Roller chain drives are one of several means of mechanical power transmission. Although none of these methods is suitable for all conditions and applications, the functional and constructional qualities of roller chain, as well as its cost effectiveness, make it an advantageous choice. Some of the positive characteristics of roller chain drives can be summarized as follows:

1. **Power Transmission Efficiency**
   - Since there is no slippage of the roller chain on the sprocket teeth, positive drive speed is maintained throughout the life of the chain. Roller chain drives perform at approximately 98% efficiency.

2. **Service Durability**
   - The even distribution of load-bearing roller chain over the sprocket teeth and the low surface friction and flexing joint pressure between lubricated chain and sprocket parts give roller chain substantial load-handling capacity and a long, reliable service life. Protected by oil, roller chain is minimally affected by adverse environmental conditions, such as high temperature, dust, and dirt. Roller chain manufactured with specialty materials or coatings resists moisture and corrosion.

3. **Application Versatility**
   - The efficiency and durability of roller chain suit it for a wide range of purposes, speeds, and load sizes. Roller chain drives are easily assembled, conserve space, and can be readily adapted to design changes.

4. **Economical Choice**
   - Taking into consideration the strength, reliability, and versatility of roller chain, the purchase price and maintenance costs are economical. Certain kinds of roller chain drives can be repaired or replaced as needed without disturbing the other components in the drive assembly. If stored in a reasonably protected environment, roller chain does not deteriorate with age.