

CURVES
CAC1500 R1



Series A-C 1500 60 Hz

IN-LINE MOUNTED CENTRIFUGAL PUMP PERFORMANCE CURVES

 **GOULDS**
WATER TECHNOLOGY
a **xylem** brand

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USEFUL PUMP FORMULAS

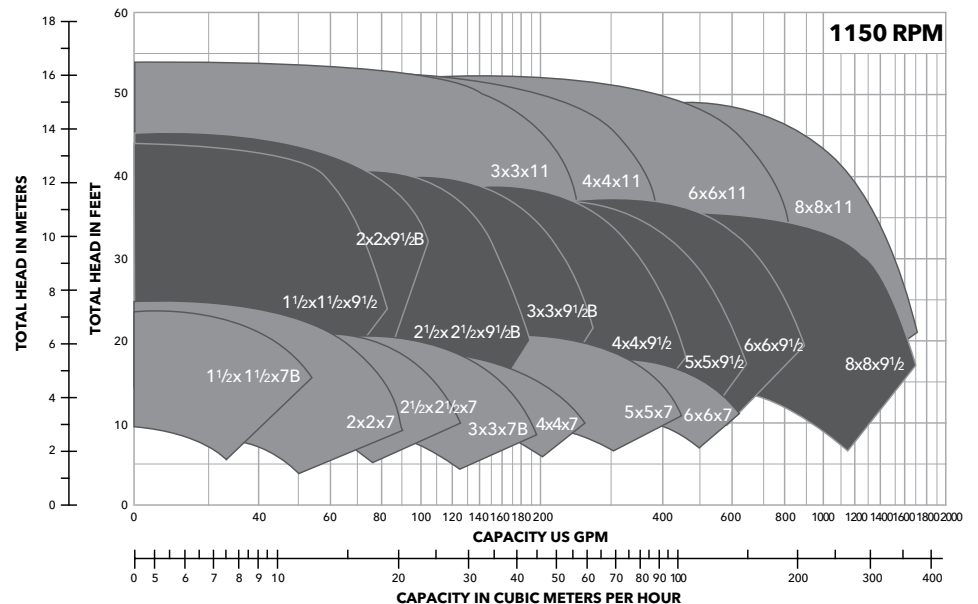
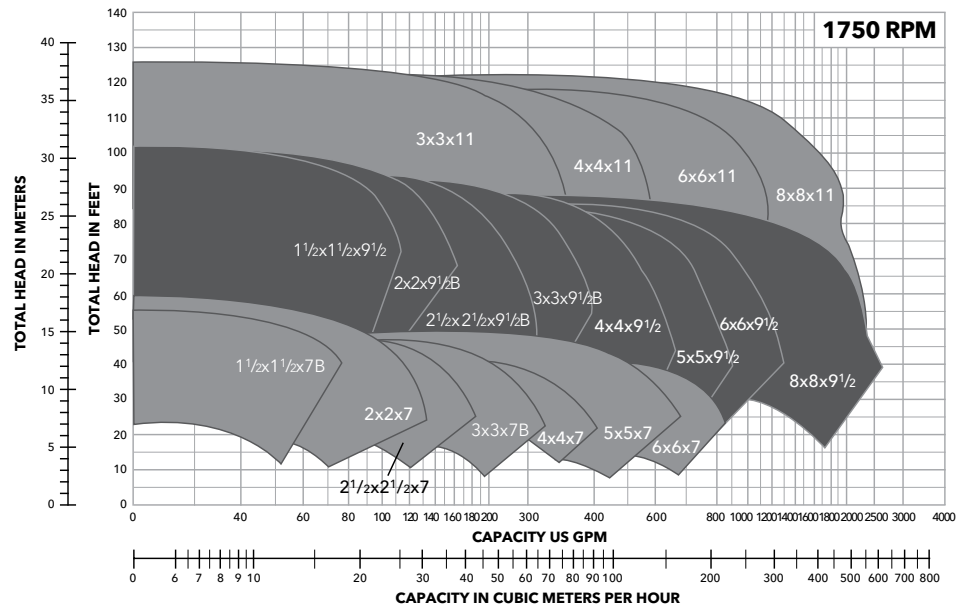
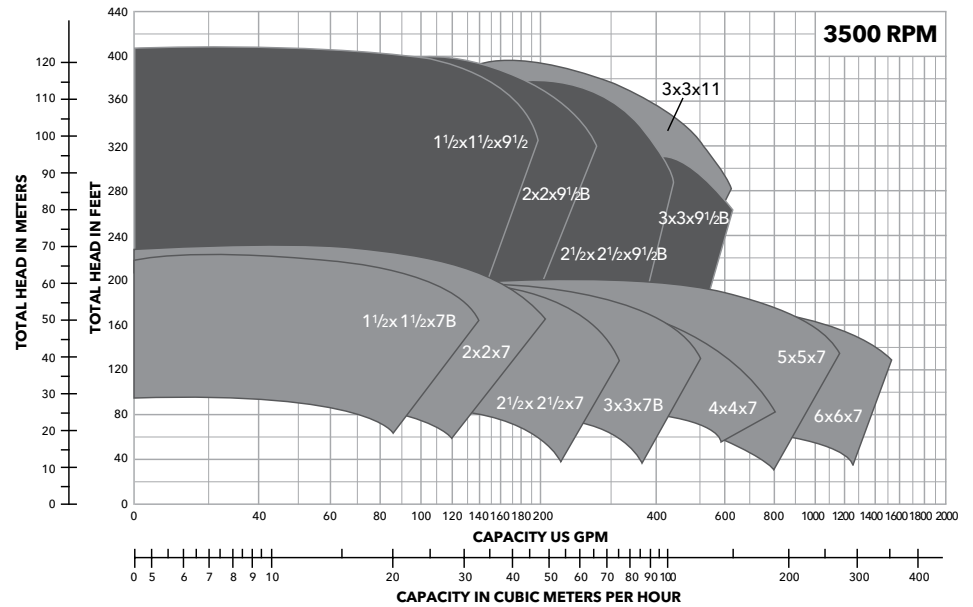
Pressure (PSI)	=	$\frac{\text{Head (feet)} \times \text{Specific Gravity}}{2.31}$	Horsepower (water)	=	$\frac{\text{GPM} \times \text{Head (feet)} \times \text{Specific Gravity}}{3960}$
Head (feet)	=	$\frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}}$	Efficiency (pump)	=	$\frac{\text{Horsepower (water)}}{\text{Horsepower (brake)}} \times 100 \text{ per cent}$
Vacuum (in. of mercury)	=	$\frac{\text{Dynamic Suction Lift (feet)} \times .883}{\text{Specific Gravity}}$	NPSH (available)	=	Positive Factors - Negative Factors
Horsepower (brake)	=	$\frac{\text{GPM} \times \text{Head (feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}}$			

AFFINITY LAWS: Effect of change of speed or impeller diameter on centrifugal pumps

	GPM Capacity	Feet 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	$Q_2 = \frac{\text{RPM}_2}{\text{RPM}_1} Q_1$	$H_2 = \left(\frac{\text{RPM}_2}{\text{RPM}_1}\right)^2 H_1$	$P_2 = \left(\frac{\text{RPM}_2}{\text{RPM}_1}\right)^3 P_1$

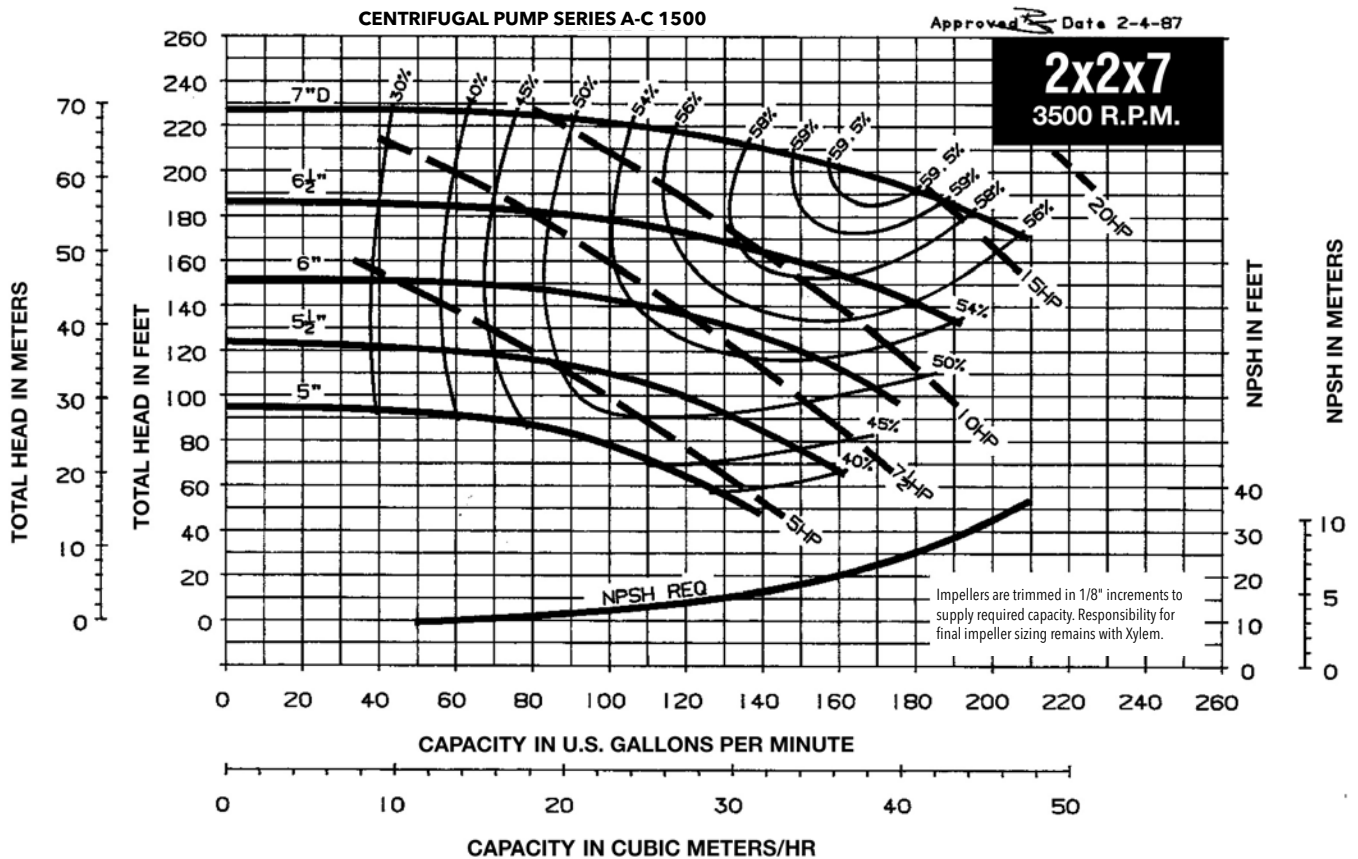
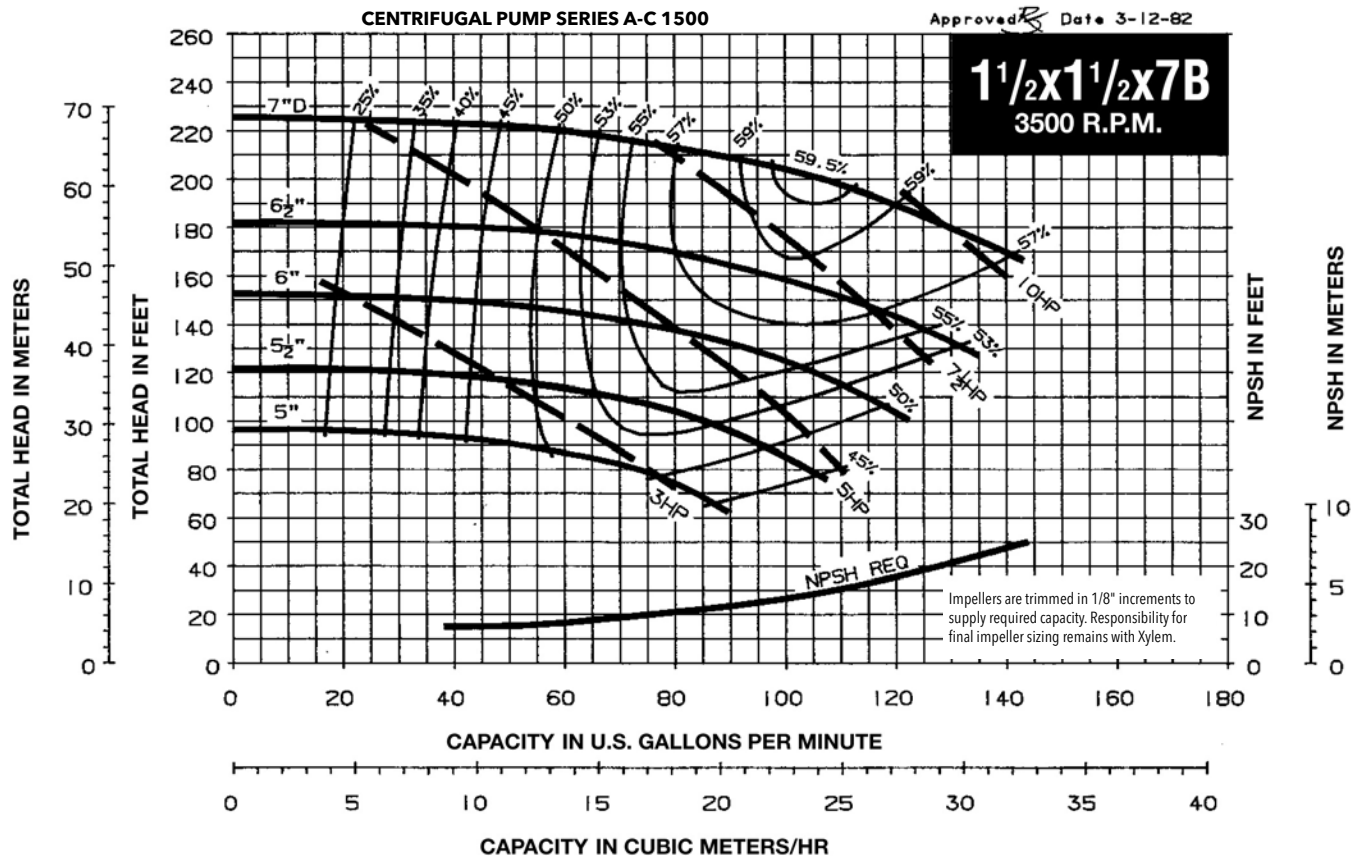
Where Q = GPM, H = Head, P = BHP, D = Impeller Diameter, RPM = Pump Speed

60 HZ FULL HYDRAULIC RANGE CURVES



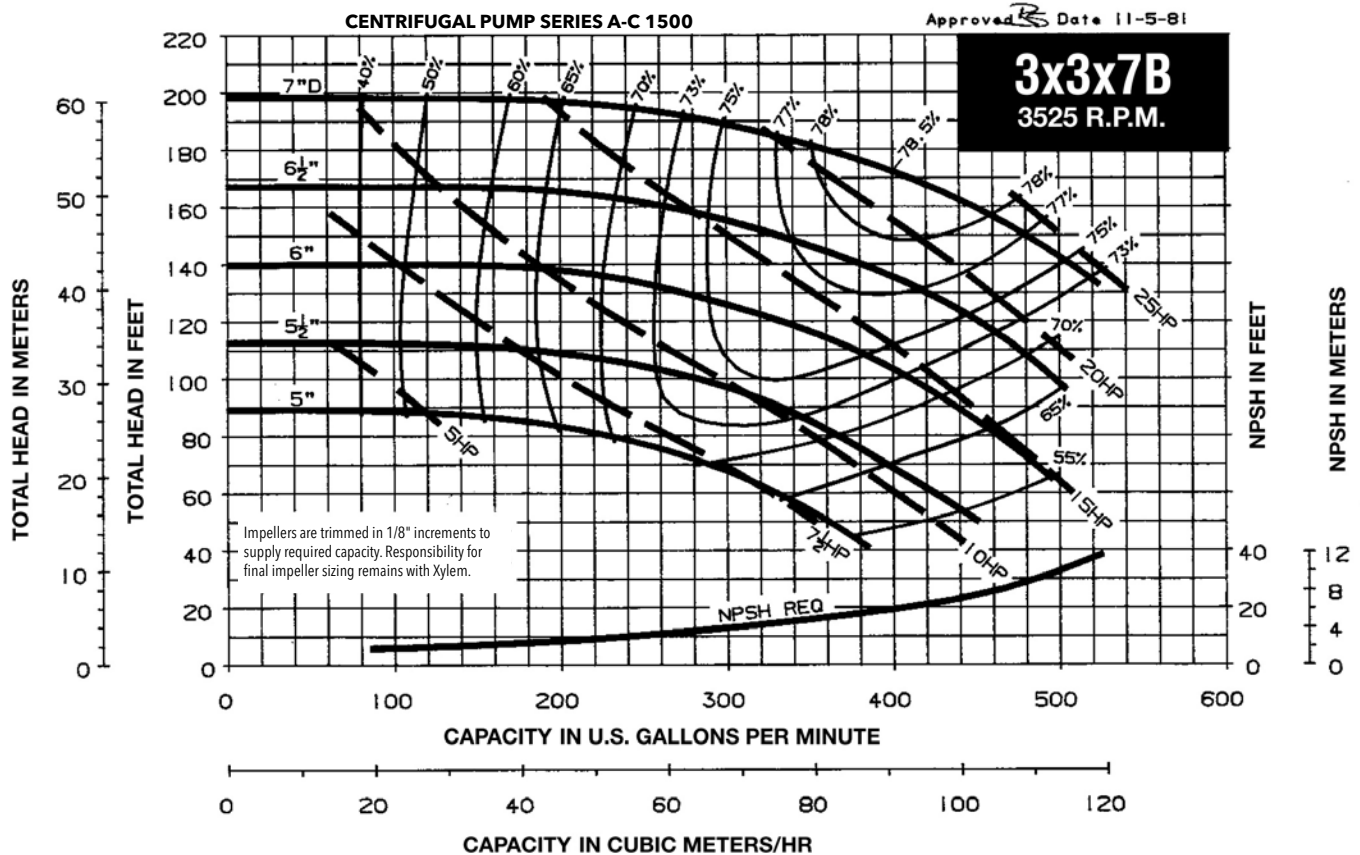
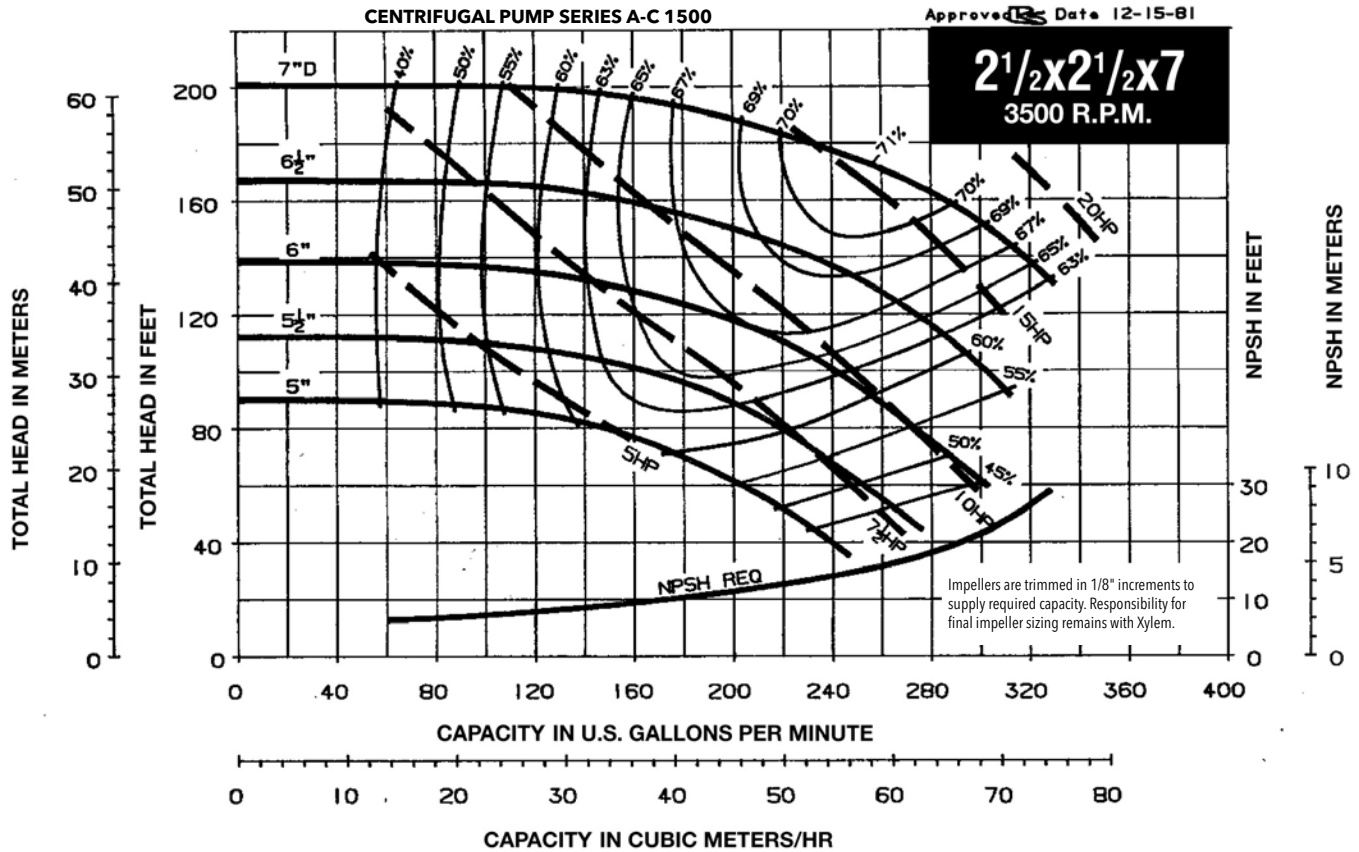
SERIES A-C 1500 - 60 Hz

