

# CNC Drawbar Force Certification

Testing Equipment used:  
OTT Power Check II Pull Force Tester



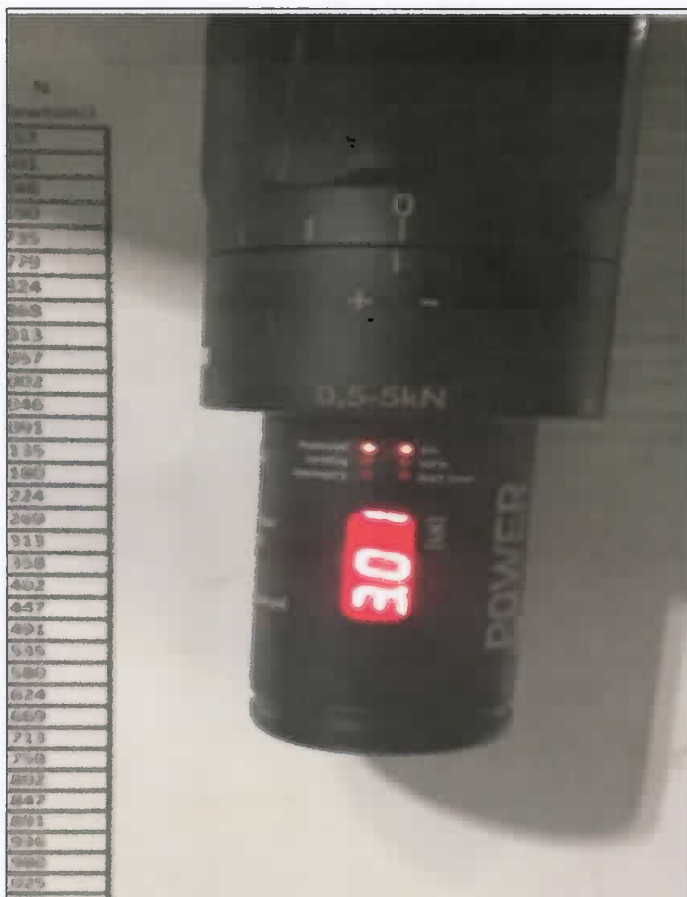
Machine Desc Brother R450X1  
 Machine S/N 113693  
 Measurement 3.01 Kn  
 Tested By Eric L.  
 Date 2-21-23

## RESULTS

Drawbar Force 680 lbs

Pass  Fail

Evidence



BT & BBT Spindle Drawbar Force		
Lbs of force	kN (kilonewtons)	N (Newtons)
350	1.56	1,557
360	1.60	1,601
370	1.65	1,646
380	1.69	1,690
390	1.73	1,735
400	1.78	1,779
410	1.82	1,824
420	1.87	1,868
430	1.91	1,913
440	1.96	1,957
450	2.00	2,002
460	2.05	2,046
470	2.09	2,091
480	2.14	2,135
490	2.18	2,180
500	2.22	2,224
510	2.27	2,269
520	2.31	2,313
530	2.36	2,358
540	2.40	2,402
550	2.45	2,447
560	2.49	2,491
570	2.54	2,535
580	2.58	2,580
590	2.62	2,624
600	2.67	2,669
610	2.71	2,713
620	2.76	2,758
630	2.80	2,802
640	2.85	2,847
650	2.89	2,891
660	2.94	2,936
670	2.98	2,980
680	3.02	3,025
690	3.07	3,069
700	3.11	3,114
710	3.16	3,158
720	3.20	3,203
730	3.25	3,247
740	3.29	3,292
750	3.34	3,336

CHANGE DRAWBAR

ACCEPTABLE PERFORMANCE ZONE