

<b>DANIELI</b> MORGÅRD SHAMMAR	<b>JOB N°</b> <b>DPC68X01</b>		<b>Doc:</b> 000-000-375-619 <b>Rev:</b> 00 <b>Page:</b> 1/40		
		<b>Customer:</b> BARRAMANSA			
<b>ROLLING MILL CALCULATIONS</b>  <b>FOR BEAMS</b>					
<b>Remarks:</b>  1) For rolling sequence see drwg. 000-000-361-344					
00	19/05/2023	Issued	Baggio M.	Paron L.	
<b>Rev.</b>	<b>Date</b>	<b>Description</b>	<b>Compiled</b>	<b>Checked</b>	<b>Approved</b>

PASS DESIGN DEPT.  
SPEED CALCULATION FOR HOT ROLLING MILL

JOB NO.   DPC68X01

STAND				MAX ROLLS DIAMETER (")				GEAR RATIO				MOTORS DATA				
N°	STAND	TYPE		UNIV-H	UNIV-V	2HIGH-H/V		1	2	3		TYPE	POWER KW	RPM		
														MIN	BASE	MAX
1 H	7555	GCC				750		118.730				AC	450	0	1000	2000
2 V	7555	GCC				750		85.673				AC	450	0	1000	2000
3 H	7555	GCC				750		118.730				AC	450	0	1000	2000
4 H	8548	GCC				660		74.409				AC	450	0	1000	2000
5 H-U	8548	GCC GUC		830	550	660		87.594				AC	800	0	1000	2000
6H/V	8548	GCC				660		68.825				AC	450	0	1000	2000
7 H-U	8548	GCC GUC		850	550	660		55.247	73.990			AC	800	0	1000	2000
8 H/V-U	8548	GCC GUC		850	550	660		43.393	58.768			AC	800	0	1000	2000
9 H-U	8548	GCC GUC		850	550	660		37.442	49.768			AC	800	0	1000	2000
10 H/V-U	8548	GCC GUC		850	550	660		27.471	37.083			AC	800	0	1000	2000
11 H-U	8548	GCC GUC		850	550	590		17.428	26.576			AC	800	0	1000	2000
12 H/V-U	8548	GCC GUC		850	550	590		13.852	27.600			AC	800	0	1000	2000
13 H-U	8548	GCC GUC		850	550	590		11.734	22.354			AC	800	0	1000	2000
14 H/V-U	8548	GCC GUC		850	550	590		9.470	18.603			AC	800	0	1000	2000
15 H-U	8548	GCC GUC		850	550	590		9.841	19.250			AC	800	0	1000	2000

ROLLING SETUP FOR BEAM S4x7.7

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR		STAND n.
		DIA.	GAP	GAP	THICKNESS		WIDTH	HEIGHT	mm <sup>2</sup>	%	m/s	DIA. mm	RPM r.p.m.	POS.	RATIO	RPM r.p.m.	LOAD kN	TORQUE kNm	POWER kW	Min.	Base	Max.	POWER	UTILIZ. %	LENGTH m		
		mm	mm	mm	mm		mm	mm												r.p.m.	r.p.m.	r.p.m.	kW				
						Billet	182.0	182.0	33093.1		0.16												0.0	9.0			
1 H		750		25.0		BOX	205.6	129.0	25581.1	22.7	0.21	651	6.1		118.730	720.3	1523.6	216.9	137.8	0	1000	2000	450	42.5	0.0	11.4	1 H
2 V		750		50.0		BOX	168.4	138.9	22629.3	11.5	0.23	637	7.0		85.673	600.0	800	93.4	68.5	0	1000	2000	450	25.4	0.0	12.9	2 V
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	20.9	0.30	672	8.4		118.730	996.2	1810	239.3	210.3	0	1000	2000	450	46.9	0.0	16.3	3 H
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.33	572	11.0		74.409	818.3	749	86.1	99.1	0	1000	2000	450	26.9	0.0	18.1	4 V
5 H		660		9.0		SHAPE	178.5	93.6	12692.0	21.0	0.42	598	13.3		87.594	1165.5	1876	195.8	272.7	0	1000	2000	800	34.1	0.0	22.9	5 H
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.43	586	14.0		68.825	963.7	331	24.6	36.0	0	1000	2000	450	8.3	0.0	23.7	6 V
7 H		660		6.0		Leader Web Flange	179.4 79.0 78.2	78.2 31.0 94.6	9849.6 2449.0 7400.6	19.9	0.54	611	16.8	1	55.247	926.8	2115	170.1	298.8	0	1000	2000	800	40.3	0.0	29.6	7 H
8 U		850 550		20.2 24.80	30.60	Shape Web Flange	148.6 80.5 79.6	79.6 20.2 64.5	6762.6 1626.1 5136.5	31.3	0.78	850 550	17.6 27.1	2	58.768	1032.3	1938 953	264.0 93.0 171.0	485.6	0	1000	2000	800	60.7	0.0	43.1	8 U
9 U		850 550		14.0 15.10	20.60	Shape Web Flange	129.8 82.0 81.8	81.8 14.0 43.6	4716.2 1148.0 3568.2	30.3	1.12	850 550	25.2 38.9	2	49.768	1253.5	1937 1054	219.8 68.0 151.8	579.7	0	1000	2000	800	72.5	0.0	61.8	9 U
10 U		850 550		10.1 9.20	14.40	Shape Web Flange	118.4 83.5 83.1	83.1 10.1 30.5	3381.3 843.4 2538.0	28.3	1.56	850 550	35.1 54.3	2	37.083	1302.7	1795 1104	170.3 52.8 117.5	626.5	0	1000	2000	800	78.3	0.0	86.1	10 U
11 H		590		9.2		Edger Web Flange	122.5 84.6 69.2	69.2 9.2 34.1	3135.3 778.3 2357.0	7.3	1.69	574	56.1	1	17.428	978.5	634	42.5	249.9	0	1000	2000	800	31.9	0.0	92.9	11 H
12 U		850 550		7.1 6.30	11.30	Shape Web Flange	112.5 84.6 70.5	70.5 7.1 24.0	2289.3 600.7 1688.6	27.0	2.31	850 550	51.9 80.2	2	27.600	1432.1	1553 933	124.8 34.2 90.6	678.3	0	1000	2000	800	84.8	0.0	127.2	12 U
13 U		850 550		5.7 3.60	8.80	Shape Web Flange	107.7 84.6 71.3	71.3 5.7 18.7	1815.1 482.2 1332.9	20.7	2.91	850 550	65.4 101.1	2	22.354	1462.9	1252 792	75.5 24.4 51.2	517.6	0	1000	2000	800	64.7	0.0	160.5	13 U
14 H		590		10.6		Edger Web Flange	108.6 84.6 67.8	67.8 5.7 19.3	1791.9 482.2 1309.7	1.3	2.95	533	105.8	1	9.470	1001.5	120	5.6	62.3	0	1000	2000	800	7.8	0.0	162.5	14 H
15 U		850 550		4.9 3.20	7.50	Beam Web Flange	104.9 84.6 68.3	68.3 4.9 15.9	1501.9 414.5 1087.4	16.2	3.52	850 550	79.1 122.2	2	19.250	1522.5	710 744	51.2 15.6 35.6	424.0	0	1000	2000	800	53.0	0.0	193.9	15 U
4747.2 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2228	60.0	55.1	78.6

ROLLING SETUP FOR BEAM S4x9.5

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH	STAND n.	
		mm	mm	mm	mm		mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	182.0	182.0	33093.1		0.20												0.0	12.0			
1 H		750		25.0		BOX	205.6	129.0	25581.1	22.7	0.25	651	7.4		118.730	881.6	1524	216.9	168.7	0	1000	2000	450	42.5	0.0	15.2	1 H
2 V		750		50.0		BOX	168.4	138.9	22629.3	11.5	0.29	637	8.6		85.673	734.4	800	93.4	83.8	0	1000	2000	450	25.4	0.0	17.2	2 V
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	20.9	0.36	672	10.3		118.730	1219.3	1810	239.3	257.3	0	1000	2000	450	57.2	0.0	21.7	3 H
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.40	572	13.5		74.409	1001.5	749	86.1	121.3	0	1000	2000	450	27.0	0.0	24.2	4 V
5 H		660		9.0		SHAPE	178.1	93.6	12692.0	21.0	0.51	598	16.3		87.594	1426.9	1868	194.5	331.7	0	1000	2000	800	41.5	0.0	30.6	5 H
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.53	586	17.1		68.825	1179.5	331	24.6	44.1	0	1000	2000	450	9.8	0.0	31.6	6 V
7 H		660		11.5		Leader Web Flange	176.9 79.0 83.7	83.7 36.5 94.4	10783.7 2883.5 7900.2	12.3	0.60	611	18.8	1	55.247	1037.0	1736	115.4	226.8	0	1000	2000	800	28.4	0.0	36.0	7 H
8 U		850 550		25.3 21.20	26.80	Shape Web Flange	141.3 80.5 87.7	87.7 25.3 57.1	7046.1 2036.7 5009.5	34.7	0.92	850 550	20.6 31.9	2	58.768	1212.6	1974 1151	326.4 96.5 229.9	705.2	0	1000	2000	800	88.1	0.0	55.1	8 U
9 U		850 550		18.6 11.80	17.00	Shape Web Flange	123.1 82.0 91.6	91.6 18.6 36.6	4877.4 1525.2 3352.2	30.8	1.33	850 550	29.8 46.1	2	49.768	1483.5	2014 1161	239.0 73.5 165.6	746.1	0	1000	2000	800	93.3	0.0	79.6	9 U
10 U		850 550		14.3 6.90	11.80	Shape Web Flange	113.8 83.5 94.3	94.3 14.3 25.5	3598.2 1194.1 2404.2	26.2	1.80	850 550	40.4 62.4	2	37.083	1498.4	1885 1147	170.6 58.2 112.5	722.0	0	1000	2000	800	90.2	0.0	107.9	10 U
11 H		590		13.0		Edger Web Flange	118.3 84.6 73.0	73.0 13.0 30.0	3291.6 1099.8 2191.8	8.5	1.97	575	65.3	1	17.428	1137.6	692	52.6	359.3	0	1000	2000	800	44.9	0.0	117.9	11 H
12 U		850 550		10.8 5.10	10.10	Shape Web Flange	110.1 84.6 74.6	74.6 10.8 21.7	2535.9 913.7 1622.2	23.0	2.55	850 550	57.3 88.6	2	27.600	1582.4	1589 892	114.3 35.8 78.4	686.0	0	1000	2000	800	85.8	0.0	153.1	12 U
13 U		850 550		9.4 3.20	8.40	Shape Web Flange	107.0 84.6 75.8	75.8 9.4 18.1	2167.6 795.2 1372.4	14.5	2.99	850 550	67.1 103.7	2	22.354	1499.3	1252 699	61.9 24.4 37.6	435.0	0	1000	2000	800	54.4	0.0	179.1	13 U
14 H		590		14.2		Edger Web Flange	107.9 84.6 71.4	71.4 9.4 18.9	2143.3 795.2 1348.1	1.1	3.02	533	108.2	1	9.470	1024.8	122	5.9	66.8	0	1000	2000	800	8.4	0.0	181.1	14 H
15 U		850 550		8.4 3.20	7.50	Beam Web Flange	104.9 84.6 71.8	71.8 8.4 16.1	1869.1 710.6 1158.5	12.8	3.46	850 550	77.8 120.2	2	19.250	1497.4	793 704	49.8 19.5 30.3	405.5	0	1000	2000	800	50.7	0.0	207.7	15 U
5359.8 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
12.0	2970	72.0	60.0	88.5

ROLLING SETUP FOR BEAM S5x10

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	mm	r.p.m.	r.p.m.	kW	%	m		
						Billet	182.0	182.0	33093.1		0.20													0.0	12.0		
1 H		750		25.0		BOX	205.6	129.0	25581.1	22.7	0.25	651	7.4		118.730	881.6	1524	216.9	168.7	0	1000	2000	450	42.5	0.0	15.2	1 H
2 V		750		50.0		BOX	168.4	138.9	22629.3	11.5	0.29	637	8.6		85.673	734.4	800	93.4	83.8	0	1000	2000	450	25.4	0.0	17.2	2 V
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	20.9	0.36	672	10.3		118.730	1219.3	1810	239.3	257.3	0	1000	2000	450	57.2	0.0	21.7	3 H
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.40	572	13.5		74.409	1001.5	749	86.1	121.3	0	1000	2000	450	27.0	0.0	24.2	4 V
5 H		660		9.0		SHAPE	178.1	93.6	12692.0	21.0	0.51	598	16.3		87.594	1426.9	1868	194.5	331.7	0	1000	2000	800	41.5	0.0	30.6	5 H
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.53	586	17.1		68.825	1179.5	331	24.6	44.1	0	1000	2000	450	9.8	0.0	31.6	6 V
7 H		660		7.0		Leader Web Flange	176.9 79.0 79.2	79.2 32.0 94.2	9987.6 2528.0 7459.6	18.8	0.65	611	20.3	1	55.247	1119.6	2042	165.1	350.4	0	1000	2000	800	43.8	0.0	38.9	7 H
8 U		850 550		20.7 26.00	32.10	Shape Web Flange	155.0 84.0 79.7	79.7 20.7 67.6	7123.0 1738.8 5384.2	28.7	0.91	850 550	20.4 31.5	2	58.768	1199.5	2073 883	260.1 102.8 157.4	556.0	0	1000	2000	800	69.5	0.0	54.5	8 U
9 U		850 550		14.5 16.10	21.80	Shape Web Flange	143.2 93.0 81.9	81.9 14.5 46.1	5120.1 1348.5 3771.6	28.1	1.26	850 550	28.4 43.9	2	49.768	1413.2	2009 1086	233.1 74.9 158.1	693.0	0	1000	2000	800	86.6	0.0	75.8	9 U
10 U		850 550		10.8 10.80	15.80	Shape Web Flange	139.7 102.0 83.4	83.4 10.8 33.4	3885.6 1101.6 2784.0	24.1	1.67	850 550	37.4 57.8	2	37.083	1387.5	1707 1078	173.7 59.2 114.5	680.5	0	1000	2000	800	85.1	0.0	99.9	10 U
11 H		590		9.8		Edger Web Flange	146.6 107.7 79.6	79.6 9.8 34.1	3768.4 1055.5 2712.9	3.0	1.72	574	57.1	1	17.428	995.5	557	30.7	183.5	0	1000	2000	800	23.0	0.0	103.0	11 H
12 U		850 550		7.7 7.50	12.30	Shape Web Flange	138.4 107.7 80.7	80.7 7.7 25.9	2919.2 829.3 2089.9	22.5	2.22	850 550	49.8 77.0	2	27.600	1374.6	1618 939	121.2 41.3 79.9	632.0	0	1000	2000	800	79.0	0.0	133.0	12 U
13 U		850 550		6.3 4.80	9.80	Shape Web Flange	133.6 107.7 81.5	81.5 6.3 20.7	2362.2 678.5 1683.7	19.1	2.74	850 550	61.5 95.1	2	22.354	1375.8	1272 830	80.9 28.1 52.8	521.2	0	1000	2000	800	65.2	0.0	164.4	13 U
14 H		590		11.2		Edger Web Flange	134.7 107.7 76.6	76.6 6.3 21.5	2329.2 678.5 1650.7	1.4	2.78	525	101.1	1	9.470	957.8	138	6.5	68.4	0	1000	2000	800	8.9	0.0	166.7	14 H
15 U		850 550		5.4 3.80	8.40	Beam Web Flange	130.5 107.7 77.1	77.1 5.4 17.7	1946.1 581.6 1364.5	16.4	3.32	850 550	74.7 115.5	2	19.250	1438.1	859 877	64.7 21.3 43.4	506.1	0	1000	2000	800	63.3	0.0	199.5	15 U
5197.9																					TOTAL POWER						

