

**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 <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f<sub>y</sub></i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress % <i>f<sub>y</sub></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%
5T11984 (DNX, 10Ab)	5A	BLACK	No. 5	0.31	33,432	107,845	180%	15M	200	148.7	744	186%
	5B		No. 5	0.31	33,048	106,607	178%	15M	200	147.0	735	184%
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%
6T7631 (DNX, 10Ab)	6A	BLACK	No. 6	0.44	46,596	105,900	177%	20M	300	207.3	691	173%
	6B		No. 6	0.44	47,541	108,047	180%	20M	300	211.5	705	176%

**NOTES**

All headed devices meet ACI 318 Section 20, and ASTM A970 Class A & HA requirements (100% *f<sub>u</sub>*) 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, 10Ab.  
 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<sub>y</sub>* = 60,000 psi (420 N/mm<sup>2</sup>).  
 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 <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f<sub>y</sub></i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress % <i>f<sub>y</sub></i> CSA Gr 400
8T1401	8A	BLACK	<b>No. 8</b>	0.79	85,430	108,139	<b>180%</b>	<b>25M</b>	500	380.0	760	<b>190%</b>
	8B		<b>No. 8</b>	0.79	85,700	108,481	<b>181%</b>	<b>25M</b>	500	381.2	762	<b>191%</b>
8T1813	8A	BLACK	<b>No. 8</b>	0.79	79,520	100,658	<b>168%</b>	<b>25M</b>	500	353.7	707	<b>177%</b>
	8B		<b>No. 8</b>	0.79	81,920	103,696	<b>173%</b>	<b>25M</b>	500	364.4	729	<b>182%</b>
8T2181	8A	BLACK	<b>No. 8</b>	0.79	85,200	107,848	<b>180%</b>	<b>25M</b>	500	379.0	758	<b>189%</b>
	8B		<b>No. 8</b>	0.79	86,130	109,025	<b>182%</b>	<b>25M</b>	500	383.1	766	<b>192%</b>
8T2502	8A	EPOXY	<b>No. 8</b>	0.79	77,890	98,595	<b>164%</b>	<b>25M</b>	500	346.5	693	<b>173%</b>
	8B		<b>No. 8</b>	0.79	78,030	98,772	<b>165%</b>	<b>25M</b>	500	347.1	694	<b>174%</b>
8T2572	8A	BLACK	<b>No. 8</b>	0.79	81,980	103,772	<b>173%</b>	<b>25M</b>	500	364.6	729	<b>182%</b>
8T2860	8A	BLACK	<b>No. 8</b>	0.79	81,980	103,772	<b>173%</b>	<b>25M</b>	500	364.6	729	<b>182%</b>
	8B		<b>No. 8</b>	0.79	84,820	107,367	<b>179%</b>	<b>25M</b>	500	377.3	755	<b>189%</b>
8T3049*	8A	BLACK	<b>No. 8</b>	0.79	76,960	97,418	<b>162%</b>	<b>25M</b>	500	342.3	685	<b>171%</b>
8T3270	8A	EPOXY	<b>No. 8</b>	0.79	80,840	102,329	<b>171%</b>	<b>25M</b>	500	359.6	719	<b>180%</b>
	8B		<b>No. 8</b>	0.79	80,420	101,797	<b>170%</b>	<b>25M</b>	500	357.7	715	<b>179%</b>
8T5241 (DNX, 10Ab)	8A	BLACK	<b>No. 8</b>	0.79	85,491	108,216	<b>180%</b>	<b>25M</b>	500	380.3	761	<b>190%</b>
	8B		<b>No. 8</b>	0.79	84,693	107,206	<b>179%</b>	<b>25M</b>	500	376.7	753	<b>188%</b>

**NOTES**

All headed devices meet ACI 318 Section 20, and ASTM A970 Class A & HA requirements (100% *f<sub>u</sub>*) 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, 10Ab.  
 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<sub>y</sub>* = 60,000 psi (420 N/mm<sup>2</sup>).  
 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 - 30M & 35M (GRADE 400)**