3500 RPM PUMP CURVES



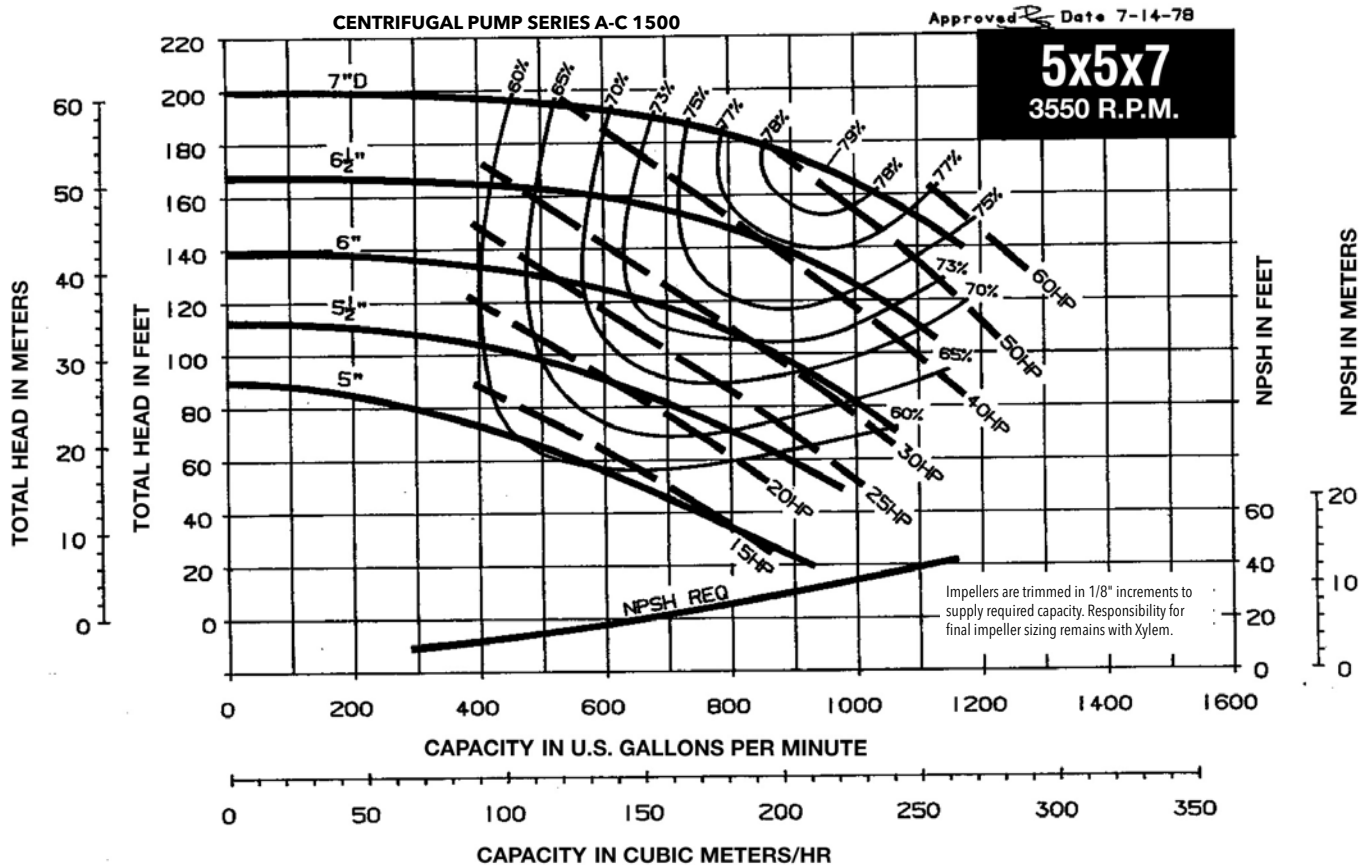
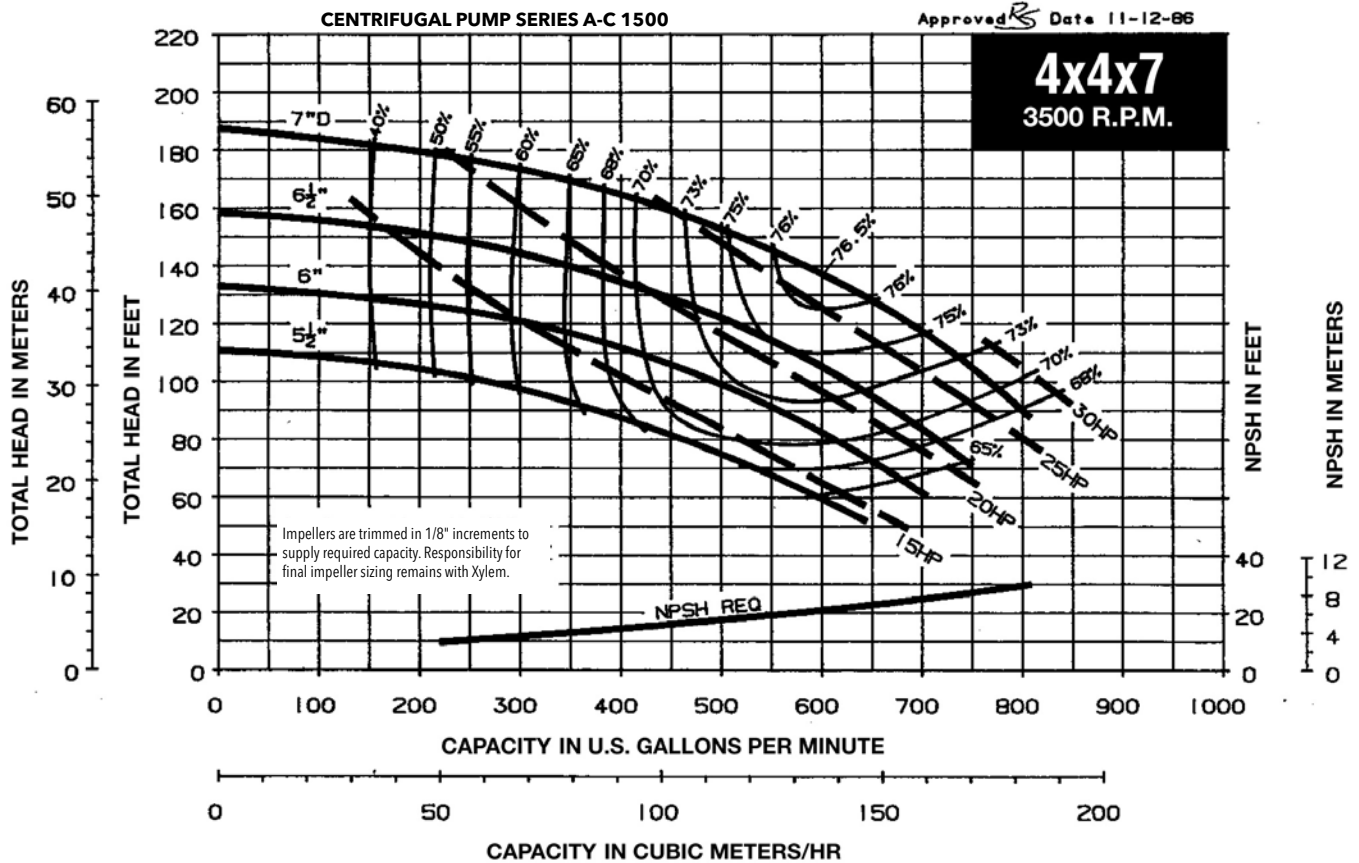
SERIES A-C 1500 - 60 Hz

3500 RPM PUMP CURVES



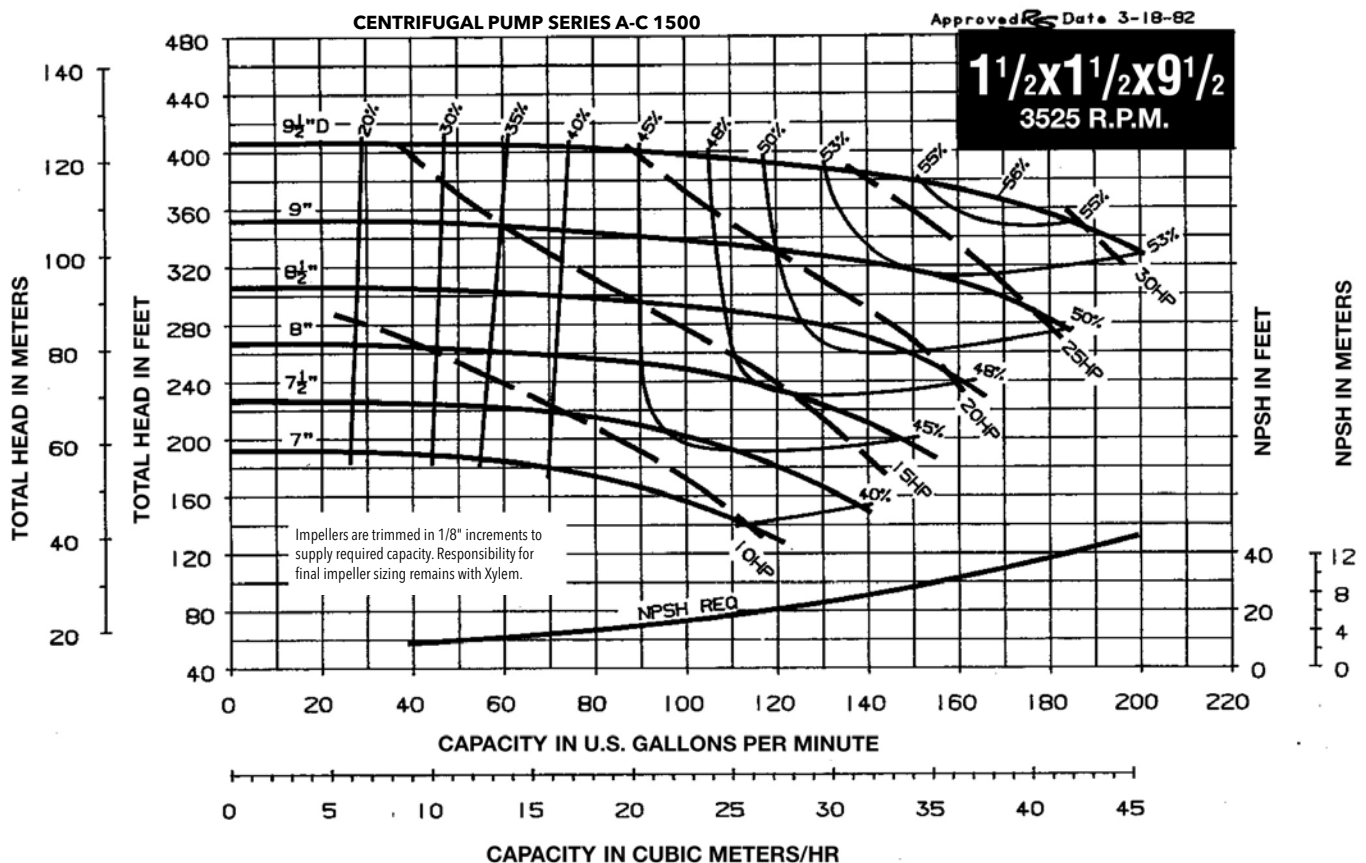
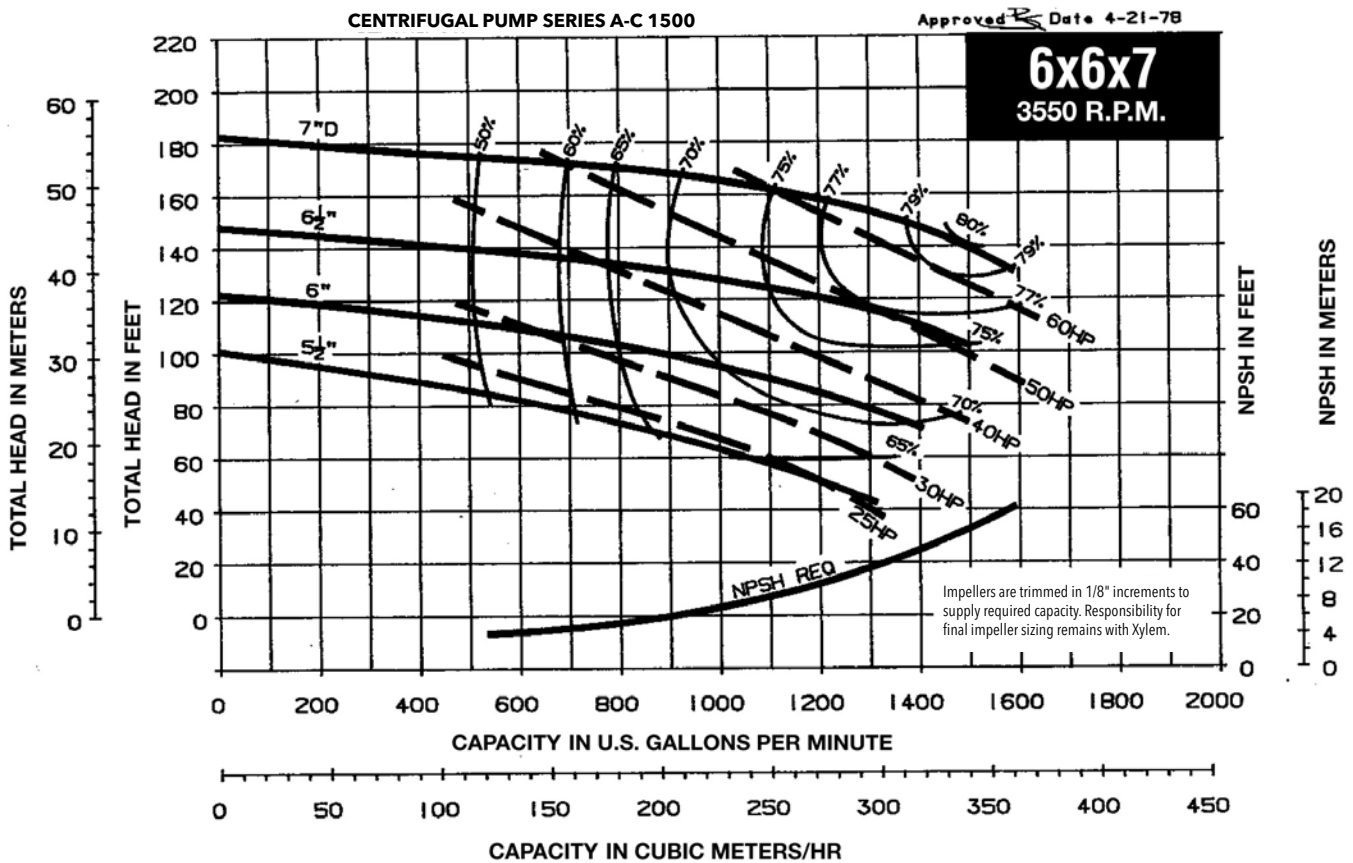
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3500 RPM PUMP CURVES



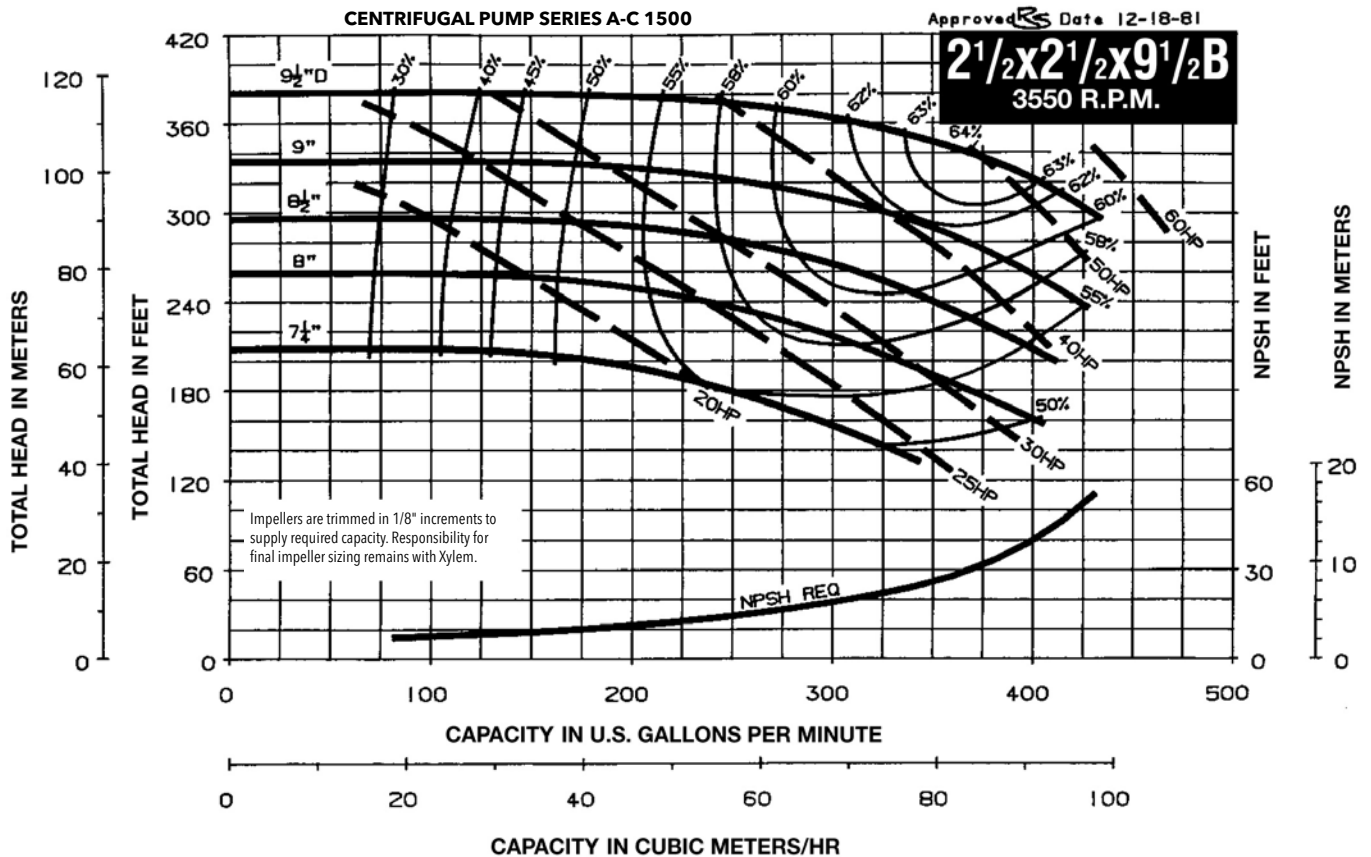
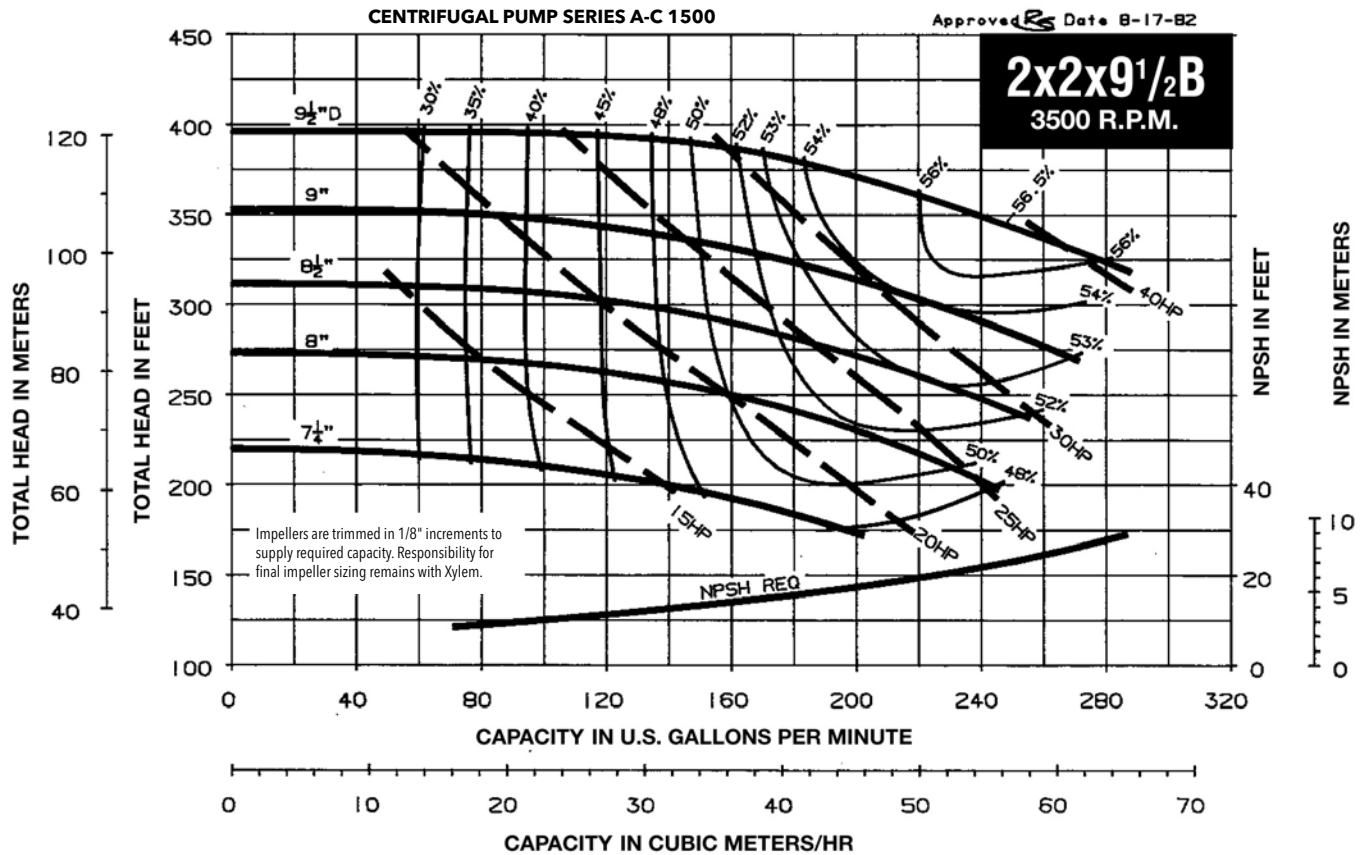
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3500 RPM PUMP CURVES



