

Challenger Series, more performance – A comparison

In the year 2016 ZSK introduced the new Challenger series at the OPEN HOUSE exhibition. The main advantage of this new machine generation is the usage of servo motors instead of stepper motors to move the pantograph. The servo motors generate more and constant torque and this leads to more embroidery performance.

Figure 1 shows a comparison between LFBF1212-400 (700) and new Challenger CLBF1212-400 (700). By running the Challenger CLBF 1212-400 (700) the maximum rotation speed of 1100rpm is reached at a stitch length of 35inc (3.5mm). In comparison to this value the LFBF 1212-400 (700) will reach the maximum rotation speed later at a shorter stitch length of 19inc. As it is shown in Figure 1 the performance benefit is approximately 10% and more over a wide range of stitch lengths starting with the longest stitches of 127inc.

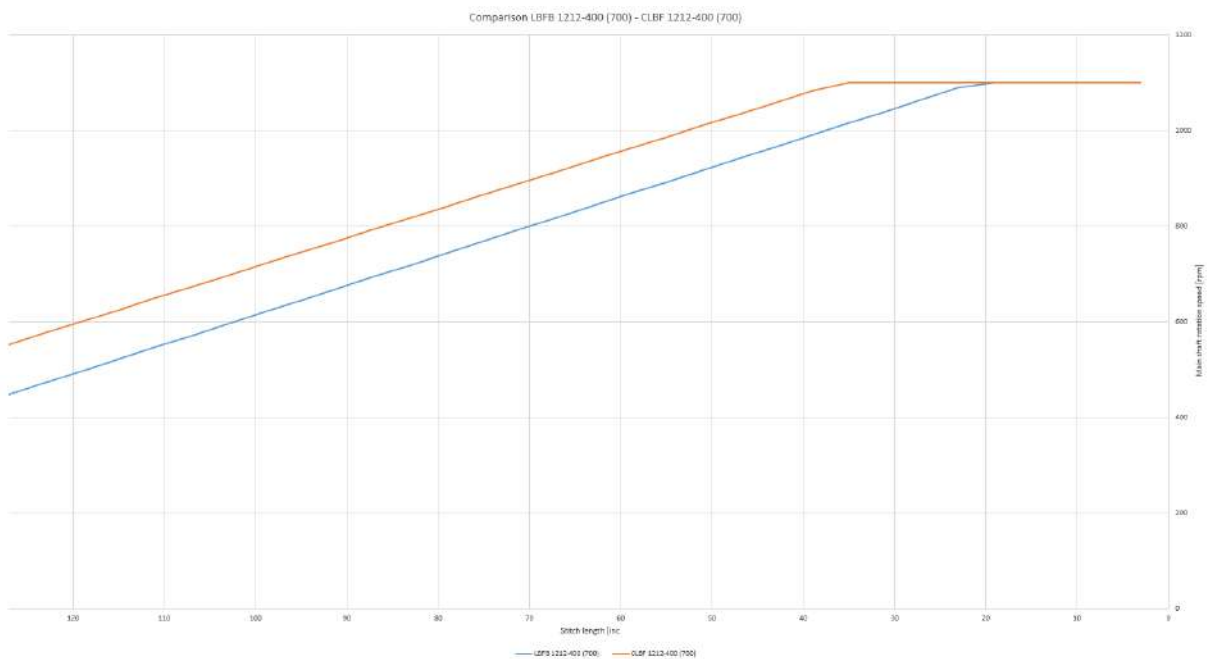


Figure 1: Comparison between LFBF1212-400 (700) and new Challenger CLBF1212-400 (700)

INC	LBFB 1212-400 (700)	CLBF 1212-400 (700)
3	1100	1100
7	1100	1100
11	1100	1100
15	1100	1100
19	1100	1100
23	1088,9107	1100
27	1064,2343	1100
31	1039,5579	1100
35	1014,8815	1100
39	990,2051	1082,0356
43	965,5287	1057,9572
47	940,8523	1033,8788
51	916,1759	1009,8004
55	891,4995	985,722
59	866,8231	961,6436
63	842,1467	937,5652
67	817,4703	913,4868
71	792,7939	889,4084
75	768,1175	865,33
79	743,4411	841,2516
83	718,7647	817,1732
87	694,0883	793,0948
91	669,4119	769,0164
95	644,7355	744,938
99	620,0591	720,8596
103	595,3827	696,7812
107	570,7063	672,7028
111	546,0299	648,6244
115	521,3535	624,546
119	496,6771	600,4676
123	472,0007	576,3892
127	447,3243	552,3108

Comparison LBFB 1212-400 (700) - CLBF 1212-400 (700)

