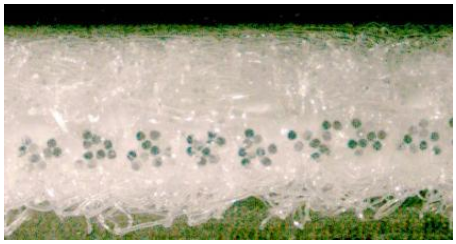
DuraPrexx™



DuraPrexx™ is the compressible design dedicated to packaging grades and positions where the amounts of water to handle remain high, with higher and higher speed at the same time. **DuraPrexx™** combines ultra-high density with compression controlled batt for high nip dewatering efficiency. The **Komprexx™** high fibres diameter, plus the ultra-high density Polyamide 6.0 developed, ensures the best elastic response, thus resistance to chemical degradation by a permanent self-washing of the felt in the nip.
With paper machines speed under constant increase, the need for nip dewatering is growing day after day, being more and more important as classical felt conditioning by uhle boxes becomes more and more costly with a decreasing efficiency at the same time. To allow the wider part (possibly up to 100 %...) of the hydraulic job to be achieved in the nip is the more logical issue. To do so, **DuraPrexx™** compressible press felts designs are a very logic solution.

How to define a compressible press felts? Simply by the ratio between the compressible part of the felt (traditionally the batt, but not only as we will see further on) and the uncompressible part (traditionally the base).

Classical Designs: the compression does not create a volume variation big enough to empty the felt, nip dewatering is almost impossible.

Prexx Generation: the compression creates a volume variation big enough to empty the felt and allows nip dewatering.

The **Komprexx™** contribution allows having a correct compressibility ratio all along the felt life, the dynamic and compressible parts of the felt under controlled compaction evolution in order to maintain the felt compressibility at the right level.
Komprexx™ is a real nonwoven structure, were the textile components are at the interface between the stronger batt decitex normally used (67 decitex) and the finer yarns encountered in bases (under 0,2 mm). **Komprexx™** is, at the same time, a stable structure in term of resistance to compaction, but remains still a compressible one!

Having less than 1 millisecond to do the job, the felt must be thin enough to reduce the transfer times, and correctly structured to allow efficient flows in the right direction! The bases designs used by the Cristini Group allow these benefits by using resistant monofilament from the highest technical standards developed and available in Europe.

Batting, back and paper sides are then adjusted to answer the demands of the press section in relation with the paper grade produced.

DuraPrexx™ is dedicated to critical positions on high speed packaging grades machines, where high specific load, high water load and surface wear are critical.