

Company: Bonneville Power Administration

Name:

Date: 2/9/2007

Selection: Gould Centrifugal Pump



#### Pump:

Size: 25SFH  
Type: CC\_ENDSUCTION  
Synch speed: 3600 rpm  
Curve: Goulds 25SFH  
Specific Speeds:  
Dimensions:  
Speed: 3500 rpm  
Dia: 9.875 in  
Impeller:  
Ns: ---  
Nss: ---  
Suction: 2.5 in  
Discharge: 2 in

#### Search Criteria:

Flow: --- US gpm Head: --- ft

#### Fluid:

Water  
Density: 62.25 lb/ft<sup>3</sup>  
Viscosity: 1.105 cP  
NPSHa: --- ft  
Temperature: 60 °F  
Vapor pressure: 0.2563 psi a  
Atm pressure: 14.7 psi a

#### Motor:

Consult GOULDS to select a motor for this pump.

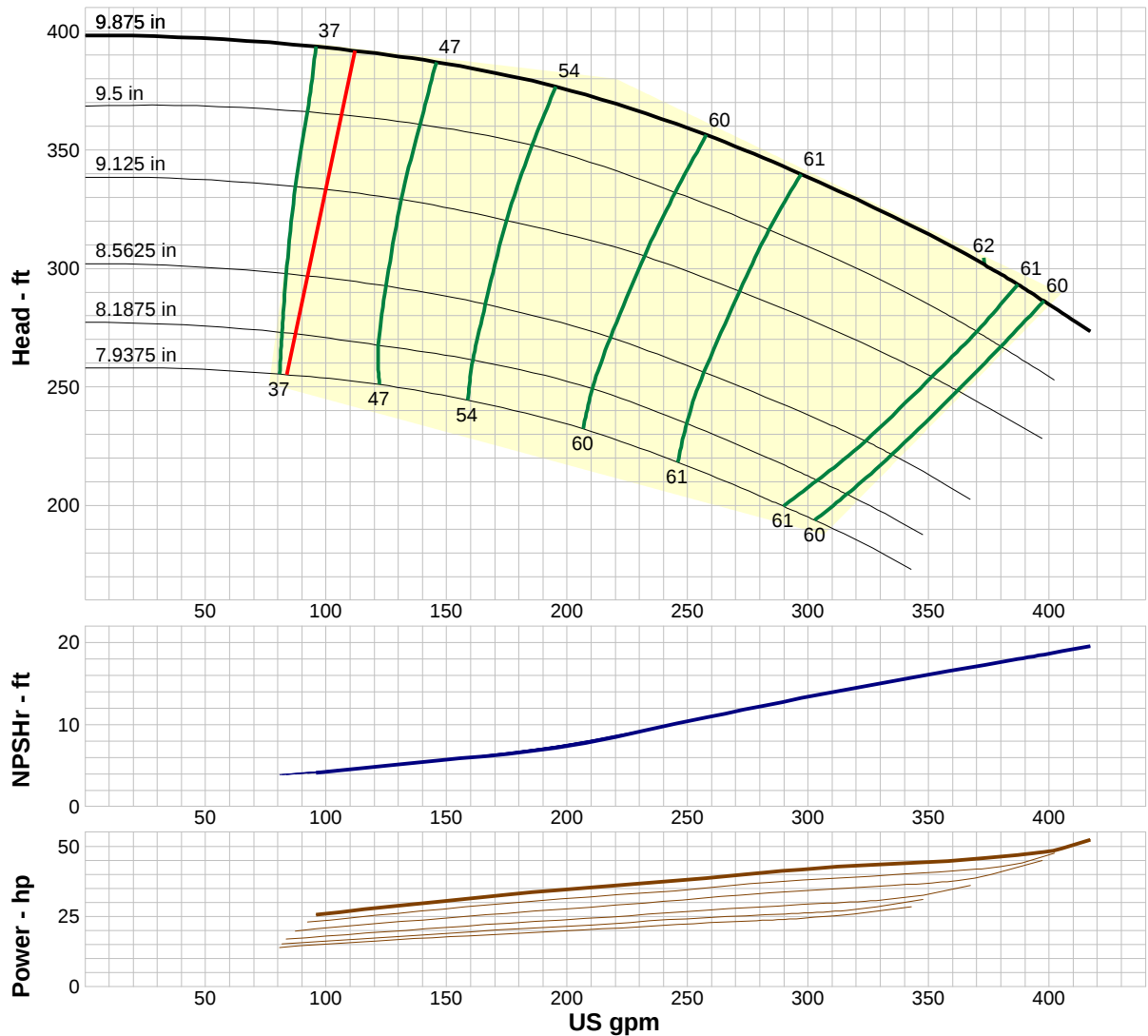
#### Pump Selection Warnings:

Design curve maximum power exceeds limit for the pump.

#### Pump Limits:

Temperature: 212 °F  
Pressure: 175 psi g  
Sphere size: 0.5 in  
Power: 50 hp  
Eye area: --- in<sup>2</sup>

| ---- Data Point ----   |                      |
|------------------------|----------------------|
| Flow:                  | 373 US gpm           |
| Head:                  | 302 ft               |
| Eff:                   | 62%                  |
| Power:                 | 45.8 hp              |
| NPSHr:                 | 17.3 ft              |
| ---- Design Curve ---- |                      |
| Shutoff head:          | 398 ft               |
| Shutoff dP:            | 172 psi              |
| Min flow:              | 112 US gpm           |
| BEP:                   | 62% @ 373 US gpm     |
| NOL power:             | 52.3 hp @ 417 US gpm |
| -- Max Curve --        |                      |
| Max power:             | 52.3 hp @ 417 US gpm |



#### Performance Evaluation:

| Flow<br>US gpm | Speed<br>rpm | Head<br>ft | Efficiency<br>% | Power<br>hp | NPSHr<br>ft |
|----------------|--------------|------------|-----------------|-------------|-------------|
| 401            | 3500         | 284        | 59              | 48.7        | 18.7        |
| 334            | 3500         | 321        | 61              | 43.7        | 15.2        |
| 267            | 3500         | 352        | 60              | 39.4        | 11.5        |
| 200            | 3500         | 375        | 54              | 34.7        | 7.45        |
| 134            | 3500         | 389        | 45              | 29.2        | 5.27        |