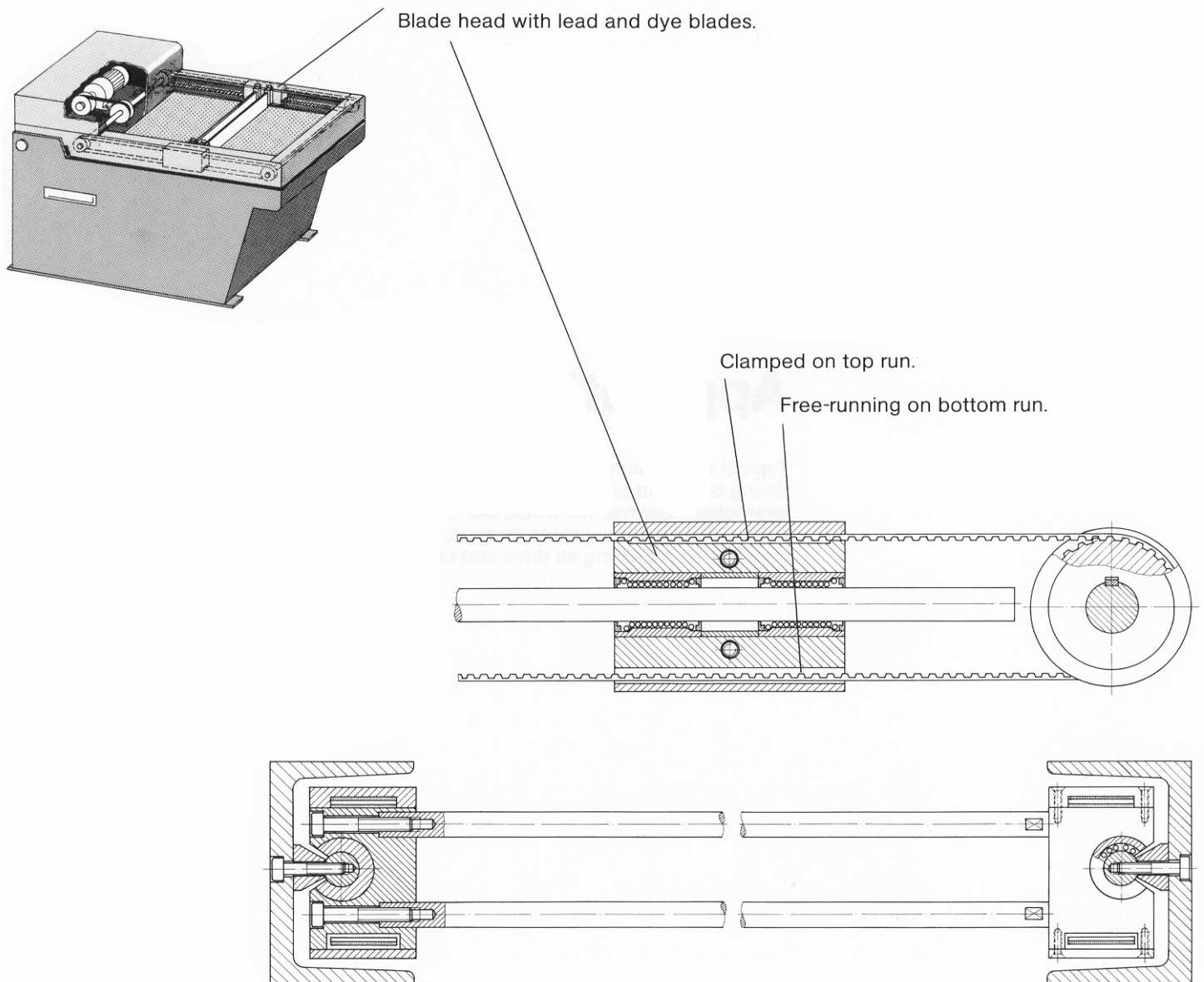


SCREENPRINTING MACHINE



The motion of a screen printing machine is characterized by fast forward and return strokes. Dye is spread over the screen printing surface by the leading blade and on the return stroke the dye is pressed through the screen by the dye blade. A considerable proportion of the drive power is used in accelerating and breaking the system.

Design Characteristics:

The timing belt has a low mass. In order to move the system backwards and forwards two BRECO timing belts are used in parallel. Open length belting is employed, each belt being clamped to one side of the blade head on the top run. The bottom run of each belt freely passes through a slot on the underneath of the blade head.