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
12.0	2970	60.0	60.0		118.2

ROLLING SETUP FOR BEAM W6x7

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.	
		mm	mm	mm	mm		mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	Min.	Base	Max.	POWER	%	m					
																		r.p.m.	r.p.m.	r.p.m.	kW							
						Billet	182.0	182.0	33093.1		0.15													0.0	7.0			
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.18	637	5.5		118.730	650.9	1430	211.0	121.1	0	1000	2000	450	41.4	0.0	8.8	1 H	
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.19	636	5.7		85.673	484.5	398	35.9	21.3	0	1000	2000	450	9.8	0.0	9.1	2 V	
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.22	670	6.2		118.730	739.9	1710	220.0	143.6	0	1000	2000	450	43.1	0.0	10.5	3 H	
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.25	598	8.0		74.409	593.6	1784	170.0	142.0	0	1000	2000	450	53.1	0.0	49.6	4 H	
5 U		830 550		34.0 24.0	36.0	Shape Web Flange	213.0 130.7 129.0	129.0 34.0 75.7	14207.0 4443.8 9763.2	29.5	0.35	830 550	8.2 12.3		87.594	714.2	2546 1255	419.4 135.8 283.6	358.1	0	1000	2000	800	62.7	0.0	54.6	5 U	
6 H		660		10.0		Leader Web Flange	220.1 135.0 103.0	103.0 25.0 76.8	11289.0 3375.0 7914.0	20.5	0.45	619	13.8		68.825	947.4	2487	172.3	248.3	0	1000	2000	450	58.2	0.0	21.5	6 H	
7 U		850 550		16.6 15.30	22.70	Shape Web Flange	190.6 135.0 105.0	105.0 16.6 49.2	7405.7 2241.0 5164.7	34.4	0.68	850 550	15.3 23.6	2	73.990	1130.1	3366 1484	403.8 174.4 229.4	645.8	0	1000	2000	800	80.7	0.0	32.8	7 U	
8 U		850 550		11.4 9.07	14.80	Shape Web Flange	182.7 135.0 108.8	108.8 11.4 31.7	4986.7 1539.0 3447.7	32.7	1.01	850 550	22.7 35.1	2	58.768	1333.0	3249 1596	316.0 124.1 191.9	750.5	0	1000	2000	800	93.8	0.0	48.7	8 U	
9 U		850 550		8.3 7.07	10.30	Shape Web Flange	170.7 135.0 109.8	109.8 8.3 22.0	3540.8 1120.5 2420.3	29.0	1.42	850 550	31.9 49.4	2	49.768	1589.9	2926 1466	219.6 82.3 137.4	734.7	0	1000	2000	800	91.8	0.0	68.5	9 U	
10 U		850 550		6.4 6.26	7.60	Shape Web Flange	163.0 135.0 110.8	110.8 6.4 16.2	2658.7 864.0 1794.7	24.9	1.89	850 550	42.5 65.8	2	37.083	1577.7	2510 1507	166.5 53.8 112.7	741.8	0	1000	2000	800	92.7	0.0	91.3	10 U	
11 H		590		5.7		Edger Web Flange	163.4 135.7 100.8	100.8 5.7 17.1	2494.6 773.5 1721.1	6.2	2.02	580	66.4	1	17.428	1157.2	1047	26.7	185.9	0	1000	2000	800	23.2	0.0	97.3	11 H	
12 U		850 550		4.7 6.10	6.10	Shape Web Flange	161.2 138.9 101.4	101.4 4.7 12.9	1965.5 652.8 1312.7	21.2	2.56	850 550	57.5 88.9	2	27.600	1588.4	1682 1600	122.3 28.2 94.0	736.8	0	1000	2000	800	92.1	0.0	123.4	12 U	
13 U		850 550		3.9 4.80	4.80	Shape Web Flange	160.8 140.9 102.2	102.2 3.9 10.2	1588.5 549.5 1039.0	19.2	3.17	850 550	71.2 110.0	2	22.354	1591.8	1680 1705	104.1 24.8 79.4	776.5	0	1000	2000	800	97.1	0.0	152.7	13 U	
14 H		590		11.4		Edger Web Flange	160.7 140.9 100.2	100.2 3.9 10.3	1579.0 549.5 1029.5	0.6	3.19	501	121.5	1	9.470	1150.5	58	2.2	27.9	0	1000	2000	800	3.5	0.0	153.7	14 H	
15 U		850 550		3.4 3.80	4.10	Beam Web Flange	150.5 141.9 100.3	100.3 3.4 8.8	1360.2 482.5 877.7	13.9	3.70	850 550	83.2 128.5	2	19.250	1600.8	1011 1562	72.1 22.8 49.3	627.7	0	1000	2000	800	78.5	0.0	178.4	15 U	
																			6261.8	TOTAL POWER								

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
7.5	1856	60.0	48.2	63.2

ROLLING SETUP FOR BEAM W6x8.5

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m	
						Billet	182.0	182.0	33093.1		0.18												0.0	9.0			
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.21	637	6.3		118.730	753.1	1430	211.0	140.1	0	1000	2000	450	41.4	0.0	10.6	1 H
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.22	636	6.5		85.673	560.7	398	35.9	24.6	0	1000	2000	450	9.8	0.0	10.9	2 V
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.25	670	7.2		118.730	856.2	1710	220.0	166.1	0	1000	2000	450	43.1	0.0	12.7	3 H
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.29	598	9.2		74.409	686.8	1784	170.0	164.3	0	1000	2000	450	53.1	0.0	59.5	4 H
5 U		830 550		34.0 24.0	36.0	Shape Web Flange	213.0 130.7 129.0	129.0 34.0 75.7	14207.0 4443.8 9763.2	29.5	0.41	830 550	9.4 14.2		87.594	826.4	2546 1255	419.4 135.8 283.6	414.3	0	1000	2000	800	62.7	0.0	65.5	5 U
6 H		660		12.0		Leader Web Flange	220.1 135.0 105.0	105.0 27.0 77.0	11729.4 3645.0 8084.4	17.4	0.50	619	15.3		68.825	1055.0	2122	142.1	228.0	0	1000	2000	450	50.7	0.0	24.8	6 H
7 U		850 550		19.3 17.00	24.50	Shape Web Flange	194.1 135.0 106.5	106.5 19.3 53.0	8246.6 2605.5 5641.1	29.7	0.71	850 550	15.9 24.5	2	73.990	1174.3	2894 1293	341.5 150.6 190.9	567.6	0	1000	2000	800	70.9	0.0	35.3	7 U
8 U		850 550		14.3 11.53	17.30	Shape Web Flange	187.5 135.0 110.7	110.7 14.3 36.7	5997.1 1930.5 4066.6	27.3	0.97	850 550	21.8 33.7	2	58.768	1282.5	2907 920	217.1 86.3 130.8	496.0	0	1000	2000	800	62.0	0.0	48.6	8 U
9 U		850 550		10.8 9.36	12.60	Shape Web Flange	175.2 135.0 111.7	111.7 10.8 26.6	4434.1 1458.0 2976.1	26.1	1.31	850 550	29.5 45.6	2	49.768	1469.0	2600 1624	259.9 100.9 158.9	803.2	0	1000	2000	800	100.4	0.0	65.7	9 U
10 U		850 550		8.4 8.16	9.50	Shape Web Flange	166.7 135.0 112.6	112.6 8.4 20.0	3382.7 1134.0 2248.7	23.7	1.72	850 550	38.7 59.8	2	37.083	1434.8	2417 1328	171.1 58.5 112.6	693.2	0	1000	2000	800	86.6	0.0	86.1	10 U
11 H		590		7.5		Edger Web Flange	167.3 135.7 102.6	102.6 7.5 21.0	3173.8 1017.8 2156.1	6.2	1.84	579	60.6	1	17.428	1055.9	946	27.0	171.0	0	1000	2000	800	21.4	0.0	91.8	11 H
12 U		850 550		6.1 7.50	7.50	Shape Web Flange	164.0 138.9 103.0	103.0 6.1 15.7	2464.6 847.3 1617.3	22.3	2.36	850 550	53.1 82.1	2	27.600	1465.7	1994 1357	128.6 31.3 97.4	715.1	0	1000	2000	800	89.4	0.0	118.2	12 U
13 U		850 550		5.0 6.00	6.00	Shape Web Flange	163.2 140.9 103.7	103.7 5.0 12.5	2004.9 704.5 1300.4	18.7	2.91	850 550	65.3 100.9	2	22.354	1459.3	1825 1279	98.6 26.7 71.9	673.9	0	1000	2000	800	84.2	0.0	145.3	13 U
14 H		590		12.5		Edger Web Flange	163.1 140.9 101.5	101.5 5.0 12.7	1991.9 704.5 1287.4	0.6	2.92	501	111.5	1	9.470	1055.7	70	2.5	29.2	0	1000	2000	800	3.6	0.0	146.2	14 H
15 U		850 550		4.3 4.80	5.10	Beam Web Flange	152.5 141.9 101.2	101.2 4.3 10.8	1698.1 610.2 1087.9	14.7	3.43	850 550	77.1 119.1	2	19.250	1483.7	1197 1238	70.0 23.5 46.5	564.7	0	1000	2000	800	70.6	0.0	171.5	15 U
5851.3 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
9.0	2228	60.0	50.0		83.7

ROLLING SETUP FOR BEAM W6x9

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m	
						Billet	182.0	182.0	33093.1		0.18													0.0	9.0		
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.21	637	6.3		118.730	753.7	1430	211.0	140.2	0	1000	2000	450	41.4	0.0	10.6	1 H
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.22	636	6.5		85.673	561.1	398	35.9	24.6	0	1000	2000	450	9.8	0.0	10.9	2 V
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.25	670	7.2		118.730	856.9	1710	220.0	166.2	0	1000	2000	450	43.1	0.0	12.7	3 H
4 H		660		20.0		Shape	245.1	124.0	20164.0	12.4	0.29	598	9.2		74.409	687.4	1784	170.0	164.4	0	1000	2000	450	53.1	0.0	59.5	4 H
						Web	99.9	49.0	4895.1																		
						Flange	124.0	123.1	15268.9																		
5 U		830 550		34.0 24.0	36.0	Shape	213.0	129.0	14207.0	29.5	0.41				87.594	827.1		419.4	414.7	0	1000	2000	800	62.7	0.0	65.5	5 U
						Web	130.7	34.0	4443.8			830	9.4				2546	135.8									
						Flange	129.0	75.7	9763.2			550	14.2				1255	283.6									
6 H		660		11.0		Leader	220.1	104.0	11509.3	19.0	0.51	619	15.6		68.825	1076.1	2200	152.7	249.9	0	1000	2000	450	55.5	0.0	25.3	6 H
						Web	135.0	26.0	3510.0																		
						Flange	104.0	76.9	7999.3																		
7 U		850 550		18.8 17.80	25.30	Shape	195.6	105.0	8266.4	28.2	0.71			2	73.990	1172.4		316.4	525.0	0	1000	2000	800	65.6	0.0	35.2	7 U
						Web	135.0	18.8	2538.0			850	15.8				2799	140.8									
						Flange	105.0	54.6	5728.4			550	24.5				1232	175.6									
8 U		850 550		14.1 12.68	18.50	Shape	189.6	109.2	6168.7	25.4	0.95			2	58.768	1247.9		204.2	454.1	0	1000	2000	800	56.8	0.0	47.2	8 U
						Web	135.0	14.1	1903.5			850	21.2				2818	81.1									
						Flange	109.2	39.1	4265.2			550	32.8				886	123.1									
9 U		850 550		10.8 10.42	13.70	Shape	177.1	109.9	4626.3	25.0	1.26			2	49.768	1409.1		253.9	752.8	0	1000	2000	800	94.1	0.0	63.0	9 U
						Web	135.0	10.8	1458.0			850	28.3				2525	95.2									
						Flange	109.9	28.8	3168.3			550	43.8				1610	158.7									
10 U		850 550		8.4 9.04	10.40	Shape	168.3	110.7	3541.3	23.5	1.65			2	37.083	1371.6		176.0	681.8	0	1000	2000	800	85.2	0.0	82.2	10 U
						Web	135.0	8.4	1134.0			850	37.0				2417	58.5									
						Flange	110.7	21.7	2407.3			550	57.2				1346	117.5									
11 H		590		7.6		Edger	169.0	102.7	3343.3	5.6	1.74	578	57.6	1	17.428	1004.5	932	25.9	156.3	0	1000	2000	800	19.5	0.0	87.1	11 H
						Web	135.7	7.6	1031.3																		
						Flange	102.7	22.5	2312.0																		
12 U		850 550		6.1 8.20	8.20	Shape	165.4	103.0	2607.3	22.0	2.24			2	27.600	1386.6		132.9	699.4	0	1000	2000	800	87.4	0.0	111.7	12 U
						Web	138.9	6.1	847.3			850	50.2				2064	33.5									
						Flange	103.0	17.1	1760.0			550	77.6				1372	99.5									
13 U		850 550		5.0 6.60	6.60	Shape	164.4	103.5	2125.7	18.5	2.74			2	22.354	1377.5		102.9	664.1	0	1000	2000	800	83.0	0.0	137.0	13 U
						Web	140.9	5.0	704.5			850	61.6				1825	26.7									
						Flange	103.5	13.7	1421.2			550	95.2				1316	76.2									
14 H		590		12.5		Edger	164.3	101.5	2112.7	0.6	2.76	501	105.2	1	9.470	996.1	73	2.5	27.5	0	1000	2000	800	3.5	0.0	137.9	14 H
						Web	140.9	5.0	704.5																		
						Flange	101.5	13.9	1408.2																		
15 U		850 550		4.3 5.30	5.60	Beam	153.5	101.2	1799.3	14.8	3.24			2	19.250	1401.4		74.5	568.2	0	1000	2000	800	71.0	0.0	161.9	15 U
						Web	141.9	4.3	610.2			850	72.8				1197	23.5									
						Flange	101.2	11.8	1189.1			550	112.5				1297	51.1									
5689.3 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
9.0	2228	60.0	50.0		83.7



