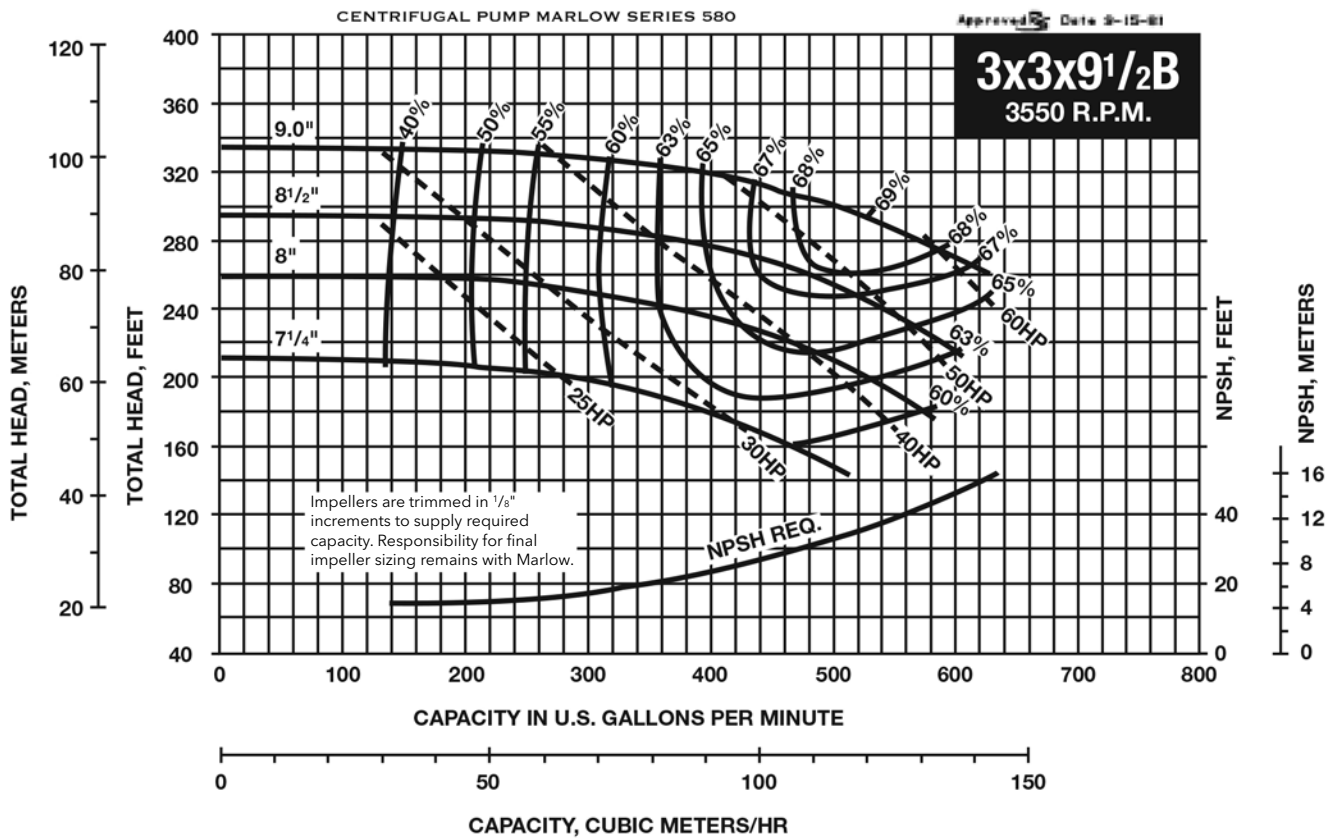
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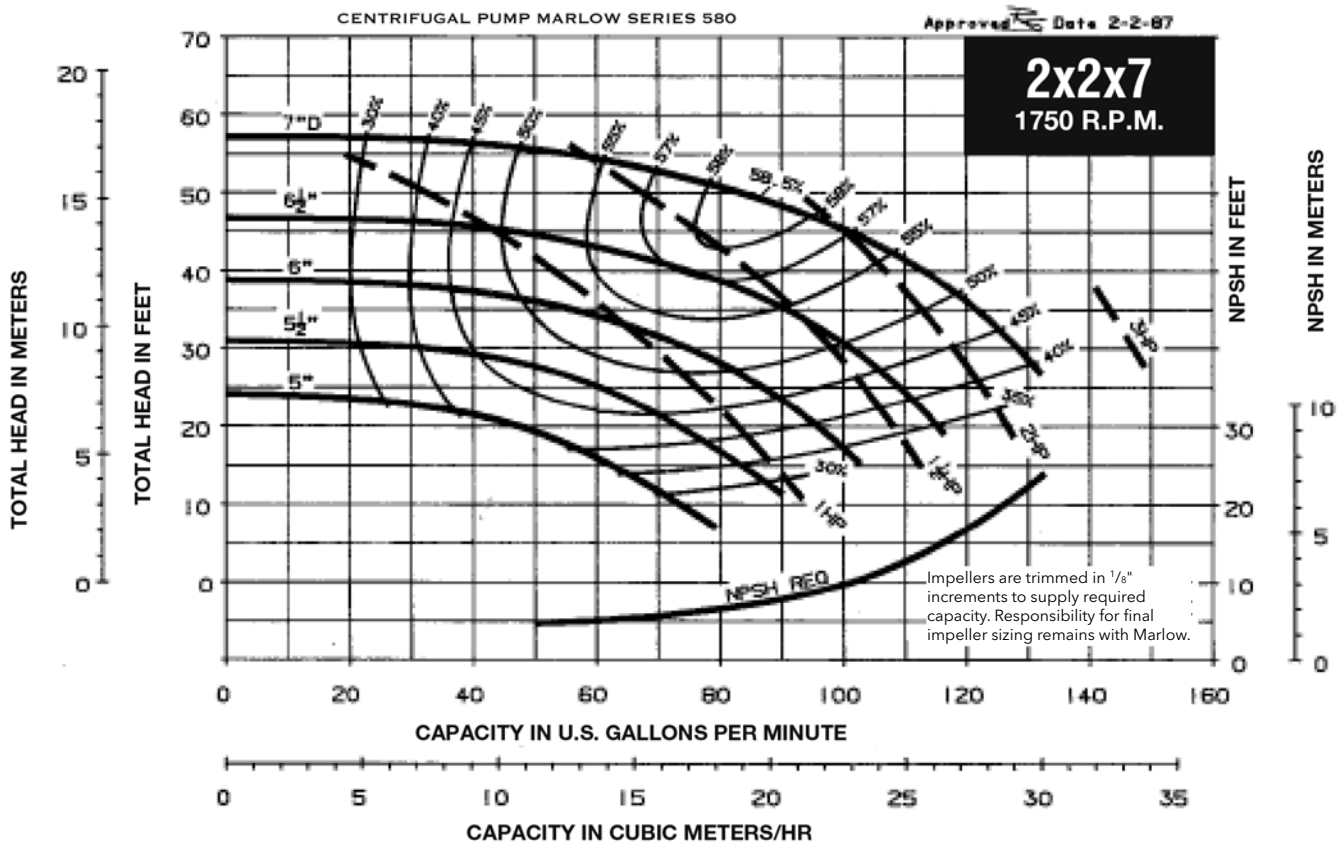
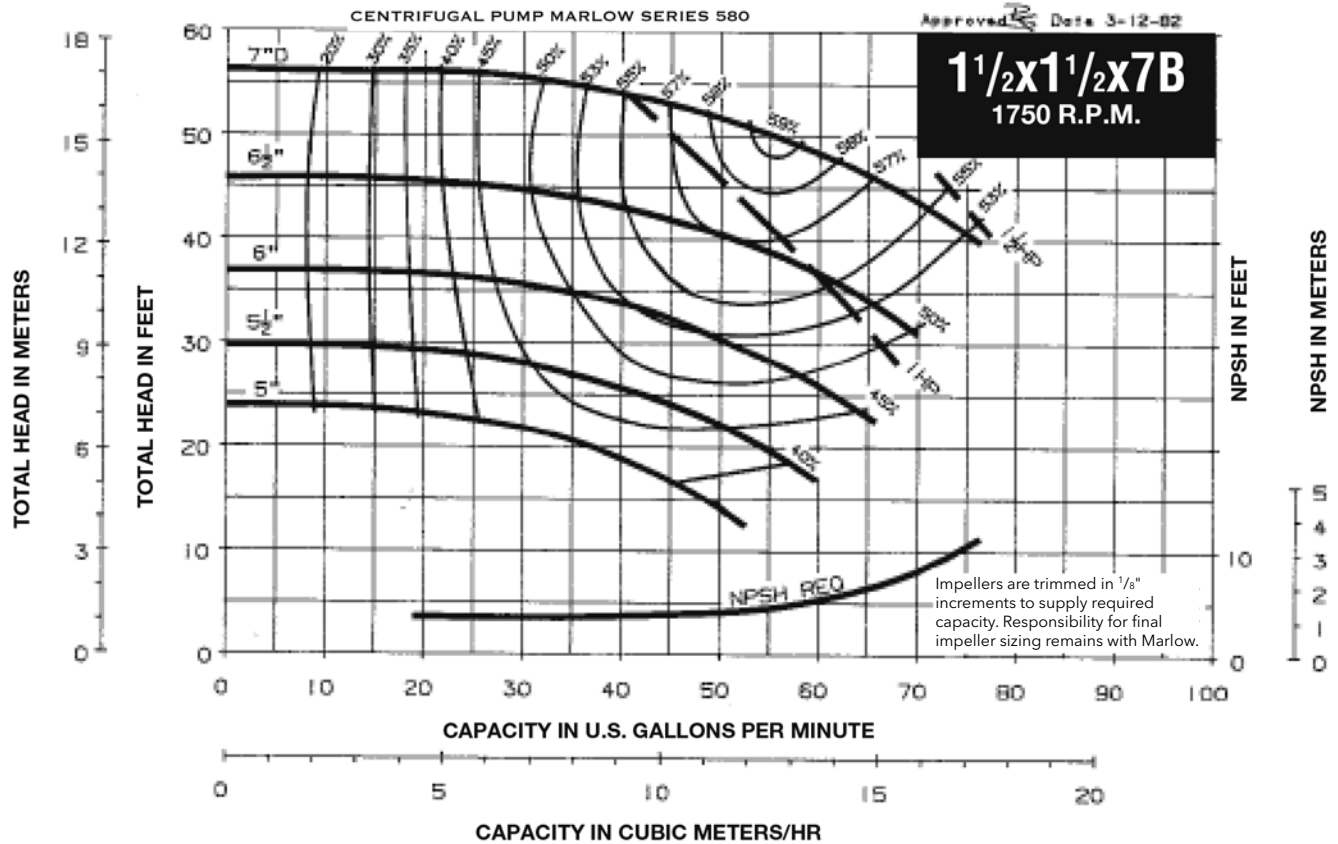
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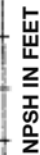
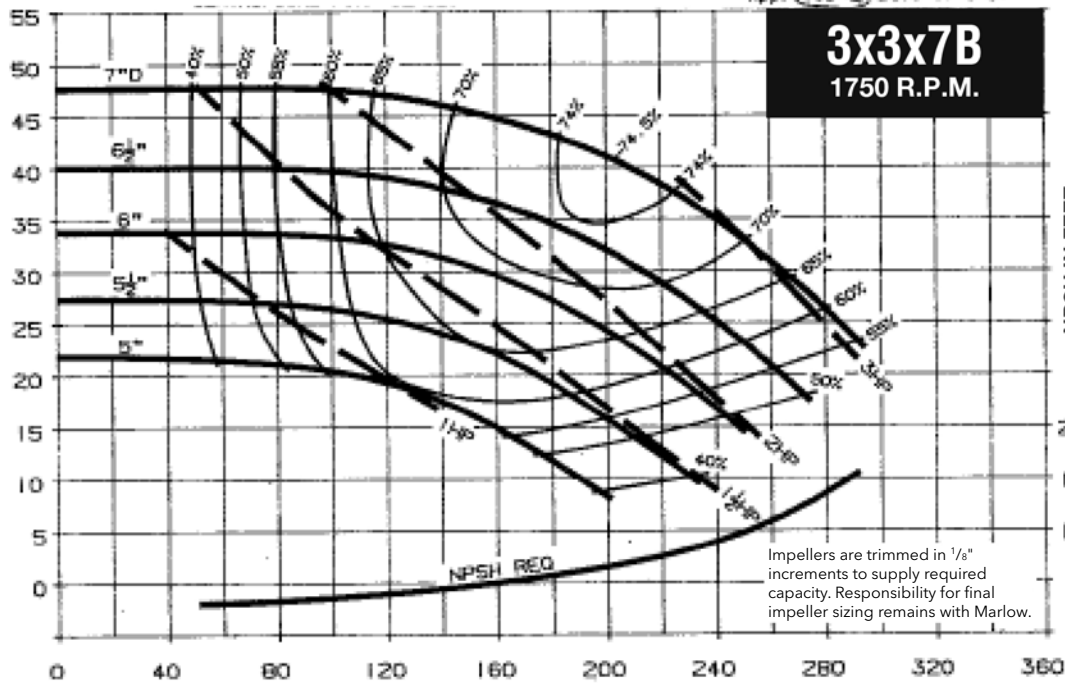
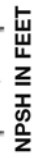