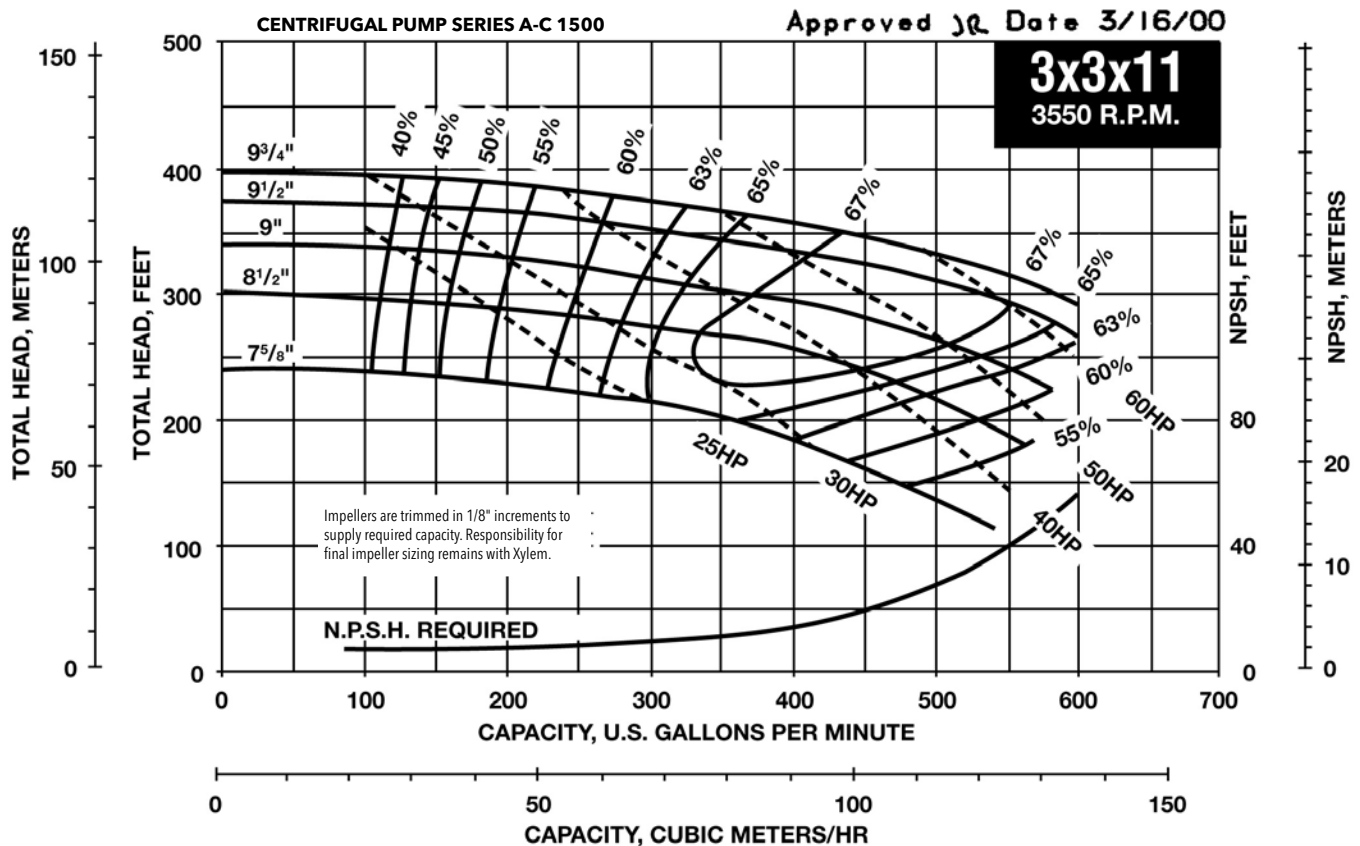
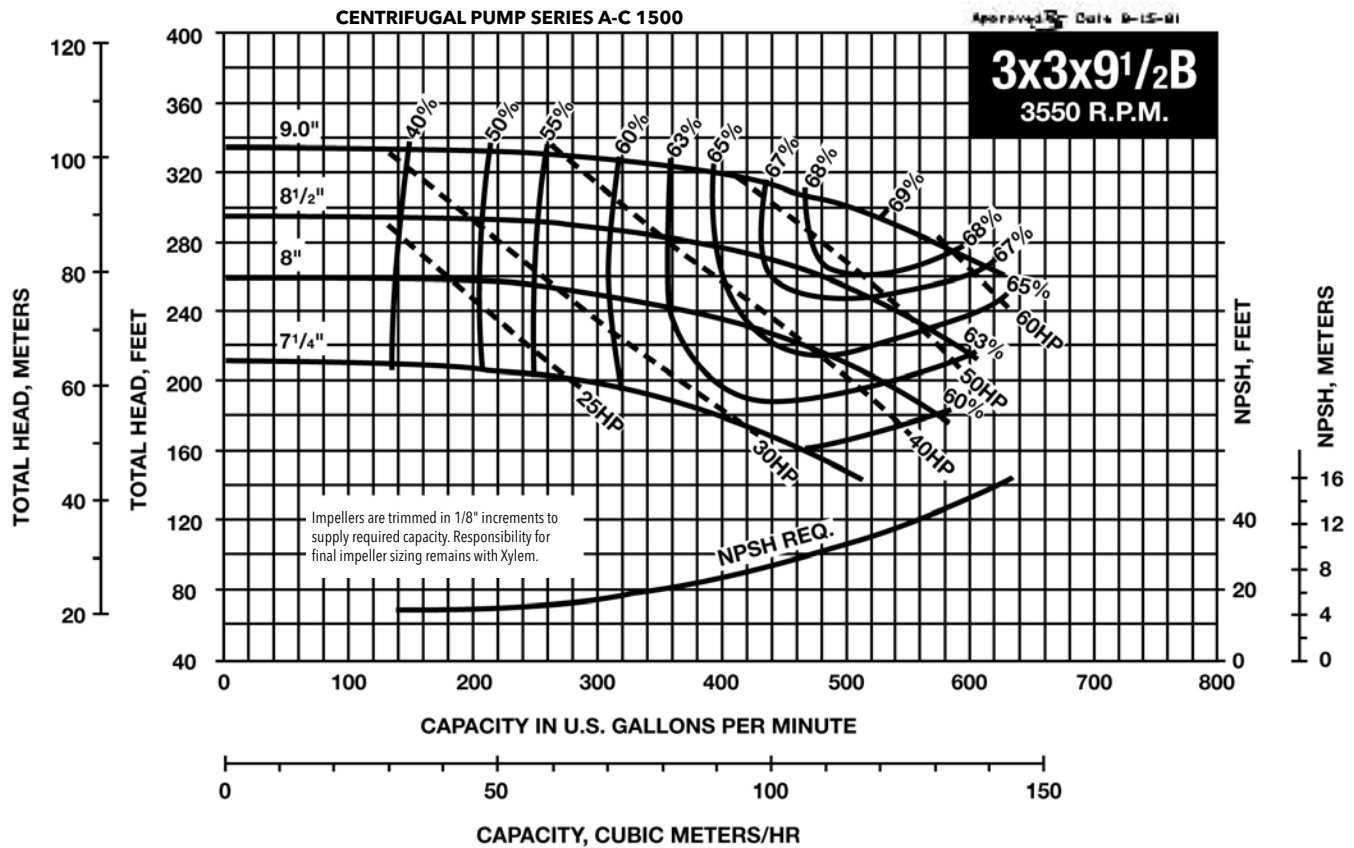
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3500 RPM PUMP CURVES



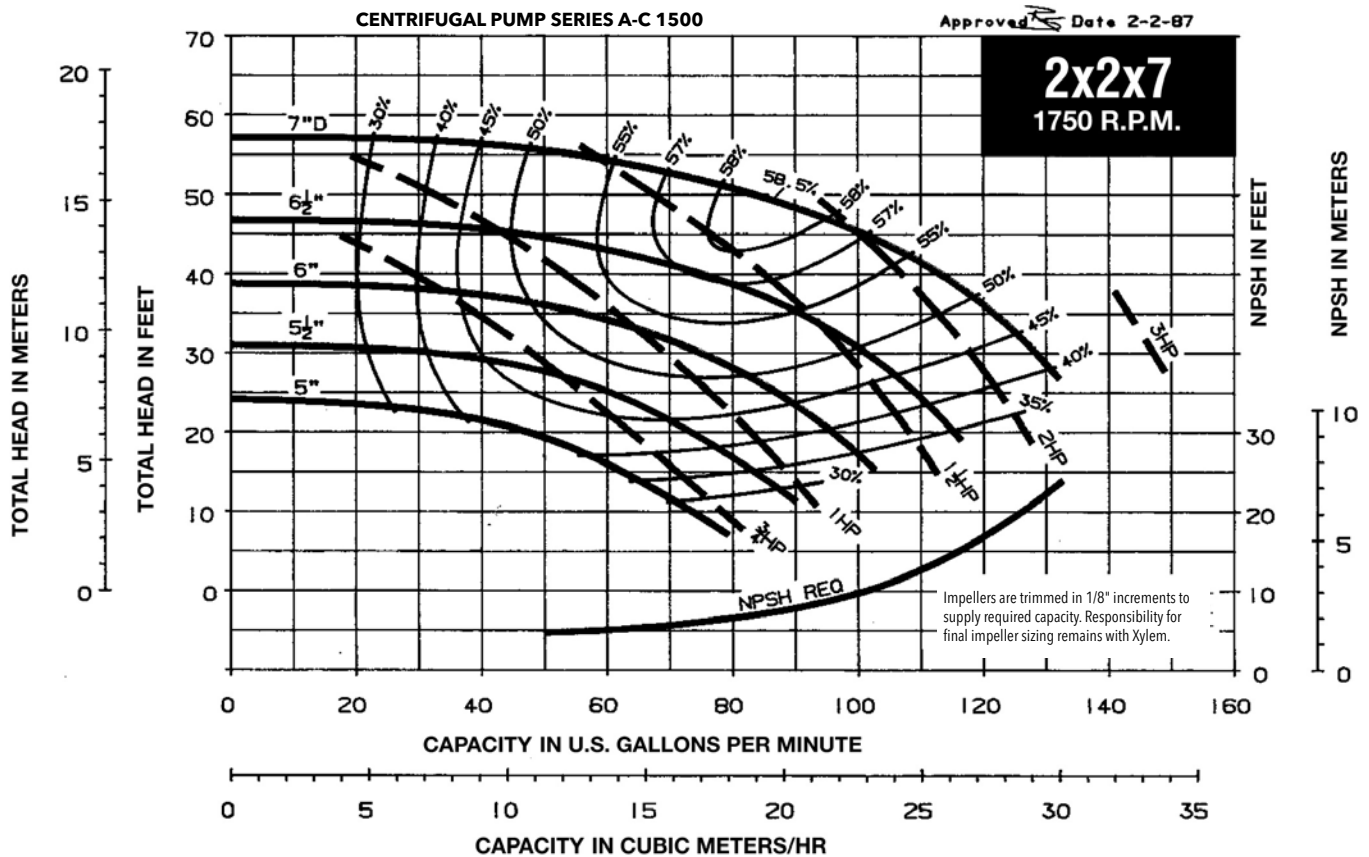
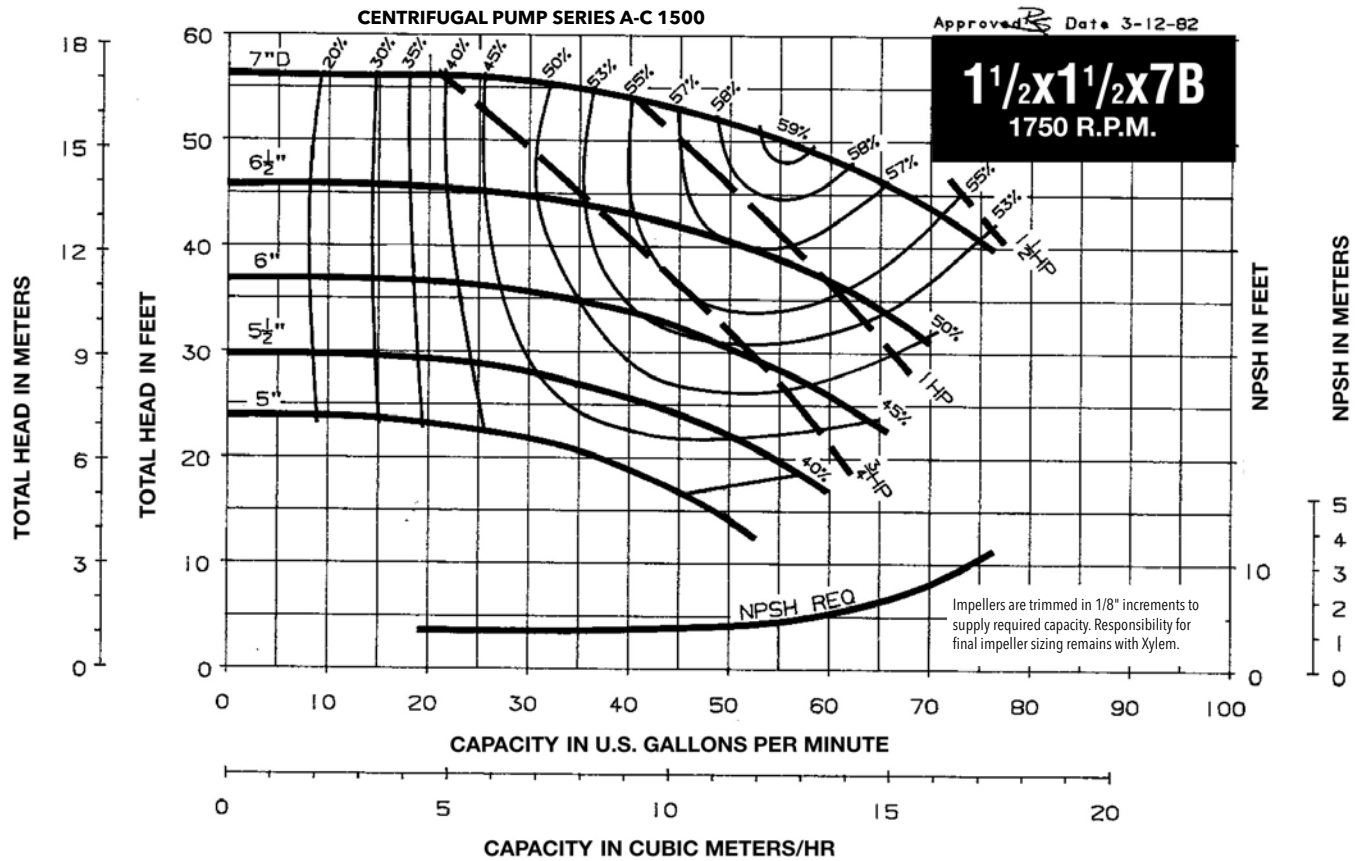
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3500 RPM PUMP CURVES



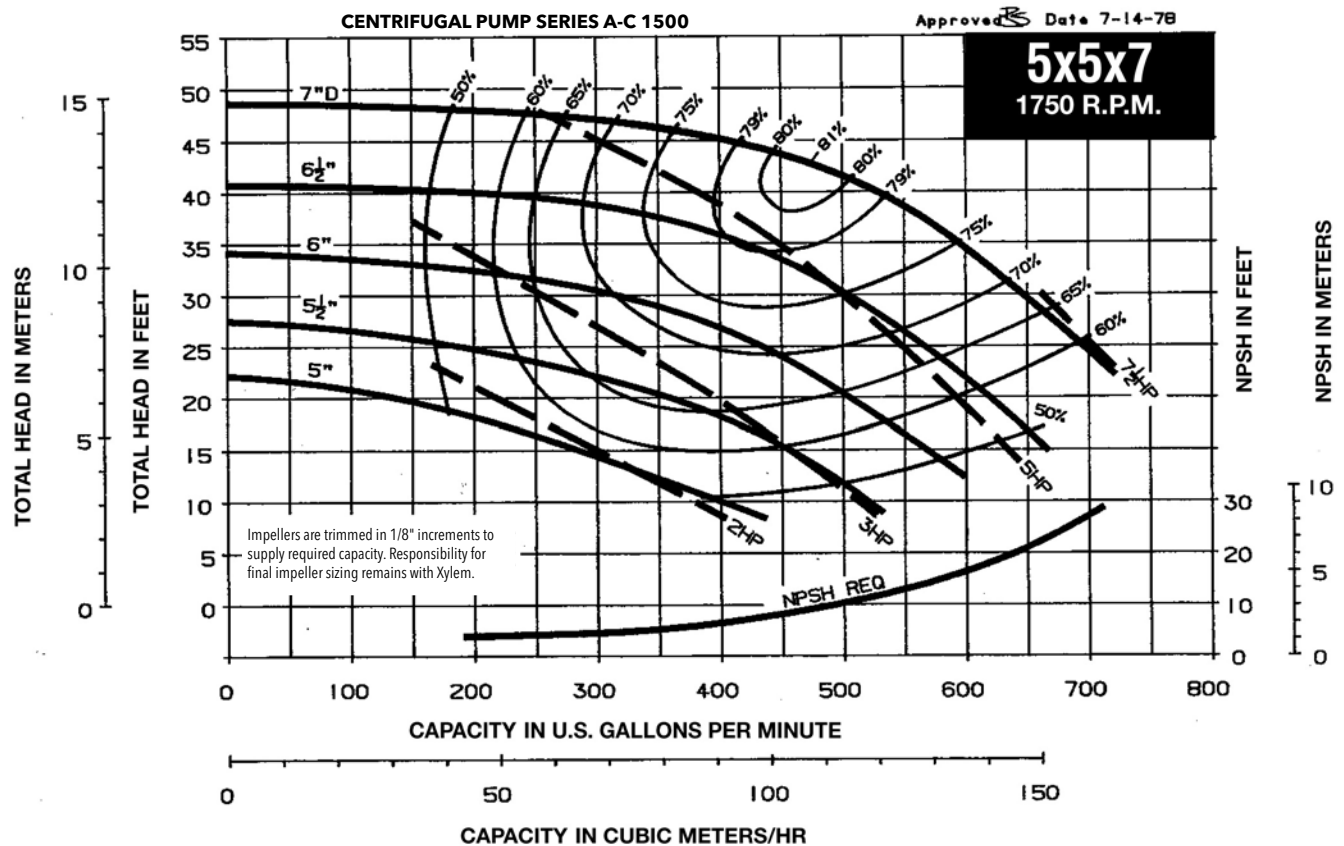
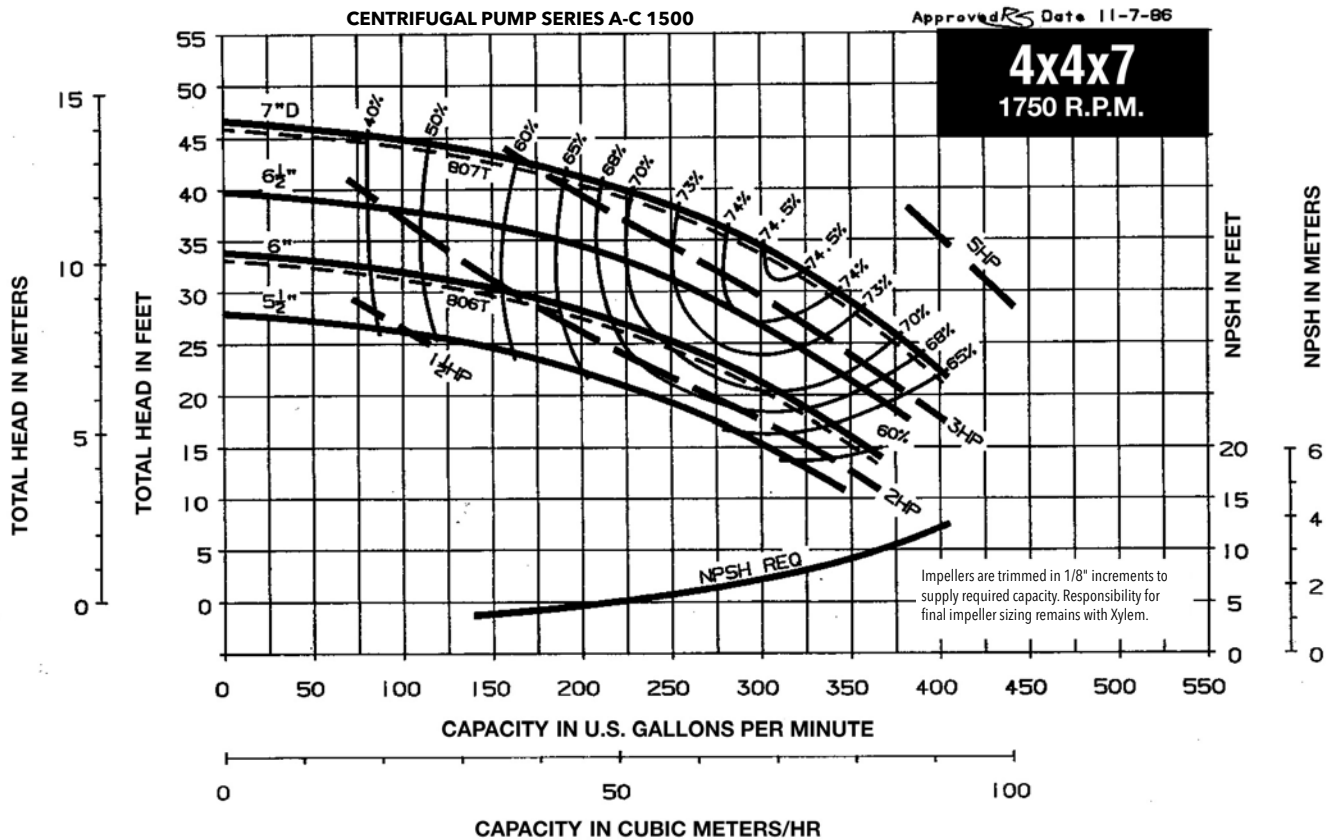
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1750 RPM PUMP CURVES



