



Pump Industry Australia Inc.

Commissioning Check List.

| Item | Description | Completed |
|------|---|-----------|
| 1 | Check health & safety requirements have been met. | Yes/No |
| 2 | Check all required personnel are available. | Yes/No |
| 3 | Check all tools required for commissioning are available. | Yes/No |
| 4 | Check all documentation for commissioning is available. | Yes/No |
| 5 | Conduct toolbox meeting of commissioning personnel. | Yes/No |
| 6 | Check pump installation in general meets industry standards. | Yes/No |
| 7 | Remove coupling guard & uncouple driver from the pump. | Yes/No |
| 8 | Check driver operates satisfactorily. | Yes/No |
| 9 | Check rotation of pump & driver is correct. | Yes/No |
| 10 | Check pump and driver are correctly aligned. | Yes/No |
| 11 | Recouple driver and refit driver. (See Note 2). | Yes/No |
| 12 | Check pump & motor bearings are correctly lubricated. | Yes/No |
| 13 | If oil lubricated bearings check oil level is correct. | Yes/No |
| 14 | Conduct prestart checks. | Yes/No |
| 15 | Conduct prestart procedure. | Yes/No |
| 16 | Start the pump set. | Yes/No |
| 17 | Record valve shut suction & discharge pressures. | Yes/No |
| 18 | Record suction and discharge pressures at discharge valve $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ & full open | Yes/No |
| 19 | If pump set has a control panel, check indicators and audible and visual alarms are operational. | Yes/No |
| 20 | If pump set has auto start shut down and restart on auto. | Yes/No |
| 21 | Record appropriate pump and motor specified readings every 10 minutes. | Yes/No |
| 22 | Check the pump gland leakage is acceptable. | Yes/No |
| 23 | Check by observing pump suction gauge that expected suction conditions are being met. | Yes/No |
| 24 | If practical check the pump flow rate. | Yes/No |
| 25 | After 30 minutes repeat Item 21 every 30 minutes. | Yes/No |
| 26 | After a satisfactory 2 hour run shut pump down. | Yes/No |
| 27 | If problem arises during commissioning fix and run for 90 minutes after the fix. | Yes/No |
| 28 | After 30 minutes running repeat Item 17 every 30 minutes. | Yes/No |
| 29 | Evaluate the results taken during the commissioning run to confirm pump set is fully operational. | Yes/No |
| 30 | Complete commission records. | Yes/No |
| 31 | Sign off on commissioning. | Yes/No |

Notes:

- 1) The above check list can be used for both electric and engine driven pumps.
- 2) If the pump is a motor pump steps 7 through 12 are not required but rotation should be checked by bump starting the motor pump.
- 3) The above is for centrifugal pumps, however it can also be used for positive displacement pumps with the following adjustments:
 - a) Modify pump pre start and starting procedures to include starting with discharge valve fully open.
 - b) Conduct a check to prove any pressure relief valve fitted operates correctly.
- 4) For axial flow pumps these cannot be started with discharge valve closed so pre start and starting procedures should be modified accordingly.