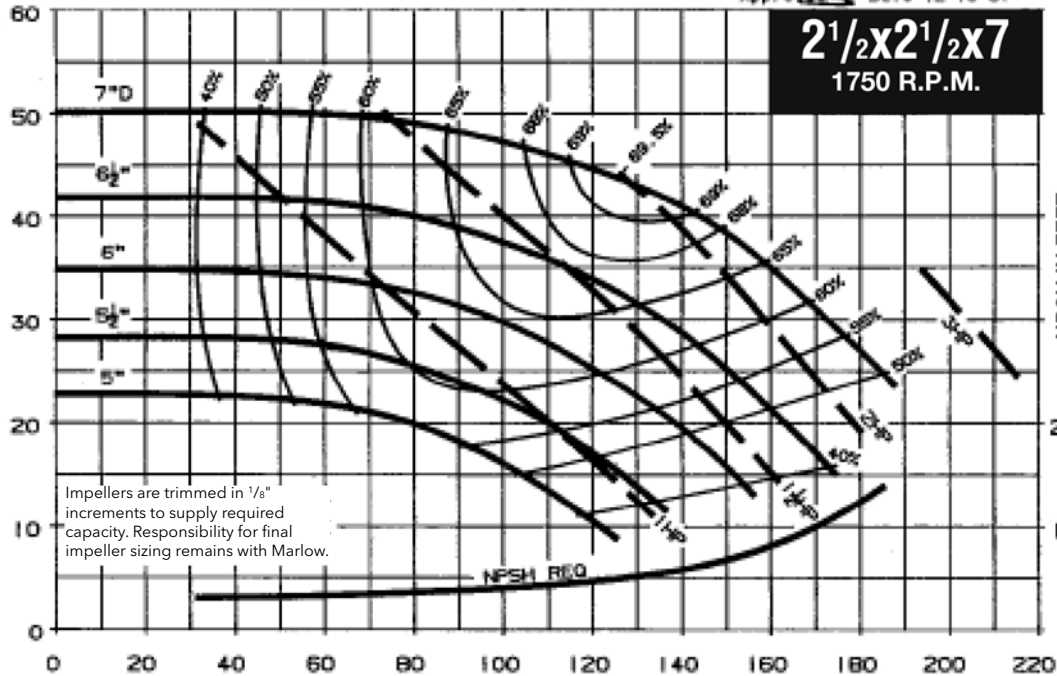
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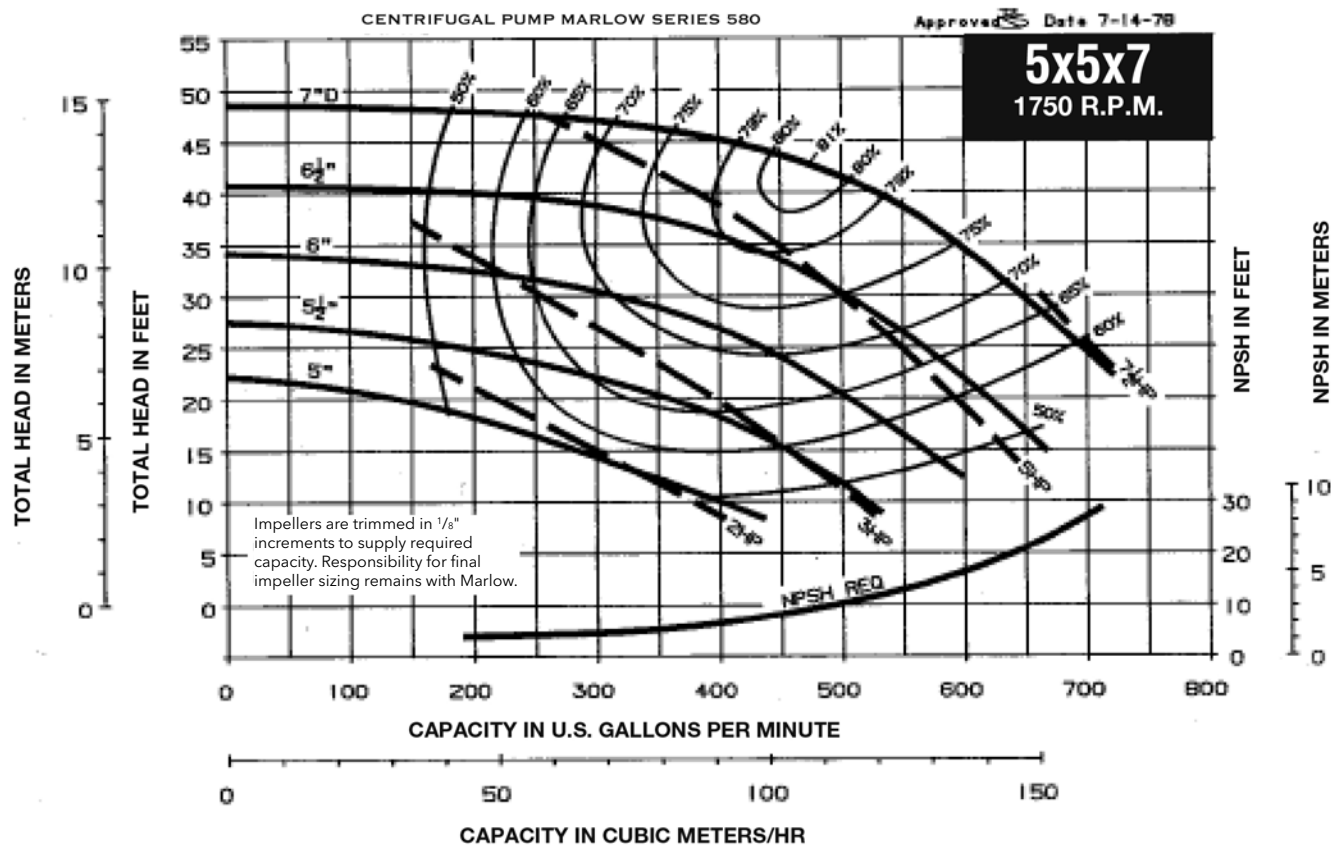
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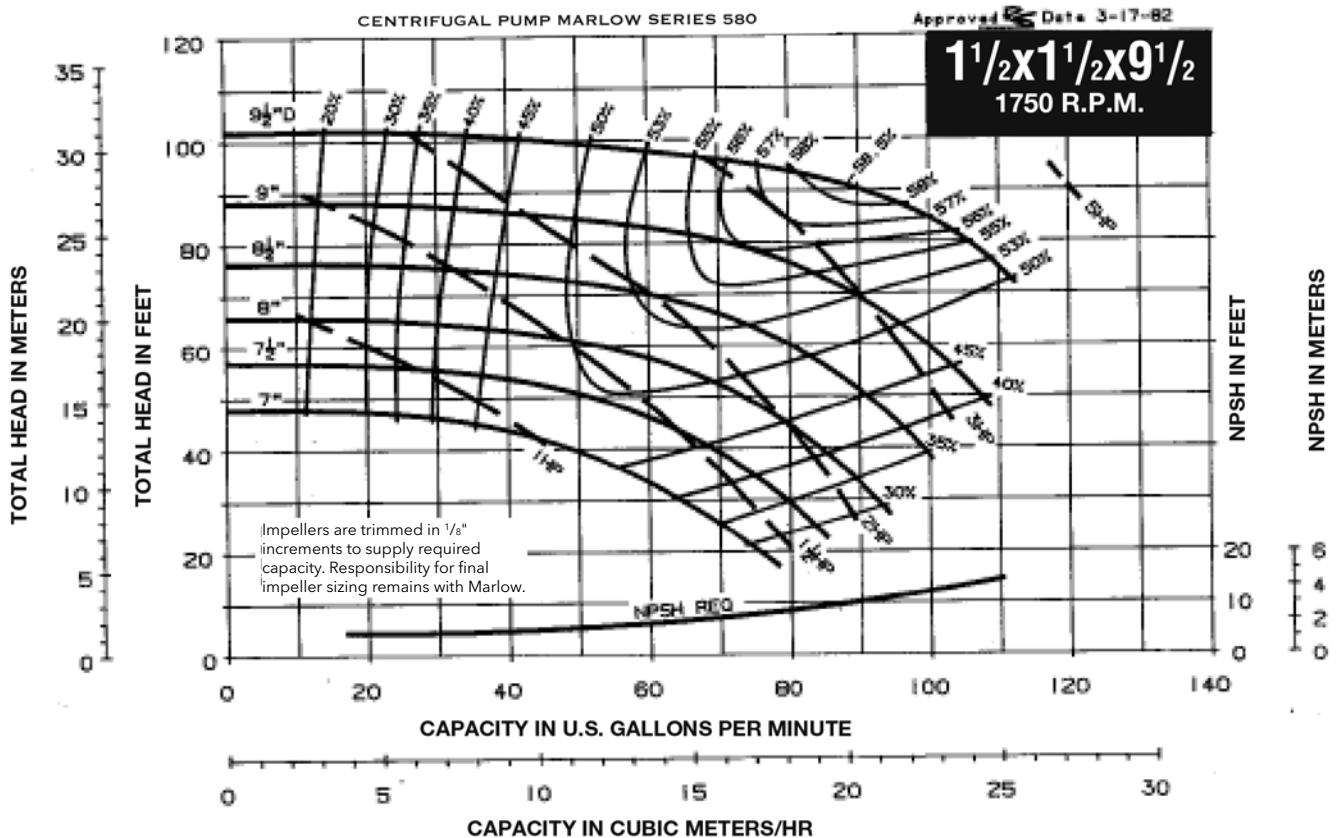
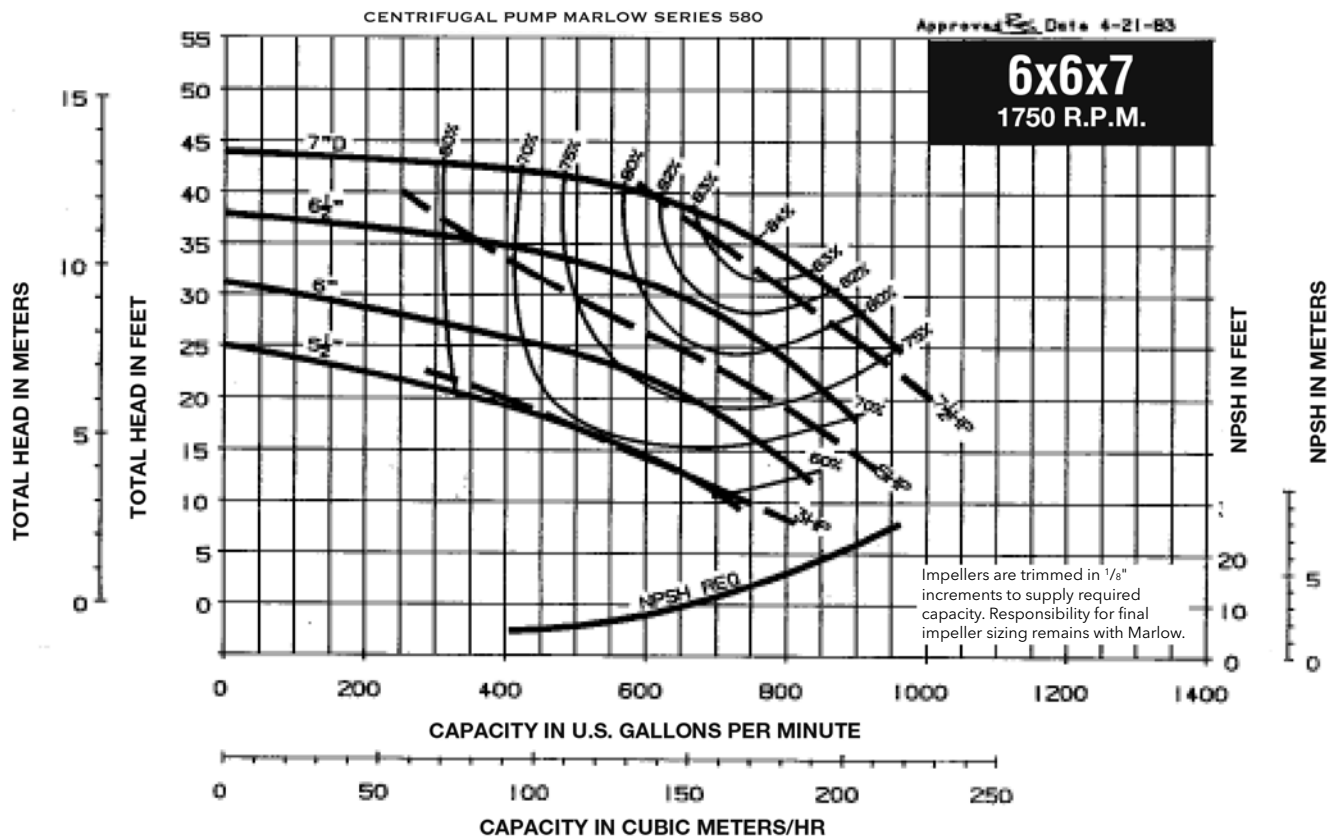
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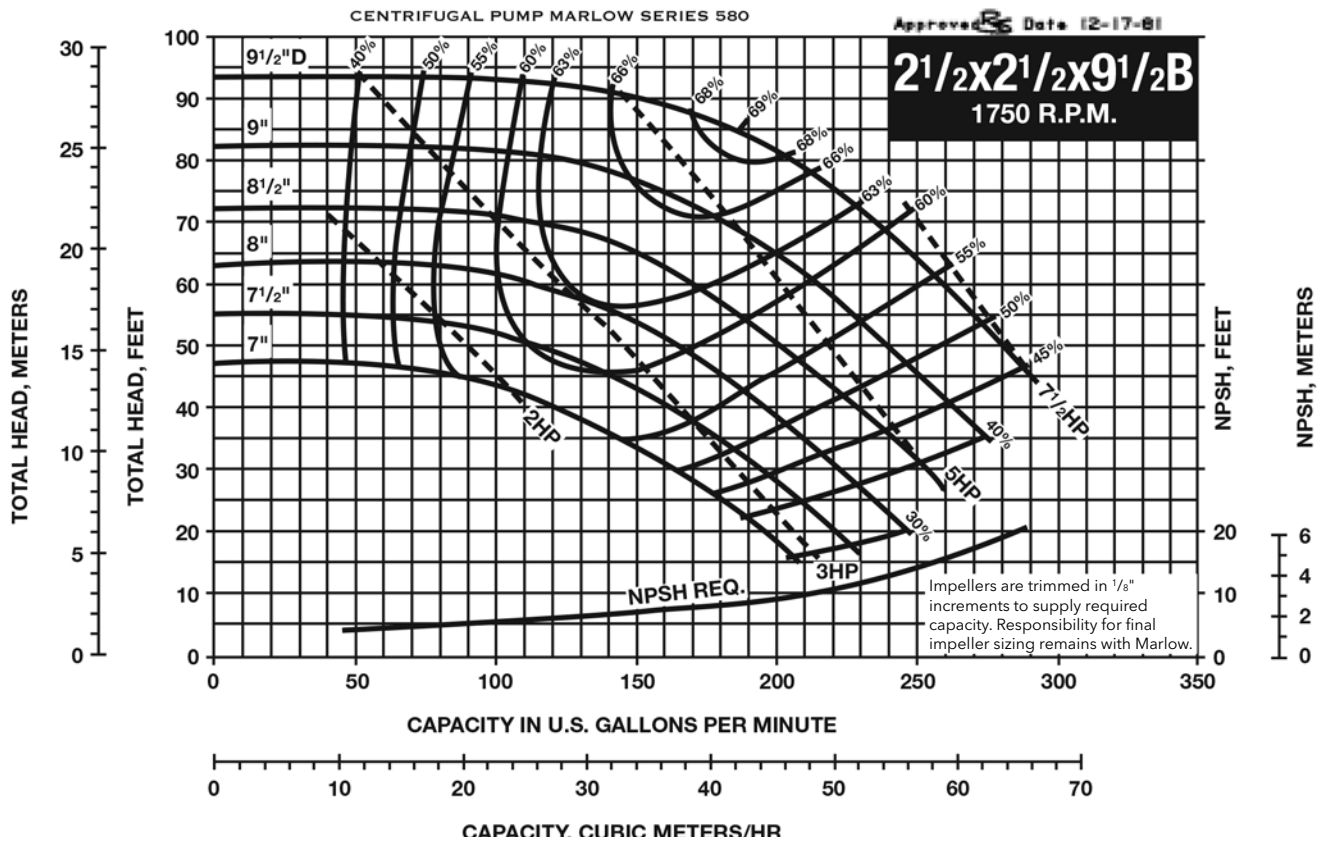
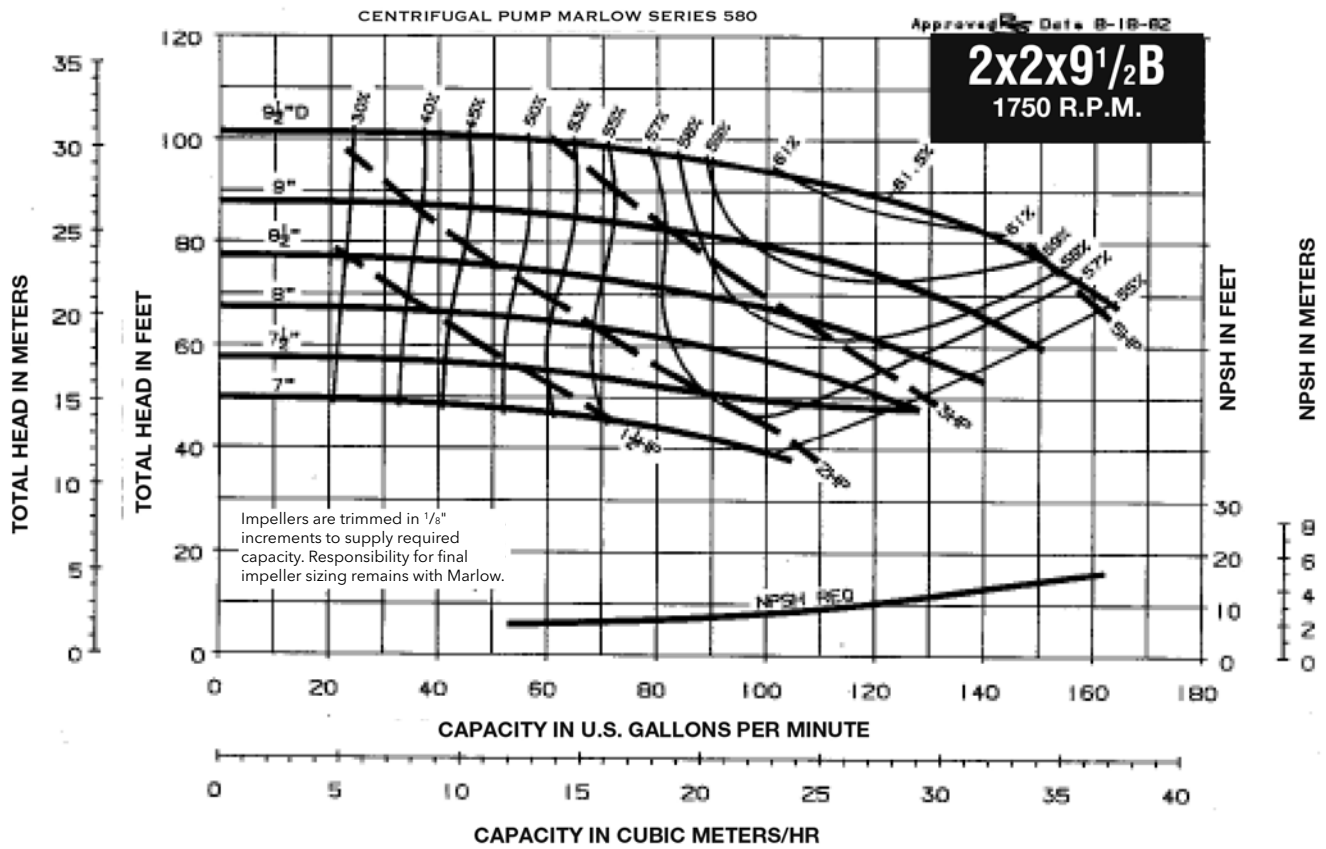
