

SPEED CHANGE GEARBOX OF A SPEED-ADJUSTABLE CLOTH-ROLLING MACHINE WITH A SAFETY DEVICE

ABSTRACT OF THE DISCLOSURE

The present invention relates to a speed change gearbox of a cloth-rolling machine with a safety device which includes a speed change gearbox in which a
5 macro-adjusting gear set, a micro-adjusting gear set, a stepped gear set, a clutch transmission set and a plurality of transmission shafts are installed. When the power is transmitted to a cloth-rolling transmission shaft, the macro-adjusting gear set and the micro-adjusting gear set pivotally mounted on the cloth-rolling transmission shaft are driven by the transmission gear. Meanwhile, a gear with different tooth amount ratio
10 will be chosen to indirectly transmit the power to the clutch transmission set. The clutch slide plate is used to control its engagement with any toothed wheel of the stepped gear set so that the power transmission is achieved while an increasing or a decreasing speed shift is chosen. Accordingly, the required power is transmitted through a safety device to the cloth-pulling transmission shaft to complete the shifting
15 applied to the circular knitting machine. Thus, the cloth weight and strip distance can be stabilized for avoidance of an uncommon cloth-pulling.

Figure 4.