LUBRICANTS OR ANTI - CREASING AGENT – CONCLUDING PART

REF:TT/ MAY 2020 / WK 3

Chemical Composition of lubricants or anti- creasing agents

Common chemical constituents are:

- **Acrylamide based –** Has high swelling property.

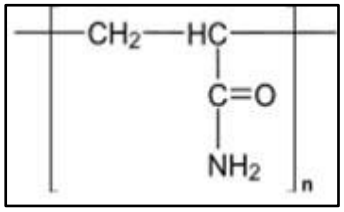

Fig 1.1Acrylamide Co-polymer

- **Acrylic acid copolymer –** High swelling property.

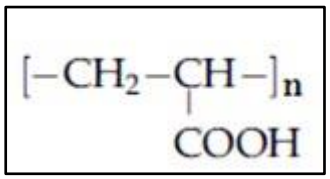

Fig 1.2Acrylic acid Co-polymer

- **Poly-ethers based –** Non-Ionic by nature

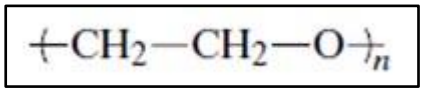

Fig 1.3Poly-ether Co-polymer

Crease formation and types of fabrics

Crease formations are different in different types of fabric. Few of them are described here.

- The processing of woven fabric is done in open-width form. Hence, the possibility of creasing is less in woven fabric. Whereas knit fabric is processed in rope form; and crease formation is high. Thus, the use of lubricants is very important in knits processing.
- The formation of creases is not same in all types of knits. Single jersey knitted fabrics is highly creased prone. Crease formation in single jersey fabric depends on its GSM (grams per square meter). Crease formation is very high up to 200 gsm single jersey fabric. Double jersey knitted fabrics like rib and interlock fabric has fewer creases. Because they are balanced due to it looks same in both sides and it has more space to relax in its structure. Generally lubricating agent need not to be used in these types of fabrics.
- Crease formations are more with higher yarn count, twists and yarn tension during knitting.
- Synthetic fibers are processed at higher temperature for longer period. Hence, possibility of crease formation is high in these fibers. In high temperature, molecular movement increases and intermolecular attraction force decreases, therefore viscosity of water decreases. When liquor viscosity is very less, fabric cushioning ability decreases hence permanent crease marks are being produced. Hence the use of lubricating agent is required in their processing.

Wishing you a great week ahead!

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