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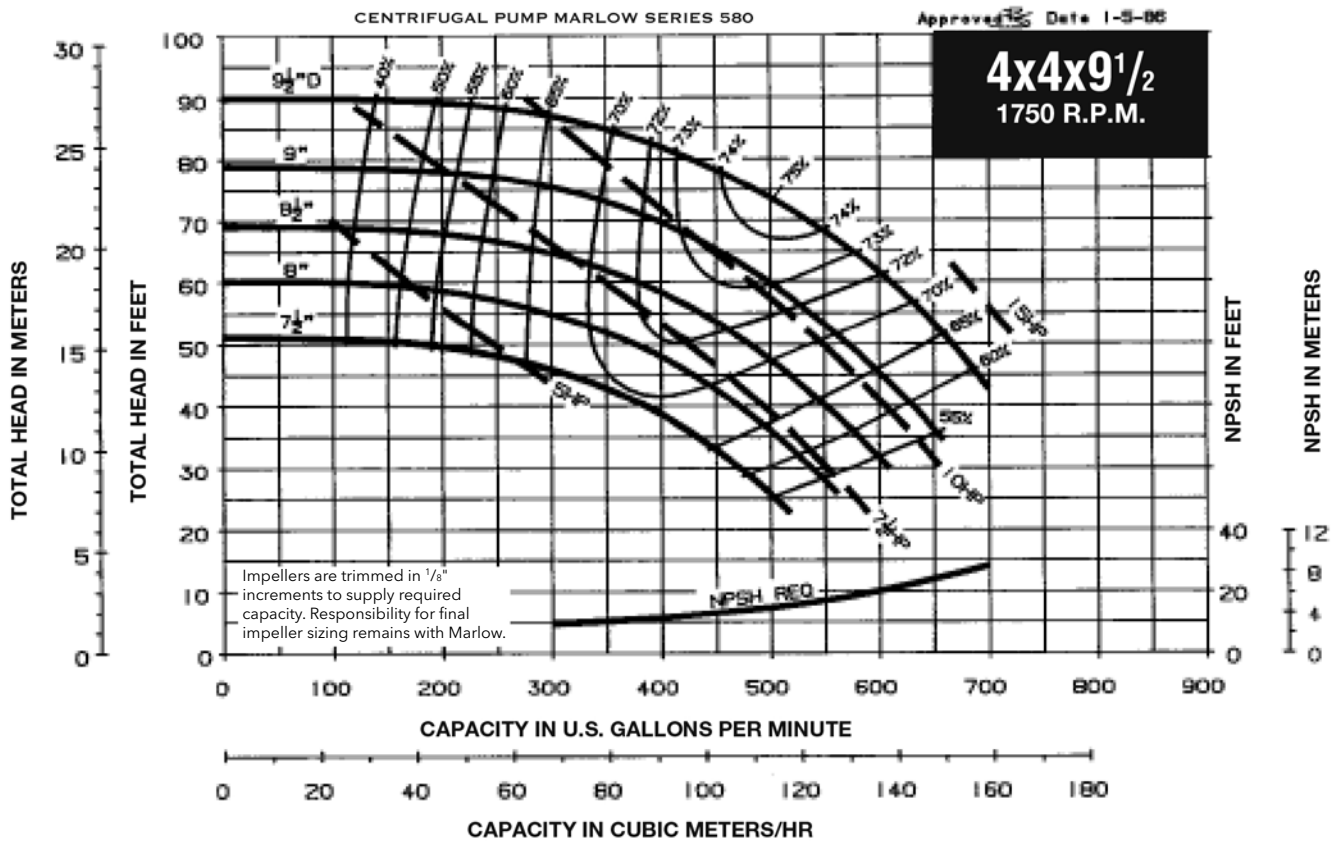
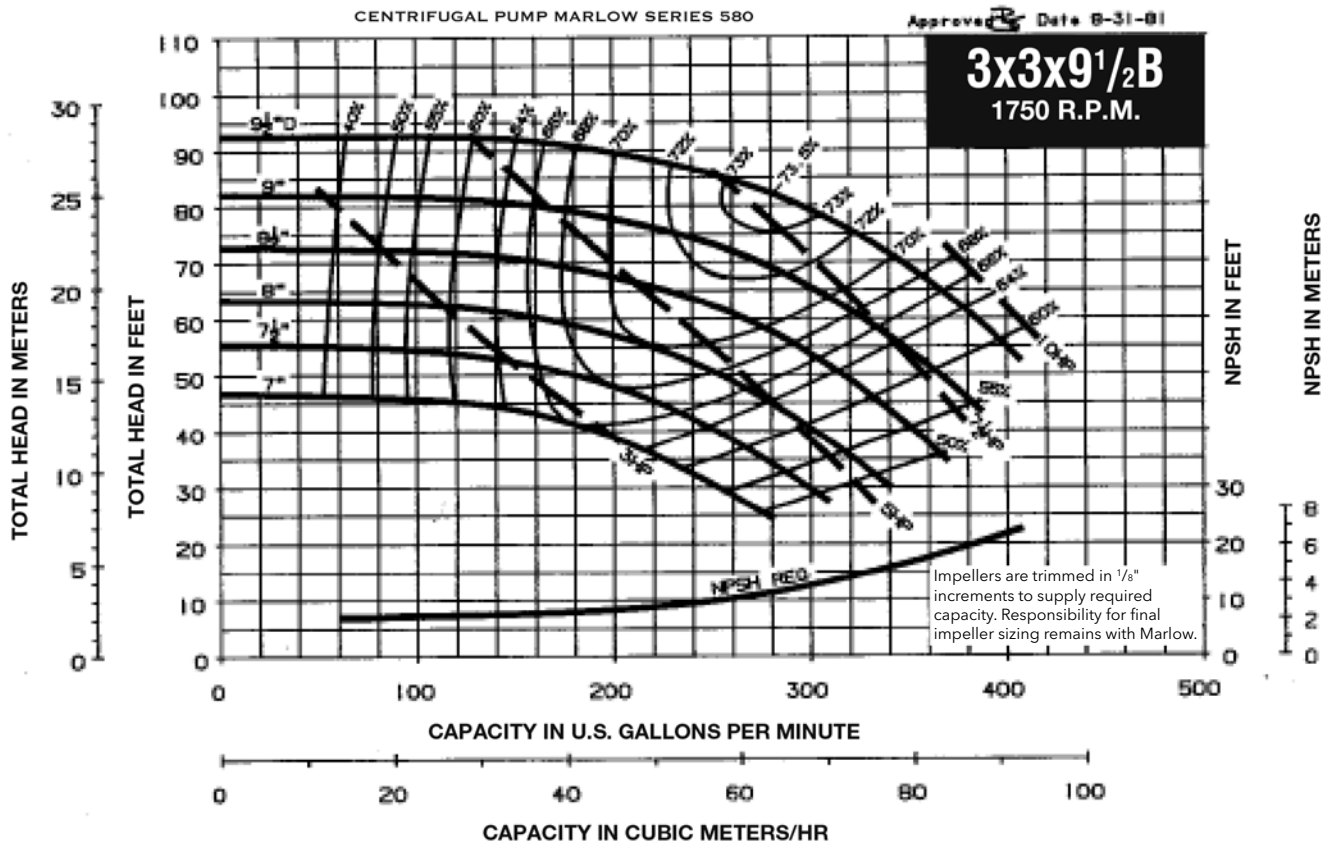
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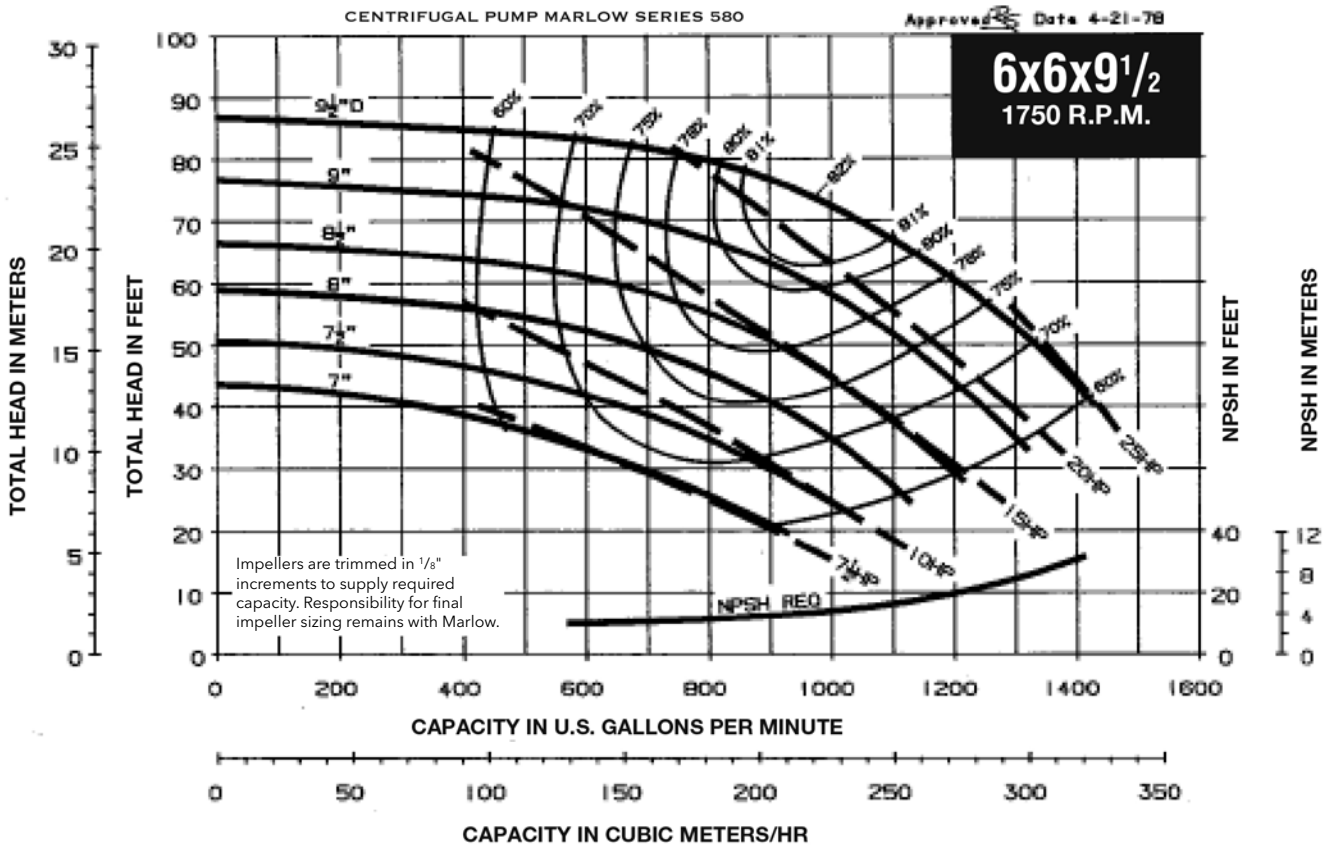
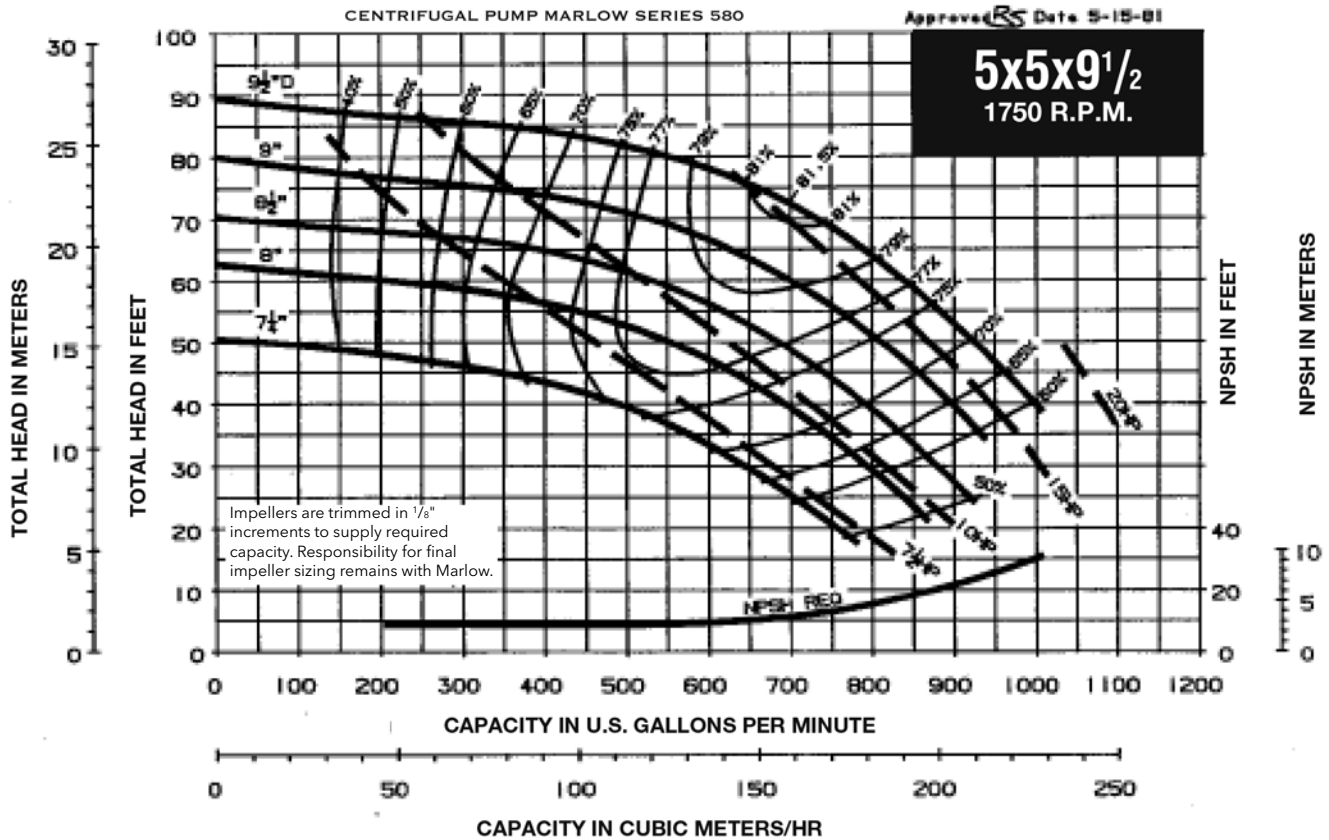
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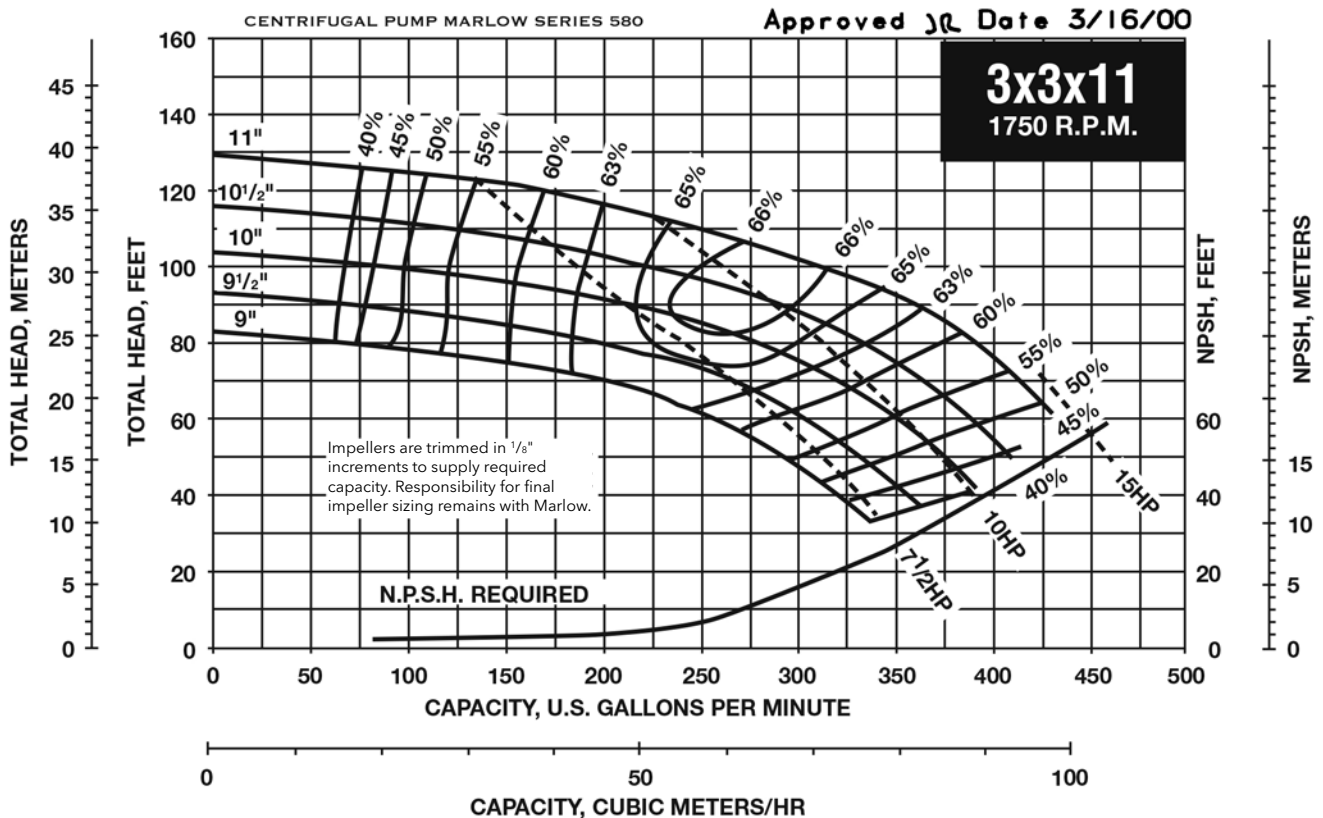