ROLLING SETUP FOR BEAM W6x12

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		WIDTH	HEIGHT	mm²	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	Min.	Base	Max.	POWER	%	m		
							mm	mm												r.p.m.	r.p.m.	r.p.m.	kW				
						Billet	182.0	182.0	33093.1		0.21													0.0	12.0		
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.25	637	7.4		118.730	880.6	1430	211.0	163.9	0	1000	2000	450	41.4	0.0	14.1	1 H
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.25	636	7.7		85.673	655.6	398	35.9	28.8	0	1000	2000	450	9.8	0.0	14.5	2 V
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.30	670	8.4		118.730	1001.1	1710	220.0	194.2	0	1000	2000	450	43.2	0.0	16.9	3 H
4 H		660		20.0		Shape	245.1	124.0	20164.0	12.4	0.34	598	10.8		74.409	803.1	1784	170.0	192.1	0	1000	2000	450	53.1	0.0	79.3	4 H
						Web	99.9	49.0	4895.1																		
						Flange	124.0	123.1	15268.9																		
5 U		830 550		34.0 25.5	37.5	Shape	213.1	124.0	14443.0	28.4	0.47				87.594	950.5		378.2	429.7	0	1000	2000	800	56.5	0.0	89.4	5 U
						Web	127.7	34.0	4341.8			830	10.9				2513	134.0									
						Flange	124.0	81.5	10101.2			550	16.4				1153	244.2									
6 H		660		10.0		Leader	227.9	105.6	12906.8	10.6	0.53	613	16.4		68.825	1130.9	1961	119.2	205.0	0	1000	2000	450	45.6	0.0	30.1	6 H
						Web	135.0	29.0	3915.0																		
						Flange	105.6	85.1	8991.8																		
7 U		850 550		20.8 19.98	27.50	Shape	200.0	107.0	9128.3	29.3	0.75			2	73.990	1240.5		368.7	647.3	0	1000	2000	800	80.9	0.0	42.5	7 U
						Web	135.0	20.8	2808.0			850	16.8				2987	160.4									
						Flange	107.0	59.1	6320.3			550	25.9				1354	208.3									
8 U		850 550		15.4 13.73	19.50	Shape	191.9	111.8	6672.2	26.9	1.02			2	58.768	1348.0		239.1	574.4	0	1000	2000	800	71.8	0.0	58.2	8 U
						Web	135.0	15.4	2079.0			850	22.9				3021	93.2									
						Flange	111.8	41.1	4593.2			550	35.4				975	146.0									
9 U		850 550		12.1 11.55	14.80	Shape	179.6	112.8	5130.2	23.1	1.33			2	49.768	1484.6		255.6	798.4	0	1000	2000	800	99.8	0.0	75.7	9 U
						Web	135.0	12.1	1633.5			850	29.8				2525	95.2									
						Flange	112.8	31.0	3496.7			550	46.1				1639	160.4									
10 U		850 550		9.9 10.36	11.70	Shape	171.0	113.5	4097.1	20.1	1.66			2	37.083	1385.2		167.3	654.3	0	1000	2000	800	81.8	0.0	94.8	10 U
						Web	135.0	9.9	1336.5			850	37.4				2314	53.6									
						Flange	113.5	24.3	2760.6			550	57.7				1341	113.6									
11 H		590		9.0		Edger	171.8	105.5	3889.8	5.1	1.75	576	58.0	1	17.428	1011.2	968	27.5	167.1	0	1000	2000	800	20.9	0.0	99.8	11 H
						Web	135.7	9.0	1221.3																		
						Flange	105.5	25.3	2668.5																		
12 U		850 550		7.6 9.70	9.70	Shape	168.5	106.0	3179.8	18.3	2.14			2	27.600	1328.3		130.3	656.7	0	1000	2000	800	82.1	0.0	122.1	12 U
						Web	138.9	7.6	1055.6			850	48.1				1994	31.3									
						Flange	106.0	20.0	2124.2			550	74.4				1388	99.1									
13 U		850 550		6.6 8.20	8.20	Shape	167.7	106.5	2727.5	14.2	2.50			2	22.354	1254.3		98.1	576.6	0	1000	2000	800	72.1	0.0	142.3	13 U
						Web	140.9	6.6	929.9			850	56.1				1740	24.3									
						Flange	106.5	16.9	1797.6			550	86.7				1315	73.9									
14 H		590		14.1		Edger	167.6	103.3	2701.7	0.9	2.52	501	96.1	1	9.470	910.5	115	5.0	49.9	0	1000	2000	800	6.8	0.0	143.7	14 H
						Web	140.9	6.6	929.9																		
						Flange	103.3	17.2	1771.8																		
15 U		850 550		5.9 6.90	7.20	Beam	156.7	102.7	2372.4	12.2	2.87			2	19.250	1241.8		77.3	522.3	0	1000	2000	800	65.3	0.0	163.6	15 U
						Web	141.9	5.9	837.2			850	64.5				1197	23.5									
						Flange	102.7	14.9	1535.2			550	99.7				1343	53.8									
5860.6 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
12.0	2970	72.0	57.0	91.5

ROLLING SETUP FOR BEAM W6x16

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR		STAND n.
		DIA.	GAP	GAP	THICKNESS	TYPE	WIDTH	HEIGHT	mm²	%	m/s	mm	r.p.m.	POS.	RATIO	RPM	LOAD	TORQUE	POWER	Min.	Base	Max.	POWER	UTILIZ.	LENGTH		
		mm	mm	mm	mm		mm	mm												r.p.m.	r.p.m.	r.p.m.	kW			%	
						Billet	182.0	182.0	33093.1		0.23													0.0	12.0		
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.28	637	8.5		118.730	1003.9	1430	211.0	186.8	0	1000	2000	450	41.5	0.0	14.1	1 H
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.29	636	8.7		85.673	747.4	398	35.9	32.8	0	1000	2000	450	9.8	0.0	14.5	2 V
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.34	670	9.6		118.730	1141.3	1710	220.0	221.4	0	1000	2000	450	49.2	0.0	16.9	3 H
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.39	598	12.3		74.409	915.5	1784	170.0	219.0	0	1000	2000	450	53.1	0.0	79.3	4 H
5 U		830 550		34.0 29.0	41.0	Shape Web Flange	220.1 127.7 124.0	124.0 34.0 88.5	15311.0 4341.8 10969.2	24.1	0.51	830 550	11.7 17.6		87.594	1022.2	2513 1051	337.2 134.0 203.2	412.0	0	1000	2000	800	51.5	0.0	89.4	5 U
6 H		660		10.0		Leader Web Flange	235.3 135.0 110.9	110.9 26.0 90.9	13588.8 3510.0 10078.8	11.2	0.57	612	17.8		68.825	1226.8	2084	130.2	243.1	0	1000	2000	450	54.0	0.0	28.6	6 H
7 U		850 550		19.8 24.90	32.10	Shape Web Flange	209.8 135.0 111.8	111.8 19.8 68.1	10289.2 2673.0 7616.2	24.3	0.75	850 550	17.0 26.2	2	73.990	1254.6	2597 1325	311.7 121.3 190.4	553.4	0	1000	2000	800	69.2	0.0	37.7	7 U
8 U		850 550		15.5 19.04	24.60	Shape Web Flange	203.0 135.0 117.1	117.1 15.5 51.0	8059.0 2092.5 5966.5	21.7	0.96	850 550	21.6 33.5	2	58.768	1272.2	2696 997	220.0 74.2 145.8	498.7	0	1000	2000	800	62.3	0.0	48.2	8 U
9 U		850 550		12.7 16.45	19.60	Shape Web Flange	189.7 135.0 117.5	117.5 12.7 40.4	6461.6 1714.5 4747.1	19.8	1.20	850 550	27.0 41.7	2	49.768	1343.7	2325 1751	256.1 80.8 175.3	723.9	0	1000	2000	800	90.5	0.0	60.1	9 U
10 U		850 550		10.7 14.69	16.00	Shape Web Flange	180.0 135.0 118.1	118.1 10.7 32.7	5312.0 1444.5 3867.5	17.8	1.46	850 550	32.8 50.8	2	37.083	1217.9	2206 1494	184.4 48.8 135.6	634.1	0	1000	2000	800	79.3	0.0	73.1	10 U
11 H		590		9.7		Edger Web Flange	181.0 135.7 112.7	112.7 9.7 33.6	5097.9 1316.3 3781.6	4.0	1.52	572	50.9	1	17.428	887.0	1026	29.3	156.2	0	1000	2000	800	22.0	0.0	76.2	11 H
12 U		850 550		8.4 13.60	13.60	Shape Web Flange	177.0 138.9 113.2	113.2 8.4 27.6	4293.5 1166.8 3126.7	15.8	1.81	850 550	40.6 62.8	2	27.600	1121.5	1922 1575	148.5 29.0 119.5	631.8	0	1000	2000	800	79.0	0.0	90.4	12 U
13 U		850 550		7.3 11.60	11.60	Shape Web Flange	175.1 140.9 113.3	113.3 7.3 23.6	3699.4 1028.6 2670.8	13.8	2.10	850 550	47.2 72.9	2	22.354	1054.2	1825 1586	127.5 26.7 100.8	629.8	0	1000	2000	800	78.7	0.0	104.9	13 U
14 H		590		14.8		Edger Web Flange	175.2 140.9 105.0	105.0 7.3 24.5	3603.2 1028.6 2574.6	2.6	2.15	500	82.3	1	9.470	779.8	265	18.4	159.0	0	1000	2000	800	25.5	0.0	107.7	14 H
15 U		850 550		6.7 10.10	10.40	Beam Web Flange	163.1 141.9 103.5	103.5 6.7 21.3	3160.2 950.7 2209.5	12.3	2.46	850 550	55.2 85.3	2	19.250	1062.7	1108 1631	98.6 20.1 78.5	569.9	0	1000	2000	800	71.2	0.0	122.9	15 U
5872.1																			TOTAL POWER								

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
12.0	2970	60.0	50.0		128.2

ROLLING SETUP FOR BEAM S6x12.5

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.	
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	Min.	Base	Max.	POWER	%	m		
																					r.p.m.	r.p.m.	r.p.m.	kW				
						Billet	182.0	182.0	33093.1		0.20													0.0	12.0			
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.24	637	7.0		118.730	836.6	1430	211.0	155.7	0	1000	2000	450	41.4	0.0	14.1	1 H	
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.24	636	7.3		85.673	622.8	398	35.9	27.3	0	1000	2000	450	9.8	0.0	14.5	2 V	
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.28	670	8.0		118.730	951.1	1710	220.0	184.5	0	1000	2000	450	43.1	0.0	16.9	3 H	
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.32	598	10.3		74.409	762.9	1784	170.0	182.5	0	1000	2000	450	53.1	0.0	79.3	4 H	
5 U		830 550		34.0 29.0	41.0	Shape Web Flange	220.1 127.7 124.0	124.0 34.0 88.5	15311.0 4341.8 10969.2	24.1	0.42	830 550	9.7 14.7		87.594	851.8	2513 1051	337.2 134.0 203.2	343.3	0	1000	2000	800	50.4	0.0	89.4	5 U	
6 H		660		8.0		Leader Web Flange	230.0 135.0 93.1	93.1 28.0 89.7	12128.6 3780.0 8348.6	20.8	0.53	615	16.6		68.825	1139.8	2464	184.3	319.6	0	1000	2000	450	71.0	0.0	32.0	6 H	
7 U		850 550		20.0 24.20	31.00	Shape Web Flange	200.4 130.0 93.4	93.4 20.0 66.7	8833.0 2600.0 6233.0	27.2	0.73	850 550	16.5 25.4	2	73.990	1217.8	2895 1114	314.3 153.6 160.7	541.7	0	1000	2000	800	67.7	0.0	44.0	7 U	
8 U		850 550		15.0 15.70	22.60	Shape Web Flange	183.4 130.0 95.2	95.2 15.0 48.7	6586.6 1950.0 4636.6	25.4	0.98	850 550	22.1 34.1	2	58.768	1297.2	2799 842	209.2 83.1 126.2	483.6	0	1000	2000	800	60.4	0.0	58.9	8 U	
9 U		850 550		11.9 10.30	17.40	Shape Web Flange	172.7 130.0 96.7	96.7 11.9 37.4	5165.1 1547.0 3618.1	21.6	1.25	850 550	28.1 43.5	2	49.768	1400.9	2356 1482	239.5 86.1 153.4	705.9	0	1000	2000	800	88.2	0.0	75.2	9 U	
10 U		850 550		9.8 6.70	14.00	Shape Web Flange	165.4 130.0 97.8	97.8 9.8 30.0	4205.7 1274.0 2931.7	18.6	1.54	850 550	34.6 53.4	2	37.083	1281.9	2177 1216	158.1 49.3 108.8	572.4	0	1000	2000	800	71.6	0.0	92.3	10 U	
11 H		590		8.9		Edger Web Flange	167.1 130.5 87.8	87.8 8.9 31.8	3955.9 1161.5 2794.5	5.9	1.64	575	54.3	1	17.428	946.5	1082	35.4	201.4	0	1000	2000	800	26.6	0.0	98.1	11 H	
12 U		850 550		7.6 7.00	12.10	Shape Web Flange	161.5 130.5 88.6	88.6 7.6 25.8	3277.5 991.8 2285.7	17.1	1.97	850 550	44.4 68.6	2	27.600	1224.3	1827 1240	122.4 27.6 94.8	568.5	0	1000	2000	800	71.1	0.0	118.5	12 U	
13 U		850 550		6.7 5.30	10.30	Shape Web Flange	158.0 130.5 89.3	89.3 6.7 21.9	2830.0 874.4 1955.7	13.7	2.29	850 550	51.4 79.4	2	22.354	1148.4	1540 1222	96.6 20.4 76.3	519.9	0	1000	2000	800	65.0	0.0	137.2	13 U	
14 H		590		12.7		Edger Web Flange	159.1 130.5 85.0	85.0 6.7 22.7	2804.8 874.4 1930.5	0.9	2.31	518	85.1	1	9.470	806.0	133	5.0	44.6	0	1000	2000	800	6.9	0.0	138.4	14 H	
15 U		850 550		6.0 4.00	9.20	Beam Web Flange	155.6 130.5 85.5	85.5 6.0 19.5	2453.7 783.0 1670.7	12.5	2.64	850 550	59.3 91.6	2	19.250	1140.6	1105 1333	85.8 21.7 64.1	532.3	0	1000	2000	800	66.5	0.0	158.2	15 U	
5383.2 TOTAL POWER																												