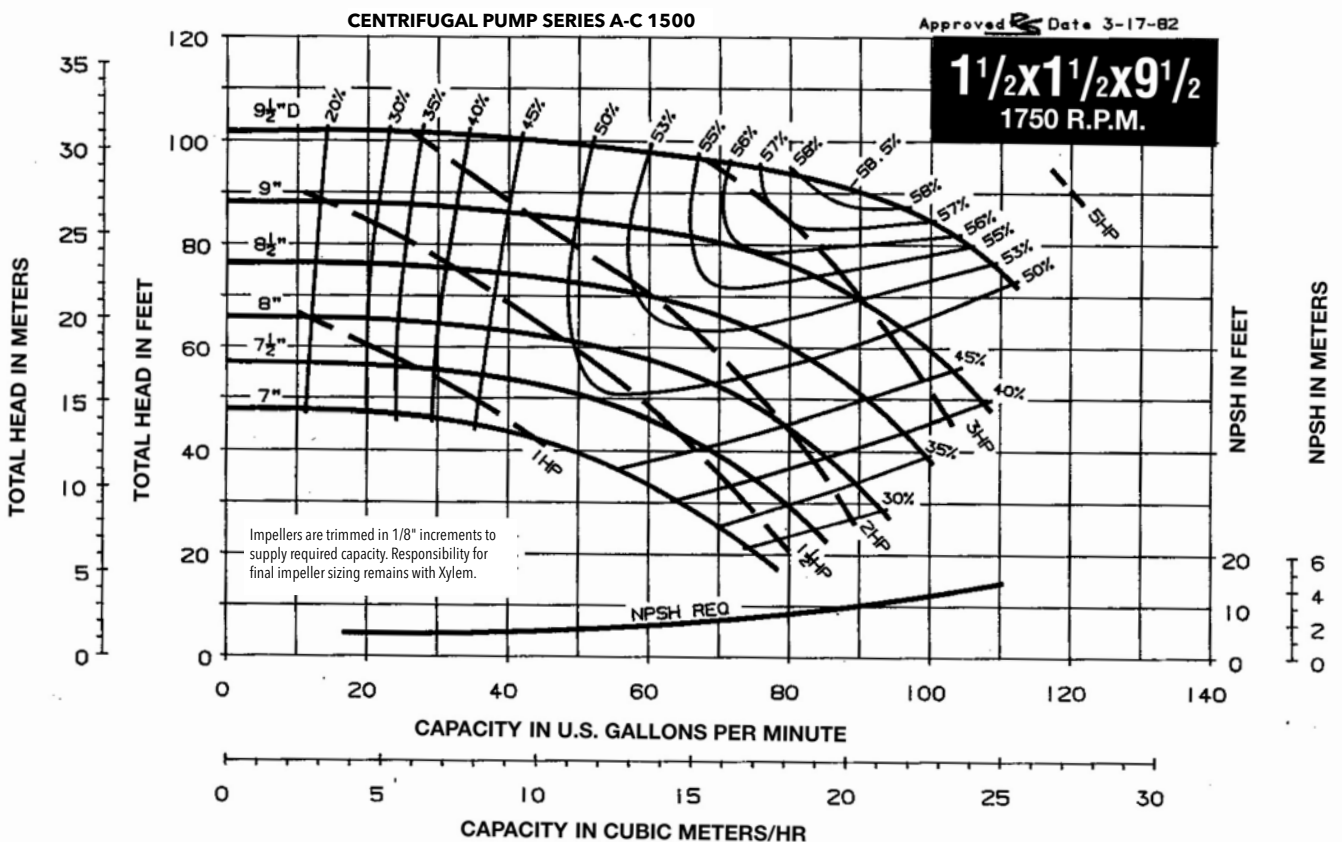
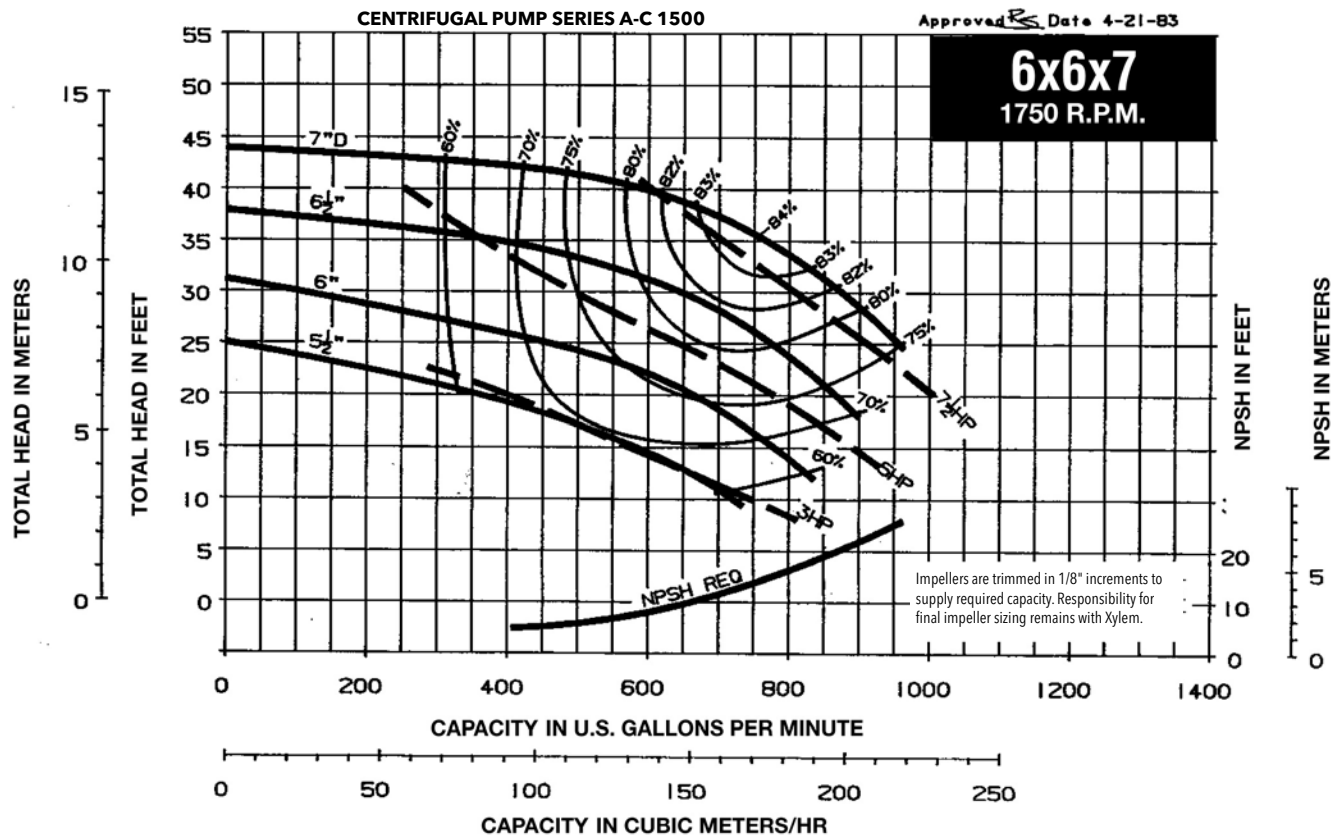
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1750 RPM PUMP CURVES



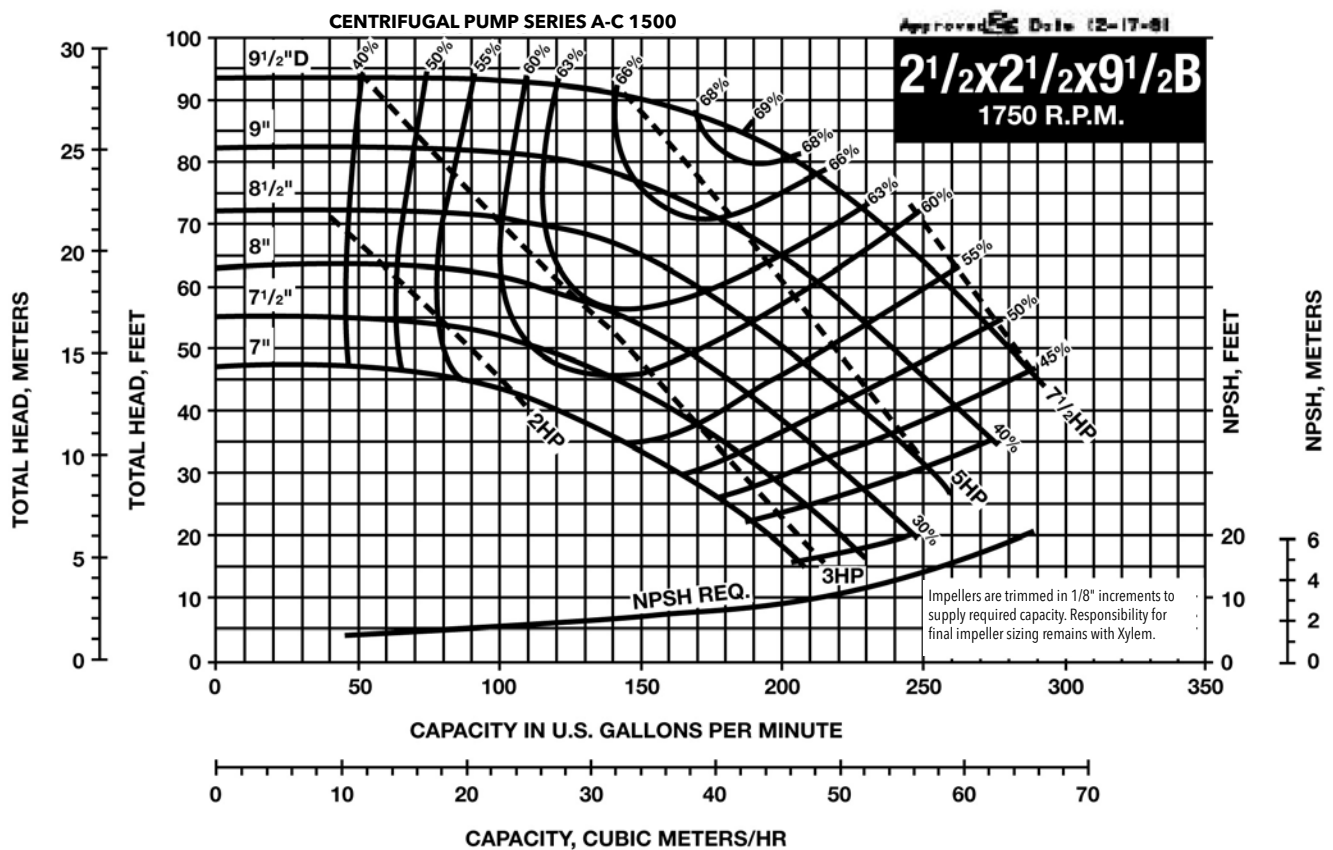
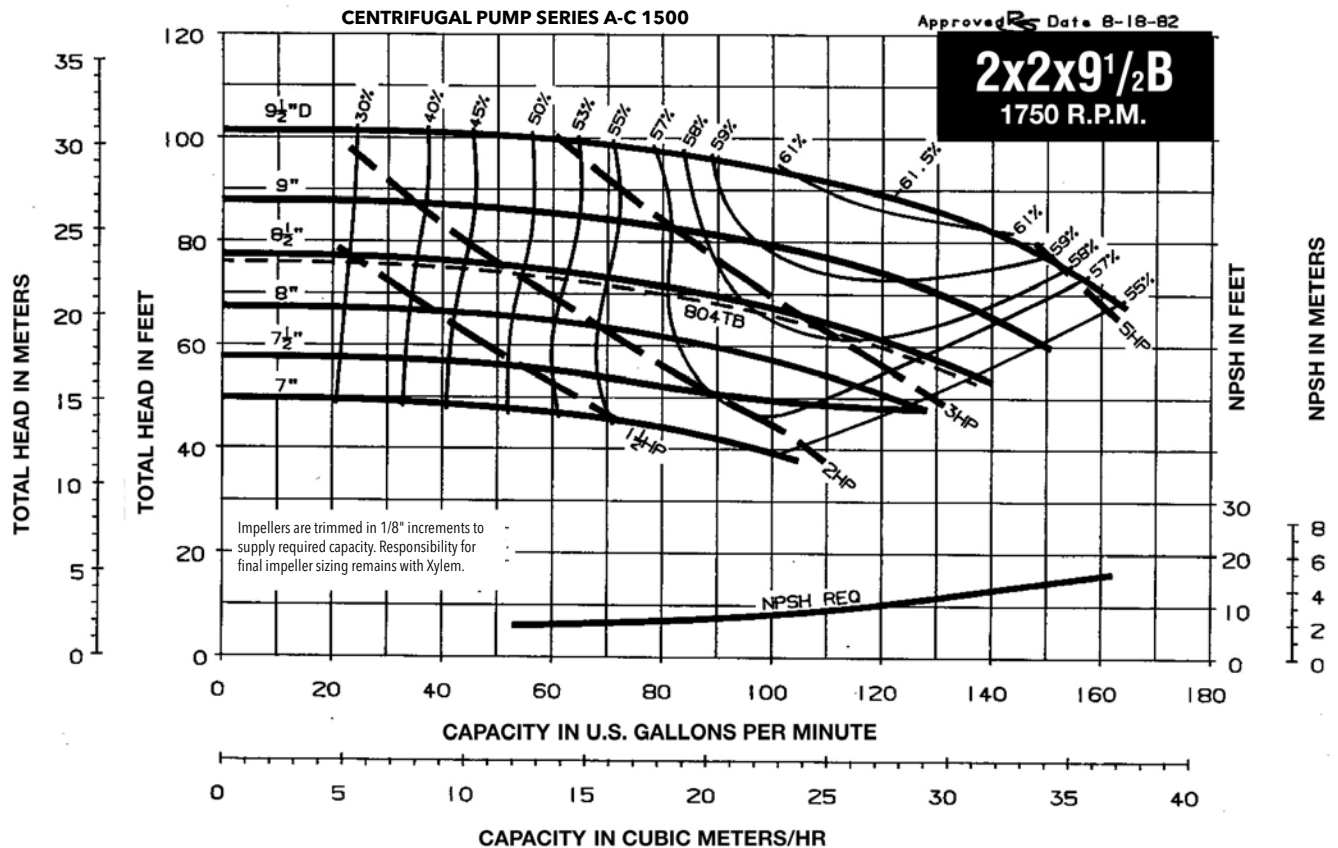
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1750 RPM PUMP CURVES



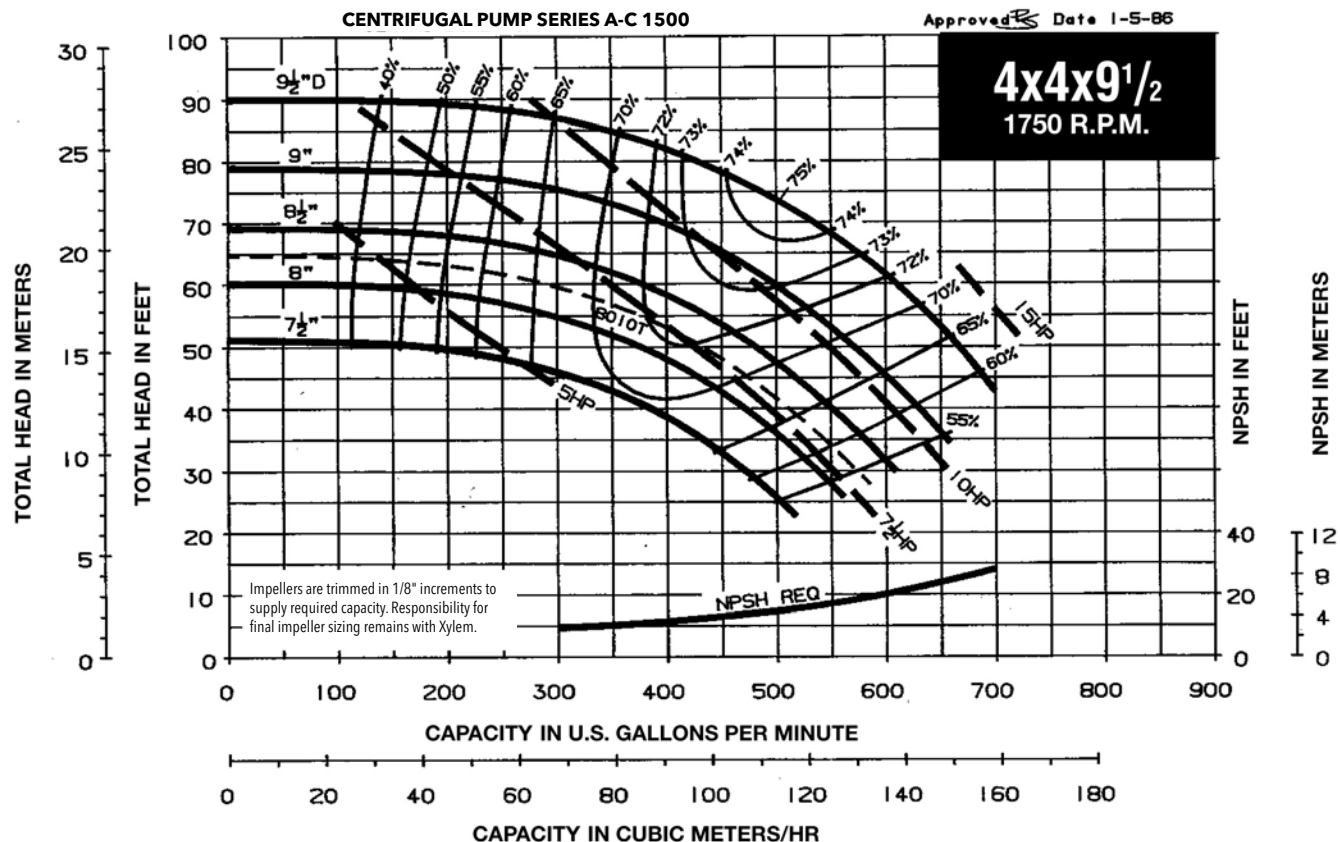
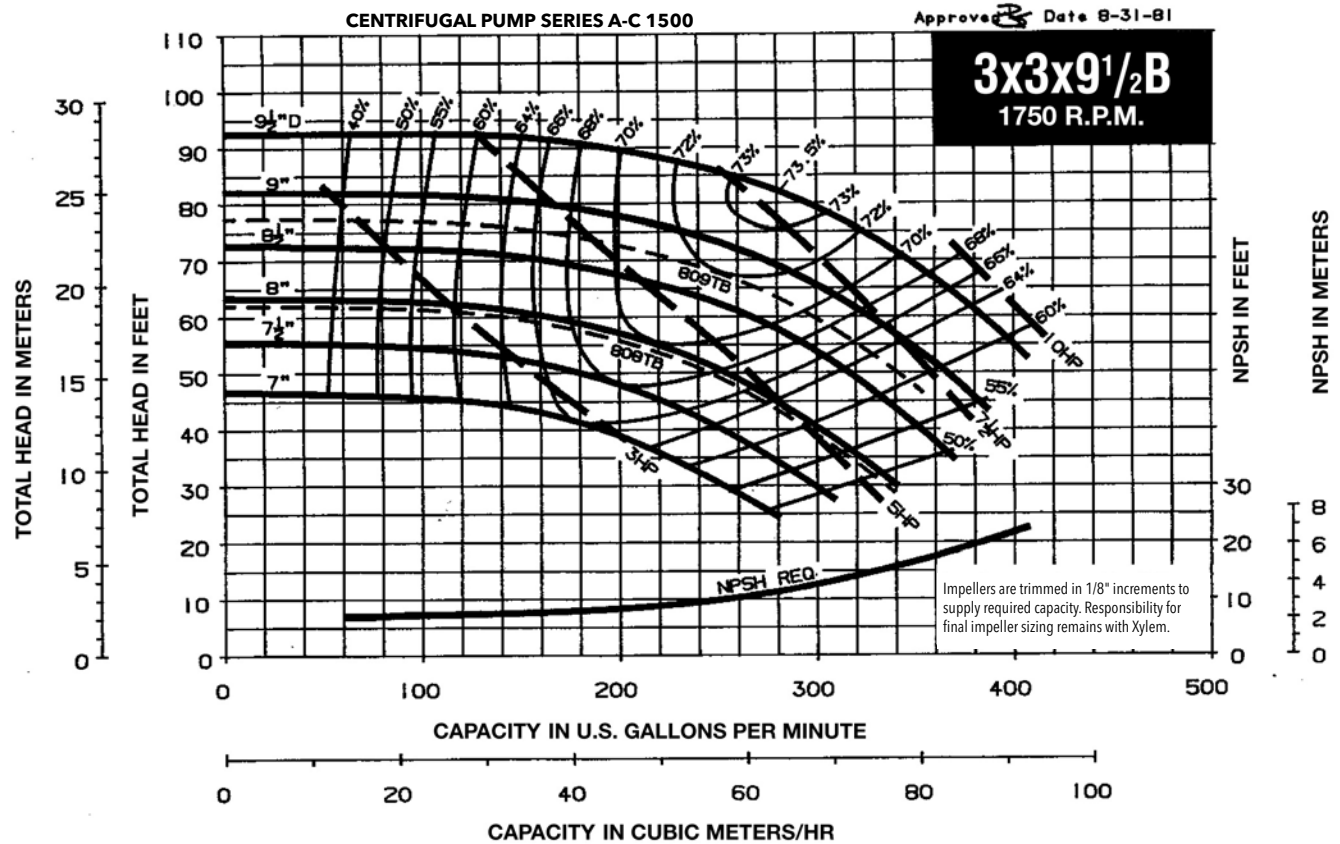
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1750 RPM PUMP CURVES



