It is obvious economically to convert out-of-date steam hammer into hydraulic hammer, CTK CNC fully-hydraulic die forging hammer, which can save much cost comparing to buying a new fully-hydraulic die forging hammer.

Performances and Features:
The fully hydraulic power tup is fixed on the frame with elastic anti-vibrating pad , controlled by advanced tapered valve and driven by combined cylinder and double anti-leakage technique and integrated hydraulic system ,so the main oil circuit is substantially simple due to no pipe connection. Comparing to the innovation of steam-air hammer in China, the fully hydraulic power tup has the following advantages:
**A. lower noise**
The noise of forging hammer is unavoidable but can be reduced. If the striking energy is enough, the forging will be formed without many strikes. Or if the striking energy can be controlled to give just necessary but not more, the situation will be different.
Traditionally, the striking energy is not adjustable and usually much more than really needed. Also the operator is accustomed to strike more times, in fact, which are waste.
As far as Baixie fully hydraulic hammer is concerned , it can precisely control the striking energy and each striking can be preset according to designed program which control striking energy and striking sequence , therefore, no surplus energy is waste and noise is reduced accordingly.
**B. Constant forging quality**
When the forging hammer is operated manually, no matter how skilled the operator is, who can not guarantee keeping same for each forgings. Especially to the shift-change, its more difficult to keep constant striking energy and striking numbers for the same forging. But Baixie fully hydraulic hammer is able to keep the same forging procedure by using CNC, even if operated by different workers. For some special forgings, the forging procedure can be pre-programmed and digitally stored by CNC, and will be re-used for the same forging late.
**C. Lower running cost**
Energy-saving not only means high driving efficiency but precise energy control to avoid unnecessary energy consumption ,which will also influence lives of forging hammer and forging die because of absorbing surplus energy.
**D. Wide application**
It is easy to explain how big the parts can be forged on the forging machine by an operator, while it is difficult to forging hammer. The outstanding advantages of a forging hammer are fast striking speed and high striking frequency, which is most suitable for those forgings needing many times strike and fast speed deformation to fill in the die impression.
Due to fast forging speed and short die contact time, it is suitable to forge thin and light and cooling-fast forgings and good for die life. When forging these kinds of forgings with complex shape and weight tolerance requirement, the forging hammer´s performance and economic advantages are very obvious.
The forging hammer is the best equipment for forging industry and very suitable for production in small batch with various shapes.
**E. Lower investment cost**
It is obvious economically to innovate old steam-air hammer into hydraulic power tup and much cheaper than buying a new fully-hydraulic die forging hammer.
Regardless of hammer power, steam-air hammer is much cheaper than fully-hydraulic hammer. But as a matter of fact , the driving system of the hammer must be taken into consideration, in this way, the cost between them is almost the same.
**F. Easy maintenance and operation**
The main features of Baixie fully hydraulic hammer are unique design and reliable safety. By using three standard hydraulic priority valves, Baixie fully hydraulic hammer can realize oil filling, oil discharge, adjustment and striking operations with easy and fast and cheap maintenance and convenient change-work etc.

The fully hydraulic hammer can monitor oil cleanness, temperature, pressure and level by sensors, and will alarm immediately as long as something wrong happens and then automatically diagnose and protect itself by stopping the forging or even the hammer. Meanwhile, this sensor system can also monitor other safety auxiliaries in order to let the hammer can be operated with suitable conditions.

In order to be convenient for the users to service and maintenance easier and faster, the normal troubles can be shown on the screen. If there is something wrong, it is quick to find the trouble and solve it at once to shorten the downtime.

Technical parameters:

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| --- | --- | --- | --- | --- | --- | --- |
| 规格SPEC. | CTKA | 160 | 200 | 250 | 320 | 400 |
| 打击能量Striking energy | kJ | 160 | 200 | 250 | 320 | 400 |
| 锤头重量Ram weight | kg | 9000 | 10000 | 11500 | 13000 | 17000 |
| 打击行程Striking stroke | mm | 1000 | 1050 | 1100 | 1200 | 1300 |
| 打击频率Striking frequency | Min-1 | 60 | 55 | 50 | 45 | 45 |
| 电机功率 Motor power | kW | 4×75 | 4×90 | 4×90 | 4×110 | 6×110 |