ROLLING SETUP FOR BEAM S6x17.2

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	182.0	182.0	33093.1		0.23												0.0	12.0			
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.28	637	8.5		118.730	1003.9	1430	211.0	186.8	0	1000	2000	450	41.5	0.0	14.1	1 H
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.29	636	8.7		85.673	747.4	398	35.9	32.8	0	1000	2000	450	9.8	0.0	14.5	2 V
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.34	670	9.6		118.730	1141.3	1710	220.0	221.4	0	1000	2000	450	49.2	0.0	16.9	3 H
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.39	598	12.3		74.409	915.5	1784	170.0	219.0	0	1000	2000	450	53.1	0.0	79.3	4 H
5 U		830 550		37.0 25.5	37.7	Shape Web Flange	213.1 127.7 124.0	124.0 37.0 82.0	14887.3 4724.9 10162.4	26.2	0.52	830 550	12.0 18.1		87.594	1051.3	2248 1146	348.5 107.2 241.3	437.9	0	1000	2000	800	54.7	0.0	82.2	5 U
6 H		660		15.0		Leader Web Flange	230.0 135.0 100.1	100.1 35.0 90.0	13738.2 4725.0 9013.2	7.7	0.57	615	17.5		68.825	1207.5	1882	109.2	200.6	0	1000	2000	450	44.6	0.0	28.3	6 H
7 U		850 550		28.0 21.10	27.70	Shape Web Flange	194.3 130.0 105.0	105.0 28.0 60.4	9978.7 3640.0 6338.7	27.4	0.78	850 550	17.5 27.0	2	73.990	1293.6	2708 1393	363.0 134.4 228.7	664.6	0	1000	2000	800	83.1	0.0	38.9	7 U
8 U		850 550		23.3 12.50	19.00	Shape Web Flange	177.0 130.0 111.3	111.3 23.3 41.8	7678.2 3029.0 4649.2	23.1	1.01	850 550	22.7 35.1	2	58.768	1335.3	2714 980	227.3 78.1 149.2	540.8	0	1000	2000	800	67.6	0.0	50.6	8 U
9 U		850 550		19.9 8.20	14.80	Shape Web Flange	168.4 130.0 114.9	114.9 19.9 32.5	6316.4 2587.0 3729.4	17.7	1.23	850 550	27.6 42.7	2	49.768	1374.6	2468 1586	243.6 94.4 149.2	704.6	0	1000	2000	800	88.1	0.0	61.5	9 U
10 U		850 550		17.3 4.90	11.70	Shape Web Flange	161.8 130.0 118.1	118.1 17.3 25.7	5279.6 2249.0 3030.6	16.4	1.47	850 550	33.0 51.1	2	37.083	1225.4	2422 1393	180.2 61.0 119.1	623.4	0	1000	2000	800	77.9	0.0	73.5	10 U
11 H		590		15.7		Edger Web Flange	164.5 130.5 94.6	94.6 15.7 29.5	4844.1 2048.9 2795.3	8.2	1.60	576	53.1	1	17.428	925.9	1432	63.2	351.5	0	1000	2000	800	47.5	0.0	80.1	11 H
12 U		850 550		13.9 5.90	11.00	Shape Web Flange	159.3 130.5 95.5	95.5 13.9 23.9	4099.9 1814.0 2286.0	15.4	1.89	850 550	42.6 65.8	2	27.600	1174.5	2149 1289	133.3 38.2 95.1	593.9	0	1000	2000	800	74.2	0.0	94.7	12 U
13 U		850 550		12.6 4.70	9.70	Shape Web Flange	156.9 130.5 96.6	96.6 12.6 21.0	3676.6 1644.3 2032.3	10.3	2.11	850 550	47.5 73.3	2	22.354	1060.8	1851 1138	90.7 29.4 61.2	450.5	0	1000	2000	800	56.3	0.0	105.6	13 U
14 H		590		18.8		Edger Web Flange	158.1 130.5 91.1	91.1 12.6 22.0	3651.8 1644.3 2007.5	0.7	2.13	518	78.4	1	9.470	742.8	130	4.9	40.4	0	1000	2000	800	6.8	0.0	106.3	14 H
15 U		850 550		11.9 4.00	9.20	Beam Web Flange	155.5 130.5 91.6	91.6 11.9 19.9	3375.4 1553.0 1822.5	7.6	2.30	850 550	51.7 79.9	2	19.250	995.0	1105 1174	68.1 21.7 46.4	368.3	0	1000	2000	800	46.3	0.0	115.0	15 U
5636.6 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
12.0	2970	60.0	50.0		128.2

ROLLING SETUP FOR BEAM W8x10

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA  mm²	RED.  %	SPEED  m/s	WORK DIA.  mm	ROLLS RPM  r.p.m.	GEAR		MOTOR RPM  r.p.m.	ROLLING LOAD  kN	ROLLING TORQUE  kNm	ROLLING POWER  kW	MOTOR DATA				MOTOR UTILIZ.  %	BAR LENGTH  m		STAND n.	
		WIDTH	HEIGHT	POS.	RATIO		Min.  r.p.m.	Base  r.p.m.						Max.  r.p.m.	POWER  kW													
		mm	mm																	mm	mm	mm	mm		mm	mm		
						Billet	182.0	182.0	33093.1		0.20													0.0	9.0			
1 H		750		18.0		SHAPE	210.7	160.0	27516.0	16.9	0.24	637	7.1		118.730	837.2	1430	211.0	155.8	0	1000	2000	450	41.4	0.0	10.6	1 H	
2 V		750		50.0		EDGER	190.9	163.3	26711.0	2.9	0.24	636	7.3		85.673	623.3	398	35.9	27.4	0	1000	2000	450	9.8	0.0	10.9	2 V	
3 H		750		25.0		SHAPE	219.7	140.0	23018.0	13.8	0.28	670	8.0		118.730	951.8	1710	220.0	184.7	0	1000	2000	450	43.1	0.0	12.7	3 H	
4 H		660		20.0		Shape Web Flange	245.1 99.9 124.0	124.0 49.0 123.1	20164.0 4895.1 15268.9	12.4	0.32	598	10.3		74.409	763.5	1784	170.0	182.6	0	1000	2000	450	53.1	0.0	59.5	4 H	
5 U		830 550		34.0 25.5	37.7	Shape Web Flange	213.1 127.7 124.0	124.0 34.0 81.5	14443.0 4341.8 10101.2	28.4	0.45	830 550	10.3 15.6		87.594	903.6	2513 1153	378.2 134.0 244.2	408.5	0	1000	2000	800	56.5	0.0	67.1	5 U	
6 H		660		10.0		Leader Web Flange	232.7 143.0 107.5	107.5 26.0 80.9	12414.6 3718.0 8696.6	14.0	0.52	617	16.2		68.825	1111.8	2262	156.8	265.2	0	1000	2000	450	58.9	0.0	23.5	6 H	
7 U		850 550		17.8 17.10	24.80	Shape Web Flange	214.2 154.0 109.2	109.2 17.8 53.4	8573.6 2741.2 5832.4	30.9	0.76	850 550	17.0 26.2	2	73.990	1255.6	3285 1417	176.4 223.8	711.2	0	1000	2000	800	88.9	0.0	34.0	7 U	
8 U		850 550		12.8 11.40	17.00	Shape Web Flange	214.7 162.0 113.5	113.5 12.8 36.1	6166.7 2073.6 4093.1	28.1	1.05	850 550	23.6 36.5	2	58.768	1386.5	3402 975	101.0 143.3	603.5	0	1000	2000	800	75.4	0.0	47.2	8 U	
9 U		850 550		9.6 9.10	12.20	Shape Web Flange	214.1 174.0 114.8	114.8 9.6 25.8	4633.5 1670.4 2963.1	24.9	1.40	850 550	31.4 48.5	2	49.768	1562.7	3094 1680	114.8 165.7	922.6	0	1000	2000	800	115.3	0.0	62.9	9 U	
10 U		850 550		7.6 7.90	9.20	Shape Web Flange	213.7 182.0 116.2	116.2 7.6 19.3	3630.7 1383.2 2247.5	21.6	1.78	850 550	40.1 61.9	2	37.083	1486.0	2909 1347	64.3 112.4	741.4	0	1000	2000	800	92.7	0.0	80.2	10 U	
11 H		590		6.9		Edger Web Flange	221.3 183.0 104.6	104.6 6.9 20.5	3407.5 1262.7 2144.8	6.1	1.90	582	62.4	1	17.428	1087.7	1356	42.5	277.9	0	1000	2000	800	34.7	0.0	85.5	11 H	
12 U		850 550		5.7 7.50	7.50	Shape Web Flange	214.4 189.0 105.0	105.0 5.7 15.7	2724.9 1077.3 1647.6	20.0	2.38	850 550	53.4 82.5	2	27.600	1473.7	2501 1317	36.3 89.9	705.7	0	1000	2000	800	88.2	0.0	106.9	12 U	
13 U		850 550		4.9 6.20	6.20	Shape Web Flange	214.9 192.0 105.7	105.7 4.9 12.9	2308.5 940.8 1367.7	15.3	2.80	850 550	63.0 97.4	2	22.354	1408.9	2120 1216	26.4 63.8	595.4	0	1000	2000	800	74.4	0.0	126.2	13 U	
14 H		590		12.4		Edger Web Flange	214.7 192.0 101.5	101.5 4.9 13.2	2282.2 940.8 1341.4	1.1	2.84	501	108.2	1	9.470	1024.5	102	5.1	57.2	0	1000	2000	800	7.2	0.0	127.6	14 H	
15 U		850 550		4.3 5.00	5.30	Beam Web Flange	204.5 193.5 101.2	101.2 4.3 11.1	1960.4 832.1 1128.4	14.1	3.30	850 550	74.2 114.7	2	19.250	1428.7	1511 1280	27.4 49.7	599.2	0	1000	2000	800	74.9	0.0	148.6	15 U	
6438.2																			TOTAL POWER									

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2228	60.0	45.0	88.7

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
							WIDTH	HEIGHT						Min.	Base					Max.	POWER	%	m				
																									mm	mm	
		mm	mm	mm	mm		mm	mm	mm²	%	m/s	mm	r.p.m.			r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	182.0	182.0	33093.1		0.20												0.0	9.0			
1 H		750		18.0		SHAPE	201.5	160.2	27286.8	17.5	0.24	633	7.1		118.730	848.7	1324	185.2	138.6	0	1000	2000	450	36.3	0.0	10.7	1 H
2 V		750		50.0		EDGER	195.2	160.2	26819.8	1.7	0.24	633	7.3		85.673	623.1	232	12.3	9.3	0	1000	2000	450	3.3	0.0	10.9	2 V
3 H		750		25.0		SHAPE	214.4	140.0	22854.6	14.8	0.28	668	8.1		118.730	959.0	1594	191.7	162.2	0	1000	2000	450	37.6	0.0	12.7	3 H
4 H		660		20.0		Shape Web Flange	233.9 97.9 124.0	124.0 49.0 121.1	19810.1 4797.1 15013.0	13.3	0.33	595	10.5		74.409	778.5	1694	158.9	174.1	0	1000	2000	450	49.7	0.0	60.7	4 H
5 U		830 550		34.0 25.5	37.7	Shape Web Flange	213.1 127.7 124.0	124.0 34.0 81.5	14443.0 4341.8 10101.2	27.1	0.45	830 550	10.3 15.5		87.594	901.6	2491 1124	364.9 132.8 232.1	393.3	0	1000	2000	800	54.5	0.0	67.1	5 U
6 H		660		12.0		Leader Web Flange	232.5 143.0 109.5	109.5 28.0 80.9	12858.1 4004.0 8854.1	11.0	0.50	617	15.6		68.825	1071.0	2103	135.5	220.8	0	1000	2000	450	49.1	0.0	22.7	6 H
7 U		850 550		20.6 18.50	26.30	Shape Web Flange	217.1 154.0 111.2	111.2 20.6 56.6	9465.3 3172.4 6292.9	26.4	0.68	850 550	15.3 23.7	2	73.990	1134.7	3121 1356	360.4 159.2 201.2	578.8	0	1000	2000	800	72.4	0.0	30.8	7 U
8 U		850 550		15.6 13.20	18.80	Shape Web Flange	218.2 162.0 116.1	116.1 15.6 39.7	7137.8 2527.2 4610.6	24.6	0.91	850 550	20.3 31.4	2	58.768	1195.2	3402 981	243.3 101.0 142.3	518.1	0	1000	2000	800	64.8	0.0	40.8	8 U
9 U		850 550		12.3 10.90	14.00	Shape Web Flange	217.7 174.0 117.5	117.5 12.3 29.4	5596.4 2140.2 3456.2	21.6	1.15	850 550	25.9 40.1	2	49.768	1290.9	3142 1723	288.8 118.4 170.4	784.4	0	1000	2000	800	98.1	0.0	52.0	9 U
10 U		850 550		9.8 9.30	10.50	Shape Web Flange	216.5 182.0 119.1	119.1 9.8 22.1	4419.2 1783.6 2635.6	21.0	1.46	850 550	32.8 50.8	2	37.083	1218.1	3252 1464	210.0 80.4 129.7	722.4	0	1000	2000	800	90.3	0.0	65.9	10 U
11 H		590		8.9		Edger Web Flange	224.4 183.0 106.9	106.9 8.9 23.5	1438.7 1628.7 2510.0	6.3	1.56	580	51.4	1	17.428	895.1	1527	53.2	286.1	0	1000	2000	800	39.9	0.0	70.4	11 H
12 U		850 550		7.6 8.90	8.90	Shape Web Flange	217.2 189.0 107.3	107.3 7.6 18.4	3414.4 1436.4 1978.0	17.5	1.89	850 550	42.5 65.7	2	27.600	1											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2228	60.0	45.1	88.6