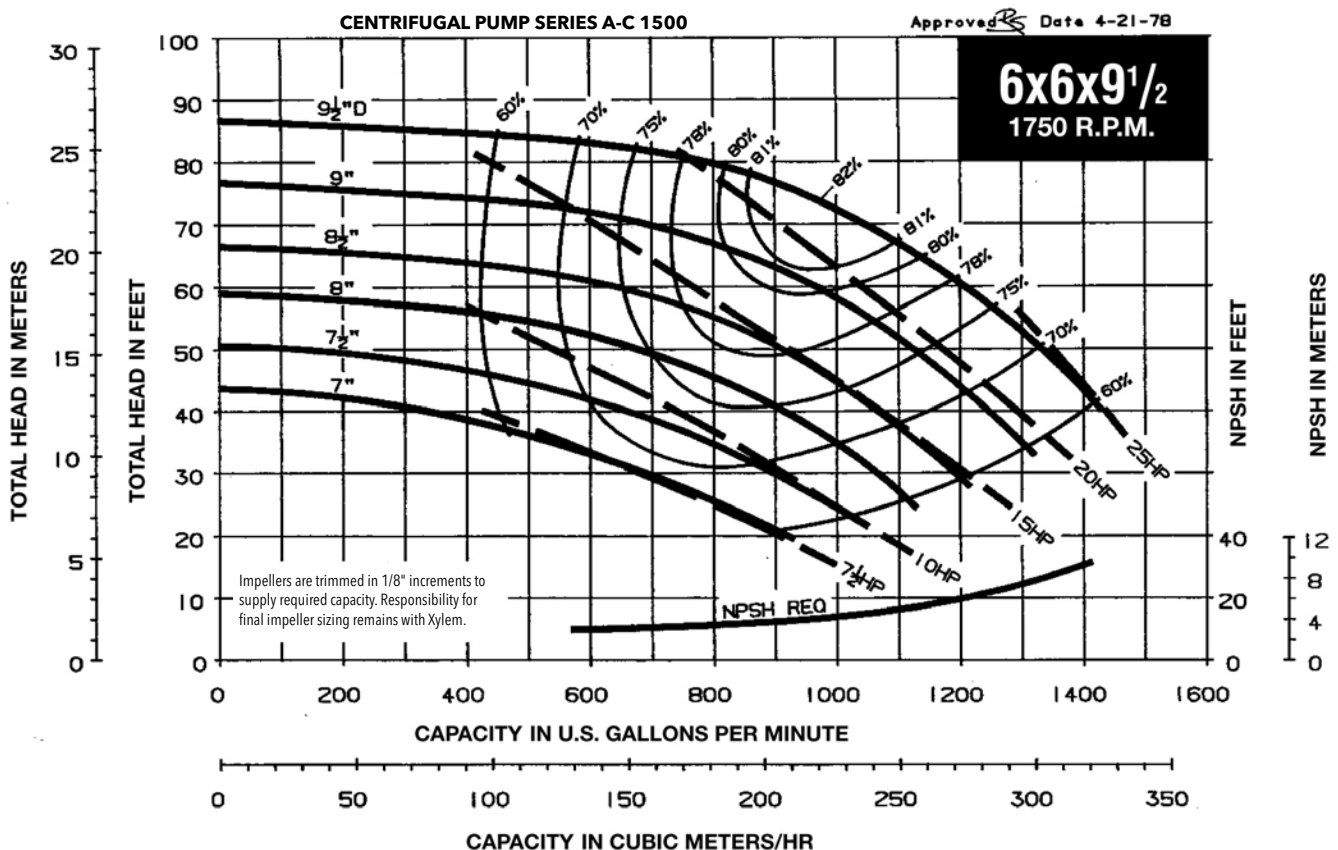
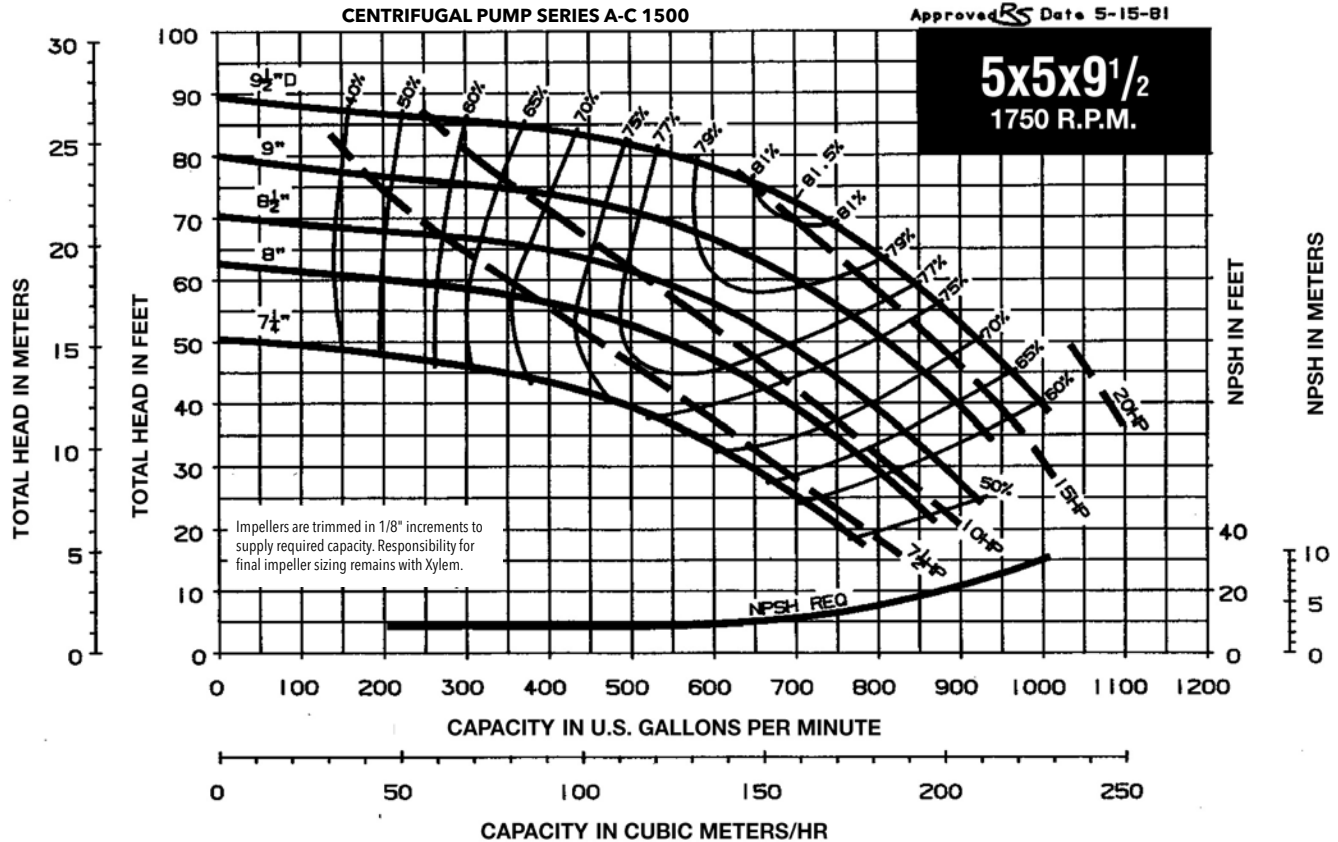
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1750 RPM PUMP CURVES



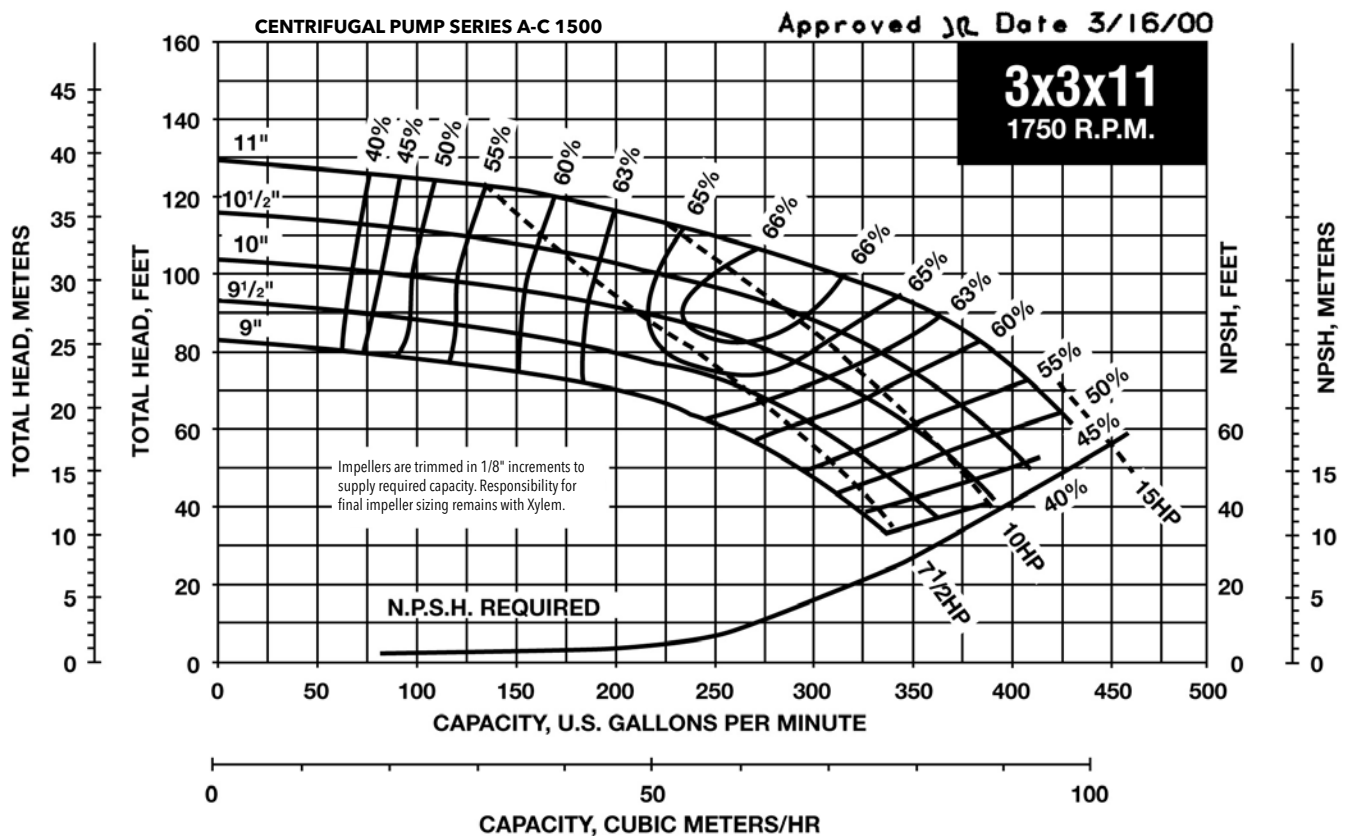
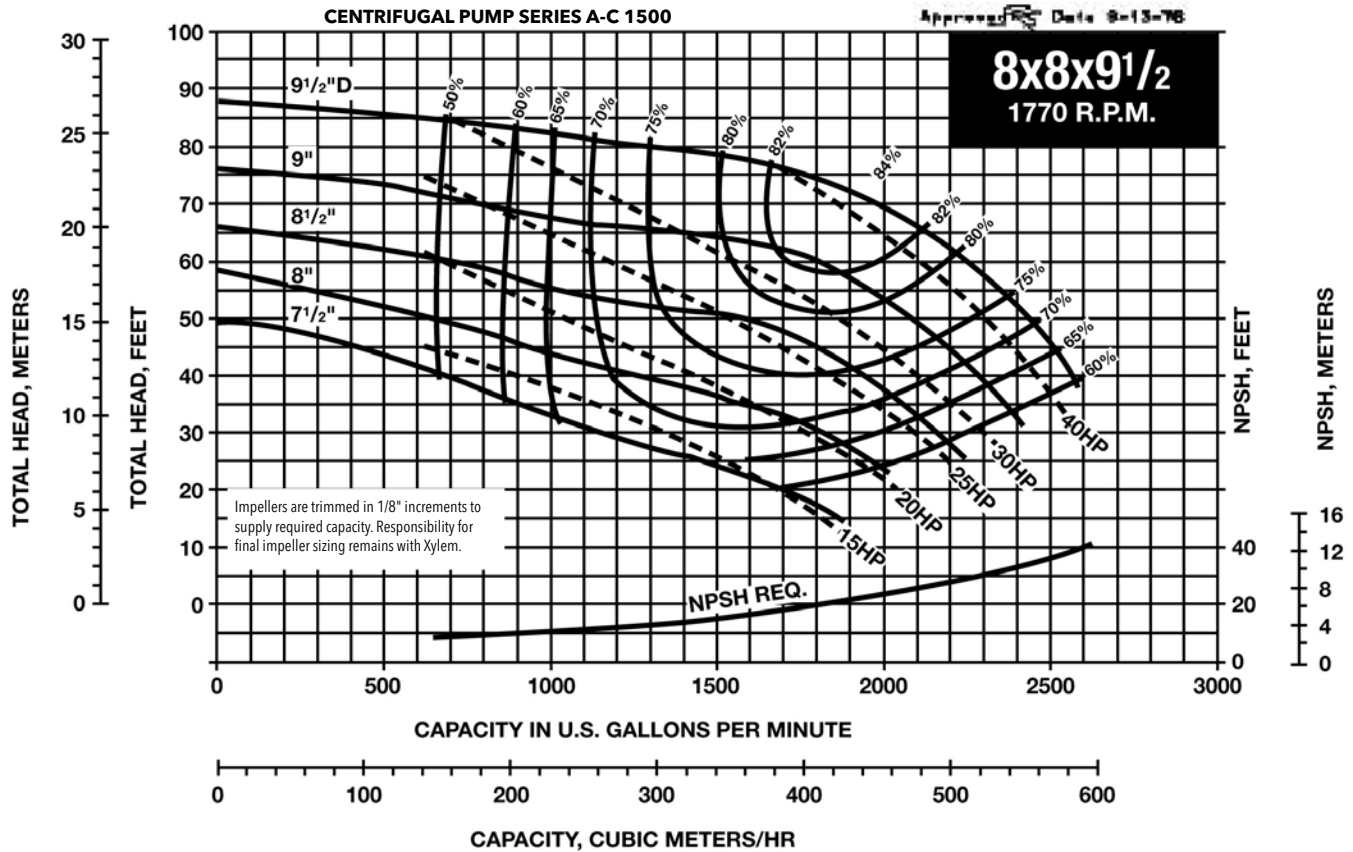
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1750 RPM PUMP CURVES



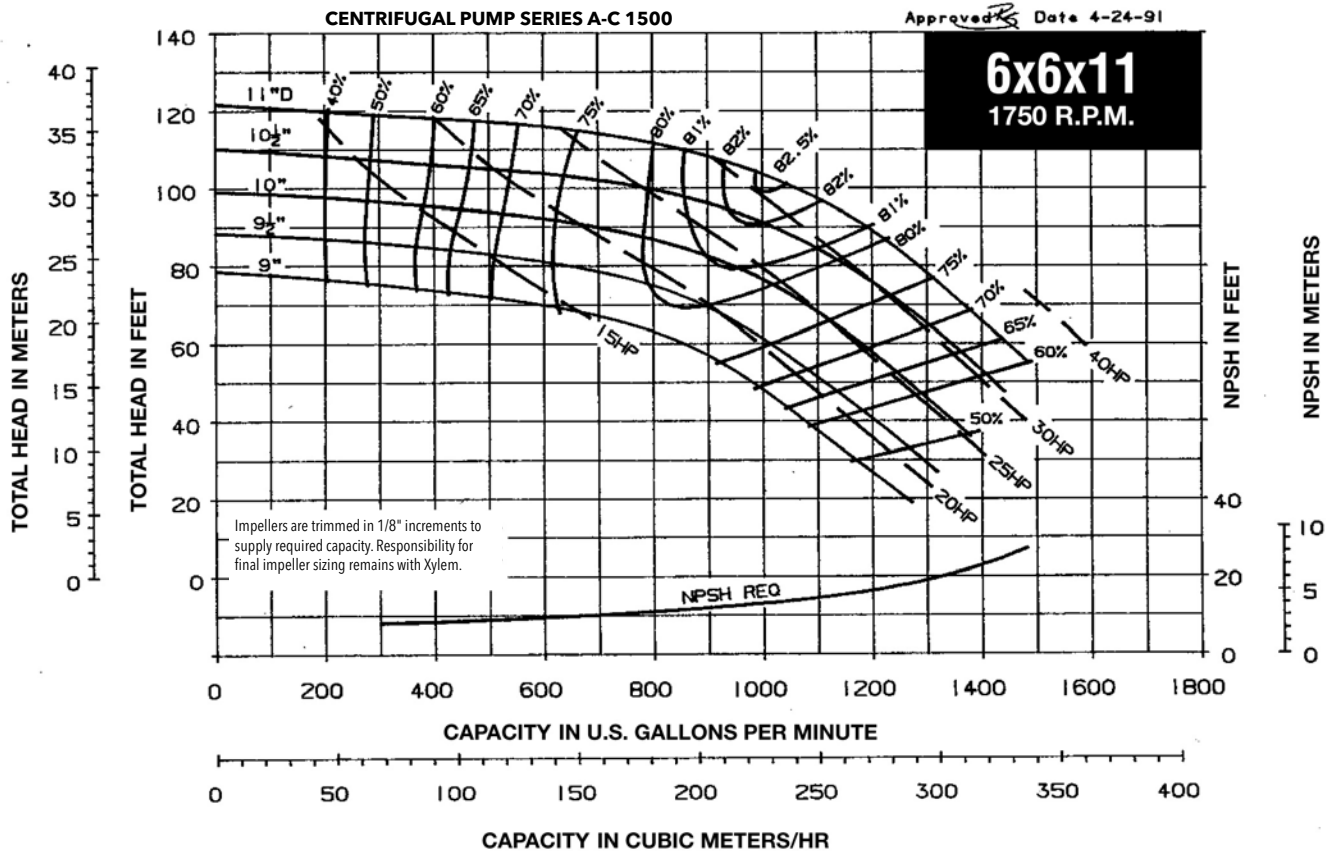
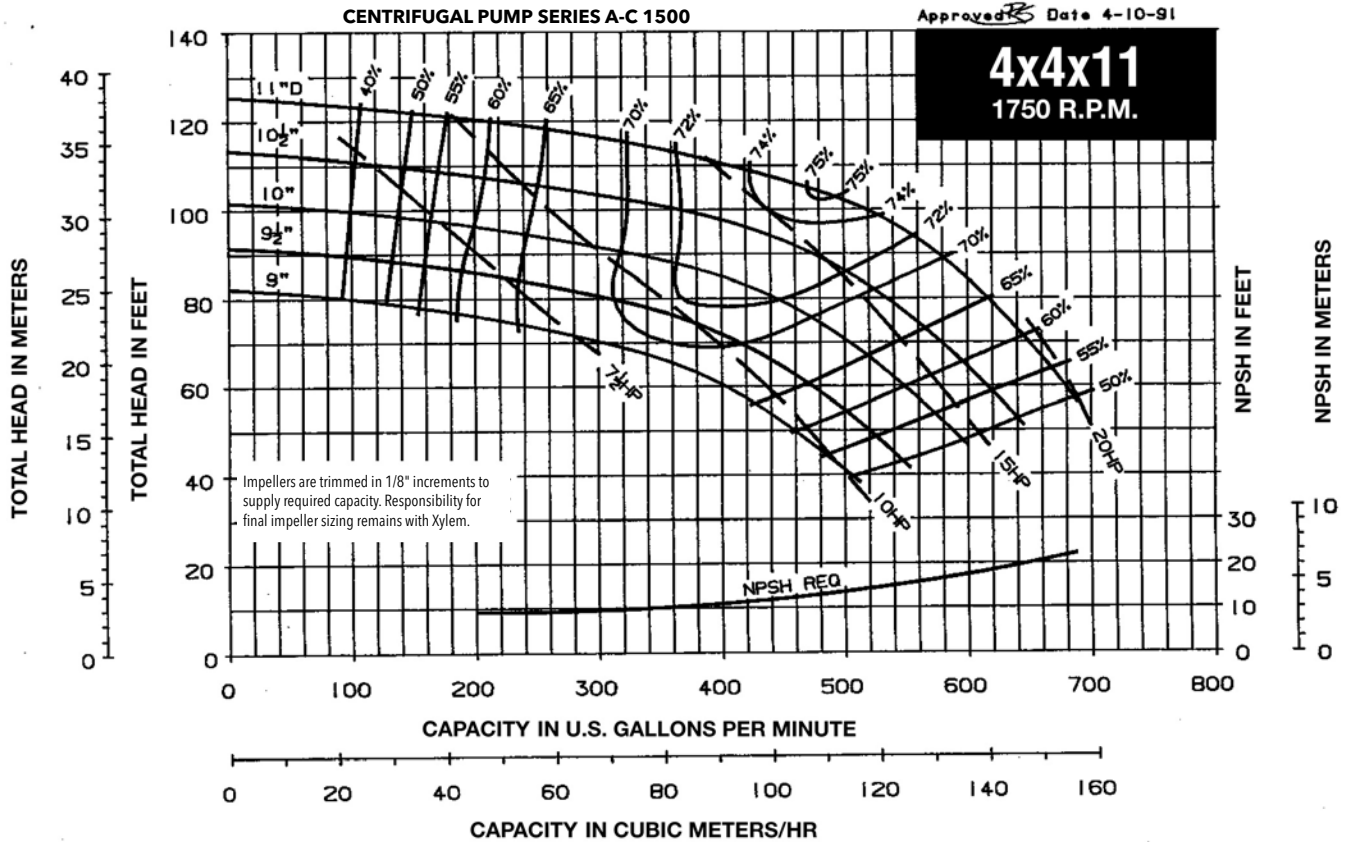
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1750 RPM PUMP CURVES