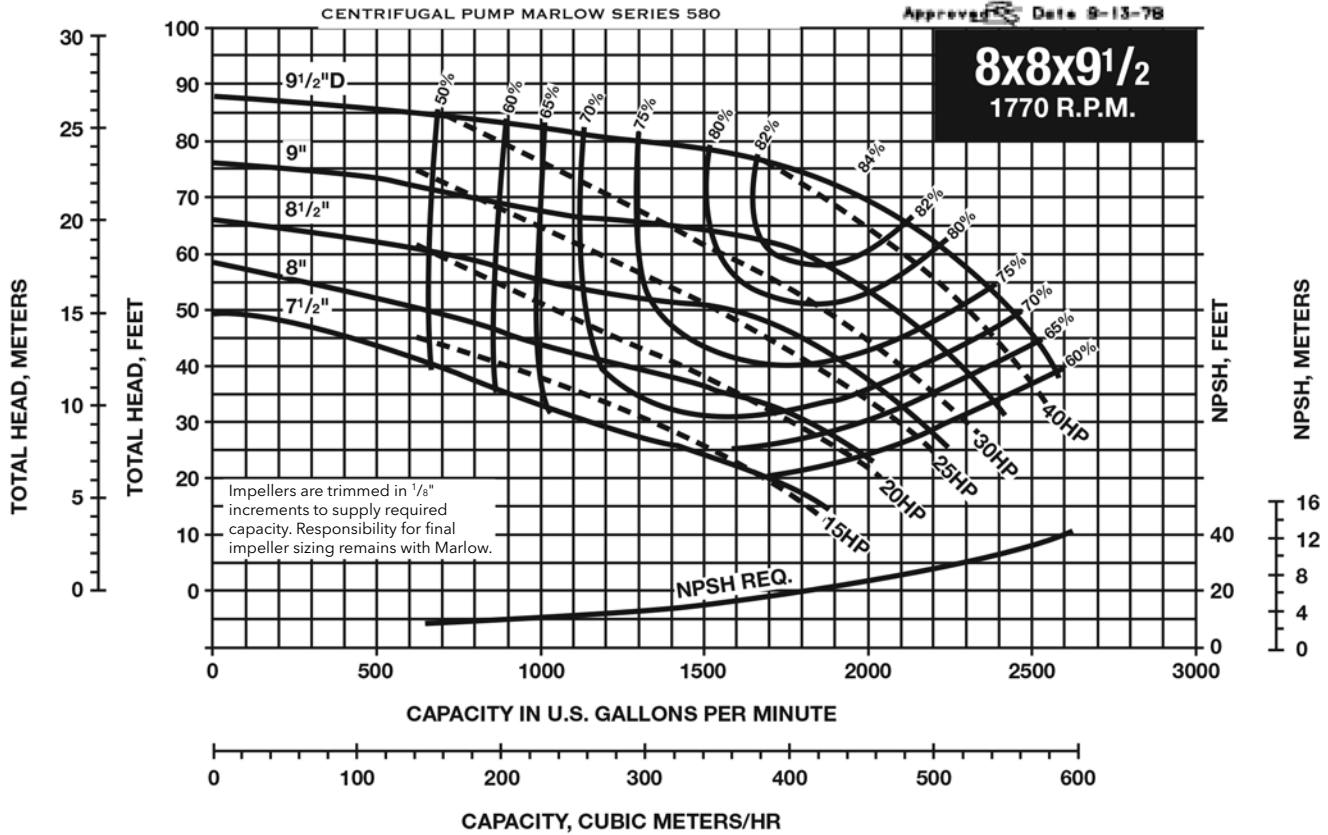
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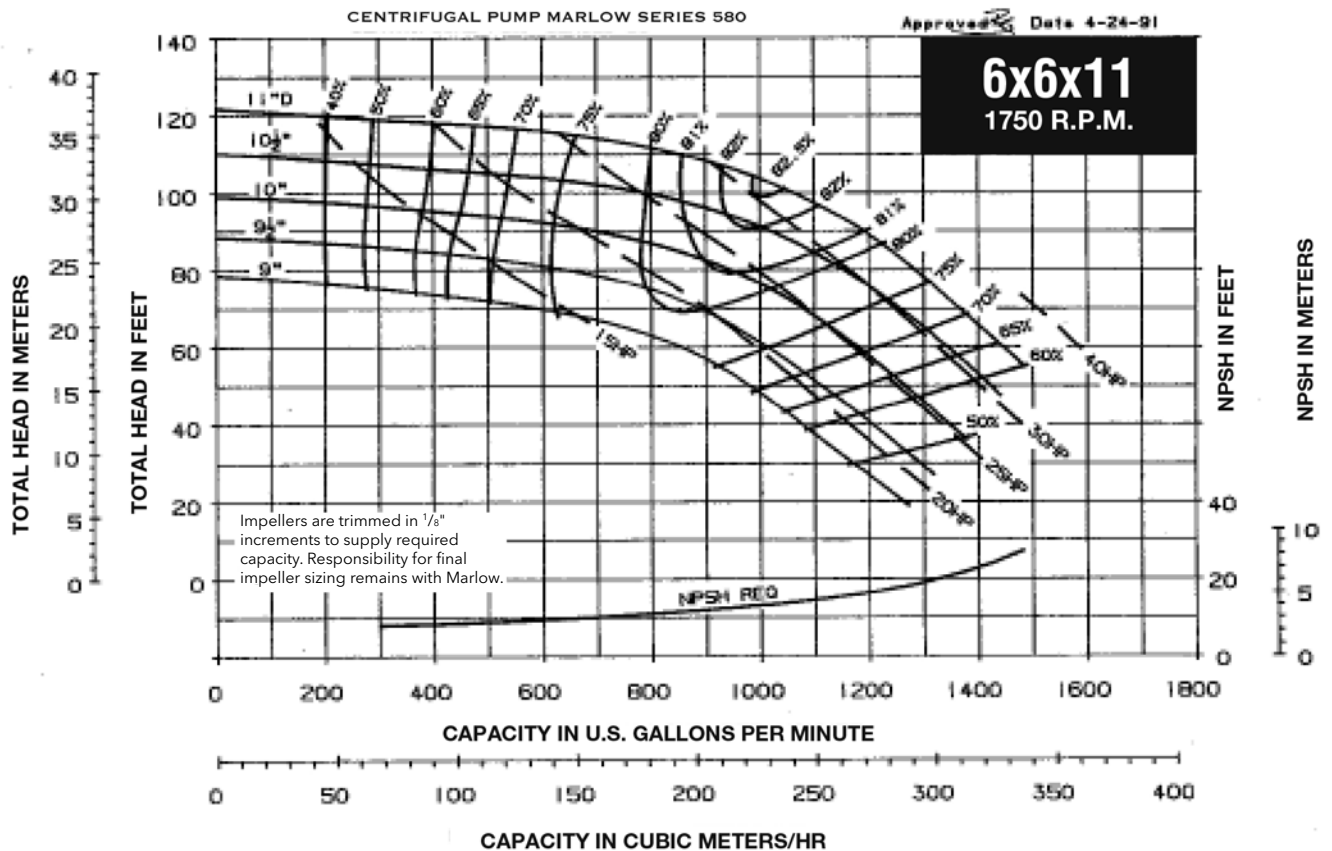
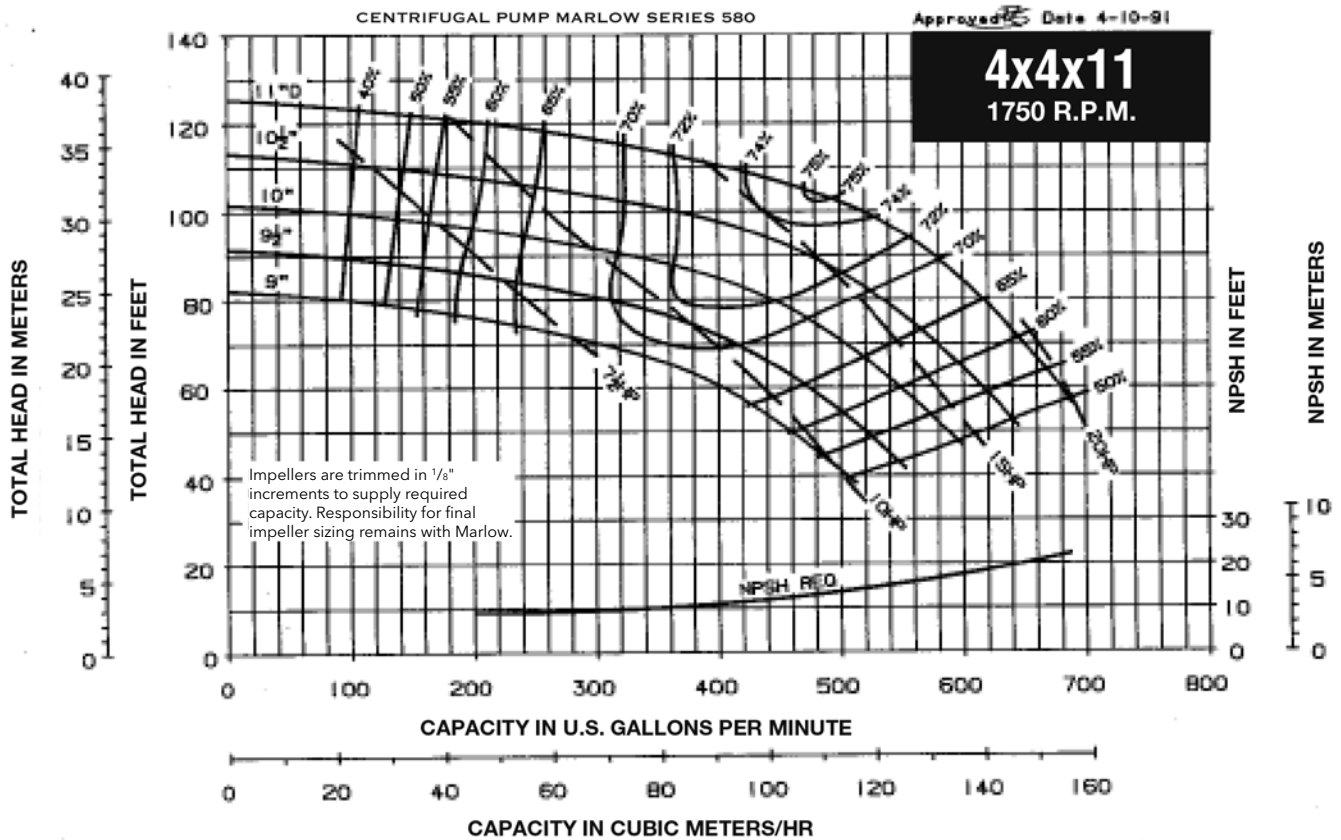
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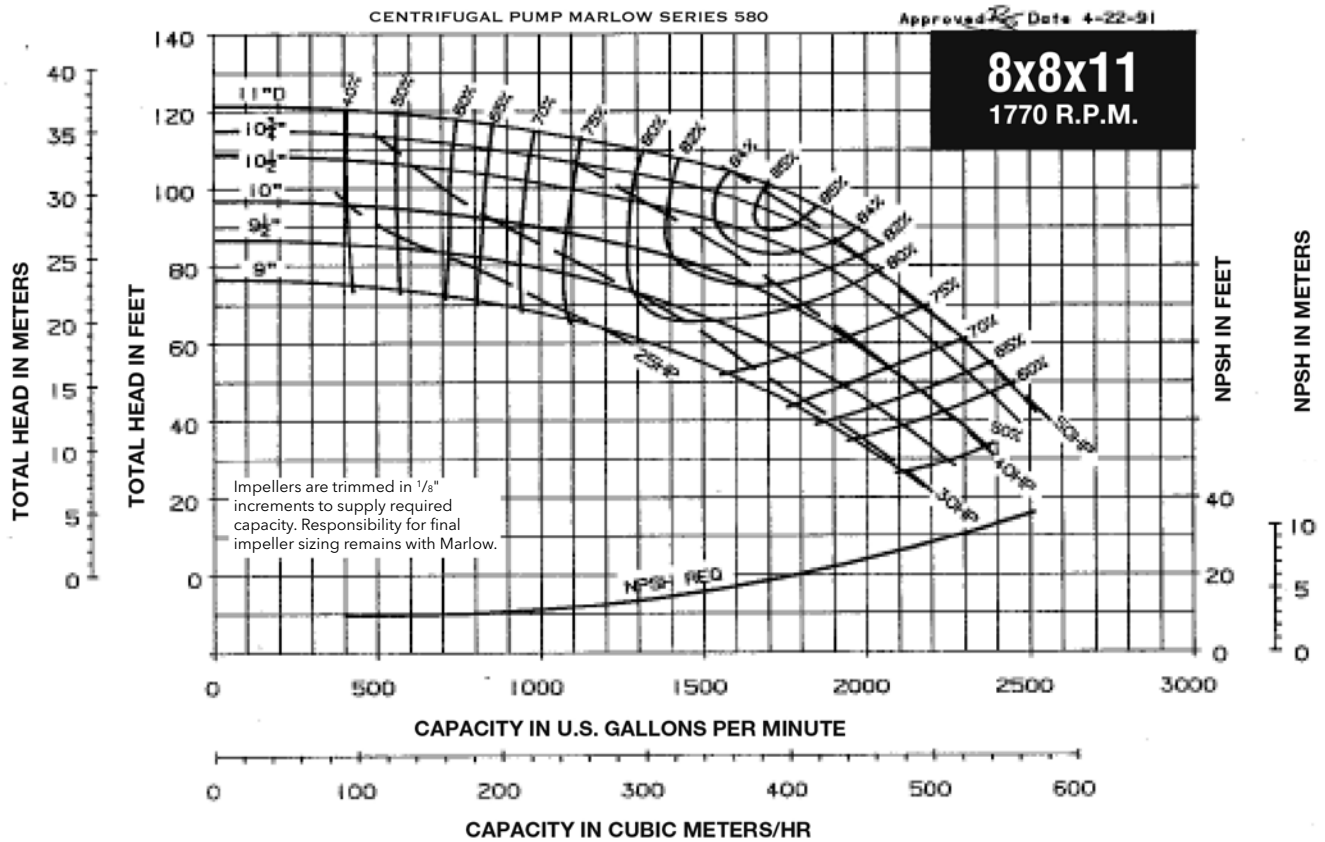
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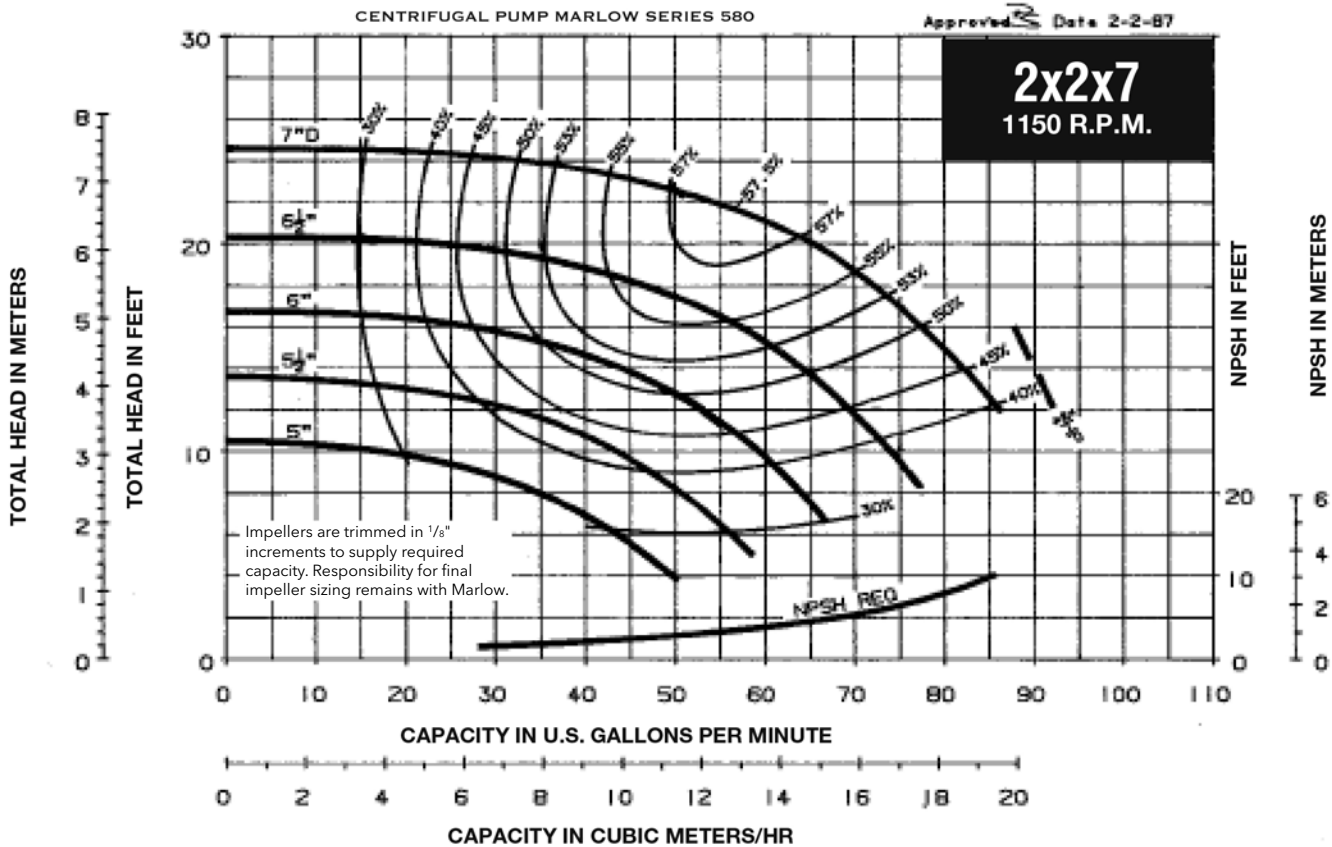