ROLLING SETUP FOR BEAM W8x15

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	182.0	182.0	33093.1		0.20													0.0	9.0		
1 H		750		18.0		SHAPE	201.5	160.2	27286.8	17.5	0.24	633	7.2		118.730	850.0	1324	185.2	138.9	0	1000	2000	450	36.3	0.0	10.7	1 H
2 V		750		50.0		EDGER	195.2	160.2	26819.8	1.7	0.24	633	7.3		85.673	624.0	232	12.3	9.4	0	1000	2000	450	3.3	0.0	10.9	2 V
3 H		750		25.0		SHAPE	214.4	140.0	22854.6	14.8	0.28	668	8.1		118.730	960.5	1594	191.7	162.4	0	1000	2000	450	37.6	0.0	12.7	3 H
4 H		660		20.0		Shape Web Flange	233.9 97.9 124.0	124.0 49.0 121.1	19810.1 4797.1 15013.0	13.3	0.33	595	10.5		74.409	779.7	1694	158.9	174.4	0	1000	2000	450	49.7	0.0	60.7	4 H
5 U		830 550		34.0 25.5	37.7	Shape Web Flange	213.1 127.7 124.0	124.0 34.0 81.5	14443.0 4341.8 10101.2	27.1	0.45	830 550	10.3 15.6		87.594	903.0	2491 1124	364.9 132.8 232.1	393.9	0	1000	2000	800	54.5	0.0	67.1	5 U
6 H		660		11.0		Leader Web Flange	232.7 143.0 108.5	108.5 27.0 81.0	12647.3 3861.0 8786.3	12.4	0.51	617	15.8		68.825	1090.6	2182	145.9	242.1	0	1000	2000	450	53.8	0.0	23.0	6 H
7 U		850 550		19.9 19.20	27.00	Shape Web Flange	218.3 154.0 109.5	109.5 19.9 58.0	9411.7 3064.6 6347.1	25.6	0.69	850 550	15.4 23.9	2	73.990	1143.0	3057 1304	341.3 152.7 188.5	552.0	0	1000	2000	800	69.0	0.0	30.9	7 U
8 U		850 550		15.3 14.40	20.00	Shape Web Flange	220.3 162.0 114.3	114.3 15.3 42.0	7282.4 2478.6 4803.8	22.6	0.89	850 550	20.0 30.9	2	58.768	1173.3	3263 939	225.2 92.9 132.3	470.8	0	1000	2000	800	58.8	0.0	40.0	8 U
9 U		850 550		12.5 12.60	15.80	Shape Web Flange	220.9 174.0 115.4	115.4 12.5 32.9	5977.4 2175.0 3802.4	17.9	1.08	850 550	24.3 37.6	2	49.768	1210.5	2894 1590	248.2 100.5 147.7	632.1	0	1000	2000	800	79.0	0.0	48.7	9 U
10 U		850 550		10.5 11.50	12.80	Shape Web Flange	220.5 182.0 116.5	116.5 10.5 26.5	4995.1 1911.0 3084.1	16.4	1.30	850 550	29.1 45.0	2	37.083	1079.3	2909 1353	177.3 64.3 113.0	540.3	0	1000	2000	800	67.5	0.0	58.3	10 U
11 H		590		9.5		Edger Web Flange	228.6 183.0 107.8	107.8 9.5 27.6	4716.7 1738.5 2978.2	5.6	1.37	579	45.3	1	17.428	788.8	1573	55.5	262.8	0	1000	2000	800	41.6	0.0	61.7	11 H
12 U		850 550		8.1 10.80	10.80	Shape Web Flange	220.9 189.0 107.6	107.6 8.1 22.2	3917.0 1530.9 2386.1	17.0	1.65	850 550	37.1 57.4	2	27.600	1024.4	2702 1440	147.0 42.3 104.7	571.3	0	1000	2000	800	71.4	0.0	74.4	12 U
13 U		850 550		7.1 9.30	9.30	Shape Web Flange	221.1 192.0 108.1	108.1 7.1 19.1	3423.5 1363.2 2060.3	12.6	1.89	850 550	42.5 65.6	2	22.354	949.3	2370 1325	107.0 33.1 73.9	475.7	0	1000	2000	800	62.6	0.0	85.1	13 U
14 H		590		14.6		Edger Web Flange	221.1 192.0 104.1	104.1 7.1 19.4	3386.1 1363.2 2022.9	1.1	1.91	501	72.9	1	9.470	690.5	147	7.2	54.8	0	1000	2000	800	9.9	0.0	86.0	14 H
15 U		850 550		6.3 7.80	8.10	Beam Web Flange	210.1 193.5 103.1	103.1 6.3 16.7	2945.8 1219.1 1726.8	13.0	2.20	850 550	49.4 76.3	2	19.250	950.1	1744 1491	102.5 36.6 66.0	529.9	0	1000	2000	800	69.7	0.0	98.9	15 U
																			5210.8	TOTAL POWER							

ROLLING SETUP FOR BEAM W6x15

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m	
						Billet	152.0	233.0	35385.1		0.22													0.0	9.0		
1 H		750		30.0		SHAPE	169.0	213.0	31120.3	12.1	0.25	596	8.0		118.730	950.3	1149	189.0	158.4	0	1000	2000	450	37.0	0.0	10.0	1 H
2 V		750		30.0		EDGER	160.0	213.0	28984.8	6.9	0.27	644	8.0		85.673	681.3	880	89.2	74.3	0	1000	2000	450	24.2	0.0	10.7	2 V
3 H		750		25.0		SHAPE	184.8	194.0	26575.6	8.3	0.29	631	8.8		118.730	1050.5	1266	214.2	198.4	0	1000	2000	450	44.1	0.0	11.7	3 H
4 H		660		25.0		Shape Web Flange	209.4 76.1 180.0	180.0 60.0 115.5	25362.0 4566.0 20796.0	4.6	0.31	564	10.4		74.409	772.2	1089	122.2	132.8	0	1000	2000	450	38.2	0.0	68.1	4 H
5 U		830 550		39.0 31.0	40.7	Shape Web Flange	193.1 96.7 174.0	174.0 39.0 87.8	19046.5 3771.3 15275.2	24.9	0.41	830 550	9.4 14.2		87.594	822.4	2071 1378	401.5 152.7 248.8	394.7	0	1000	2000	800	60.0	0.0	82.4	5 U
6 H		660		12.0		Leader Web Flange	209.8 107.0 165.0	165.0 29.0 86.6	17388.3 3103.0 14285.3	8.7	0.45	589	14.5		68.825	997.2	2020	163.3	247.7	0	1000	2000	450	55.2	0.0	17.9	6 H
7 U		850 550		20.7 17.10	27.70	Shape Web Flange	189.2 117.0 166.5	166.5 20.7 58.9	12222.7 2421.9 9800.8	29.7	0.64	850 550	14.3 22.1	2	73.990	1057.0	2597 2291	492.1 138.1 354.0	736.2	0	1000	2000	800	92.0	0.0	25.4	7 U
8 U		850 550		15.7 13.70	19.80	Shape Web Flange	187.5 122.0 170.8	170.8 15.7 41.3	8974.2 1915.4 7058.8	26.6	0.87	850 550	19.5 30.1	2	58.768	1143.5	2601 2094	360.4 93.0 267.3	734.2	0	1000	2000	800	91.8	0.0	34.6	8 U
9 U		850 550		12.4 10.20	14.70	Shape Web Flange	180.2 127.0 171.6	171.6 12.4 30.6	6828.3 1574.8 5253.5	23.9	1.14	850 550	25.6 39.5	2	49.768	1272.7	1904 2138	259.1 65.4 193.7	693.9	0	1000	2000	800	86.7	0.0	45.5	9 U
10 U		850 550		10.1 9.50	11.30	Shape Web Flange	174.5 132.0 173.0	173.0 10.1 23.3	5368.2 1333.2 4035.0	21.4	1.45	850 550	32.5 50.3	2	37.083	1206.2	1842 2180	229.2 50.8 178.4	780.6	0	1000	2000	800	97.6	0.0	57.9	10 U
11 H		590		9.2		Edger Web Flange	176.2 134.2 158.2	158.2 9.2 24.5	5115.6 1234.6 3881.0	4.7	1.52	570	50.9	1	17.428	886.8	949	29.7	158.5	0	1000	2000	800	22.3	0.0	60.8	11 H
12 U		850 550		7.7 9.40	9.40	Shape Web Flange	172.3 137.7 158.7	158.7 7.7 19.3	4116.1 1060.3 3055.8	19.5	1.89	850 550	42.4 65.6	2	27.600	1170.8	1645 2000	166.4 30.3 136.1	739.1	0	1000	2000	800	92.4	0.0	75.5	12 U
13 U		850 550		6.6 7.70	7.70	Shape Web Flange	171.6 140.2 159.6	159.6 6.6 15.8	3439.8 925.3 2514.5	16.4	2.26	850 550	50.8 78.5	2	22.354	1134.7	1063 2318	146.0 26.0 120.0	776.0	0	1000	2000	800	97.0	0.0	90.4	13 U
14 H		590		14.1		Edger Web Flange	171.3 140.2 154.2	154.2 6.6 16.0	3397.9 925.3 2472.6	1.2	2.29	450	97.1	1	9.470	919.4	99	3.5	35.9	0	1000	2000	800	4.9	0.0	91.5	14 H
15 U		850 550		5.9 6.40	6.70	Beam Web Flange	155.7 141.7 153.8	153.8 5.9 13.8	2954.6 836.0 2118.6	13.0	2.63	850 550	59.1 91.3	2	19.250	1137.6	535 2223	119.4 10.4 109.1	739.0	0	1000	2000	800	92.4	0.0	105.2	15 U
6599.9																					TOTAL POWER						