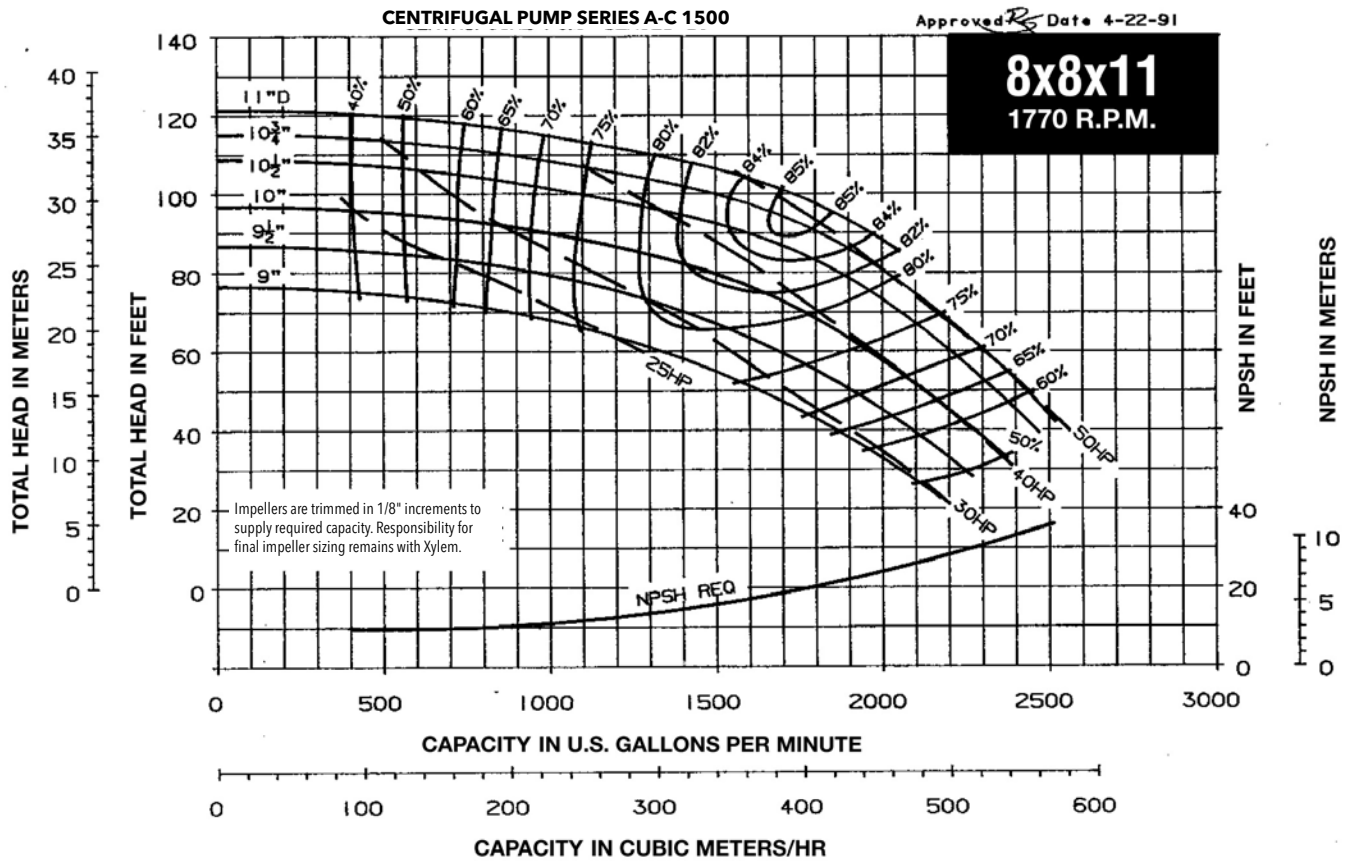
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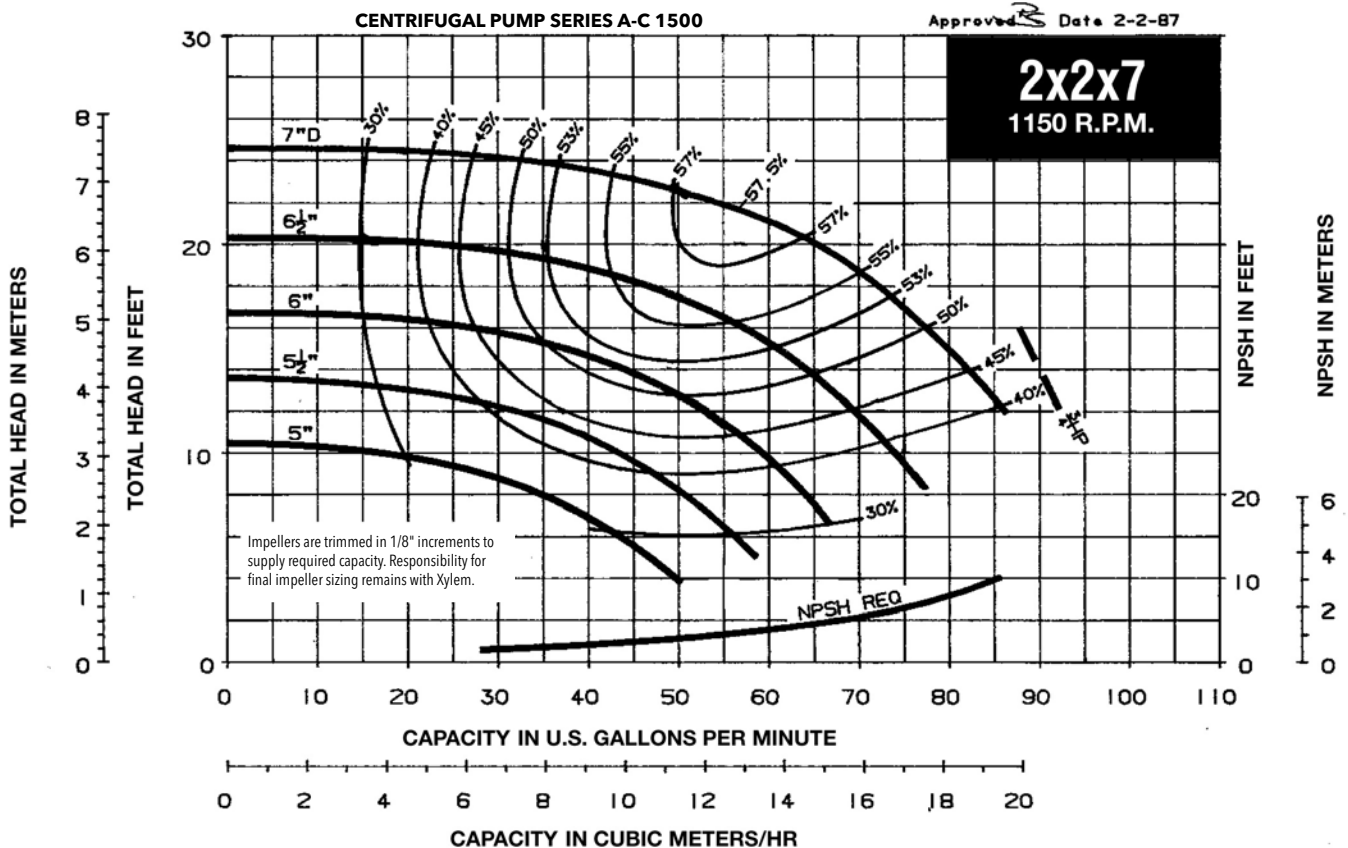
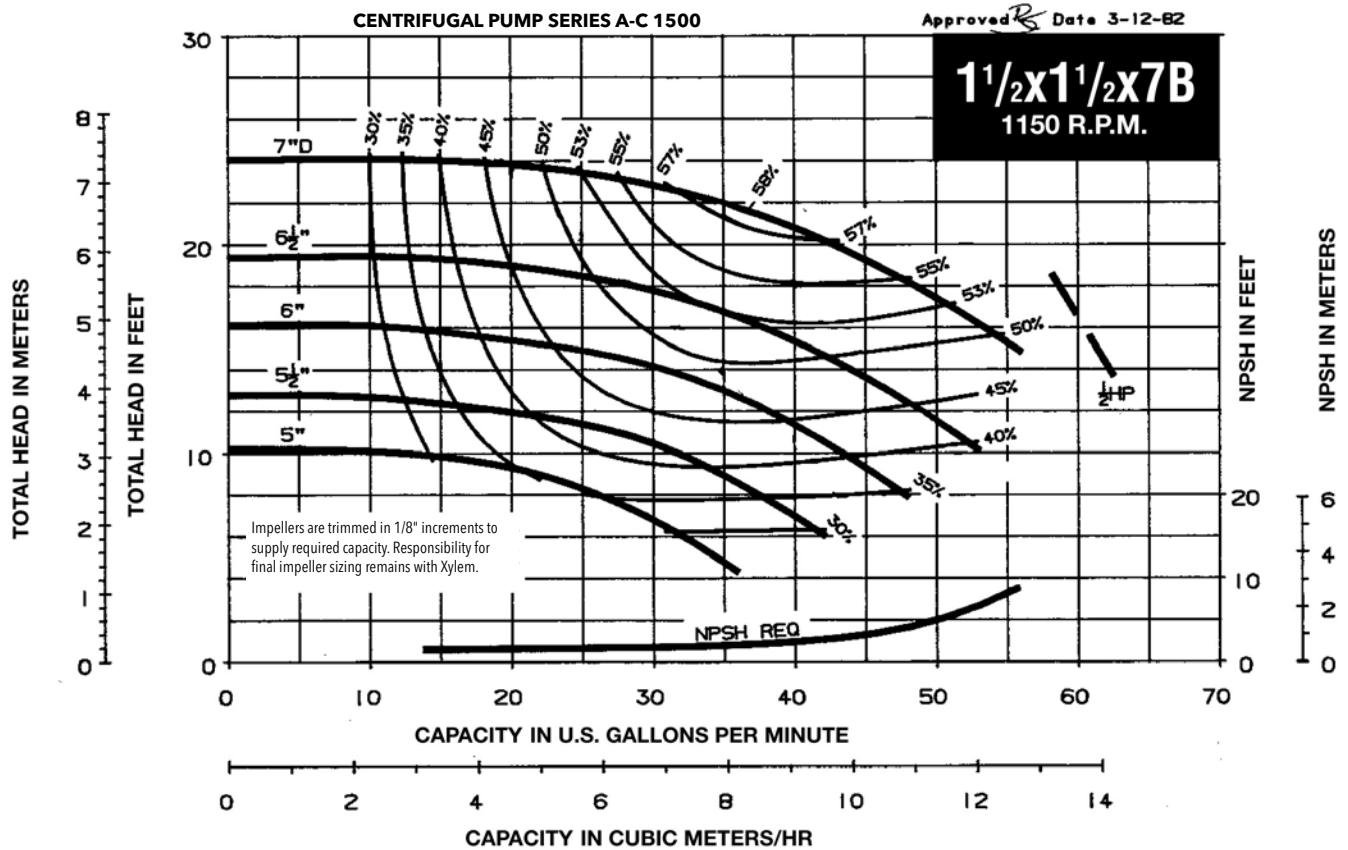
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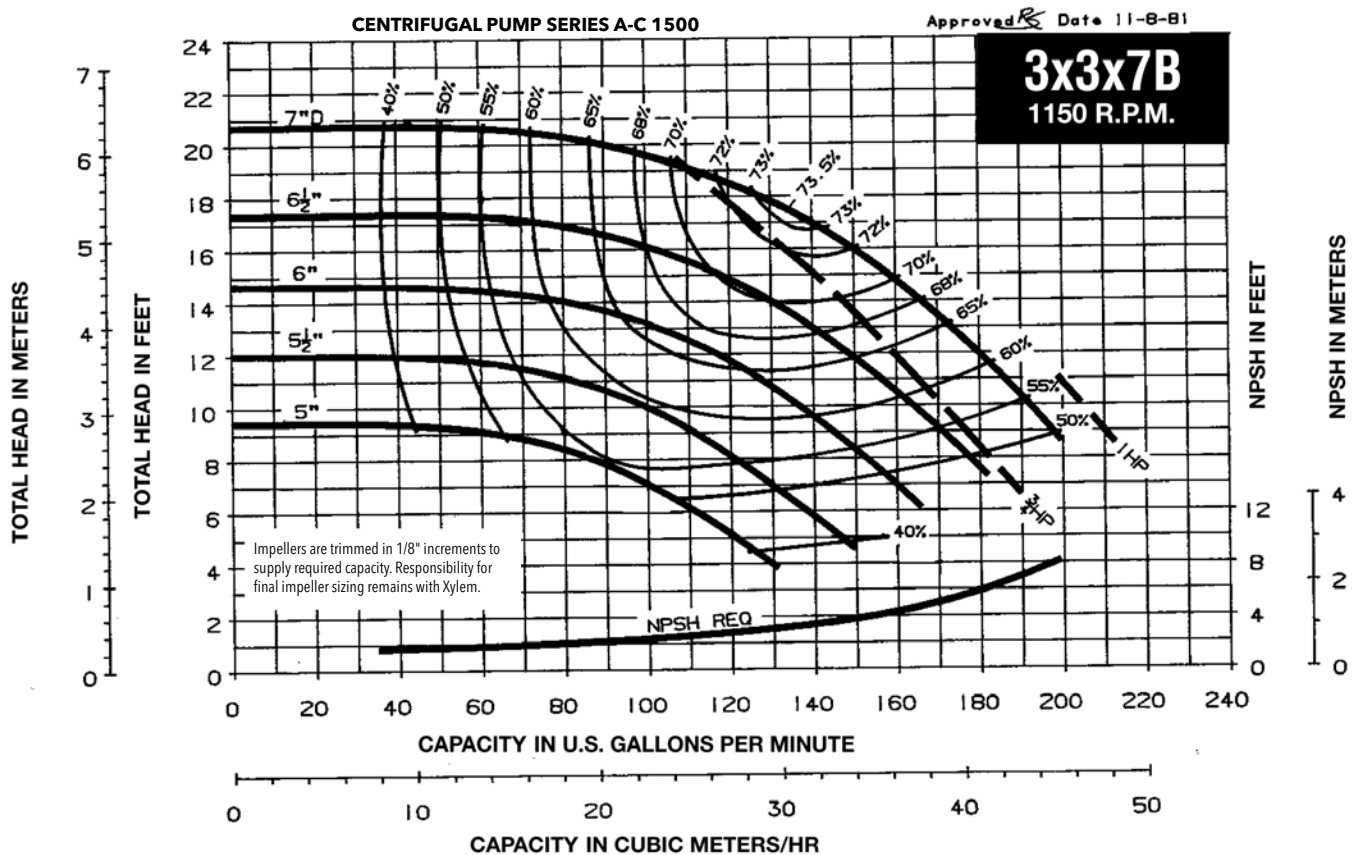
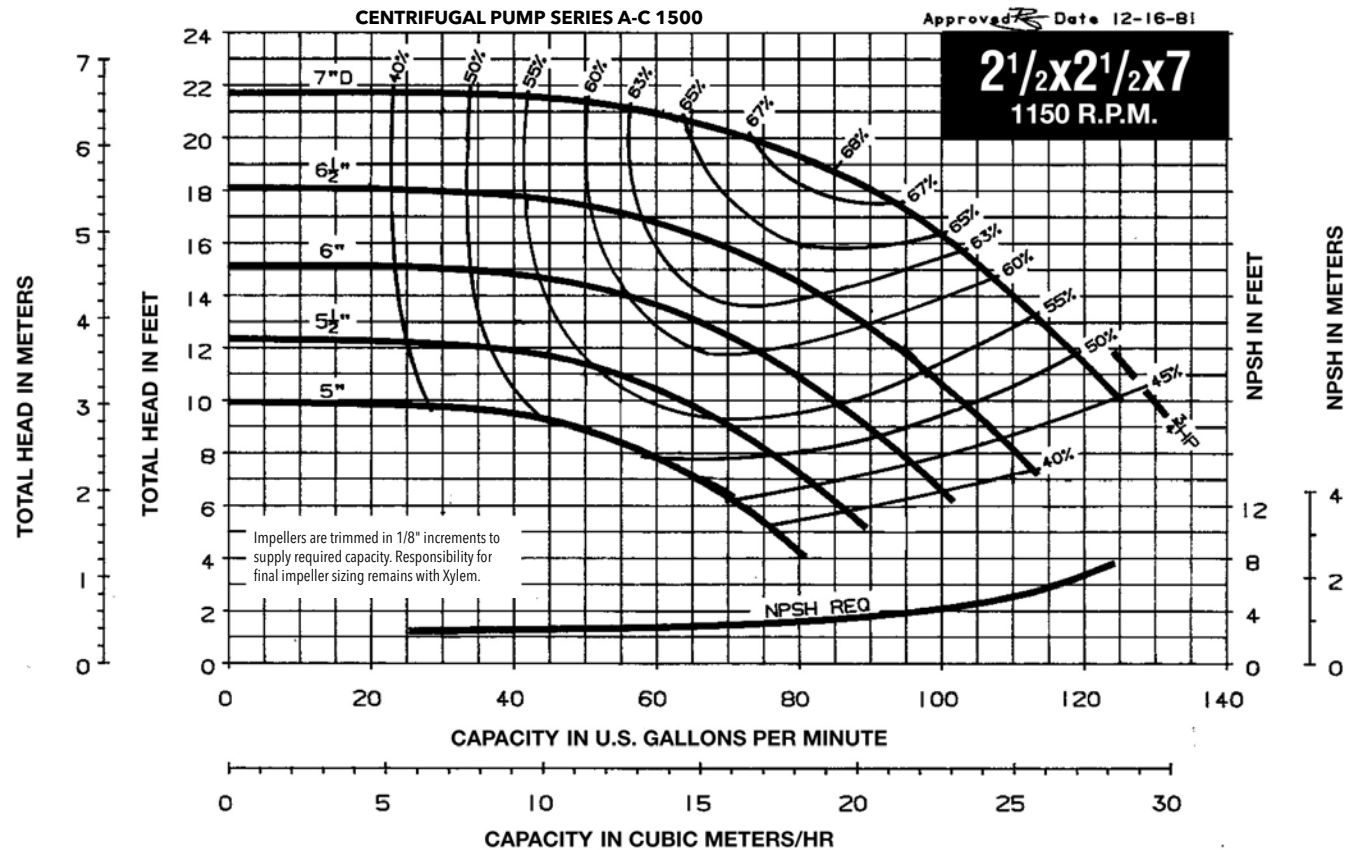
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1150 RPM PUMP CURVES



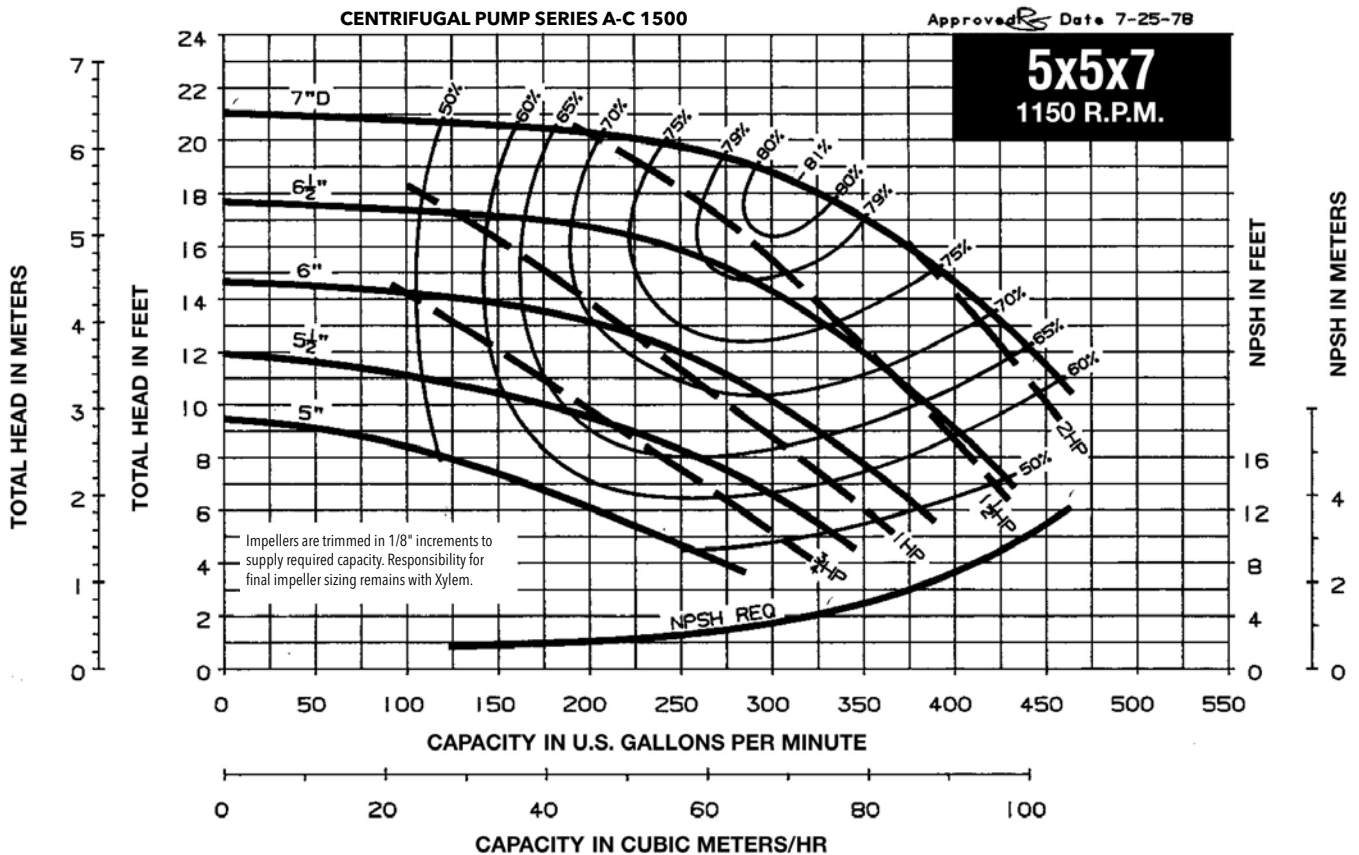
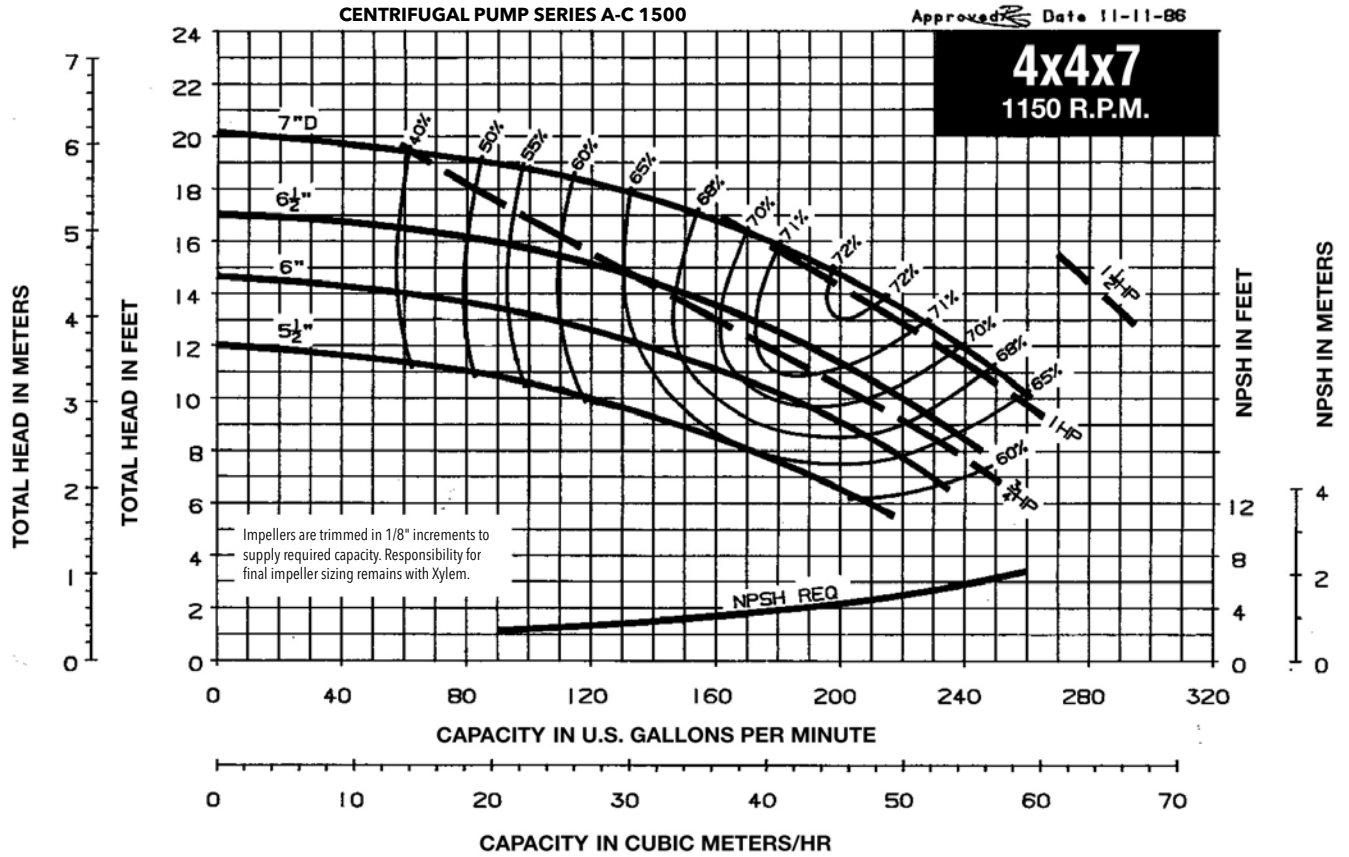
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1150 RPM PUMP CURVES