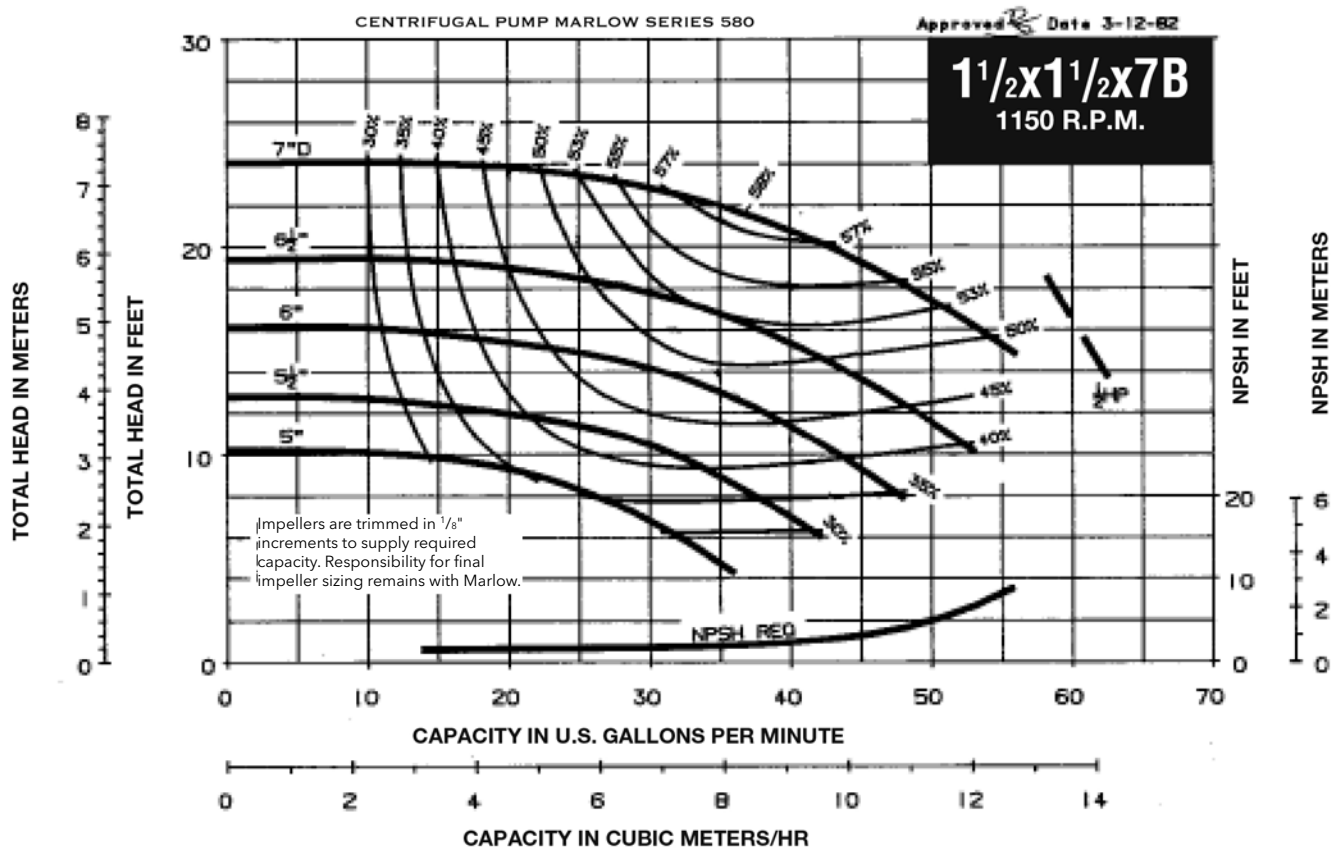
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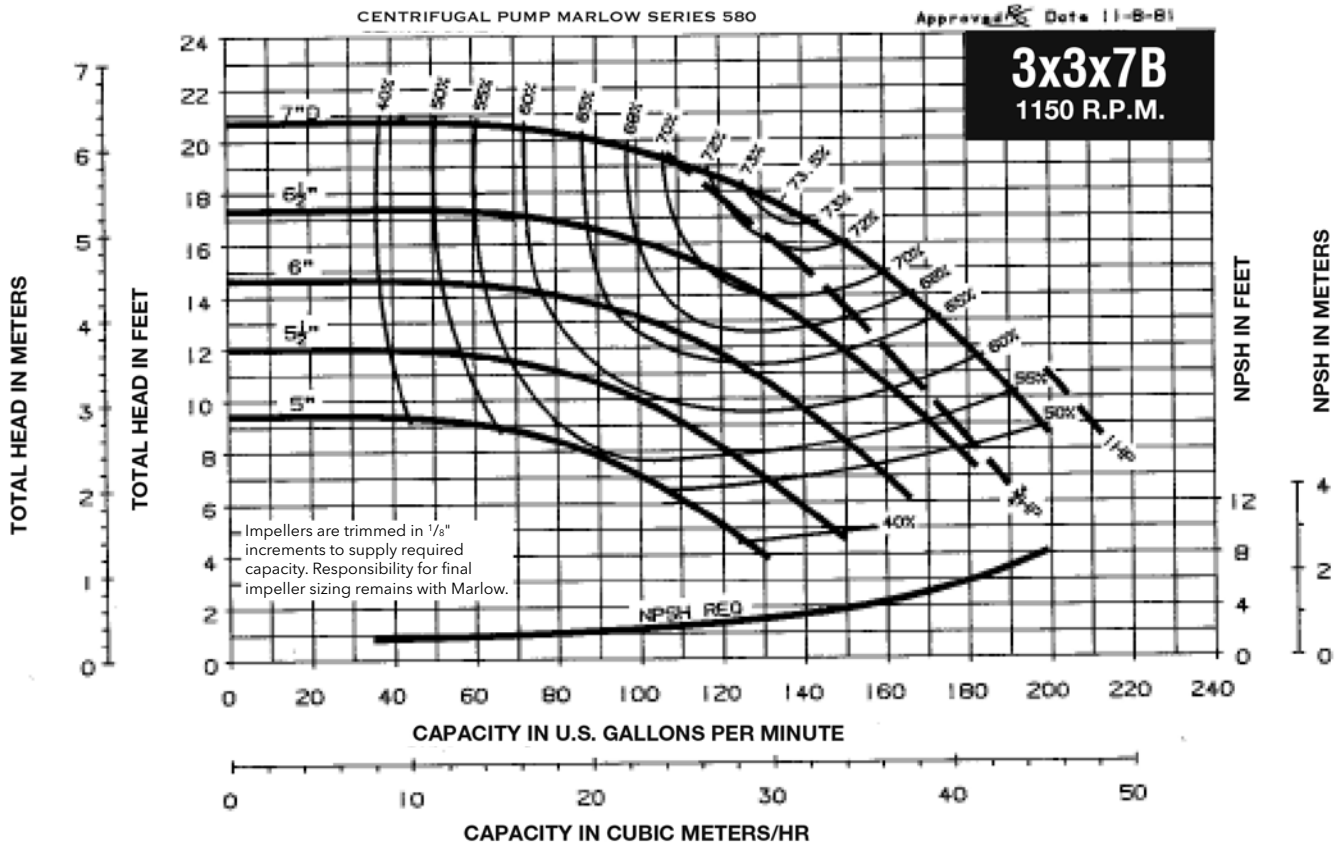
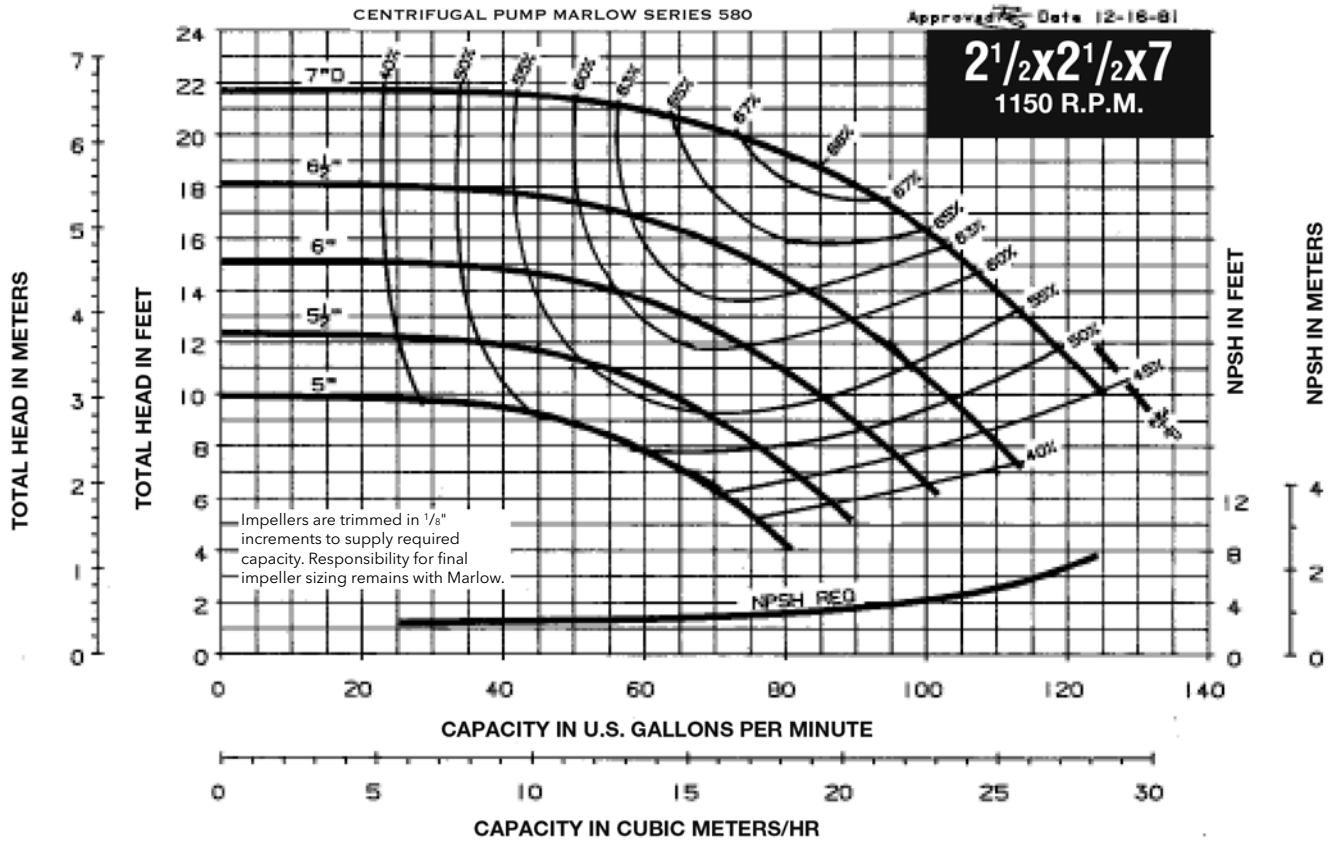
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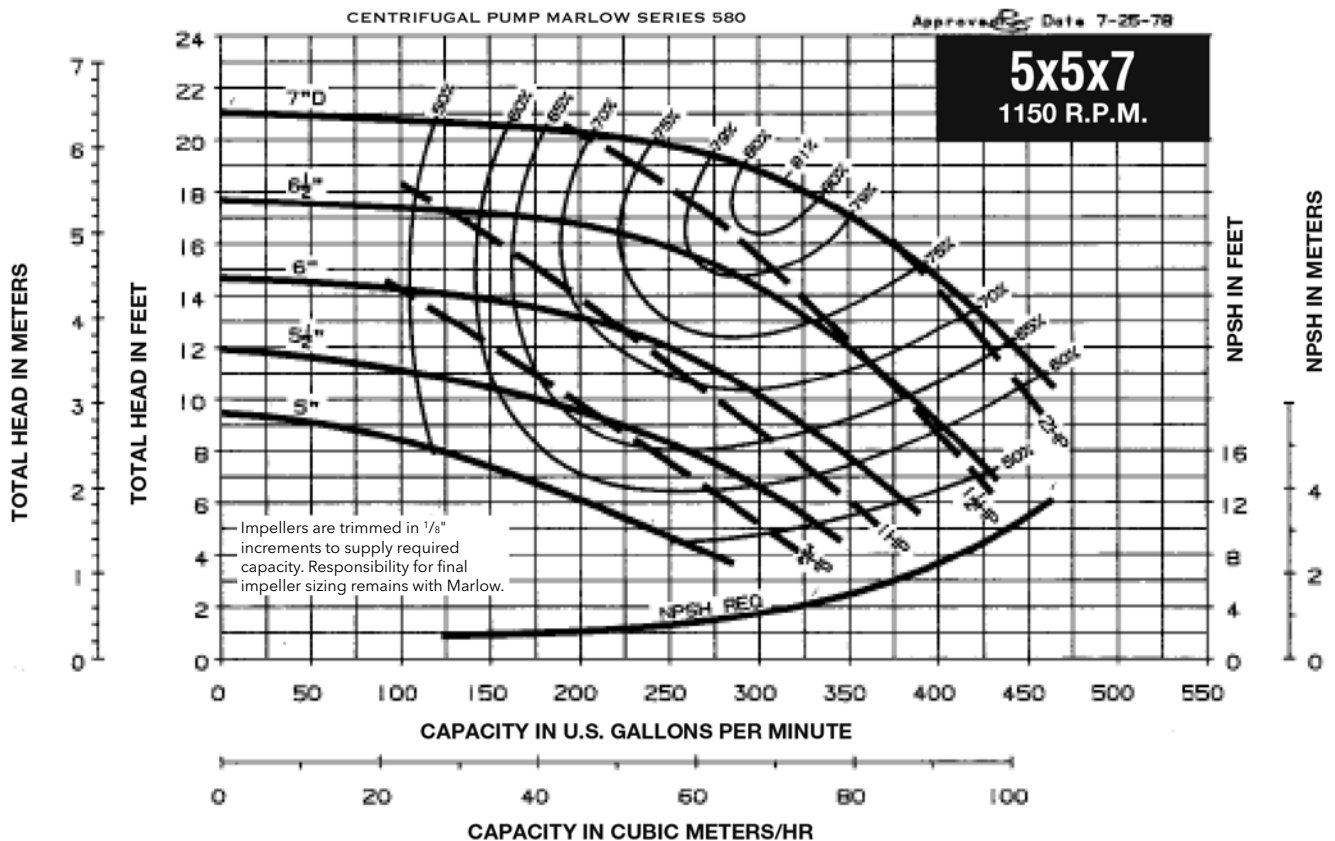
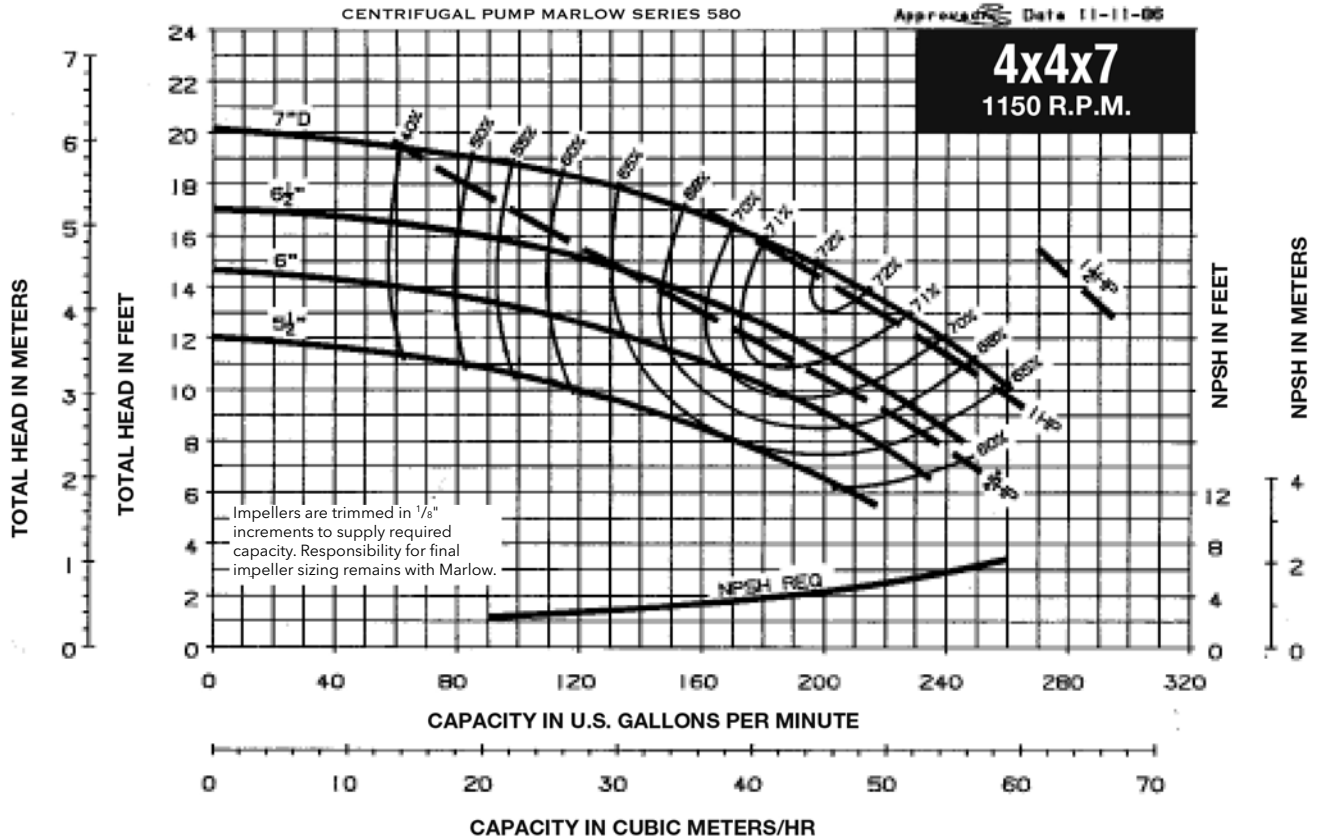
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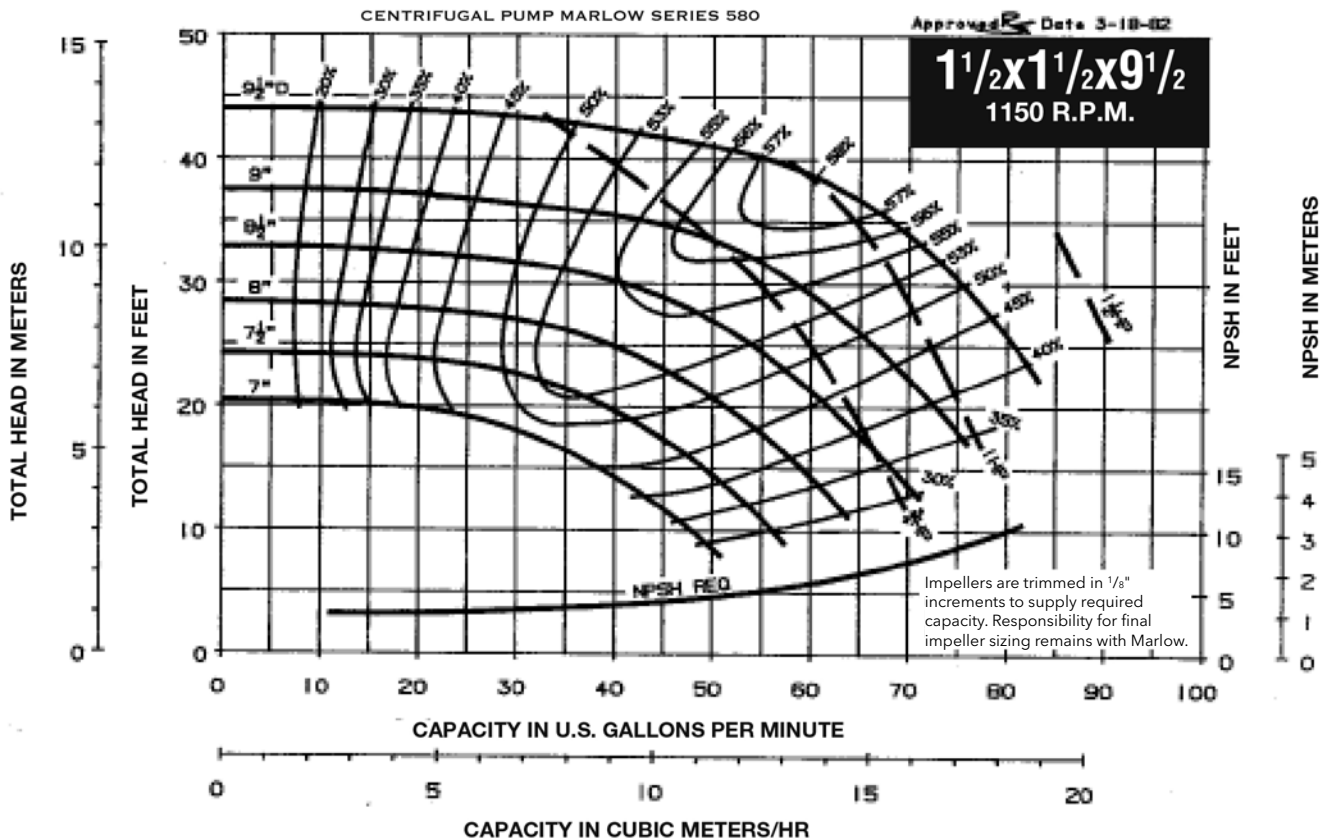
