

THAT PUMP CURVE CAN BECOME AN ELECTRICAL PROBLEM.



Pump BHP can affect motor size, cable, breaker, starter, and MCC design.



Swipe to see what to check.

02/10

WHAT I NOTICED

The pump BHP was very close to the selected motor HP.



Review the datasheet



Review the performance curve



Compare BHP vs motor HP



That is worth one more question.

03/10

WHY SHOULD ELECTRICAL ENGINEERS CARE?

Pump BHP helps determine motor size.



Pump BHP

Motor HP

Cable

Breaker

Starter

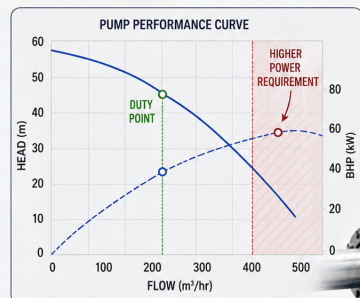
MCC



One number can affect the entire feeder.

DON'T STOP AT THE RATED POINT

The duty-point BHP may look fine. The operating range may not.



Check rated BHP



Check maximum BHP on the curve



Look beyond one number.

04/10

WHEN MOTOR MARGIN IS TOO SMALL



Higher motor loading



Less operating margin



Late field changes

The issue may appear only when real operation begins.



Plan margin now. Avoid costly surprises later.

05/10

ONE MOTOR CHANGE CAN CASCADE

A small selection issue can become system rework.



Motor

Different load or voltage requirements.



Cable

Recalculate ampacity and voltage drop.



Breaker

Check interrupting capacity and trip settings.



Starter

Verify sizing, coordination, and overload.



MCC

Confirm space, bus load, and heat.



Swipe to see what to check.

06/10

WHAT I CHECK

1.

Pump BHP at the rated point

2.

Maximum BHP on the curve

3.

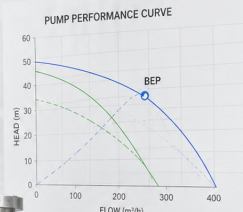
Selected motor HP

4.

Margin looks unusually small?



This is an interface review, not pump design.



THIS IS NOT ABOUT DOING MECHANICAL DESIGN



It is about understanding the number that sizes your motor.



Know the interface



Ask better questions



Prevent rework later



Swipe to see what to check.

08/10

LOOK ONE DOCUMENT FURTHER

A quick interface review can prevent cost and schedule pain later.



Earlier questions



Fewer surprises



Better coordination



09/10

FIELD CHECKLIST



Check pump BHP at the rated point



Check maximum BHP on the curve



Compare with selected motor HP



Ask questions if the margin looks small



Review cable, breaker, starter, and MCC impact



Use approved project and vendor criteria.