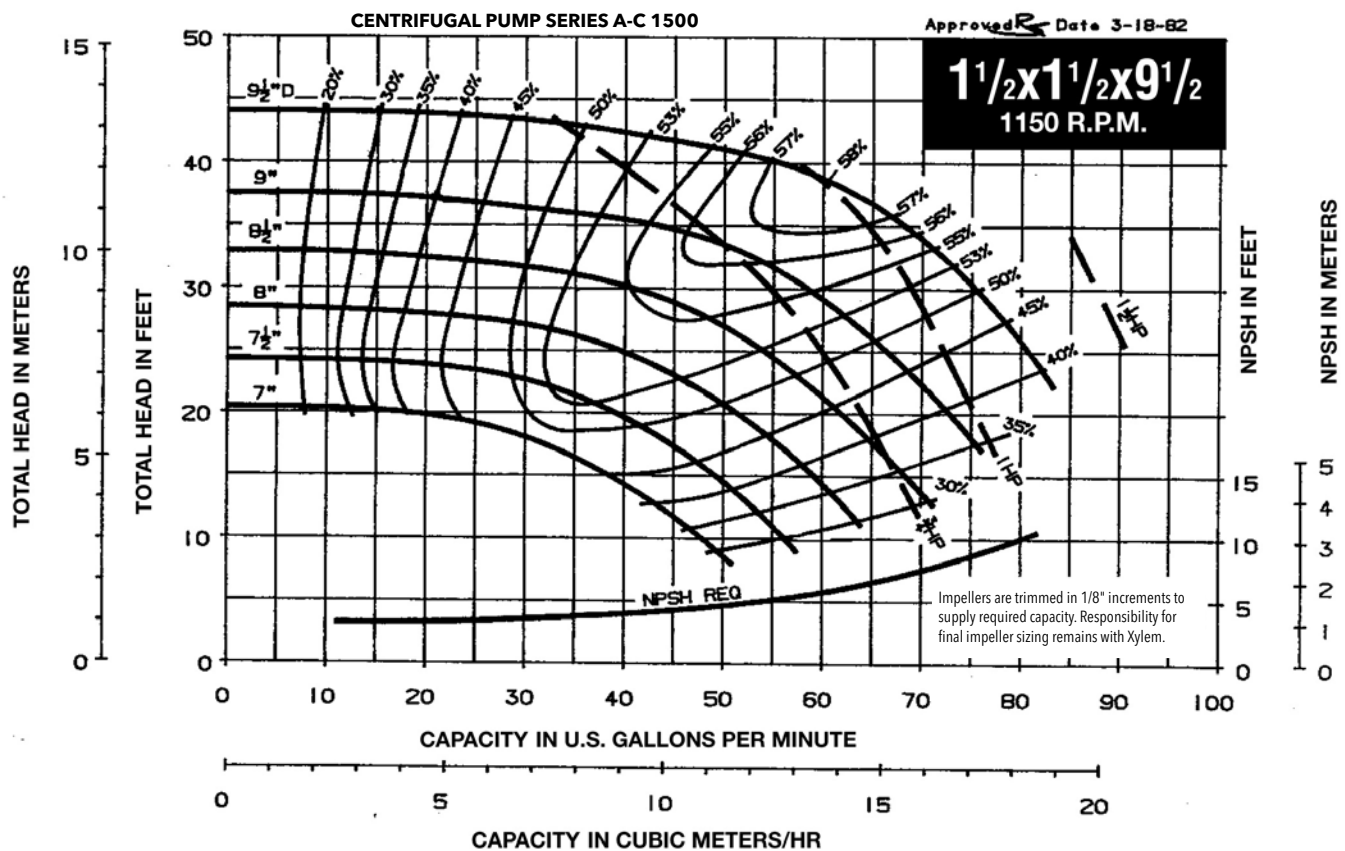
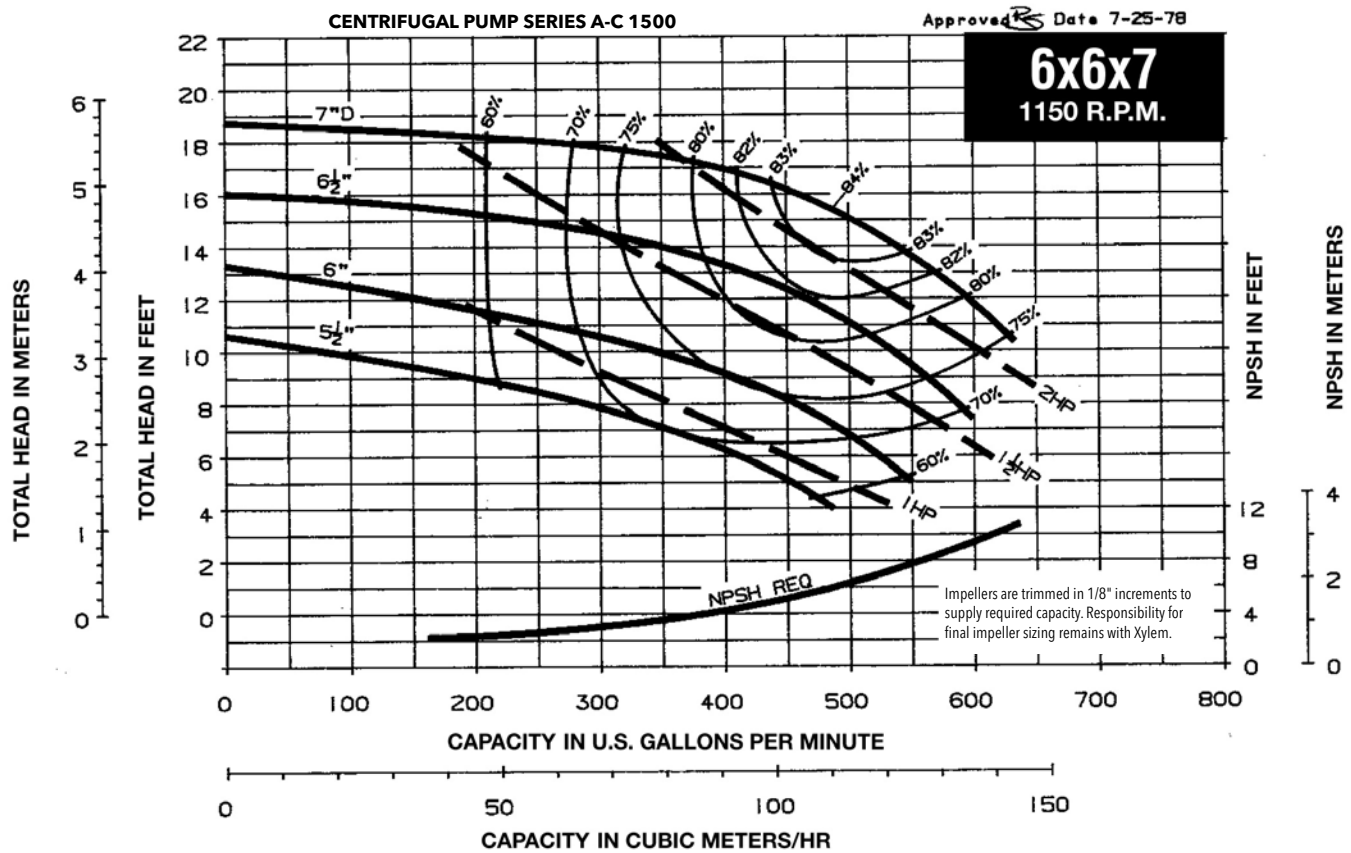
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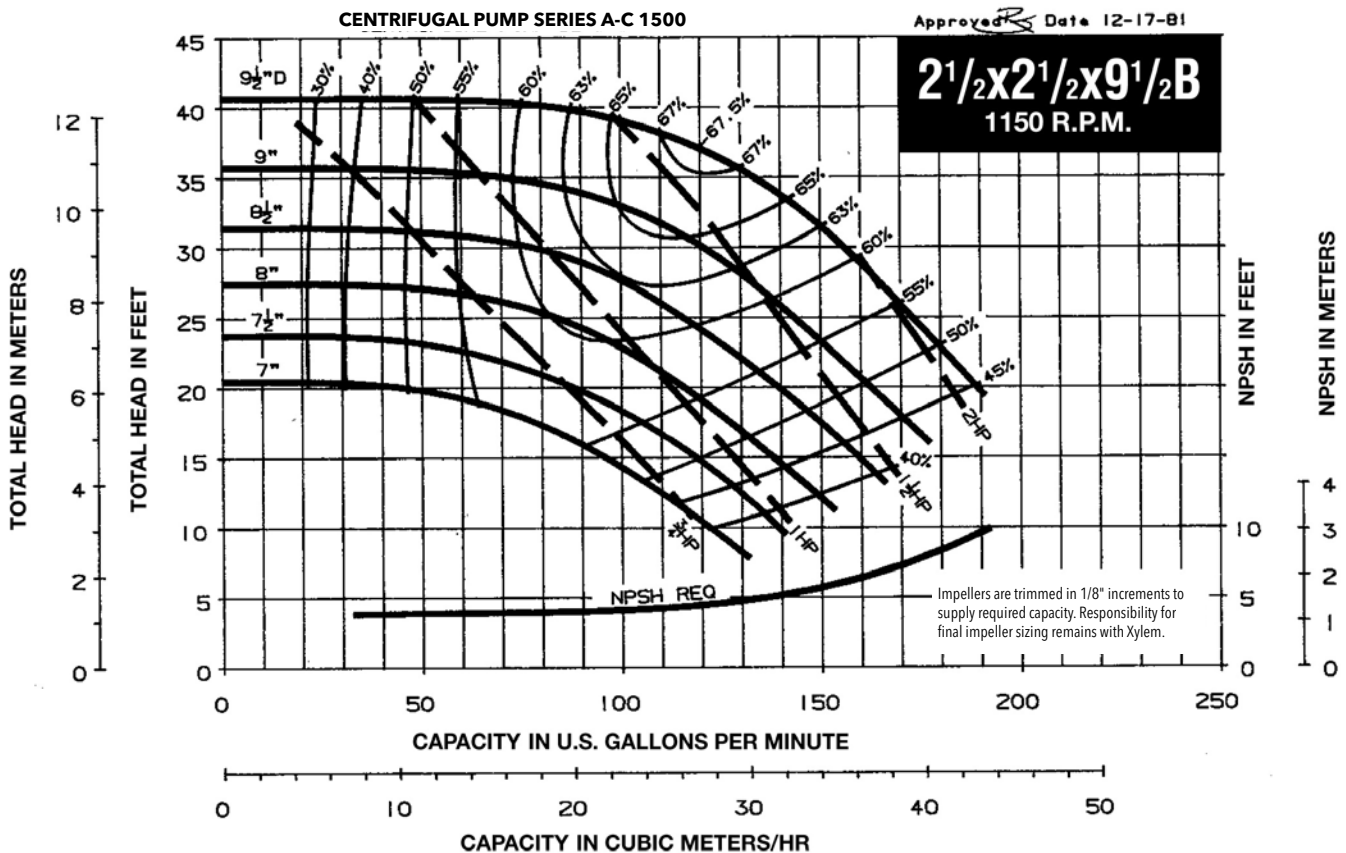
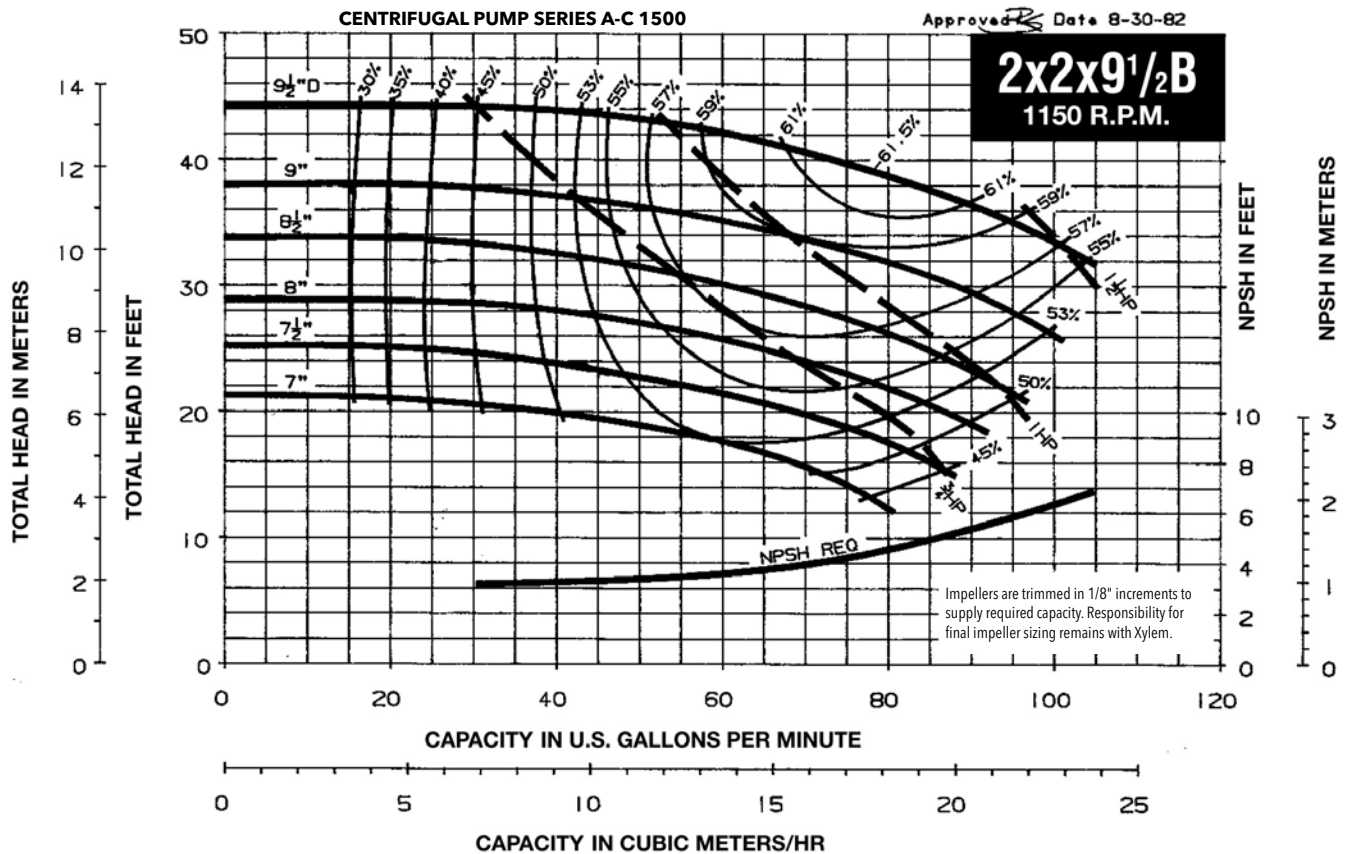
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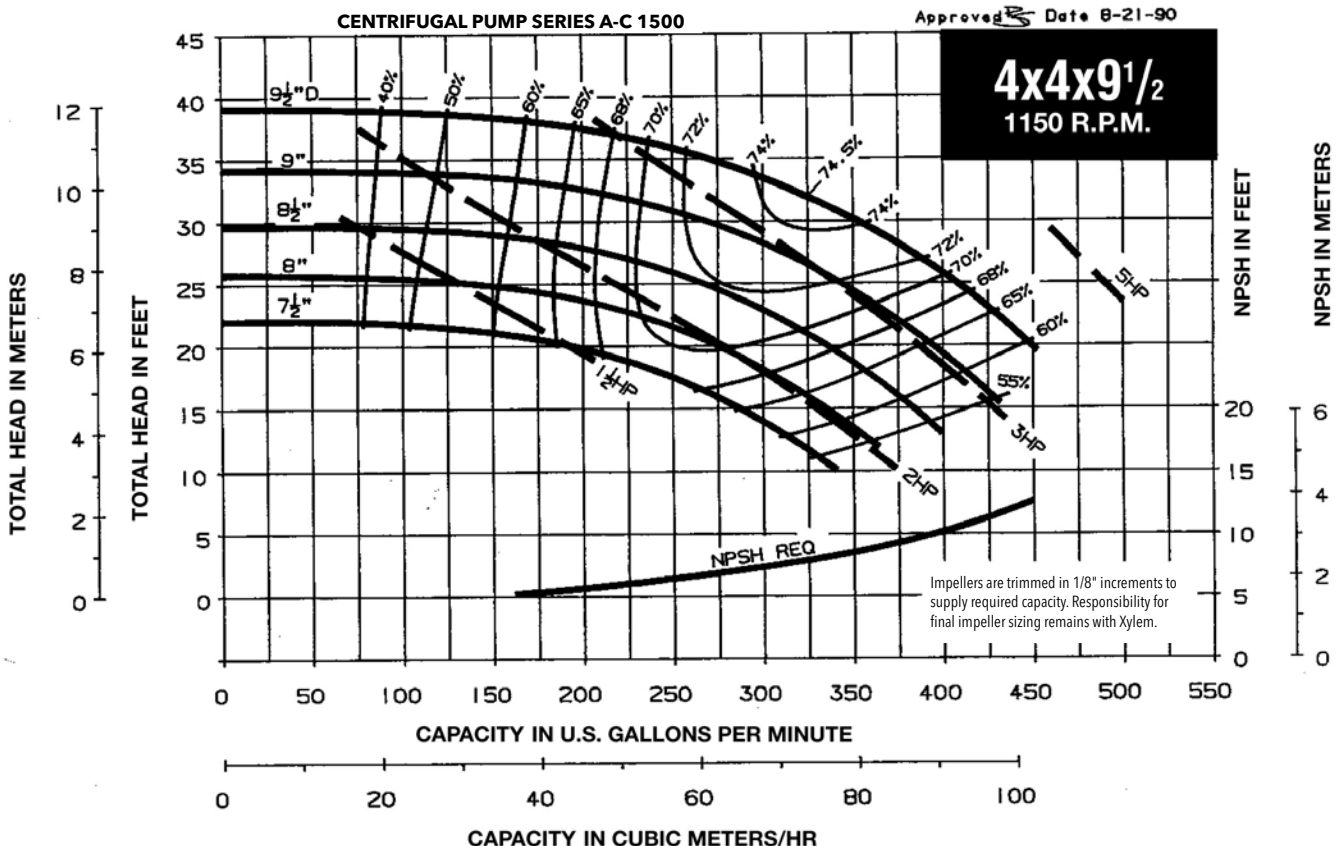
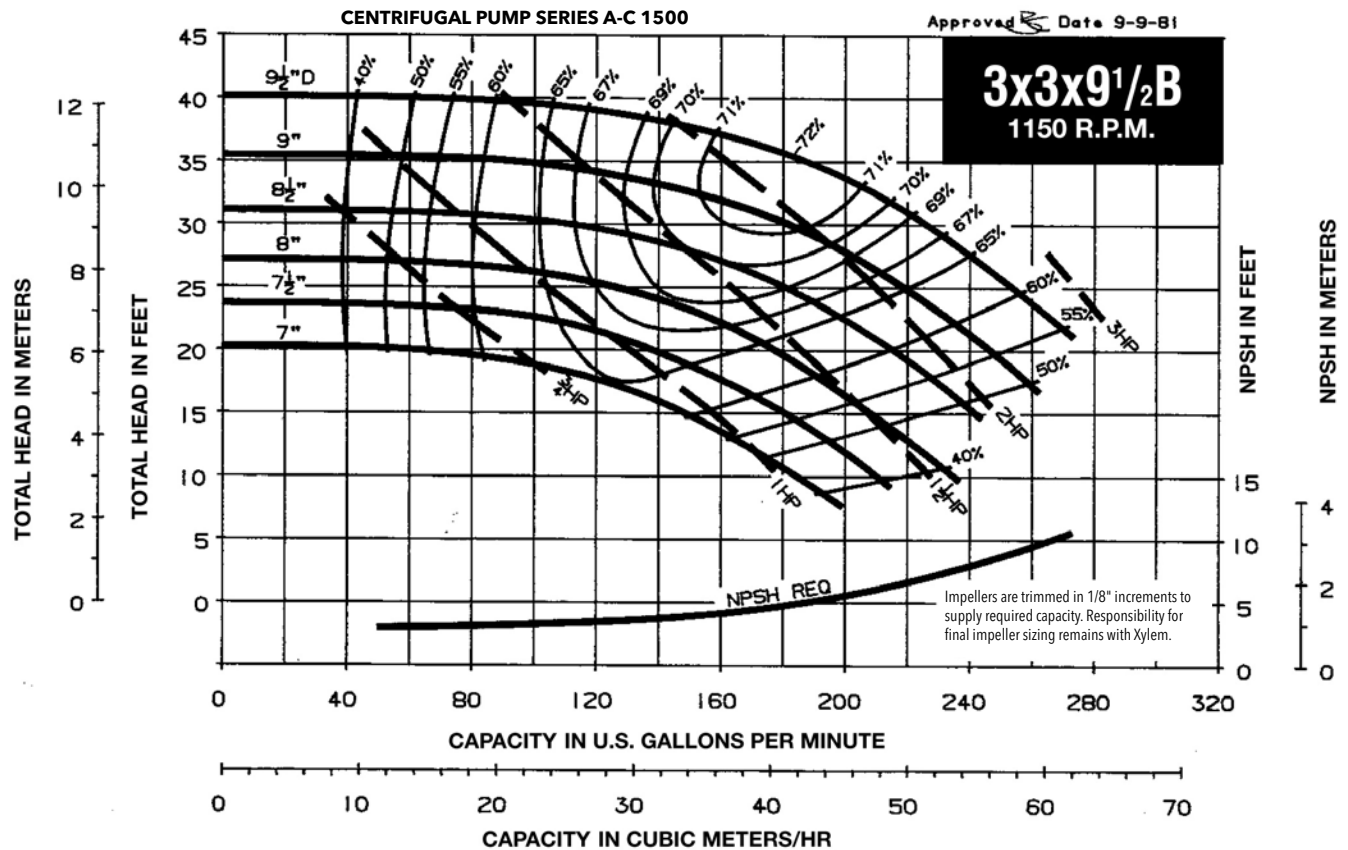
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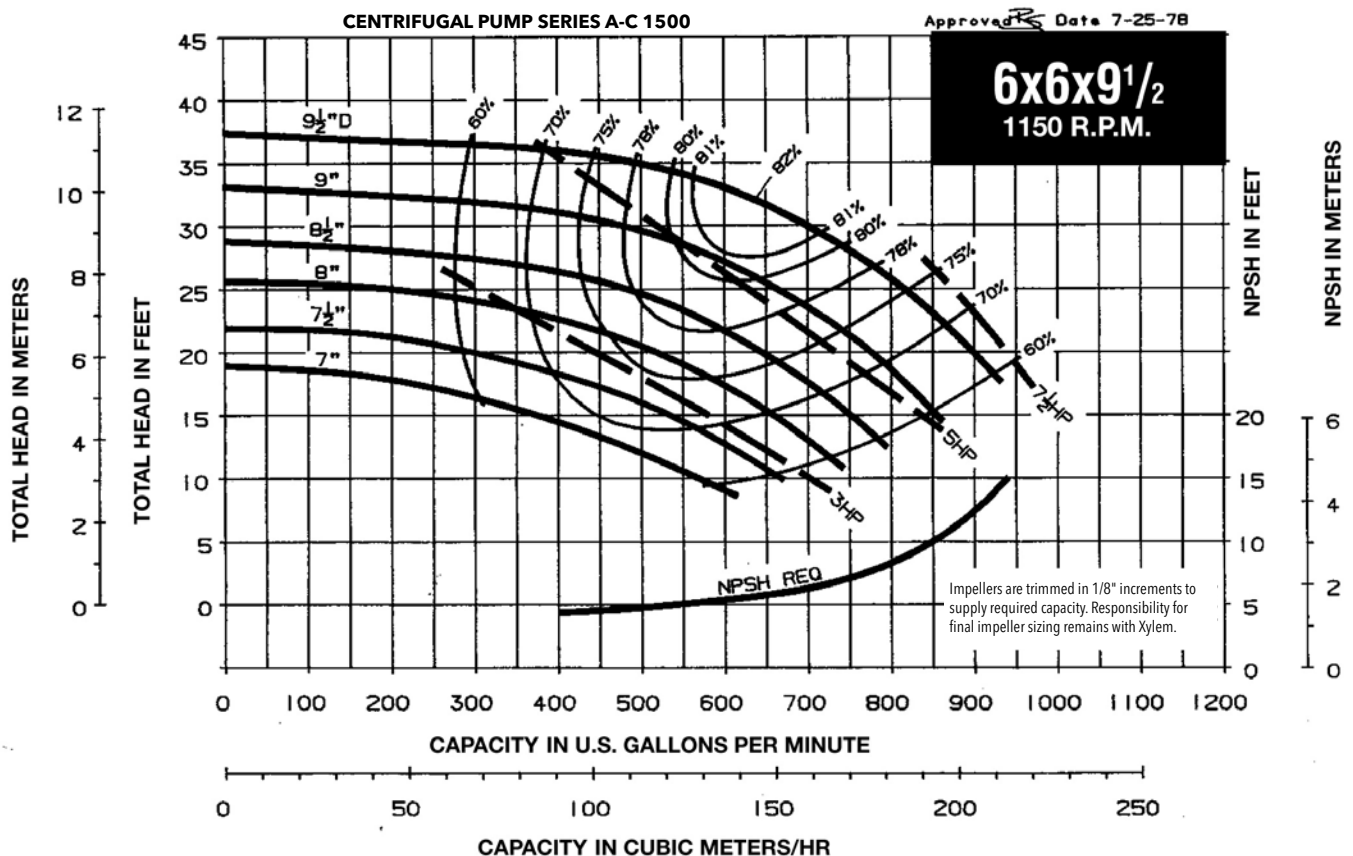
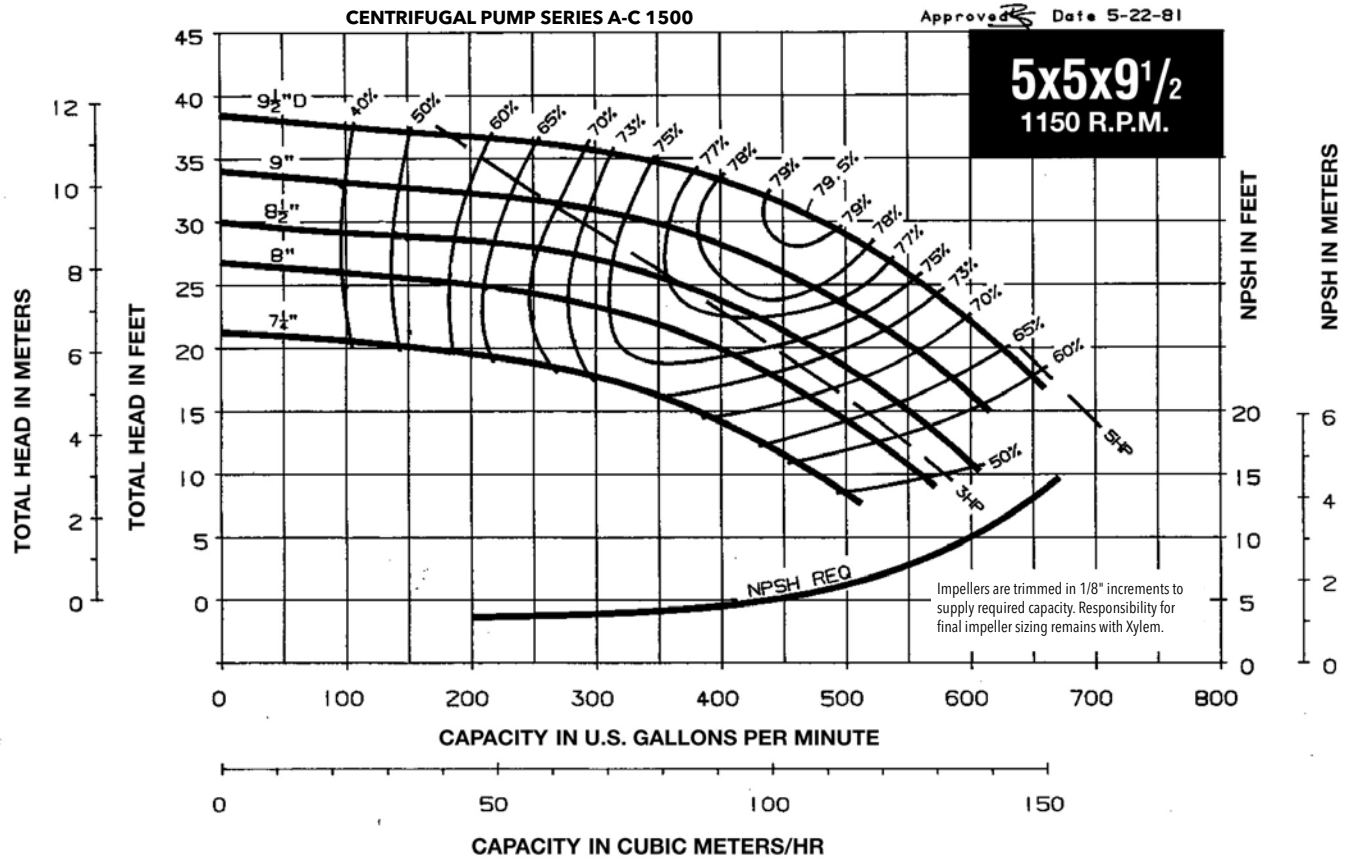
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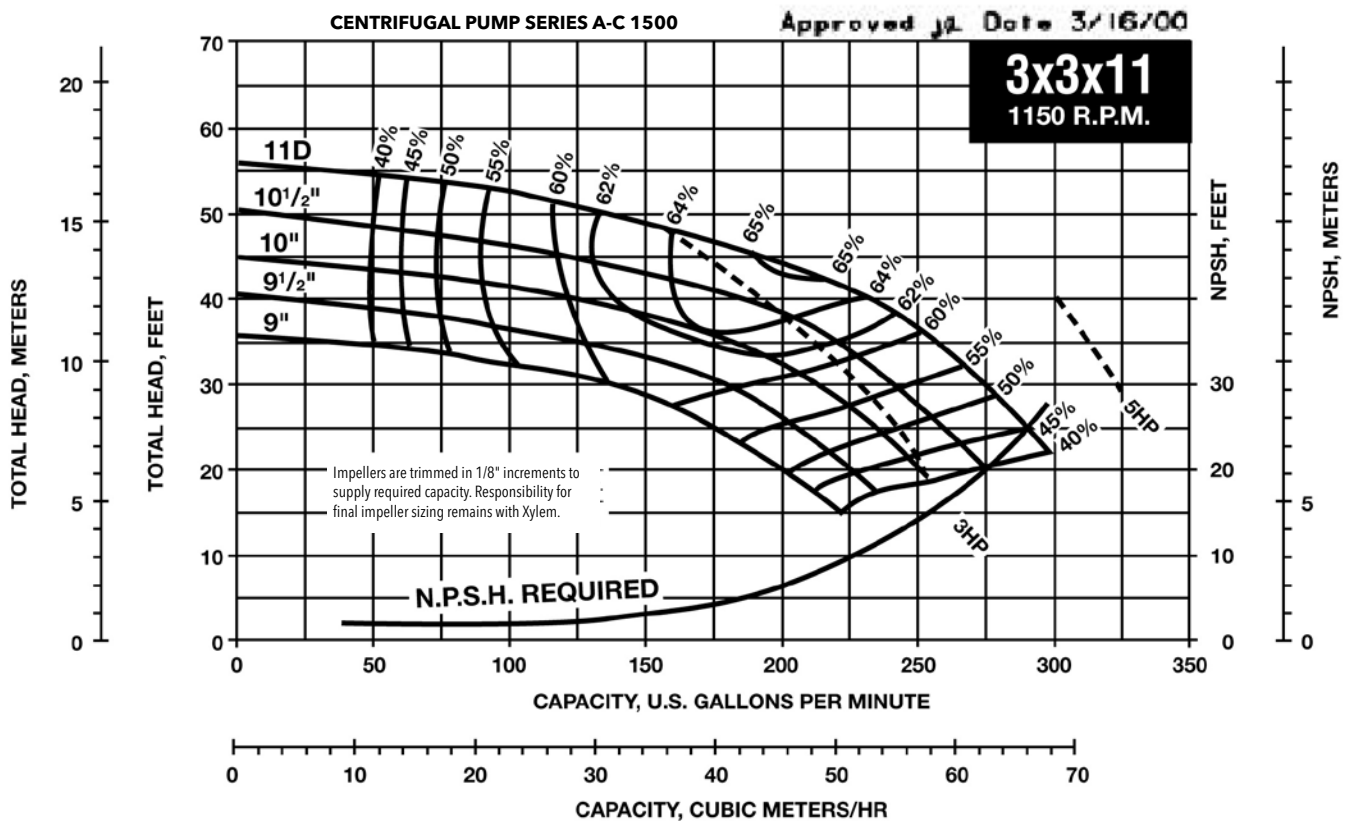