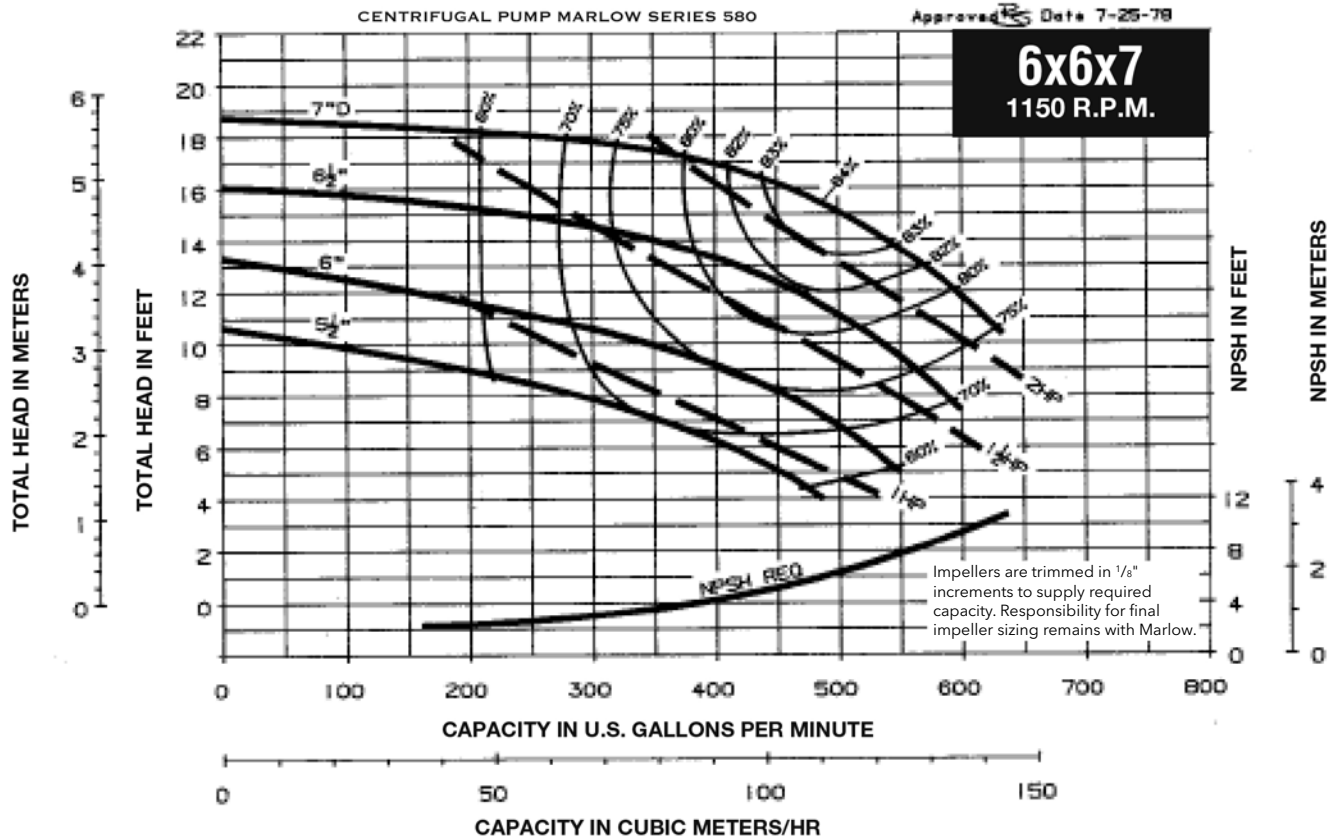
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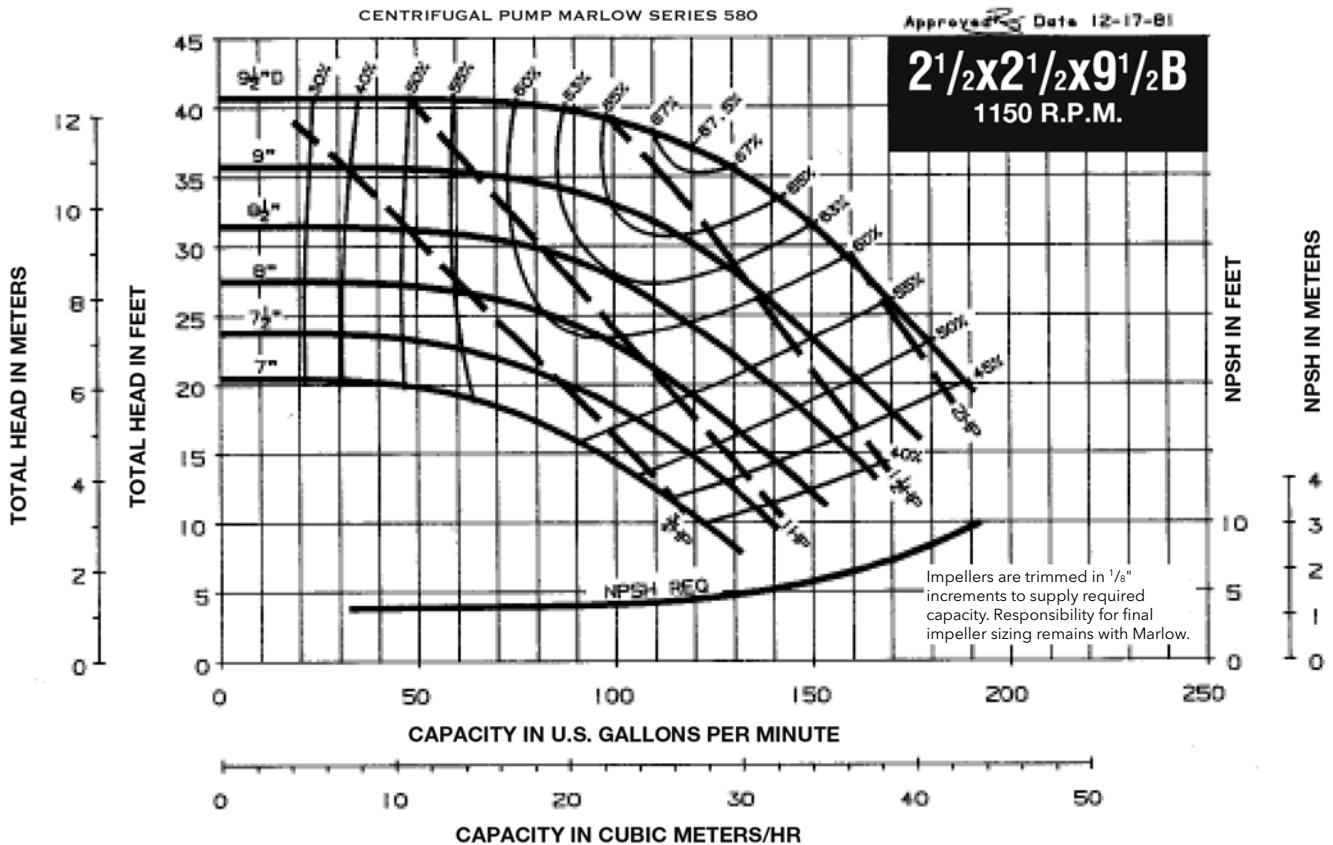
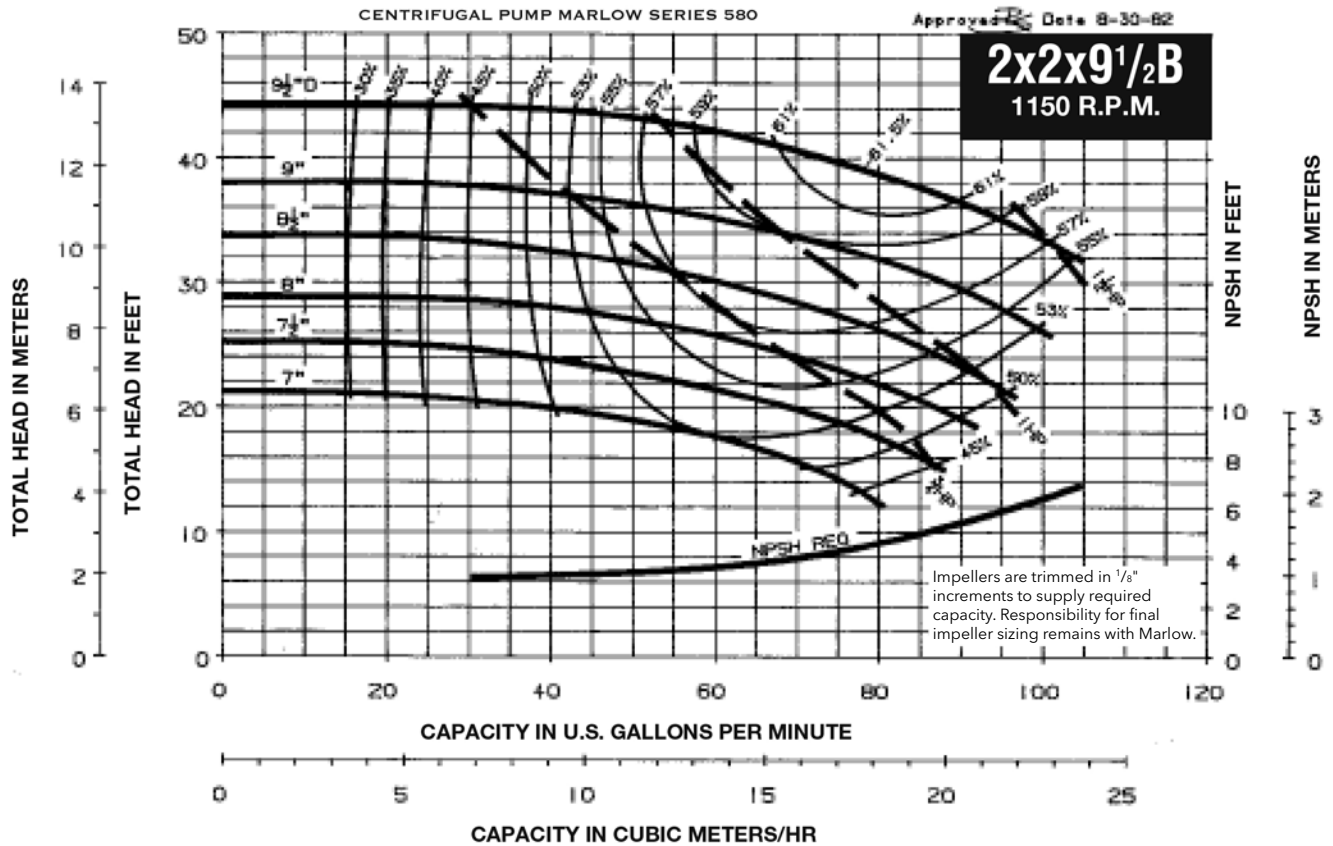
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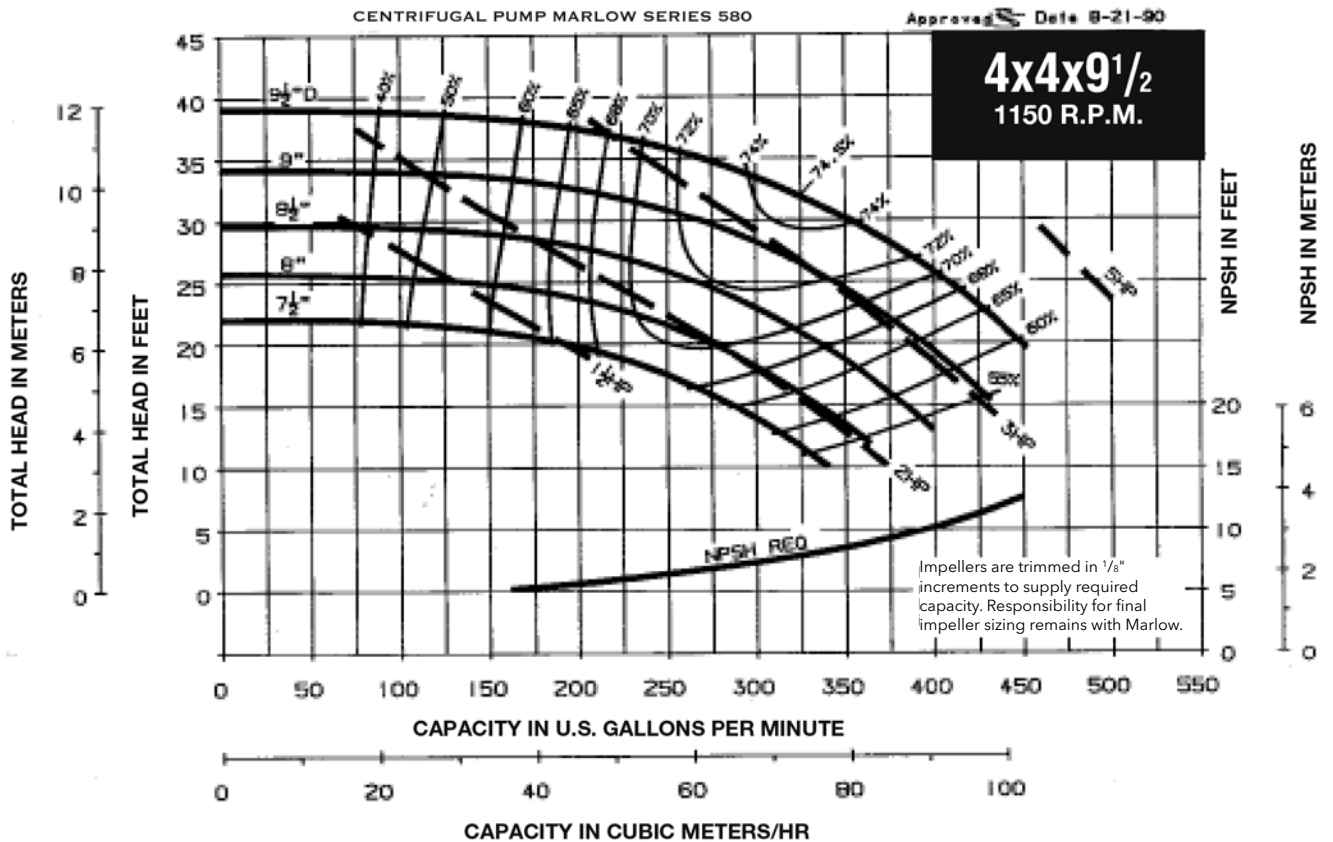
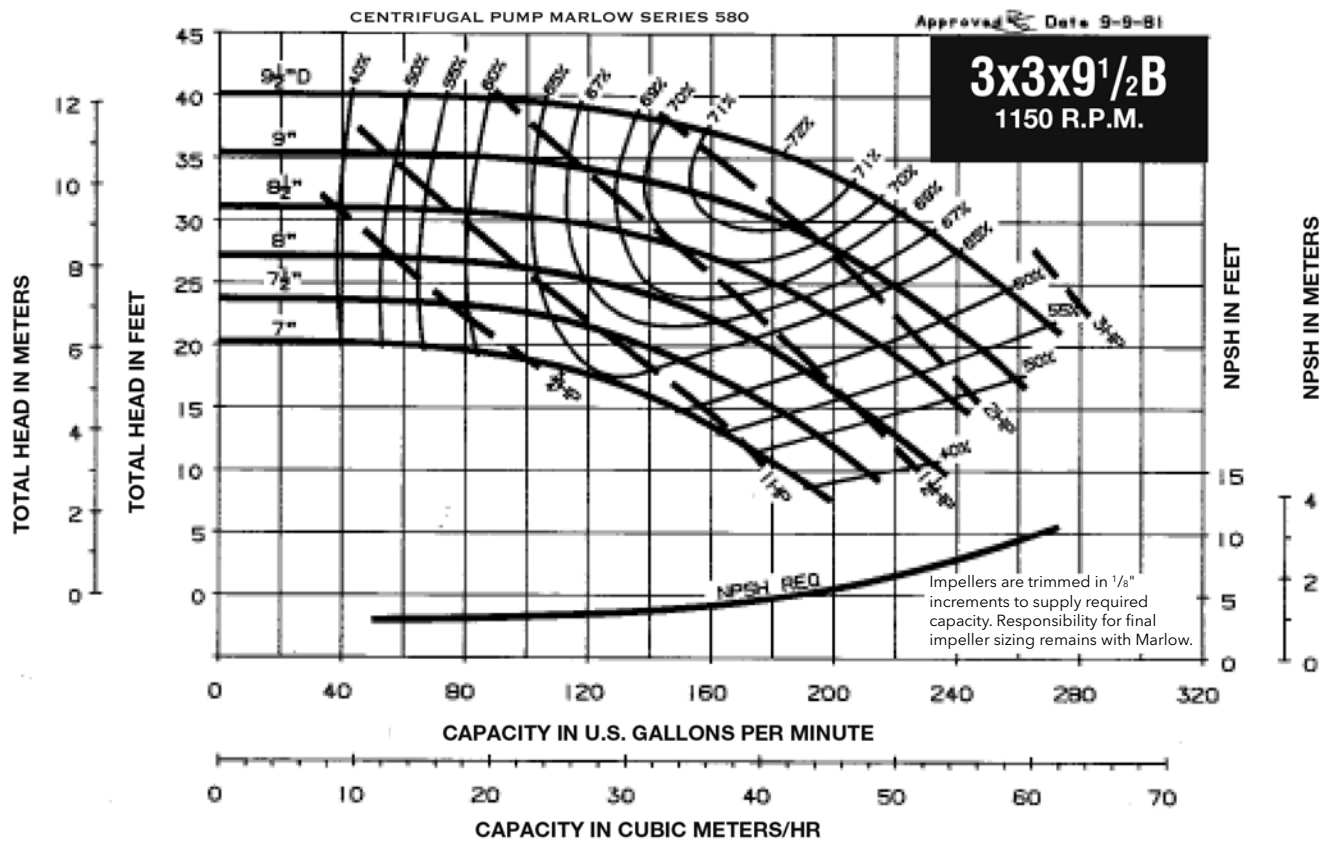