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2378	60.0	40.0	102.7



ROLLING SETUP FOR BEAM W6x20

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR		STAND n.
		DIA.	GAP	GAP	THICKNESS	TYPE	WIDTH	HEIGHT	mm <sup>2</sup>	%	m/s	DIA. mm	RPM r.p.m.	POS.	RATIO	RPM r.p.m.	LOAD kN	TORQUE kNm	POWER kW	Min.	Base	Max.	POWER	UTILIZ. %	LENGTH m		
		mm	mm	mm	mm		mm	mm												r.p.m.	r.p.m.	r.p.m.	kW				
						Billet	152.0	233.0	35385.1		0.21												0.0	9.0			
1 H		750		30.0		SHAPE	169.0	213.0	31120.3	12.1	0.24	596	7.8		118.730	928.5	1149	189.0	154.8	0	1000	2000	450	37.0	0.0	10.0	1 H
2 V		750		30.0		EDGER	160.0	213.0	28984.8	6.9	0.26	644	7.8		85.673	665.7	880	89.2	72.6	0	1000	2000	450	24.2	0.0	10.7	2 V
3 H		750		25.0		SHAPE	184.8	194.0	26575.6	8.3	0.29	631	8.6		118.730	1026.5	1266	214.2	193.9	0	1000	2000	450	43.1	0.0	11.7	3 H
4 H		660		25.0		Shape Web Flange	209.4 76.1 180.0	180.0 60.0 115.5	25362.0 4566.0 20796.0	4.6	0.30	564	10.1		74.409	754.5	1089	122.2	129.8	0	1000	2000	450	38.2	0.0	68.1	4 H
5 U		830 550		39.0 31.0	40.7	Shape Web Flange	193.1 96.7 174.0	174.0 39.0 87.8	19046.5 3771.3 15275.2	24.9	0.40	830 550	9.2 13.8		87.594	803.5	2071 1378	401.5 152.7 248.8	385.7	0	1000	2000	800	60.0	0.0	82.4	5 U
6 H		660		11.0		Leader Web Flange	208.4 107.0 164.0	164.0 28.0 86.7	17216.9 2996.0 14220.9	9.6	0.44	588	14.3		68.825	985.3	2029	165.2	247.7	0	1000	2000	450	55.9	0.0	18.1	6 H
7 U		850 550		21.2 19.50	30.20	Shape Web Flange	194.0 117.0 164.8	164.8 21.2 63.9	13014.1 2480.4 10533.7	24.4	0.58	850 550	13.1 20.3	2	73.990	970.0	2351 2061	401.9 113.2 288.8	551.8	0	1000	2000	800	71.1	0.0	23.9	7 U
8 U		850 550		16.8 17.20	23.40	Shape Web Flange	194.2 122.0 169.2	169.2 16.8 48.4	10247.3 2049.6 8197.7	21.3	0.74	850 550	16.6 25.7	2	58.768	978.4	2440 1947	315.4 81.9 233.5	549.8	0	1000	2000	800	70.2	0.0	30.3	8 U
9 U		850 550		13.7 14.20	18.70	Shape Web Flange	187.6 127.0 169.4	169.4 13.7 38.6	8272.2 1739.9 6532.3	19.3	0.92	850 550	20.6 31.9	2	49.768	1026.4	1845 2031	238.3 61.5 176.8	514.6	0	1000	2000	800	64.3	0.0	37.6	9 U
10 U		850 550		11.4 13.40	15.30	Shape Web Flange	181.9 132.0 169.9	169.9 11.4 31.3	6818.5 1504.8 5313.7	17.6	1.11	850 550	25.0 38.7	2	37.083	927.9	1842 2146	226.3 50.8 175.5	593.0	0	1000	2000	800	79.9	0.0	45.6	10 U
11 H		590		10.4		Edger Web Flange	184.1 134.2 159.5	159.5 10.4 32.3	6542.5 1395.7 5146.8	4.0	1.16	565	39.2	1	17.428	683.9	1046	34.6	142.2	0	1000	2000	800	26.0	0.0	47.5	11 H
12 U		850 550		8.7 12.70	12.70	Shape Web Flange	178.8 137.7 159.9	159.9 8.7 25.8	5321.2 1198.0 4123.2	18.7	1.43	850 550	32.1 49.6	2	27.600	884.9	1751 2235	202.9 34.3 168.5	681.0	0	1000	2000	800	96.2	0.0	58.4	12 U
13 U		850 550		7.5 10.70	10.70	Shape Web Flange	177.5 140.2 160.1	160.1 7.5 21.7	4527.2 1051.5 3475.7	14.9	1.68	850 550	37.7 58.2	2	22.354	842.4	1110 2515	168.8 28.3 140.5	666.3	0	1000	2000	800	98.9	0.0	68.7	13 U
14 H		590		14.7		Edger Web Flange	177.4 140.2 155.5	155.5 7.5 22.0	4478.7 1051.5 3427.2	1.1	1.70	449	72.1	1	9.470	682.6	125	4.1	30.8	0	1000	2000	800	5.6	0.0	69.4	14 H
15 U		850 550		6.7 9.10	9.40	Beam Web Flange	161.1 141.7 154.6	154.6 6.7 19.2	3914.0 949.4 2964.6	12.6	1.94	850 550	43.6 67.4	2	19.250	839.1	572 2520	151.0 11.8 139.1	689.1	0	1000	2000	800	102.7	0.0	79.4	15 U
5603.1																			TOTAL POWER								

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2378	60.0	40.9	101.7

ROLLING SETUP FOR BEAM W6x25

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR		STAND n.
		DIA.	GAP	GAP	THICKNESS	TYPE	WIDTH	HEIGHT	mm²	%	m/s	DIA. mm	RPM r.p.m.	POS.	RATIO	RPM r.p.m.	LOAD kN	TORQUE kNm	POWER kW	Min.	Base	Max.	POWER	%	LENGTH		
		mm	mm	mm	mm		mm	mm												r.p.m.	r.p.m.	r.p.m.	r.p.m.		m		
						Billet	152.0	233.0	35385.1		0.22												0.0	9.0			
1 H		750		30.0		SHAPE	169.0	213.0	31120.3	12.1	0.25	596	8.0		118.730	953.6	1149	189.0	159.0	0	1000	2000	450	37.0	0.0	10.0	1 H
2 V		750		30.0		EDGER	160.0	213.0	28984.8	6.9	0.27	644	8.0		85.673	683.6	880	89.2	74.6	0	1000	2000	450	24.2	0.0	10.7	2 V
3 H		750		25.0		SHAPE	184.8	194.0	26575.6	8.3	0.29	631	8.9		118.730	1054.2	1266	214.2	199.1	0	1000	2000	450	44.3	0.0	11.7	3 H
4 H		660		25.0		Shape Web Flange	209.4 76.1 180.0	180.0 60.0 115.5	25362.0 4566.0 20796.0	4.6	0.31	564	10.4		74.409	774.9	1089	122.2	133.3	0	1000	2000	450	38.2	0.0	68.1	4 H
5 U		830 550		39.0 31.0	40.7	Shape Web Flange	193.1 96.7 174.0	174.0 39.0 87.8	19046.5 3771.3 15275.2	24.9	0.41	830 550	9.4 14.2		87.594	825.2	2071 1378	401.5 152.7 248.8	396.1	0	1000	2000	800	60.0	0.0	82.4	5 U
6 H		660		11.0		Leader Web Flange	208.4 107.0 164.0	164.0 28.0 86.7	17216.9 2996.0 14220.9	9.6	0.45	588	14.7		68.825	1011.9	2029	165.2	254.4	0	1000	2000	450	56.5	0.0	18.1	6 H
7 U		850 550		22.8 22.20	33.00	Shape Web Flange	199.3 117.0 164.2	164.2 22.8 69.7	14105.3 2667.6 11437.7	18.1	0.55	850 550	12.4 19.2	2	73.990	919.1	2056 1779	302.2 86.5 215.7	393.1	0	1000	2000	800	53.5	0.0	22.0	7 U
8 U		850 550		18.7 20.20	26.50	Shape Web Flange	200.1 122.0 169.1	169.1 18.7 54.6	11515.7 2281.4 9234.3	18.4	0.68	850 550	15.2 23.5	2	58.768	894.2	2355 1917	303.0 76.3 226.7	482.7	0	1000	2000	800	67.5	0.0	27.0	8 U
9 U		850 550		15.5 17.00	21.60	Shape Web Flange	193.1 127.0 169.2	169.2 15.5 44.3	9469.0 1968.5 7500.5	17.8	0.82	850 550	18.5 28.6	2	49.768	920.9	1875 2069	247.1 63.5 183.6	478.8	0	1000	2000	800	65.0	0.0	32.8	9 U
10 U		850 550		13.0 15.90	17.80	Shape Web Flange	186.7 132.0 169.8	169.8 13.0 36.2	7863.5 1716.0 6147.5	17.0	0.99	850 550	22.3 34.4	2	37.083	826.3	1921 2264	250.8 55.2 195.6	585.1	0	1000	2000	800	88.5	0.0	39.5	10 U
11 H		590		11.8		Edger Web Flange	189.0 134.2 160.9	160.9 11.8 37.2	7563.8 1583.6 5980.2	3.8	1.03	562	35.0	1	17.428	610.8	1111	38.1	139.7	0	1000	2000	800	28.6	0.0	41.1	11 H
12 U		850 550		10.2 15.10	15.10	Shape Web Flange	183.6 137.7 161.4	161.4 10.2 30.5	6329.4 1404.5 4924.9	16.3	1.23	850 550	27.7 42.8	2	27.600	764.0	1699 2285	206.9 32.3 174.6	599.7	0	1000	2000	800	98.1	0.0	49.1	12 U
13 U		850 550		9.0 13.10	13.10	Shape Web Flange	182.3 140.2 161.6	161.6 9.0 26.5	5536.2 1261.8 4274.4	12.5	1.41	850 550	31.6 48.9	2	22.354	707.5	1110 2535	169.7 28.3 141.3	562.3	0	1000	2000	800	99.4	0.0	56.1	13 U
14 H		590		16.8		Edger Web Flange	182.2 140.2 157.6	157.6 9.0 26.8	5484.7 1261.8 4222.9	0.9	1.42	449	60.5	1	9.470	572.5	142	4.3	27.5	0	1000	2000	800	6.0	0.0	56.7	14 H
15 U		850 550		8.2 11.40	11.70	Beam Web Flange	165.7 141.7 156.1	156.1 8.2 23.8	4873.8 1161.9 3711.9	11.1	1.60	850 550	36.0 55.6	2	19.250	692.0	572 2616	160.1 11.8 148.3	602.7	0	1000	2000	800	108.9	0.0	63.8	15 U
5087.9																					TOTAL POWER						

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2378	60.0	39.9	102.8

ROLLING SETUP FOR BEAM W8x18

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH	STAND n.	
		mm	mm	mm	mm		WIDTH	HEIGHT	mm²	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	Min.	Base	Max.	POWER	%	m		
							mm	mm												r.p.m.	r.p.m.	r.p.m.	kW				
						Billet	152.0	233.0	35385.1		0.22													0.0	9.0		
1 H		750		30.0		SHAPE	169.0	213.0	31120.3	12.1	0.25	596	8.0		118.730	950.8	1149	189.0	158.5	0	1000	2000	450	37.0	0.0	10.0	1 H
2 V		750		30.0		EDGER	160.0	213.0	28984.8	6.9	0.27	644	8.0		85.673	681.6	880	89.2	74.4	0	1000	2000	450	24.2	0.0	10.7	2 V
3 H		750		25.0		SHAPE	184.8	194.0	26575.6	8.3	0.29	631	8.9		118.730	1051.0	1266	214.2	198.5	0	1000	2000	450	44.1	0.0	11.7	3 H
4 H		660		25.0		Shape Web Flange	209.4 76.1 180.0	180.0 60.0 115.5	25362.0 4566.0 20796.0	4.6	0.31	564	10.4		74.409	772.6	1089	122.2	132.9	0	1000	2000	450	38.2	0.0	68.1	4 H
5 U		830 550		42.0 36.5	46.2	Shape Web Flange	204.1 96.7 172.0	172.0 42.0 99.6	21191.6 4061.4 17130.2	16.4	0.37	830 550	8.4 12.7		87.594	739.5	1923 999	318.7 152.8 165.9	281.8	0	1000	2000	800	47.6	0.0	76.5	5 U
6 H		660		12.0		Leader Web Flange	231.5 117.0 151.9	151.9 30.0 99.0	18555.6 3510.0 15045.6	12.4	0.42	592	13.5		68.825	930.6	2144	211.0	298.7	0	1000	2000	450	71.3	0.0	16.8	6 H
7 U		850 550		22.1 22.80	33.70	Shape Web Flange	213.5 131.0 153.1	153.1 22.1 71.4	13821.0 2895.1 10925.9	25.5	0.56	850 550	12.6 19.5	2	73.990	935.2	2607 1759	425.3 131.4 293.8	562.9	0	1000	2000	800	75.2	0.0	22.5	7 U
8 U		850 550		16.6 17.30	24.60	Shape Web Flange	219.4 144.0 158.0	158.0 16.6 51.3	10494.1 2390.4 8103.7	24.1	0.74	850 550	16.6 25.7	2	58.768	978.3	2670 1900	382.5 112.6 269.9	666.8	0	1000	2000	800	85.2	0.0	29.6	8 U
9 U		850 550		12.9 14.40	18.50	Shape Web Flange	219.7 161.0 158.7	158.7 12.9 38.4	8169.0 2076.9 6092.1	22.2	0.95	850 550	21.4 33.1	2	49.768	1064.3	2399 1850	307.0 90.3 216.7	687.5	0	1000	2000	800	85.9	0.0	38.1	9 U
10 U		850 550		10.2 12.60	14.30	Shape Web Flange	218.8 172.0 159.4	159.4 10.2 29.5	6458.7 1754.4 4704.3	20.9	1.20	850 550	27.0 41.8	2	37.083	1003.0	2436 1909	255.0 70.5 184.5	722.3	0	1000	2000	800	90.3	0.0	48.1	10 U
11 H		590		9.3		Edger Web Flange	238.1 177.3 142.4	142.4 9.3 31.6	6149.6 1648.9 4500.7	4.8	1.26	573	42.1	1	17.428	733.8	986	46.4	204.7	0	1000	2000	800	34.9	0.0	50.5	11 H
12 U		850 550		7.8 11.90	11.90	Shape Web Flange	225.1 187.3 142.3	142.3 7.8 24.5	4941.3 1460.9 3480.4	19.6	1.57	850 550	35.4 54.6	2	27.600	975.8	1843 1850	189.3 37.3 152.0	700.8	0	1000	2000	800	89.8	0.0	62.9	12 U
13 U		850 550		6.7 9.90	9.90	Shape Web Flange	225.3 191.3 142.8	142.8 6.7 20.3	4186.1 1281.7 2904.4	15.3	1.86	850 550	41.7 64.5	2	22.354	932.9	1584 1708	139.7 30.6 109.2	610.7	0	1000	2000	800	81.8	0.0	74.3	13 U
14 H		590		14.2		Edger Web Flange	225.1 191.3 135.8	135.8 6.7 20.9	4117.9 1281.7 2836.2	1.6	1.89	468	77.0	1	9.470	729.1	187	9.6	77.1	0	1000	2000	800	13.2	0.0	75.5	14 H
15 U		850 550		5.9 7.90	8.50	Beam Web Flange	210.9 193.3 134.9	134.9 5.9 17.6	3521.2 1140.5 2380.7	14.5	2.21	850 550	49.6 76.7	2	19.250	955.0	838 2105	146.9 15.5 131.5	763.3	0	1000	2000	800	99.9	0.0	88.3	15 U
6140.8																			TOTAL POWER								