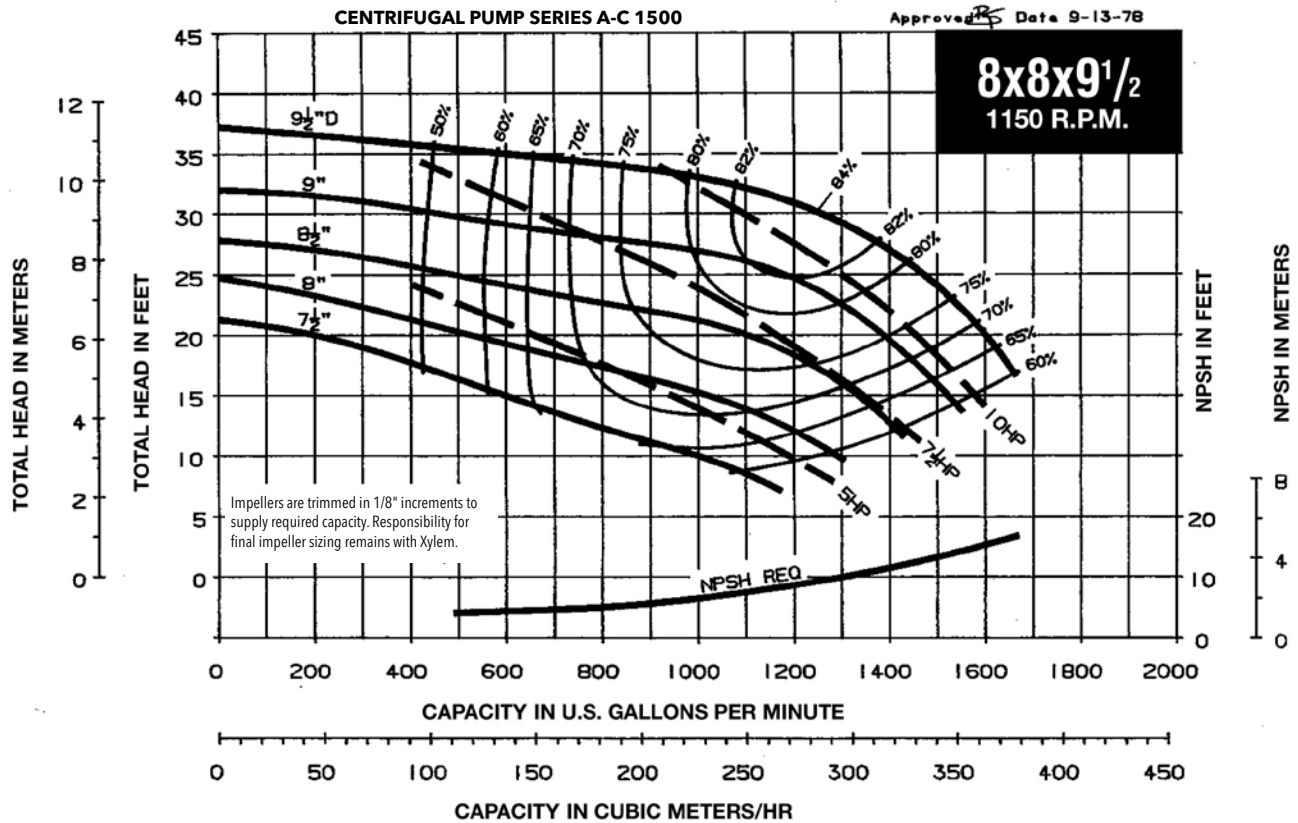
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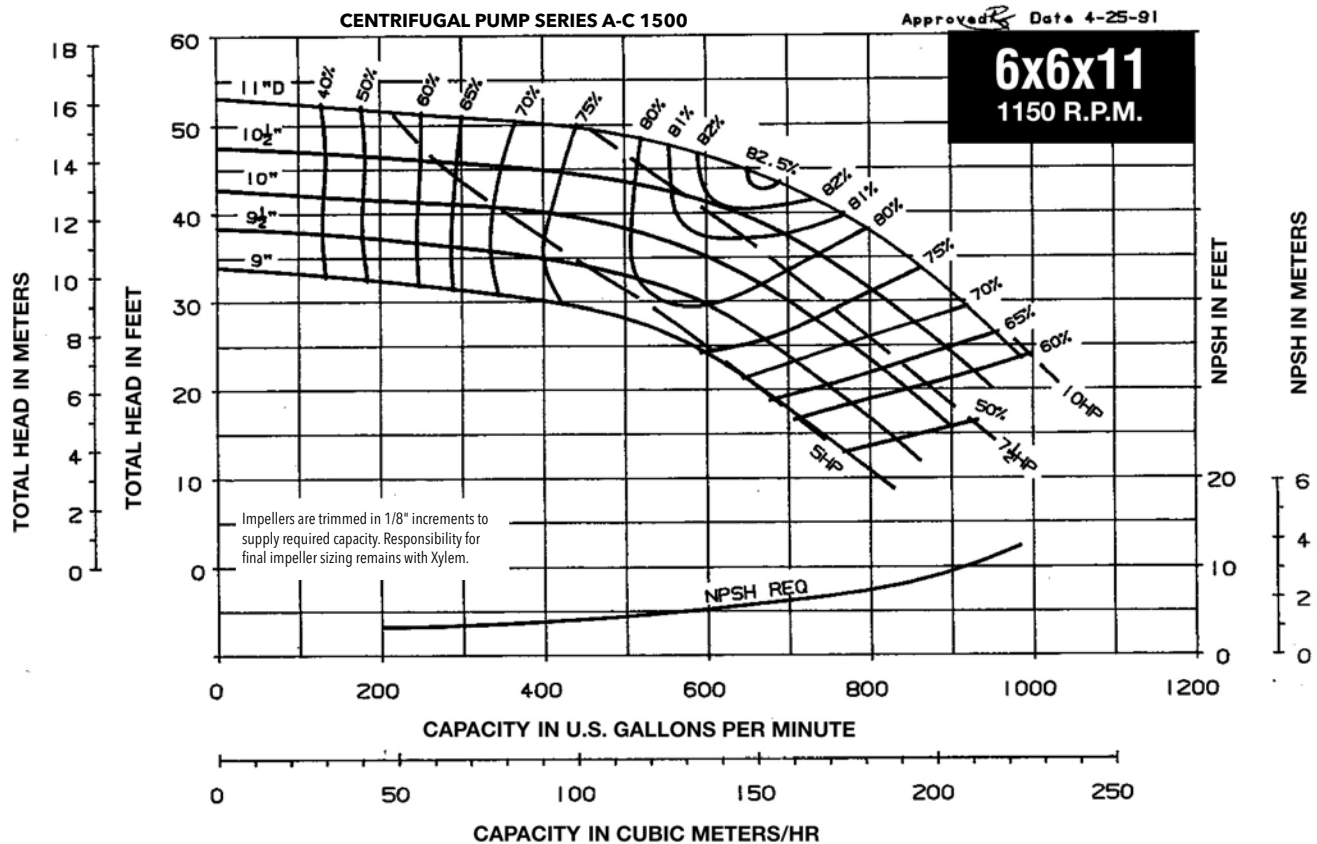
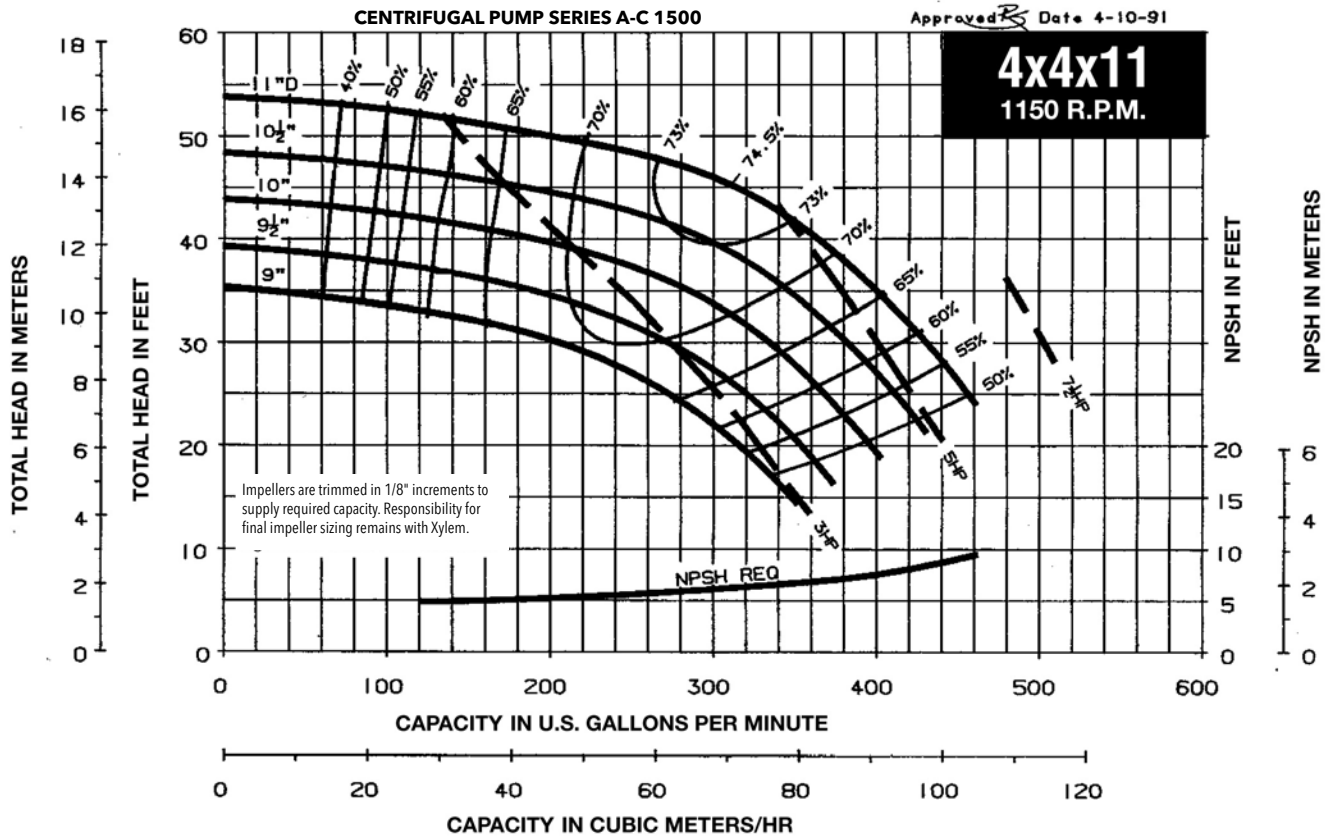
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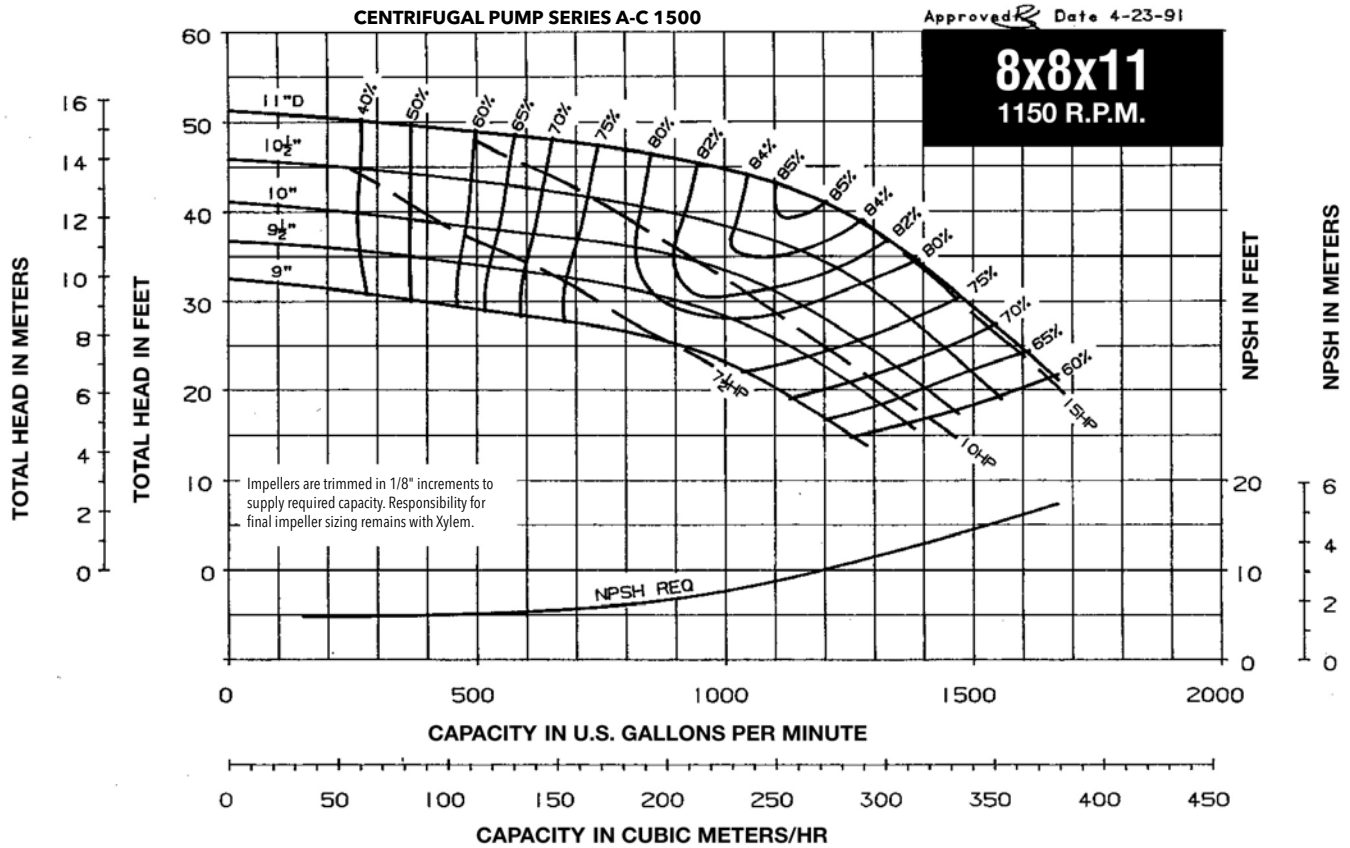
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1150 RPM PUMP CURVES



SERIES A-C 1500 - 60 Hz

1150 RPM PUMP CURVES



Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com



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