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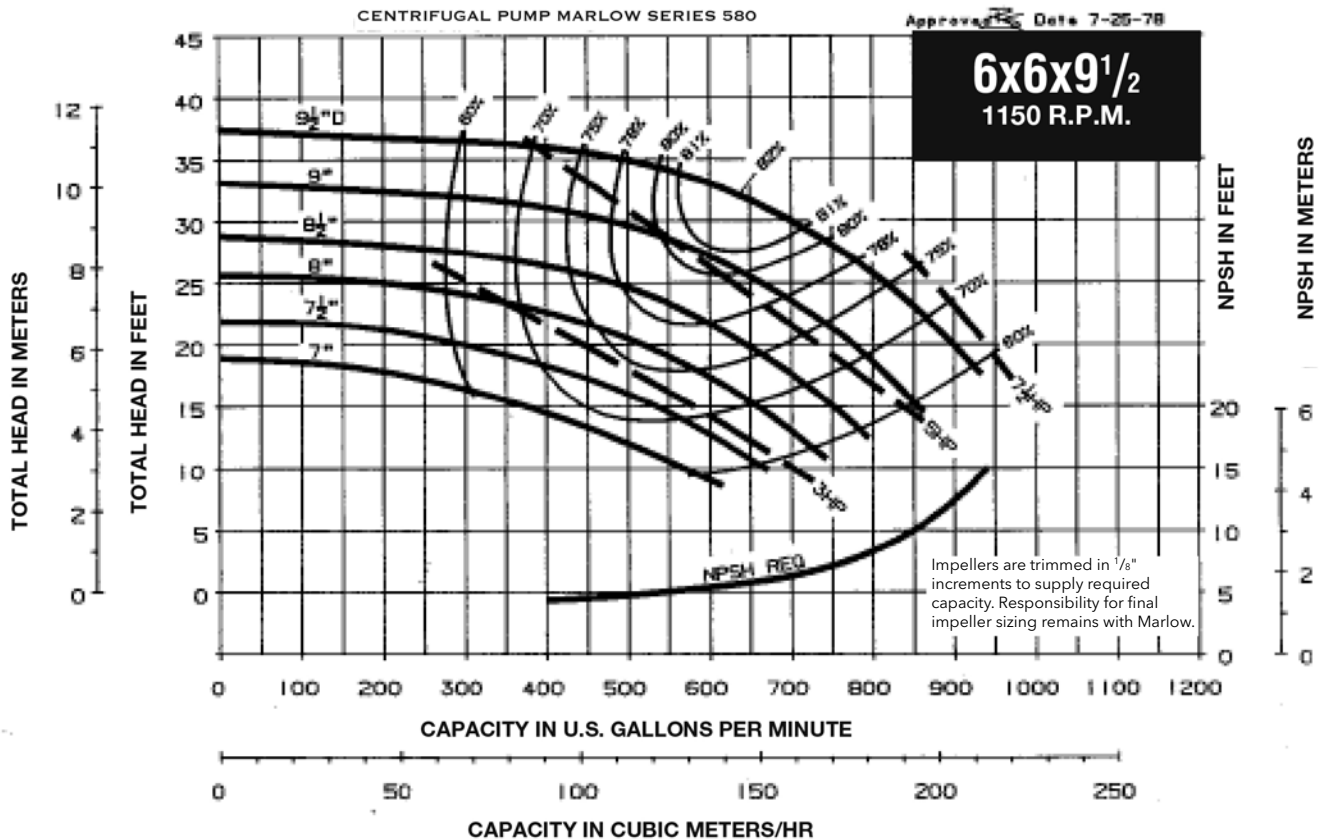
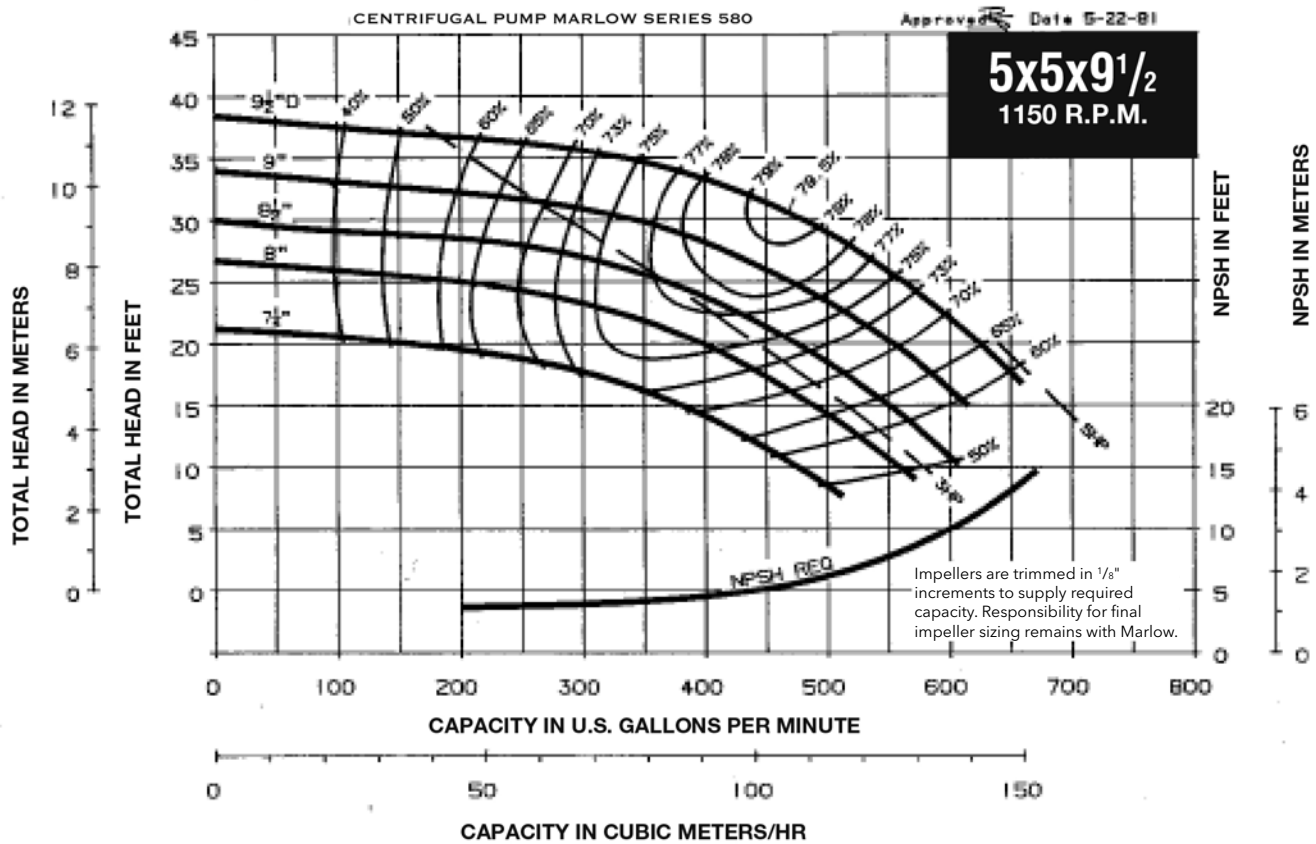


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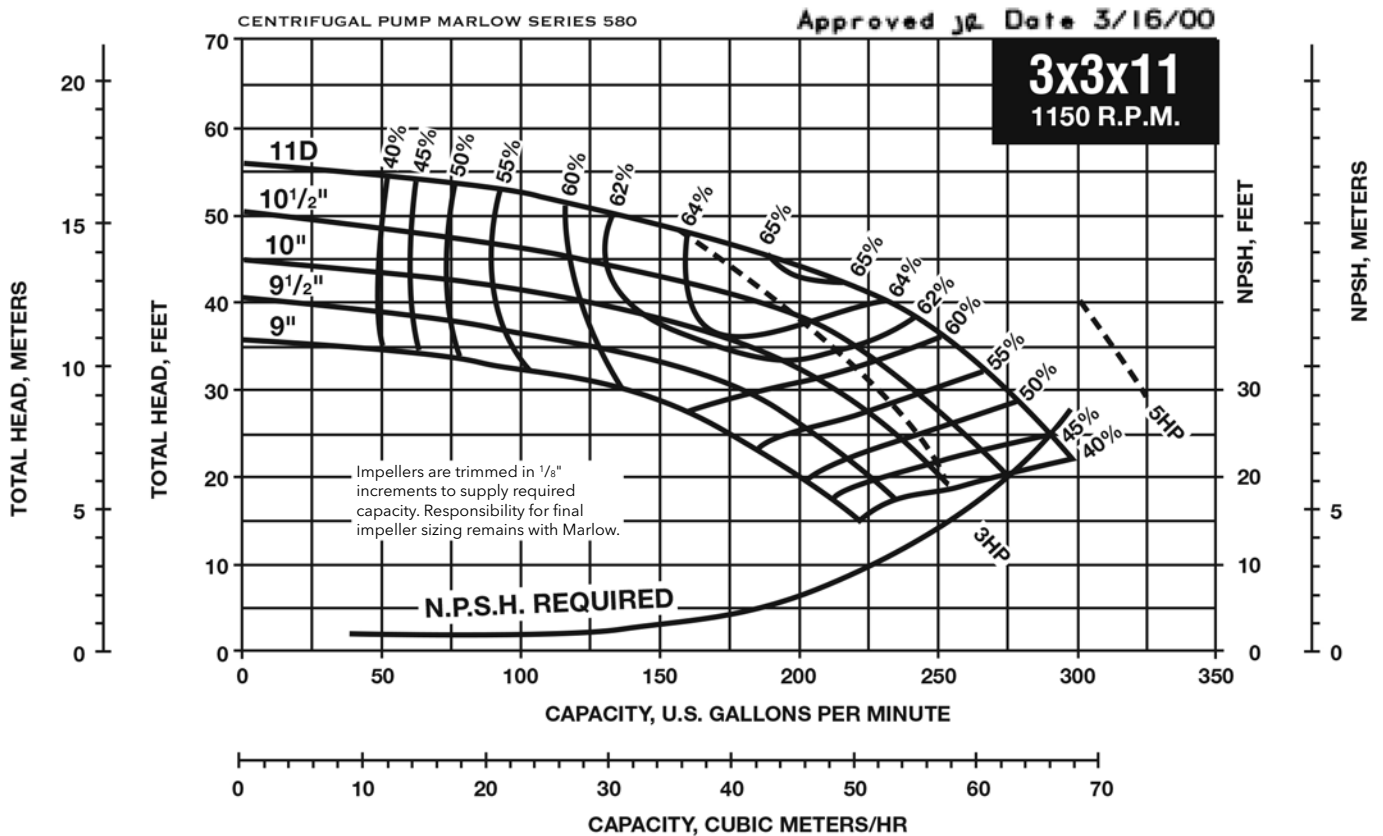
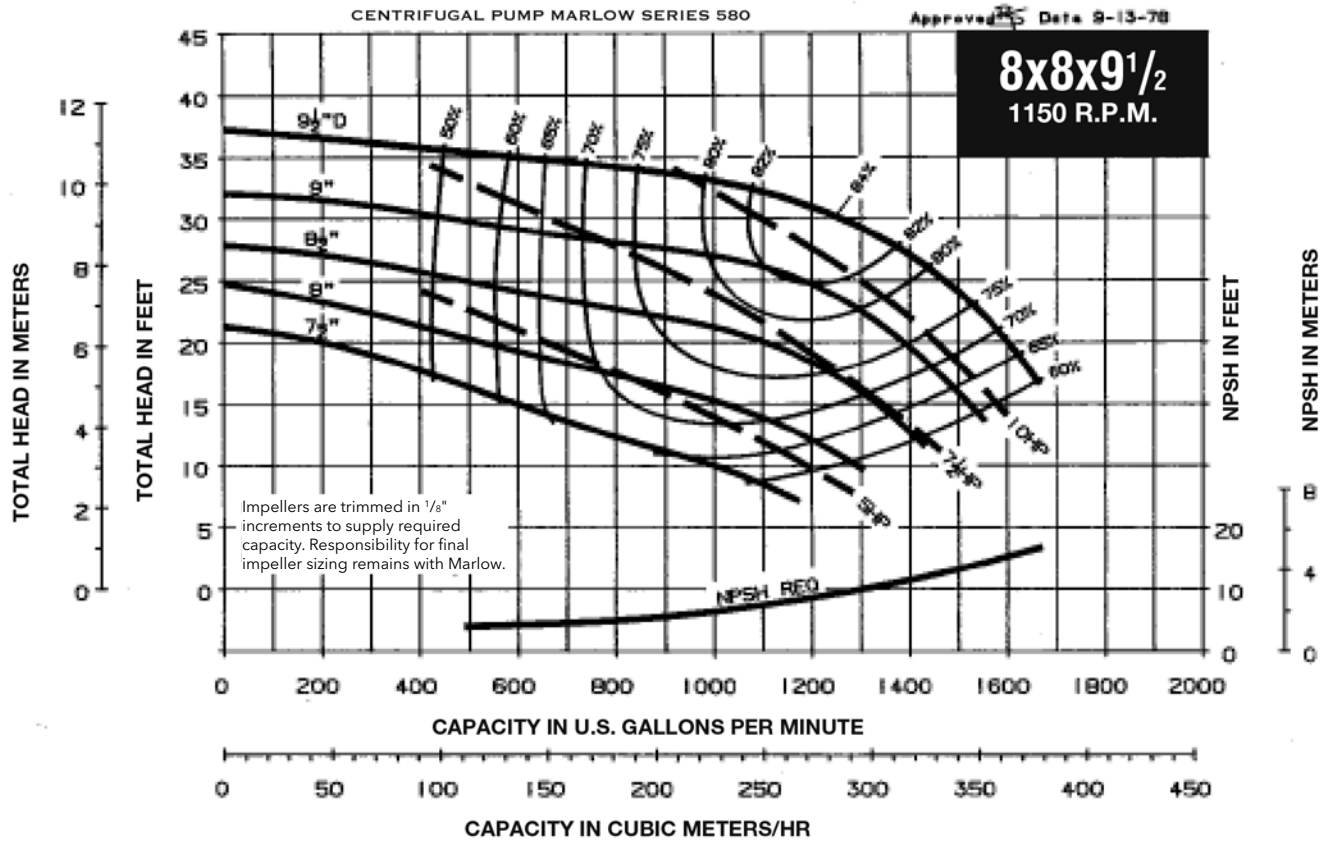
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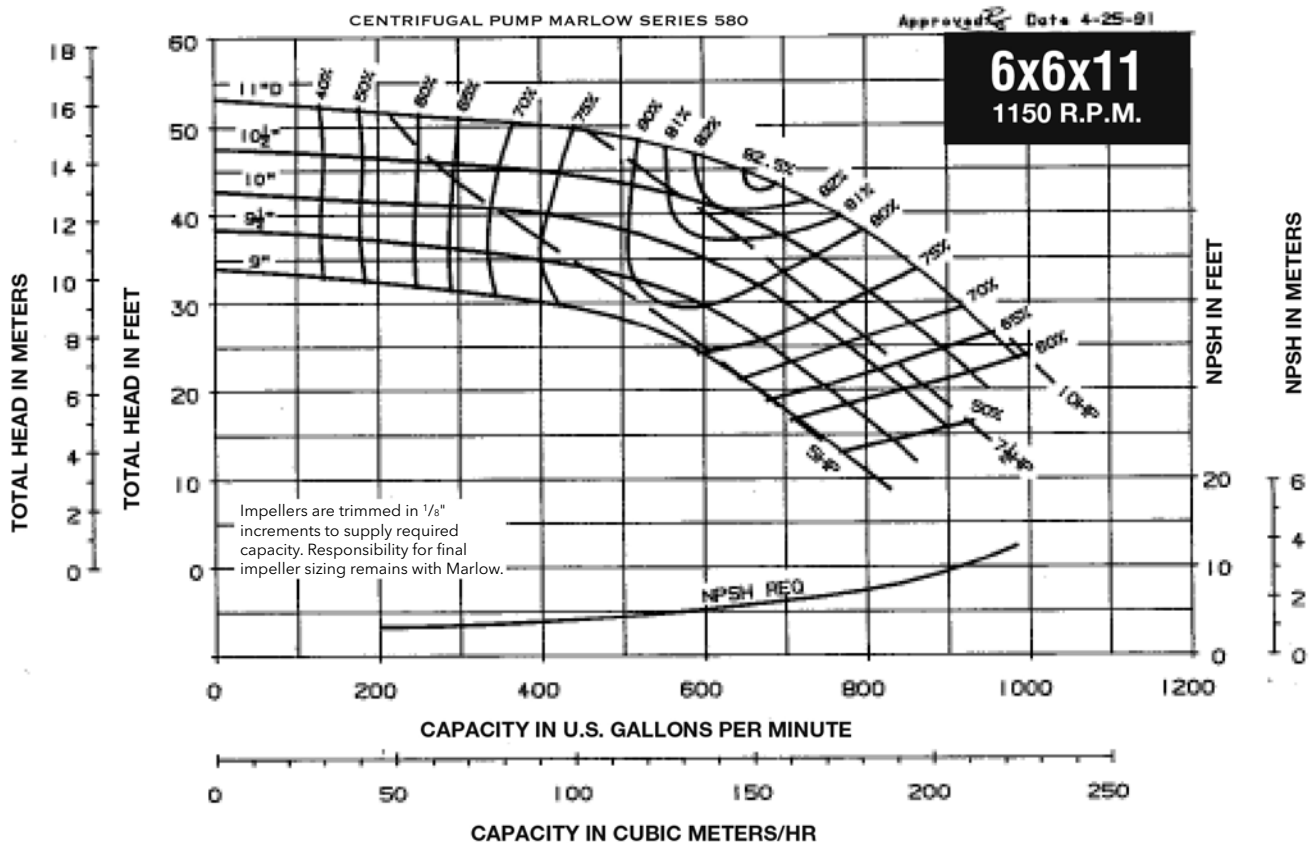
