

BPI® BARSPLICER DOUGHNUT SYSTEM TEST DATA CONVERSION - 15M & 20M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
5T1121	5A	BLACK	No. 5	0.31	31,870	102,806	171%	15M	200	141.8	709	177%
	5B		No. 5	0.31	31,770	102,484	171%	15M	200	141.3	707	177%
5T6848	5A	EPOXY	No. 5	0.31	32,960	106,323	177%	15M	200	146.6	733	183%
	5B		No. 5	0.31	33,330	107,516	179%	15M	200	148.3	741	185%
5T7302	5A	EPOXY	No. 5	0.31	30,710	99,065	165%	15M	200	136.6	683	171%
	5B		No. 5	0.31	29,880	96,387	161%	15M	200	132.9	665	166%
5T7912	5A	BLACK	No. 5	0.31	31,180	100,581	168%	15M	200	138.7	693	173%
	5B		No. 5	0.31	31,430	101,387	169%	15M	200	139.8	699	175%
6T2281	6A	BLACK	No. 6	0.44	43,980	99,955	167%	20M	300	195.6	652	163%
	6B		No. 6	0.44	44,100	100,227	167%	20M	300	196.2	654	163%
6T2469	6A	BLACK	No. 6	0.44	43,020	97,773	163%	20M	300	191.4	638	159%
	6B		No. 6	0.44	47,300	107,500	179%	20M	300	210.4	701	175%
6T5472	6A	BLACK	No. 6	0.44	46,320	105,273	175%	20M	300	206.0	687	172%
	6B		No. 6	0.44	44,820	101,864	170%	20M	300	199.4	665	166%
6T5571	6A	EPOXY	No. 6	0.44	46,130	104,841	175%	20M	300	205.2	684	171%
	6B		No. 6	0.44	45,850	104,205	174%	20M	300	203.9	680	170%

NOTES

All headed devices meet ACI 318 Section 20, and ASTM A970 Class A & HA requirements (100% *f_u*) Grade 60 bar.
 Ask about the Barsplicer DoughNUT DNX to meet CSA A23.3 Clause 7.1.4 requirement of gross bearing area to be 10 times the bar area, 10A_b.
 Results shown are from routine testing of various heat lots of completed headed devices, per Barsplice Products, Inc. ISO 9001 Quality System.
 Conducted on reinforcing bars per ASTM A615 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 N/mm²).
 Tests performed in accordance with ASTM A1034, Section 10.3, Monotonic Tension Tests, using load rates per ASTM A370
 See Lab reports for stress versus displacement curves (stress versus cross-head position).
 ASTM = American Society for Testing and Materials, CSA = Canadian Standards Association

BPI® BARSPLICER DOUGHNUT SYSTEM TEST DATA CONVERSION - 25M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
8T1401	8A	BLACK	No. 8	0.79	85,430	108,139	180%	25M	500	380.0	760	190%
	8B		No. 8	0.79	85,700	108,481	181%	25M	500	381.2	762	191%
8T1506	8A	BLACK	No. 8	0.79	85,290	107,962	180%	25M	500	379.4	759	190%
	8B		No. 8	0.79	85,220	107,873	180%	25M	500	379.1	758	190%
8T1813	8A	BLACK	No. 8	0.79	79,520	100,658	168%	25M	500	353.7	707	177%
	8B		No. 8	0.79	81,920	103,696	173%	25M	500	364.4	729	182%
8T2039	8A	BLACK	No. 8	0.79	85,070	107,684	179%	25M	500	378.4	757	189%
	8B		No. 8	0.79	83,490	105,684	176%	25M	500	371.4	743	186%
8T2181	8A	BLACK	No. 8	0.79	85,200	107,848	180%	25M	500	379.0	758	189%
	8B		No. 8	0.79	86,130	109,025	182%	25M	500	383.1	766	192%
8T2502	8A	EPOXY	No. 8	0.79	77,890	98,595	164%	25M	500	346.5	693	173%
	8B		No. 8	0.79	78,030	98,772	165%	25M	500	347.1	694	174%
8T2572	8A	BLACK	No. 8	0.79	81,980	103,772	173%	25M	500	364.6	729	182%
8T2860	8A	BLACK	No. 8	0.79	81,980	103,772	173%	25M	500	364.6	729	182%
	8B		No. 8	0.79	84,820	107,367	179%	25M	500	377.3	755	189%
8T3270	8A	EPOXY	No. 8	0.79	80,840	102,329	171%	25M	500	359.6	719	180%
	8B		No. 8	0.79	80,420	101,797	170%	25M	500	357.7	715	179%

NOTES

All headed devices meet ACI 318 Section 20, and ASTM A970 Class A & HA requirements (100% *f_u*) Grade 60 bar.
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 Results shown are from routine testing of various heat lots of completed headed devices, per Barsplice Products, Inc. ISO 9001 Quality System.
 Conducted on reinforcing bars per ASTM A615 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 N/mm²).
 Tests performed in accordance with ASTM A1034, Section 10.3, Monotonic Tension Tests, using load rates per ASTM A370
 See Lab reports for stress versus displacement curves (stress versus cross-head position).
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BPI® BARSPLICER DOUGHNUT SYSTEM TEST DATA CONVERSION - 30M & 35M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
9T1120	9A	BLACK	No. 9	1.00	109,910	109,910	183%	30M	700	488.9	698	175%
	9B		No. 9	1.00	109,930	109,930	183%	30M	700	489.0	699	175%
9T1328	9A	BLACK	No. 9	1.00	103,570	103,570	173%	30M	700	460.7	658	165%
	9B		No. 9	1.00	110,960	110,960	185%	30M	700	493.6	705	176%
9T1501	9A	BLACK	No. 9	1.00	104,600	104,600	174%	30M	700	465.3	665	166%
	9B		No. 9	1.00	105,290	105,290	175%	30M	700	468.3	669	167%
9T1831	9A	EPOXY	No. 9	1.00	98,180	98,180	164%	30M	700	436.7	624	156%
	9B		No. 9	1.00	98,710	98,710	165%	30M	700	439.1	627	157%
9T2131	9A	EPOXY	No. 9	1.00	105,050	105,050	175%	30M	700	467.3	668	167%
	9B		No. 9	1.00	103,930	103,930	173%	30M	700	462.3	660	165%
11T2411	11A	BLACK	No. 11	1.56	154,850	99,263	165%	35M	1000	688.8	689	172%
	11B		No. 11	1.56	155,140	99,449	166%	35M	1000	690.1	690	173%
11T2527	11A	BLACK	No. 11	1.56	160,560	102,923	172%	35M	1000	714.2	714	179%
	11B		No. 11	1.56	160,621	102,962	172%	35M	1000	714.4	714	179%
11T2731	11A	BLACK	No. 11	1.56	157,460	100,936	168%	35M	1000	700.4	700	175%
11T3177	11A	EPOXY	No. 11	1.56	154,000	98,718	165%	35M	1000	685.0	685	171%
	11B		No. 11	1.56	152,991	98,071	163%	35M	1000	680.5	681	170%
11T3920	11A	EPOXY	No. 11	1.56	156,070	100,045	167%	35M	1000	694.2	694	174%
	11B		No. 11	1.56	157,530	100,981	168%	35M	1000	700.7	701	175%

NOTES

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 Results shown are from routine testing of various heat lots of completed headed devices, per Barsplice Products, Inc. ISO 9001 Quality System.
 Conducted on reinforcing bars per ASTM A615 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 N/mm²).
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