Technical design innovations:

- The totally new design of the pump bloc assembly leads to significant space-savings (see figure).
- The optimization of the liquor distribution (circulation) system enables significant reductions in water and energy consumption as well as cycle time (requirements).
- The Flow Reversal system is equipped with a newly developed Flow Converter, which offers quicker changes in direction.
- The newly developed heating coil system located inside the vessel below the yarn carrier, reduces pressure losses. As a consequence energy-efficiency of the dyeing machine increases considerably.

Process engineering innovations

- As a standard the dyeing machine is furnished with the function “Dynamic Dyeing”. This allows the machine to be optionally used with an “ultra-short” liquor ratio technology, where the liquor circulates in one direction only if applied.
- iCone is equipped with the function “Dynamic Rinsing”, a new rinsing system. The purpose of this function is to reduce process times by rinsing with minimum liquid capacities and frequent bath changes.
- The so-called energy efficient “ee functions” ensure - inter alia - shorter discharge and drain times and improved de-aeration during filling and draining processes.
- The function “Dye Control” measures the bath saturation and is able to automatically adjust the appropriate rinsing times and the number of rinsing baths. “Dye Control” can be implemented by request.
- Additionally, the function “proVAT” is available and can be applied by customers as needed. The function “FLOWtronic” is included in the delivery scope of the iCone.
- At a winding density of e. g. 380 g/l a liquor ratio ex 1 : 3,6 can be archived, using the “ultra short” liquor ratio-technology (the liquor circulates from inside to outside). A fully flooded vessel would realize a liquor ratio ex 1 : 5,6.