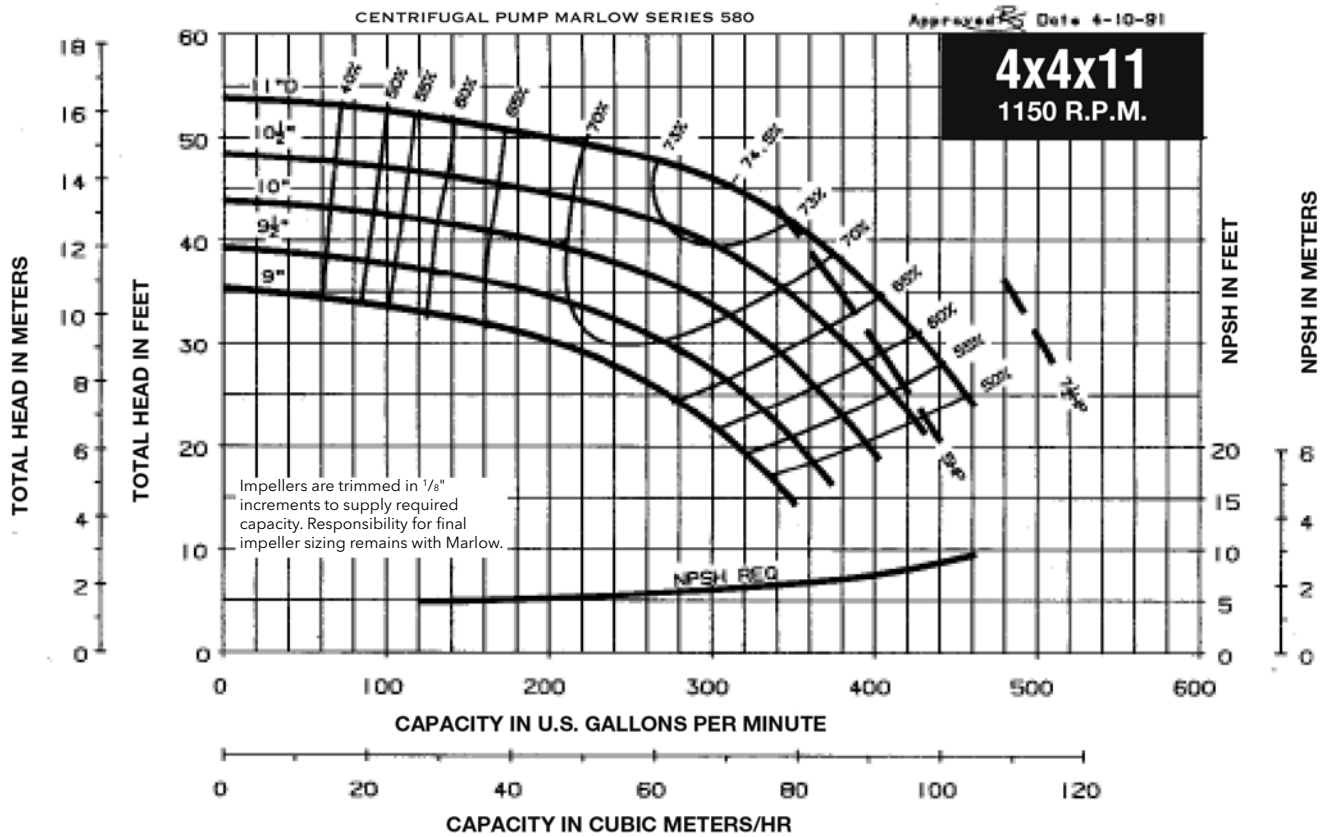
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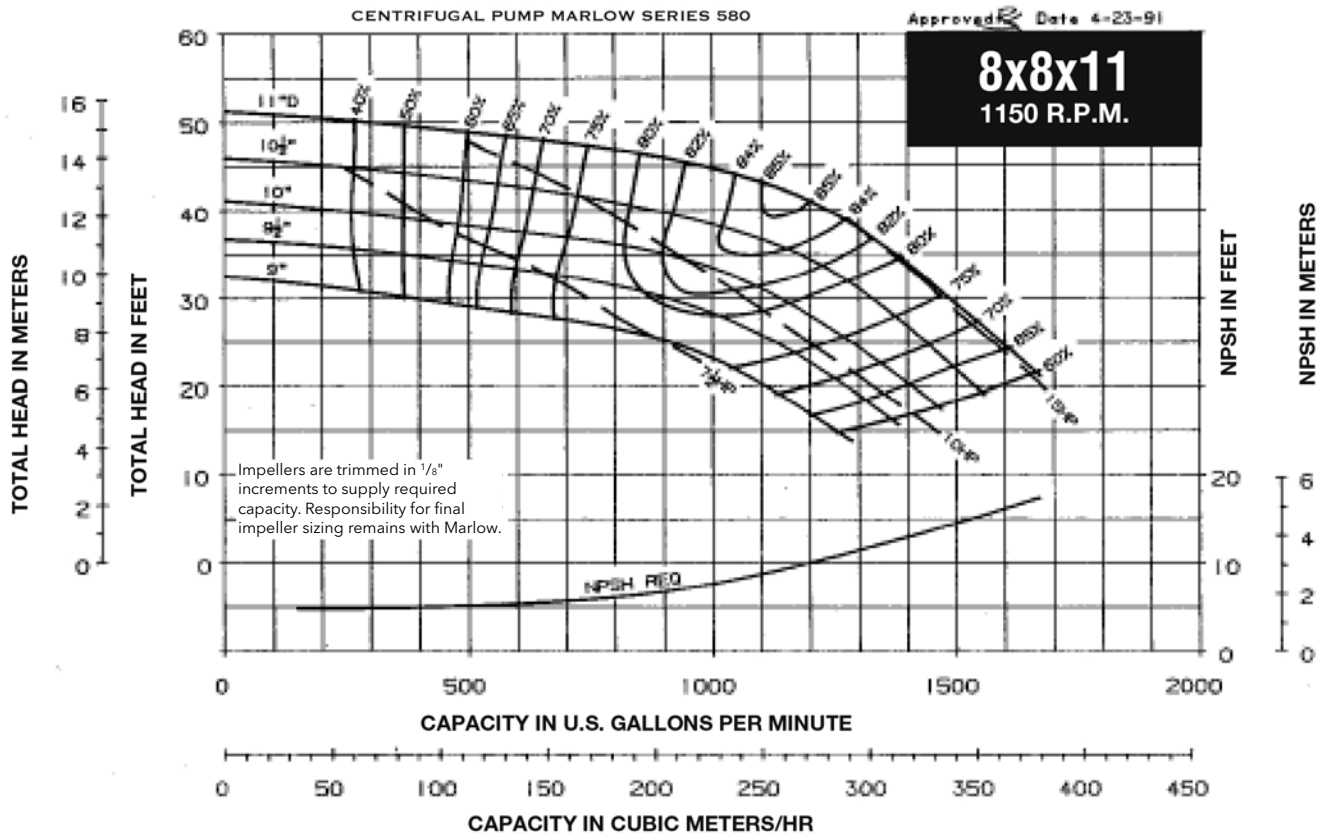
1150 RPM PUMP CURVES



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NOTES

NOTES

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8200 N. Austin Avenue, Morton Grove, Illinois 60053

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