3. 查链号35的额定功率。链轮35 17T、转速1800rpm的链条的额定功率为3.93HP，可满足要求。

4. 选择下列内容：链号35，小链轮35 17T。

选择实例 (2)

Q1. 传动装置的转速为500rpm，传输功率为10HP。转速rpm降至125(1/4)。中心距应为270mm，限定间距为480 mm，载荷平稳。这种情况如何选择链条和链轮。

A1. 设计功率按如下方式计算：
设计功率：10HP×1.0 = 10HP

2. 根据表1《简易选择图表》和额定功率选择链条和链轮齿数。
选定OCM 60 18T。

3. 减速比为0.25 $= \frac{125rpm}{500rpm}$

为此，大链轮齿数为72T= $\frac{18T}{0.25}$

4. 18T外径为119 mm，72T外径为447mm。该布置的要求间距为

$\frac{119+447}{2}$ + 270 = 553mm，该值不能含在480mm内。

5. 选择多排链。
根据表1《简易选择图表》选择OCM 50-2，16T~20T。利用该公式(B)计算得出设计功率：

$\frac{10HP \times 1.0}{1.7}$ = 5.88HP
(1.7是多排链系数)
参照额定功率。查取OCM 50-2，18T。其外径为99mm。大链轮为72T= $\frac{18T}{0.25}$ 外径373mm。

但该选择不在此间距的选择范围内。

6. 三排链的选择采用与上述相同的方法。查取OCM 50-3，13T and 52T。 链轮外径分别为73mm和271mm。

$\frac{73+271}{2}$ + 270 = 442mm，该值含在要求的间距内。

选择的链条和链轮为OCM 50-3，13T and 52T。

3. Check horsepower ratings for chain 35, and as you see, the horsepower ratings of 35 17T with speed of 1800rpm is 3.93 HP, which is satisfactory.

4. The following are selected: Chain No 35
Small Sprocket 35 17T

Selection Example (2)

Q1. The number of revolutions for drive is 500rpm and the power to be transmitted is 10HR. The rpm is reduced to 125 (1/4). The center distance should be 270mm with a space limitation of 480mm, and a uniform load. How to select chain and sprocket for this application.

A1. Design horsepower is computed as follows:
Design horsepower: 10HP×1.0=10HP

2. Select chain and the number of teeth for sprocket by referring to Table 1, Easy selection Chart and horsepower ratings.
OCM 60 18T has been selected.

3. Speed reduction ratio is 0.25 = $\frac{125rpm}{500rpm}$
Therefore, the number of teeth in the large sprocket is 72T= $\frac{18T}{0.25}$

4. The outside diameter of the 18T is 119mm and the 72T is 447mm.
The space required for these arrangements is
$\frac{119+447}{2}$ + 270 = 553mm which can not be contained in the 480mm.

5. Multiple strand chain is selected.
OCM 50-2 16T to 20T is selected using Table 1, Easy Selection Chart. The design horsepower is obtained from the formula (B)
$\frac{10HP \times 1.0}{1.7}$ = 5.88HP
(1.7 is multiple strand factor)
Refer to horsepower ratings. OCM 50 - 2, 18T is obtained. Its outside diameter is 99mm. The large sprocket is 72T = $\frac{18T}{0.25}$ outside diameter 373mm. However, this selection can not be contained in the space.

6. Triple strand chain is selected in the same manner as above. OCM 50-3, 13T and 52T are obtained. The outside diameter of sprockets is 73mm, and 271 mm respectively.
$\frac{73+271}{2}$ + 270 = 442mm can be contained in the space required.
The chain and sprockets selected are OCM 50-3, 13T and 52T.