## ROLLING SETUP FOR BEAM W8x21

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR	STAND n.	
		DIA.	GAP	GAP	THICKNESS	TYPE	WIDTH	HEIGHT				DIA.	RPM	POS.	RATIO	RPM	LOAD	TORQUE	POWER	Min.	Base	Max.	POWER	UTILIZ.	LENGTH		
		mm	mm	mm	mm		mm	mm	mm²	%	m/s	mm	r.p.m.			r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	152.0	233.0	35385.1		0.22												0.0	9.0			
1 H		750		30.0		SHAPE	169.0	213.0	30869.8	12.8	0.25	597	8.0		118.730	955.7	1168	195.3	164.6	0	1000	2000	450	38.3	0.0	10.1	1 H
2 V		750		30.0		EDGER	160.0	213.0	28650.9	7.2	0.27	645	8.0		85.673	687.6	898	93.0	78.1	0	1000	2000	450	25.2	0.0	10.8	2 V
3 H		750		25.0		SHAPE	186.7	194.0	26772.2	6.6	0.29	632	8.8		118.730	1042.1	1245	205.8	189.2	0	1000	2000	450	42.0	0.0	11.6	3 H
4 H		660		25.0		Shape Web Flange	211.0 56.2 180.0	180.0 60.0 122.6	25441.0 3372.0 22069.0	5.0	0.31	564	10.3		74.409	769.1	1103	124.2	134.4	0	1000	2000	450	38.8	0.0	92.2	4 H
5 U		830 550		42.0 36.5	46.2	Shape Web Flange	199.1 96.7 178.8	178.8 42.0 95.4	21117.5 4061.4 17056.1	17.0	0.37	830 550	8.5 12.8		87.594	741.7	1702 1331	424.0 135.2 288.7	375.9	0	1000	2000	800	63.4	0.0	76.5	5 U
6 H		660		11.0		Leader Web Flange	231.5 117.0 150.9	150.9 29.0 97.4	18092.0 3393.0 14699.0	14.3	0.43	593	13.8		68.825	952.4	2304	246.3	356.9	0	1000	2000	450	83.3	0.0	17.2	6 H
7 U		850 550		22.2 27.50	37.60	Shape Web Flange	223.0 133.0 150.6	150.6 22.2 79.2	14879.5 2952.6 11926.9	17.8	0.52	850 550	11.7 18.1	2	73.990	868.3	2438 1411	305.1 114.0 191.1	375.0	0	1000	2000	800	54.0	0.0	20.9	7 U
8 U		850 550		17.1 20.70	28.10	Shape Web Flange	226.0 144.0 156.2	156.2 17.1 58.1	11544.3 2462.4 9081.9	22.4	0.67	850 550	15.1 23.4	2	58.768	888.9	2590 1919	384.3 105.2 279.2	608.7	0	1000	2000	800	85.6	0.0	26.9	8 U
9 U		850 550		13.5 17.40	21.50	Shape Web Flange	224.3 160.0 156.8	156.8 13.5 44.3	9104.9 2160.0 6944.9	21.1	0.85	850 550	19.2 29.6	2	49.768	954.4	2359 1895	317.5 87.5 230.0	637.6	0	1000	2000	800	83.5	0.0	34.1	9 U
10 U		850 550		11.0 15.30	17.00	Shape Web Flange	222.8 171.0 157.5	157.5 11.0 34.8	7367.7 1881.0 5486.7	19.1	1.05	850 550	23.7 36.6	2	37.083	878.9	2330 1947	259.1 64.9 194.2	643.0	0	1000	2000	800	91.5	0.0	42.2	10 U
11 H		590		10.0		Edger Web Flange	243.4 177.3 143.1	143.1 10.0 37.0	7060.9 1773.0 5287.9	4.2	1.10	571	36.8	1	17.428	641.6	1053	51.9	200.0	0	1000	2000	800	39.0	0.0	44.0	11 H
12 U		850 550		8.4 14.10	14.10	Shape Web Flange	229.4 187.3 142.3	142.3 8.4 28.8	5670.7 1573.3 4097.4	19.7	1.37	850 550	30.8 47.6	2	27.600	849.9	1903 1981	213.7 39.7 174.0	689.1	0	1000	2000	800	101.4	0.0	54.8	12 U
13 U		850 550		7.3 11.90	11.90	Shape Web Flange	229.2 191.3 142.8	142.8 7.3 24.3	4865.5 1396.5 3469.0	14.2	1.60	850 550	35.9 55.5	2	22.354	802.2	1584 1785	149.9 30.6 119.3	563.2	0	1000	2000	800	87.8	0.0	63.9	13 U
14 H		590		14.8		Edger Web Flange	229.1 191.3 136.7	136.7 7.3 24.9	4794.3 1396.5 3397.8	1.5	1.62	468	66.1	1	9.470	626.3	209	10.0	69.1	0	1000	2000	800	13.8	0.0	64.8	14 H
15 U		850 550		6.5 9.70	10.30	Beam Web Flange	214.5 193.3 135.4	135.4 6.5 21.2	4133.5 1266.5 2877.1	13.8	1.88	850 550	42.2 65.3	2	19.250	813.2	838 2234	162.7 15.5 147.3	719.8	0	1000	2000	800	110.6	0.0	75.2	15 U
5804.5																			TOTAL POWER								

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2378	60.0	40.0	102.7

ROLLING SETUP FOR BEAM S4x7.7 FROM BILLET 150

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.		
		mm	mm	mm	mm			WIDTH	HEIGHT	mm²	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	Min.	Base	Max.	POWER	%	m			
								mm	mm												r.p.m.	r.p.m.	r.p.m.	kW					
						Billet	152.0	152.0	23073.1		0.23													0.0	12.0				
1 H		750		25.0		BOX	158.0	129.0	20540.0	11.0	0.26	645	7.6		118.730	904.9	747.6	65.3	52.1	0	1000	2000	450	12.8	0.0	13.1	1 H		
2 V		750				DUMMY									85.673	0.0				0	1000	2000	450				2 V		
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	12.8	0.30	672	8.4		118.730	996.2	1667	208.8	183.5	0	1000	2000	450	40.9	0.0	15.1	3 H		
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.33	572	11.0		74.409	818.3	749	86.1	99.1	0	1000	2000	450	26.9	0.0	16.8	4 V		
5 H		660		9.0		SHAPE	178.5	93.6	12692.0	21.0	0.42	598	13.3		87.594	1165.5	1876	195.8	272.7	0	1000	2000	800	34.1	0.0	21.3	5 H		
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.43	586	14.0		68.825	963.7	331	24.6	36.0	0	1000	2000	450	8.3	0.0	22.0	6 V		
7 H		660		6.0		Leader Web Flange	179.4 79.0 78.2	78.2 31.0 94.6	9849.6 2449.0 7400.6	19.9	0.54	611	16.8	1	55.247	926.8	2115	170.1	298.8	0	1000	2000	800	40.3	0.0	27.4	7 H		
8 U		850 550		20.2 24.80	30.60	Shape Web Flange	148.6 80.5 79.6	79.6 20.2 64.5	6762.6 1626.1 5136.5	31.3	0.78	850 550	17.6 27.1	2	58.768	1032.3	1938 953	264.0 93.0 171.0	485.6	0	1000	2000	800	60.7	0.0	39.9	8 U		
9 U		850 550		14.0 15.10	20.60	Shape Web Flange	129.8 82.0 81.8	81.8 14.0 43.6	4716.2 1148.0 3568.2	30.3	1.12	850 550	25.2 38.9	2	49.768	1253.5	1937 1054	219.8 68.0 151.8	579.7	0	1000	2000	800	72.5	0.0	57.2	9 U		
10 U		850 550		10.1 9.20	14.40	Shape Web Flange	118.4 83.5 83.1	83.1 10.1 30.5	3381.3 843.4 2538.0	28.3	1.56	850 550	35.1 54.3	2	37.083	1302.7	1795 1104	170.3 52.8 117.5	626.5	0	1000	2000	800	78.3	0.0	79.8	10 U		
11 H		590		9.2		Edger Web Flange	122.5 84.6 69.2	69.2 9.2 34.1	3135.3 778.3 2357.0	7.3	1.69	574	56.1	1	17.428	978.5	634	42.5	249.9	0	1000	2000	800	31.9	0.0	86.1	11 H		
12 U		850 550		7.1 6.30	11.30	Shape Web Flange	112.5 84.6 70.5	70.5 7.1 24.0	2289.3 600.7 1688.6	27.0	2.31	850 550	51.9 80.2	2	27.600	1432.1	1553 933	124.8 34.2 90.6	678.3	0	1000	2000	800	84.8	0.0	117.9	12 U		
13 U		850 550		5.7 3.60	8.80	Shape Web Flange	107.7 84.6 71.3	71.3 5.7 18.7	1815.1 482.2 1332.9	20.7	2.91	850 550	65.4 101.1	2	22.354	1462.9	1252 792	75.5 24.4 51.2	517.6	0	1000	2000	800	64.7	0.0	148.7	13 U		
14 H		590		10.6		Edger Web Flange	108.6 84.6 67.8	67.8 5.7 19.3	1791.9 482.2 1309.7	1.3	2.95	533	105.8	1	9.470	1001.5	120	5.6	62.3	0	1000	2000	800	7.8	0.0	150.6	14 H		
15 U		850 550		4.9 3.20	7.50	Beam Web Flange	104.9 84.6 68.3	68.3 4.9 15.9	1501.9 414.5 1087.4	16.2	3.52	850 550	79.1 122.2	2	19.250	1522.5	710 744	51.2 15.6 35.6	424.0	0	1000	2000	800	53.0	0.0	179.7	15 U		
4566.2 TOTAL POWER																													

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
9.0	2065	60.0	51.1	72.8

ROLLING SETUP FOR BEAM S4x9.5 FROM BILLET 150

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
							WIDTH	HEIGHT						POS.	RATIO					Min.	Base	Max.	POWER				
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.			r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m	
						Billet	152.0	152.0	23073.1		0.28													0.0	12.0		
1 H		750		25.0		BOX	158.0	129.0	20540.0	11.0	0.32	645	9.3		118.730	1107.5	748	65.3	63.8	0	1000	2000	450	14.2	0.0	13.1	1 H
2 V		750				DUMMY									85.673	0.0				0	1000	2000	450				2 V
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	12.8	0.36	672	10.3		118.730	1219.3	1667	208.8	224.6	0	1000	2000	450	49.9	0.0	15.1	3 H
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.40	572	13.5		74.409	1001.5	749	86.1	121.3	0	1000	2000	450	27.0	0.0	16.8	4 V
5 H		660		9.0		SHAPE	178.1	93.6	12692.0	21.0	0.51	598	16.3		87.594	1426.9	1868	194.5	331.7	0	1000	2000	800	41.5	0.0	21.3	5 H
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.53	586	17.1		68.825	1179.5	331	24.6	44.1	0	1000	2000	450	9.8	0.0	22.0	6 V
7 H		660		11.5		Leader Web Flange	176.9 79.0 83.7	83.7 36.5 94.4	10783.7 2883.5 7900.2	12.3	0.60	611	18.8	1	55.247	1037.0	1736	115.4	226.8	0	1000	2000	800	28.4	0.0	25.0	7 H
8 U		850 550		25.3 21.20	26.80	Shape Web Flange	141.3 80.5 87.7	87.7 25.3 57.1	7046.1 2036.7 5009.5	34.7	0.92	850 550	20.6 31.9	2	58.768	1212.6	1974 1151	326.4 96.5 229.9	705.2	0	1000	2000	800	88.1	0.0	38.3	8 U
9 U		850 550		18.6 11.80	17.00	Shape Web Flange	123.1 82.0 91.6	91.6 18.6 36.6	4877.4 1525.2 3352.2	30.8	1.33	850 550	29.8 46.1	2	49.768	1483.5	2014 1161	239.0 73.5 165.6	746.1	0	1000	2000	800	93.3	0.0	55.3	9 U
10 U		850 550		14.3 6.90	11.80	Shape Web Flange	113.8 83.5 94.3	94.3 14.3 25.5	3598.2 1194.1 2404.2	26.2	1.80	850 550	40.4 62.4	2	37.083	1498.4	1885 1147	170.6 58.2 112.5	722.0	0	1000	2000	800	90.2	0.0	75.0	10 U
11 H		590		13.0		Edger Web Flange	118.3 84.6 73.0	73.0 13.0 30.0	3291.6 1099.8 2191.8	8.5	1.97	575	65.3	1	17.428	1137.6	692	52.6	359.3	0	1000	2000	800	44.9	0.0	82.0	11 H
12 U		850 550		10.8 5.10	10.10	Shape Web Flange	110.1 84.6 74.6	74.6 10.8 21.7	2535.9 913.7 1622.2	23.0	2.55	850 550	57.3 88.6	2	27.600	1582.4	1589 892	114.3 35.8 78.4	686.0	0	1000	2000	800	85.8	0.0	106.4	12 U
13 U		850 550		9.4 3.20	8.40	Shape Web Flange	107.0 84.6 75.8	75.8 9.4 18.1	2167.6 795.2 1372.4	14.5	2.99	850 550	67.1 103.7	2	22.354	1499.3	1252 699	61.9 24.4 37.6	435.0	0	1000	2000	800	54.4	0.0	124.5	13 U
14 H		590		14.2		Edger Web Flange	107.9 84.6 71.4	71.4 9.4 18.9	2143.3 795.2 1348.1	1.1	3.02	533	108.2	1	9.470	1024.8	122	5.9	66.8	0	1000	2000	800	8.4	0.0	125.9	14 H
15 U		850 550		8.4 3.20	7.50	Beam Web Flange	104.9 84.6 71.8	71.8 8.4 16.1	1869.1 710.6 1158.5	12.8	3.46	850 550	77.8 120.2	2	19.250	1497.4	793 704	49.8 19.5 30.3	405.5	0	1000	2000	800	50.7	0.0	144.4	15 U
5138.3																				TOTAL POWER							