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f<sub>y</sub></i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress % <i>f<sub>y</sub></i> CSA Gr 400
9T1120	9A	BLACK	<b>No. 9</b>	1.00	109,910	109,910	<b>183%</b>	<b>30M</b>	700	488.9	698	<b>175%</b>
	9B		<b>No. 9</b>	1.00	109,930	109,930	<b>183%</b>	<b>30M</b>	700	489.0	699	<b>175%</b>
9T1328	9A	BLACK	<b>No. 9</b>	1.00	103,570	103,570	<b>173%</b>	<b>30M</b>	700	460.7	658	<b>165%</b>
	9B		<b>No. 9</b>	1.00	110,960	110,960	<b>185%</b>	<b>30M</b>	700	493.6	705	<b>176%</b>
9T1831	9A	EPOXY	<b>No. 9</b>	1.00	98,180	98,180	<b>164%</b>	<b>30M</b>	700	436.7	624	<b>156%</b>
	9B		<b>No. 9</b>	1.00	98,710	98,710	<b>165%</b>	<b>30M</b>	700	439.1	627	<b>157%</b>
9T2131	9A	EPOXY	<b>No. 9</b>	1.00	105,050	105,050	<b>175%</b>	<b>30M</b>	700	467.3	668	<b>167%</b>
	9B		<b>No. 9</b>	1.00	103,930	103,930	<b>173%</b>	<b>30M</b>	700	462.3	660	<b>165%</b>
9T2732 (DNX, 10Ab)	9A	BLACK	<b>No. 9</b>	1.00	111,090	111,090	<b>185%</b>	<b>30M</b>	700	494.1	706	<b>176%</b>
	9B		<b>No. 9</b>	1.00	111,690	111,690	<b>186%</b>	<b>30M</b>	700	496.8	710	<b>177%</b>
11T2411	11A	BLACK	<b>No. 11</b>	1.56	154,850	99,263	<b>165%</b>	<b>35M</b>	1000	688.8	689	<b>172%</b>
	11B		<b>No. 11</b>	1.56	155,140	99,449	<b>166%</b>	<b>35M</b>	1000	690.1	690	<b>173%</b>
11T2527	11A	BLACK	<b>No. 11</b>	1.56	160,560	102,923	<b>172%</b>	<b>35M</b>	1000	714.2	714	<b>179%</b>
	11B		<b>No. 11</b>	1.56	160,621	102,962	<b>172%</b>	<b>35M</b>	1000	714.4	714	<b>179%</b>
11T3177	11A	EPOXY	<b>No. 11</b>	1.56	154,000	98,718	<b>165%</b>	<b>35M</b>	1000	685.0	685	<b>171%</b>
	11B		<b>No. 11</b>	1.56	152,991	98,071	<b>163%</b>	<b>35M</b>	1000	680.5	681	<b>170%</b>
11T3606*	11A	BLACK	<b>No. 11</b>	1.56	149,730	95,981	<b>160%</b>	<b>35M</b>	1000	666.0	666	<b>167%</b>
11T3920	11A	EPOXY	<b>No. 11</b>	1.56	156,070	100,045	<b>167%</b>	<b>35M</b>	1000	694.2	694	<b>174%</b>
	11B		<b>No. 11</b>	1.56	157,530	100,981	<b>168%</b>	<b>35M</b>	1000	700.7	701	<b>175%</b>
11T5133 (DNX, 10Ab)	11A	BLACK	<b>No. 11</b>	1.56	162,120	103,923	<b>173%</b>	<b>35M</b>	1000	721.1	721	<b>180%</b>
	11B		<b>No. 11</b>	1.56	157,281	100,821	<b>168%</b>	<b>35M</b>	1000	699.6	700	<b>175%</b>

**NOTES**

All headed devices meet ACI 318 Section 20, and ASTM A970 Class A & HA requirements (100% *f<sub>u</sub>*) 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, 10Ab.  
 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<sub>y</sub>* = 60,000 psi (420 N/mm<sup>2</sup>).  
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