Drive data:

Power	$P = 1.2 \text{ kW}$
Drive speed	$n = 1000 \text{ rpm}$
Belt velocity	$v = 3 \text{ m/s}$
Timing pulleys	$z = 36$

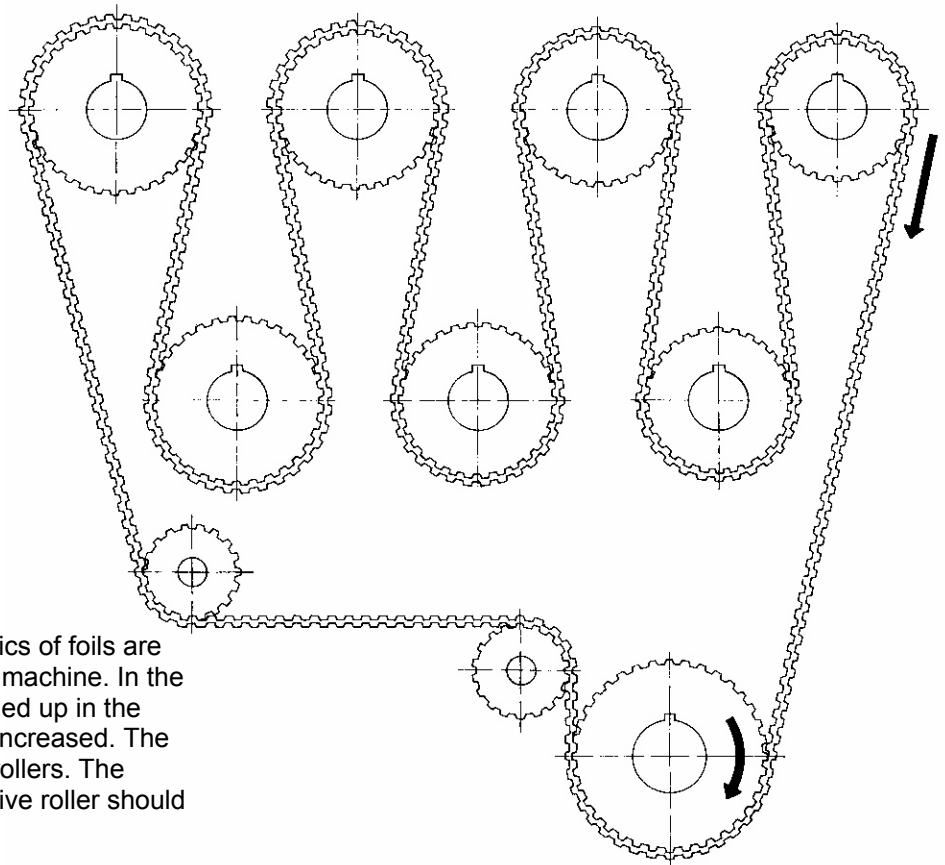
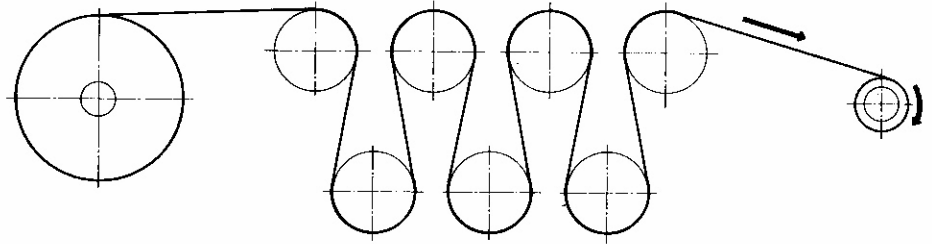
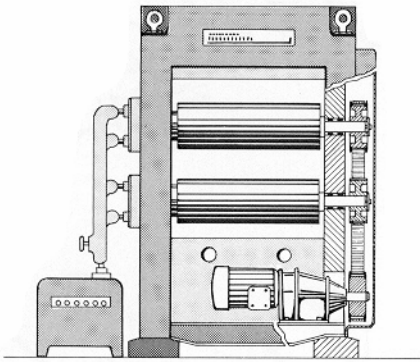
Choice of belting:

BRECO 25 T5 / open length timing belt. The timing belt has a mass of 0.055 kg/m . Due to the steel cord tension members there is no post elongation, therefore re-tensioning of the belting is not necessary and maintenance-free running without the need for lubrication can be expected.

Notes:

There is no length restriction on BRECO open length belting. The standard roll length is 50 meters.

FOIL CONVERTING MACHINE



The physical properties and characteristics of foils are deliberately changed in a foil converting machine. In the converting process the molecules are lined up in the direction of pull and the tear strength is increased. The converting process occurs over heated rollers. The change in speed between each successive roller should be in the region of 3 – 3.5%

Design Characteristics:

Bearing mounted pulleys should be fitted to the drive side of the rollers. Successive pulleys should differ from each other by one tooth i.e. $z = 33 / 32 / 31$ etc. The path of the timing belt should follow that of the foil.

Drive data:

Drive speed $n = 400$ rpm
Drive power $P = 12$ kW
Main drive pulley $z = 36$

The surrounding components on the drive side are covered in an oil film due to neighboring machine components.

Choice of belting:

BRECOFLEX 50 T20 / 7500-DL timing belt. Both sides of the belt can carry the same loading. The belt is completely oil resistant due to the polyurethane used in its construction. The steel cord tension members ensure no post elongation, thus resulting in a maintenance-free drive.

Notes:

BRECOFLEX single and double sided timing belts are available in endless lengths up to 22 meters (longer lengths available on request).