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
12.0	2065	72.0	41.7	61.5

ROLLING SETUP FOR BEAM S5x10 FROM BILLET 150

STAND n.	GROOVE n.	ROLL	EMPTY	ACTIVE	AVERAGE	GROOVE	STOCK DIMENSION		AREA	RED.	SPEED	WORK	ROLLS	GEAR		MOTOR	ROLLING	ROLLING	ROLLING	MOTOR DATA				MOTOR	BAR		STAND n.
		DIA.	GAP	GAP	THICKNESS	TYPE	WIDTH	HEIGHT				DIA.	RPM	POS.	RATIO	RPM	LOAD	TORQUE	POWER	Min.	Base	Max.	POWER	UTILIZ.	LENGTH		
		mm	mm	mm	mm		mm	mm	mm²	%	m/s	mm	r.p.m.			r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	152.0	152.0	23073.1		0.28													0.0	12.0		
1 H		750		25.0		BOX	158.0	129.0	20540.0	11.0	0.32	645	9.3		118.730	1107.5	748	65.3	63.8	0	1000	2000	450	14.2	0.0	13.1	1 H
2 V		750				DUMMY									85.673	0.0				0	1000	2000	450				2 V
3 H		750		13.5		SHAPE	196.0	116.1	17903.0	12.8	0.36	672	10.3		118.730	1219.3	1667	208.8	224.6	0	1000	2000	450	49.9	0.0	15.1	3 H
4 V		660		44.0		EDGER	156.0	121.4	16059.7	10.3	0.40	572	13.5		74.409	1001.5	749	86.1	121.3	0	1000	2000	450	27.0	0.0	16.8	4 V
5 H		660		9.0		SHAPE	178.1	93.6	12692.0	21.0	0.51	598	16.3		87.594	1426.9	1868	194.5	331.7	0	1000	2000	800	41.5	0.0	21.3	5 H
6 V		660		54.0		EDGER	166.0	96.4	12295.6	3.1	0.53	586	17.1		68.825	1179.5	331	24.6	44.1	0	1000	2000	450	9.8	0.0	22.0	6 V
7 H		660		7.0		Leader Web Flange	176.9 79.0 79.2	79.2 32.0 94.2	9987.6 2528.0 7459.6	18.8	0.65	611	20.3	1	55.247	1119.6	2042	165.1	350.4	0	1000	2000	800	43.8	0.0	27.0	7 H
8 U		850 550		20.7 26.00	32.10	Shape Web Flange	155.0 84.0 79.7	79.7 20.7 67.6	7123.0 1738.8 5384.2	28.7	0.91	850 550	20.4 31.5	2	58.768	1199.5	2073 883	260.1 102.8 157.4	556.0	0	1000	2000	800	69.5	0.0	37.9	8 U
9 U		850 550		14.5 16.10	21.80	Shape Web Flange	143.2 93.0 81.9	81.9 14.5 46.1	5120.1 1348.5 3771.6	28.1	1.26	850 550	28.4 43.9	2	49.768	1413.2	2009 1086	233.1 74.9 158.1	693.0	0	1000	2000	800	86.6	0.0	52.7	9 U
10 U		850 550		10.8 10.80	15.80	Shape Web Flange	139.7 102.0 83.4	83.4 10.8 33.4	3885.6 1101.6 2784.0	24.1	1.67	850 550	37.4 57.8	2	37.083	1387.5	1707 1078	173.7 59.2 114.5	680.5	0	1000	2000	800	85.1	0.0	69.5	10 U
11 H		590		9.8		Edger Web Flange	146.6 107.7 79.6	79.6 9.8 34.1	3768.4 1055.5 2712.9	3.0	1.72	574	57.1	1	17.428	995.5	557	30.7	183.5	0	1000	2000	800	23.0	0.0	71.6	11 H
12 U		850 550		7.7 7.50	12.30	Shape Web Flange	138.4 107.7 80.7	80.7 7.7 25.9	2919.2 829.3 2089.9	22.5	2.22	850 550	49.8 77.0	2	27.600	1374.6	1618 939	121.2 41.3 79.9	632.0	0	1000	2000	800	79.0	0.0	92.5	12 U
13 U		850 550		6.3 4.80	9.80	Shape Web Flange	133.6 107.7 81.5	81.5 6.3 20.7	2362.2 678.5 1683.7	19.1	2.74	850 550	61.5 95.1	2	22.354	1375.8	1272 830	80.9 28.1 52.8	521.2	0	1000	2000	800	65.2	0.0	114.3	13 U
14 H		590		11.2		Edger Web Flange	134.7 107.7 76.6	76.6 6.3 21.5	2329.2 678.5 1650.7	1.4	2.78	525	101.1	1	9.470	957.8	138	6.5	68.4	0	1000	2000	800	8.9	0.0	115.9	14 H
15 U		850 550		5.4 3.80	8.40	Beam Web Flange	130.5 107.7 77.1	77.1 5.4 17.7	1946.1 581.6 1364.5	16.4	3.32	850 550	74.7 115.5	2	19.250	1438.1	859 877	64.7 21.3 43.4	506.1	0	1000	2000	800	63.3	0.0	138.7	15 U
																			4976.4	TOTAL POWER							

BILLET		THEORETICAL PRODUCTION			
LENGTH	WEIGHT	Ton/h	ROLLING TIME		INTERBILLET
12.0	2065	60.0	41.7		82.2

ROLLING SETUP FOR BEAM S6x12.5 FROM BILLET 150

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m		
						Billet	152.0	152.0	23073.1		0.28												0.0	12.0			
1 H		750		15.0		SHAPE	175.8	133.5	19136.0	17.1	0.34	656	9.8		118.730	1168.6	1265	171.6	176.8	0	1000	2000	450	39.3	0.0	14.1	1 H
2 V		750		40.0		EDGER	152.3	139.2	18659.0	2.5	0.35	656	10.1		85.673	865.0	307	24.0	25.4	0	1000	2000	450	6.5	0.0	14.5	2 V
3 H		750		15.0		SHAPE	188.9	110.8	15293.0	18.0	0.42	684	11.8		118.730	1402.6	1699	208.0	257.3	0	1000	2000	450	57.2	0.0	17.7	3 H
4 V		660		50.0		EDGER	164.2	113.9	14744.0	3.6	0.44	581	14.4		74.409	1074.3	362	31.2	47.2	0	1000	2000	450	10.5	0.0	18.3	4 V
5 H		660		15.0		SHAPE	187.9	104.2	13138.0	10.9	0.49	605	15.5		87.594	1361.7	1344	114.0	185.6	0	1000	2000	800	23.2	0.0	20.5	5 H
6 H		660		8.0		Leader	200.9	89.1	10948.5	16.7	0.59	614	18.4		68.825	1266.3	1807	127.7	246.1	0	1000	2000	450	54.7	0.0	24.7	6 H
						Web Flange	100.0 89.1	28.0 91.5	2800.0 8148.5																		
7 U		850 550		20.0 24.00	31.50	Shape	178.0	89.4	8205.2	25.1	0.79	850 550	17.7 27.4	2	73.990	1311.0	2128 848	243.6 105.0 138.6	452.0	0	1000	2000	800	56.5	0.0	32.9	7 U
						Web Flange	107.0 89.4	20.0 67.8	2140.0 6065.2																		
8 U		850 550		15.0 16.60	23.00	Shape	168.3	91.4	6249.2	23.8	1.04	850 550	23.3 36.0	2	58.768	1367.2	1925 917	195.4 71.6 123.8	476.0	0	1000	2000	800	59.5	0.0	43.2	8 U
						Web Flange	114.5 91.4	15.0 49.6	1717.5 4531.7																		
9 U		850 550		11.9 10.90	17.70	Shape	163.9	92.7	4970.0	20.5	1.30	850 550	29.3 45.2	2	49.768	1455.9	1582 921	149.2 51.1 98.2	457.1	0	1000	2000	800	57.1	0.0	54.3	9 U
						Web Flange	121.0 92.7	11.9 38.1	1439.9 3530.1																		
10 U		850 550		9.8 7.70	14.20	Shape	162.4	93.8	4098.6	17.5	1.58	850 550	35.5 54.8	2	37.083	1315.4	1349 907	116.6 35.5 81.1	433.0	0	1000	2000	800	54.1	0.0	65.9	10 U
						Web Flange	127.0 93.8	9.8 30.4	1244.6 2854.0																		
11 H		590		8.9		Edger	166.7	87.8	3935.9	4.0	1.64	575	54.6	1	17.428	951.2	675	27.0	154.3	0	1000	2000	800	20.3	0.0	68.6	11 H
						Web Flange	130.5 87.8	8.9 31.6	1161.5 2774.5																		
12 U		850 550		7.6 7.00	12.10	Shape	161.5	88.6	3277.5	16.7	1.97	850 550	44.4 68.6	2	27.600	1224.3	1146 839	84.8 19.7 65.1	393.7	0	1000	2000	800	49.2	0.0	82.4	12 U
						Web Flange	130.5 88.6	7.6 25.8	991.8 2285.7																		
13 U		850 550		6.7 5.30	10.30	Shape	158.0	89.3	2830.0	13.7	2.29	850 550	51.4 79.4	2	22.354	1148.4	927 762	62.2 13.1 49.0	334.3	0	1000	2000	800	41.8	0.0	95.4	13 U
						Web Flange	130.5 89.3	6.7 21.9	874.4 1955.7																		
14 H		590		12.7		Edger	159.1	85.0	2804.8	0.9	2.31	518	85.1	1	9.470	806.0	133	5.0	44.6	0	1000	2000	800	6.9	0.0	96.2	14 H
						Web Flange	130.5 85.0	6.7 22.7	874.4 1930.5																		
15 U		850 550		6.0 4.00	9.20	Beam	155.6	85.5	2453.7	12.5	2.64	850 550	59.3 91.6	2	19.250	1140.6	1105 1333	85.8 21.7 64.1	532.3	0	1000	2000	800	66.5	0.0	110.0	15 U
						Web Flange	130.5 85.5	6.0 19.5	783.0 1670.7																		
4215.7 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
12.0	2065	80.0	41.7	51.2



ROLLING SETUP FOR BEAM S6x17.2 FROM BILLET 150

STAND n.	GROOVE n.	ROLL DIA.	EMPTY GAP	ACTIVE GAP	AVERAGE THICKNESS	GROOVE TYPE	STOCK DIMENSION		AREA	RED.	SPEED	WORK DIA.	ROLLS RPM	GEAR		MOTOR RPM	ROLLING LOAD	ROLLING TORQUE	ROLLING POWER	MOTOR DATA				MOTOR UTILIZ.	BAR LENGTH		STAND n.
		mm	mm	mm	mm		mm	mm	mm	mm <sup>2</sup>	%	m/s	mm	r.p.m.	POS.	RATIO	r.p.m.	kN	kNm	kW	r.p.m.	r.p.m.	r.p.m.	kW	%	m	
						Billet	152.0	152.0	23073.1		0.34												0.0	12.0			
1 H		750		15.0		SHAPE	175.8	133.5	19136.0	17.1	0.41	656	11.8		118.730	1402.0	1265	171.6	212.2	0	1000	2000	450	47.1	0.0	14.1	1 H
2 V		750		40.0		EDGER	152.3	139.2	18659.0	2.5	0.42	656	12.1		85.673	1037.9	307	24.0	30.5	0	1000	2000	450	6.8	0.0	14.5	2 V
3 H		750		15.0		SHAPE	188.9	110.8	15293.0	18.0	0.51	684	14.2		118.730	1682.8	1699	208.0	308.7	0	1000	2000	450	68.6	0.0	17.7	3 H
4 V		660		50.0		EDGER	164.2	113.9	14744.0	3.6	0.53	581	17.3		74.409	1288.9	362	31.2	56.6	0	1000	2000	450	12.6	0.0	18.3	4 V
5 H		660		15.0		SHAPE	187.9	104.2	13138.0	10.9	0.59	605	18.7		87.594	1633.8	1344	114.0	222.6	0	1000	2000	800	27.8	0.0	20.5	5 H
6 H		660		12.0		Leader	199.0	93.1	11718.0	10.8	0.66	613	20.6		68.825	1420.4	1276	87.2	188.4	0	1000	2000	450	41.9	0.0	23.0	6 H
			Web		100.0	32.0	3200.0																				
7 U		850 550		28.0 21.10	28.50	Shape	172.0	98.2	9093.1	22.4	0.85	850 550	19.2 29.6	2	73.990	1419.4	1375 1032	232.4 51.4 181.0	466.8	0	1000	2000	800	58.3	0.0	29.7	7 U
			Web			107.0	28.0	2996.0																			
8 U		850 550		23.3 13.50	19.60	Shape	161.9	103.9	7143.0	21.4	1.09	850 550	24.4 37.7	2	58.768	1435.1	1372 1153	63.7 136.5	511.7	0	1000	2000	800	64.0	0.0	37.8	8 U
			Web			114.5	23.3	2667.9																			
9 U		850 550		19.9 8.70	15.20	Shape	159.5	107.1	5984.0	16.2	1.30	850 550	29.2 45.1	2	49.768	1450.8	1158 1003	49.9 84.4	409.8	0	1000	2000	800	51.2	0.0	45.1	9 U
			Web			121.0	19.9	2407.9																			
10 U		850 550		17.3 5.90	12.00	Shape	158.8	110.5	5105.2	14.7	1.52	850 550	34.2 52.8	2	37.083	1267.1	984 1151	40.2 80.0	430.3	0	1000	2000	800	53.8	0.0	52.9	10 U
			Web			127.0	17.3	2197.1																			
11 H		590		15.7		Edger	163.8	94.5	4793.4	6.1	1.62	576	53.7	1	17.428	935.2	728	29.1	163.4	0	1000	2000	800	21.8	0.0	56.3	11 H
			Web		130.5	15.7	2048.9																				
12 U		850 550		13.9 5.90	11.00	Shape	159.3	95.5	4099.9	14.5	1.89	850 550	42.5 65.8	2	27.600	1174.3	884 789	21.5 48.7	312.8	0	1000	2000	800	39.1	0.0	65.8	12 U
			Web			130.5	13.9	1814.0																			
13 U		850 550		12.6 4.70	9.70	Shape	156.9	96.6	3676.6	10.3	2.11	850 550	47.4 73.3	2	22.354	1060.6	763 696	17.1 35.5	260.9	0	1000	2000	800	32.6	0.0	73.4	13 U
			Web			130.5	12.6	1644.3																			
14 H		590		18.9		Edger	158.1	91.2	3652.4	0.7	2.13	518	78.4	1	9.470	742.6	129	5.7	46.5	0	1000	2000	800	7.8	0.0	73.9	14 H
			Web		130.5	12.6	1644.3																				
15 U		850 550		11.9 4.00	9.20	Beam	155.6	91.6	3375.4	7.6	2.30	850 550	51.7 79.9	2	19.250	994.8	453 757	5.8 36.5	228.8	0	1000	2000	800	28.8	0.0	80.0	15 U
			Web			130.5	11.9	1553.0																			
3849.9 TOTAL POWER																											

BILLET		THEORETICAL PRODUCTION		
LENGTH	WEIGHT	Ton/h	ROLLING TIME	INTERBILLET
12.0	2065	60.0	34.8	89.1































