

Las Lomas Ltda.
Primera Siderúrgica Boliviana
Telf.: 3593500
Santa Cruz - Bolivia

Nº 2123154444 Versión: 0001 Fecha:02/17/2021

		Da	atos maca	nicos				,				%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512121	1.613	47.5	47.5	0	13.43	Ok											
84512122	2.613	48.5	48.5	1	14.43	Ok											
84512123	3.613	49.5	49.5	2	15.43	Ok											
84512124	4.613	50.5	50.5	3	16.43	Ok											
84512125	5.613	51.5	51.5	4	17.43	Ok											
84512126	6.613	52.5	52.5	5	18.43	Ok											
84512127	7.613	53.5	53.5	6	19.43	Ok											
84512128	8.613	54.5	54.5	7	20.43	Ok											
84512129	9.613	55.5	55.5	8	21.43	Ok											
84512130	10.613	56.5	56.5	9	22.43	Ok											
84512131	11.613	57.5	57.5	10	23.43	Ok											
84512132	12.613	58.5	58.5	11	24.43	Ok											
84512133	13.613	59.5	59.5	12	25.43	Ok											
84512134	14.613	60.5	60.5	13	26.43	Ok											
84512135	15.613	61.5	61.5	14	27.43	Ok											



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		Fy(MPa) Fs(MPa) Fs/Fy ALARG 62.5 62.5 15 28.43 63.5 63.5 16 29.43 64.5 64.5 17 30.43 65.5 65.5 18 31.43 66.5 66.5 19 32.43 67.5 67.5 20 33.43 68.5 68.5 21 34.43 69.5 69.5 22 35.43 70.5 70.5 23 36.43 71.5 71.5 24 37.43 72.5 72.5 25 38.43										%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512136	16.613	62.5	62.5	15	28.43	Ok											
84512137	17.613	63.5	63.5	16	29.43	Ok											
84512138	18.613	64.5	64.5	17	30.43	Ok											
84512139	19.613	65.5	65.5	18	31.43	Ok											
84512140	20.613	66.5	66.5	19	32.43	Ok											
84512141	21.613	67.5	67.5	20	33.43	Ok											
84512142	22.613	68.5	68.5	21	34.43	Ok											
84512143	23.613	69.5	69.5	22	35.43	Ok											
84512144	24.613	70.5	70.5	23	36.43	Ok											
84512145	25.613	71.5	71.5	24	37.43	Ok											
84512146	26.613	72.5	72.5	25	38.43	Ok											
84512147	27.613	73.5	73.5	26	39.43	Ok											
84512148	28.613	74.5	74.5	27	40.43	Ok											
84512149	29.613	75.5	75.5	28	41.43	Ok											
84512150	30.613	76.5	76.5	29	42.43	Ok											
84512151	31.613	77.5	77.5	30	43.43	Ok											\prod



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		Fy(MPa) Fs(MPa) Fs/Fy ALARGA 3 78.5 78.5 31 44.43 4 79.5 32 45.43 8 80.5 80.5 33 46.43 8 81.5 81.5 34 47.43 8 82.5 82.5 35 48.43 8 83.5 83.5 36 49.43 8 84.5 87.5 38 51.43 8 86.5 86.5 39 52.43 8 87.5 40 53.43										%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512152	32.613	78.5	78.5	31	44.43	Ok											
84512153	33.613	79.5	79.5	32	45.43	Ok											
84512154	34.613	80.5	80.5	33	46.43	Ok											
84512155	35.613	81.5	81.5	34	47.43	Ok											
84512156	36.613	82.5	82.5	35	48.43	Ok											
84512157	37.613	83.5	83.5	36	49.43	Ok											
84512158	38.613	84.5	84.5	37	50.43	Ok											
84512159	39.613	85.5	85.5	38	51.43	Ok											
84512160	40.613	86.5	86.5	39	52.43	Ok											
84512161	41.613	87.5	87.5	40	53.43	Ok											
84512162	42.613	88.5	88.5	41	54.43	Ok											
84512163	43.613	89.5	89.5	42	55.43	Ok											
84512164	44.613	90.5	90.5	43	56.43	Ok											
84512165	45.613	91.5	91.5	44	57.43	Ok											
84512166	46.613	92.5	92.5	45	58.43	Ok											
84512167	47.613	93.5	93.5	46	59.43	Ok											



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		Da	atos maca	nicos					,			%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512168	48.613	94.5	94.5	47	60.43	Ok											
84512169	49.613	95.5	95.5	48	61.43	Ok											
84512170	50.613	96.5	96.5	49	62.43	Ok											
84512171	51.613	97.5	97.5	50	63.43	Ok											
84512172	52.613	98.5	98.5	51	64.43	Ok											
84512173	53.613	99.5	99.5	52	65.43	Ok											
84512174	54.613	100.5	100.5	53	66.43	Ok											
84512175	55.613	101.5	101.5	54	67.43	Ok											
84512176	56.613	102.5	102.5	55	68.43	Ok											
84512177	57.613	103.5	103.5	56	69.43	Ok											
84512178	58.613	104.5	104.5	57	70.43	Ok											
84512179	59.613	105.5	105.5	58	71.43	Ok											
84512180	60.613	106.5	106.5	59	72.43	Ok											
84512181	61.613	107.5	107.5	60	73.43	Ok											
84512182	62.613	108.5	108.5	61	74.43	Ok											
84512183	63.613	109.5	109.5	62	75.43	Ok											



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		Da	atos maca	nicos								%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512184	64.613	110.5	110.5	63	76.43	Ok											
84512185	65.613	111.5	111.5	64	77.43	Ok											
84512186	66.613	112.5	112.5	65	78.43	Ok											
84512187	67.613	113.5	113.5	66	79.43	Ok											
84512121	1.613	47.5	47.5	0	13.43	Ok											
84512122	2.613	48.5	48.5	1	14.43	Ok											
84512123	3.613	49.5	49.5	2	15.43	Ok											
84512124	4.613	50.5	50.5	3	16.43	Ok											
84512125	5.613	51.5	51.5	4	17.43	Ok											
84512126	6.613	52.5	52.5	5	18.43	Ok											
84512127	7.613	53.5	53.5	6	19.43	Ok											
84512128	8.613	54.5	54.5	7	20.43	Ok											
84512129	9.613	55.5	55.5	8	21.43	Ok											
84512130	10.613	56.5	56.5	9	22.43	Ok											
84512131	11.613	57.5	57.5	10	23.43	Ok											
84512132	12.613	58.5	58.5	11	24.43	Ok											



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		Da	atos maca	nicos								%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512133	13.613	59.5	59.5	12	25.43	Ok											
84512134	14.613	60.5	60.5	13	26.43	Ok											
84512135	15.613	61.5	61.5	14	27.43	Ok											
84512136	16.613	62.5	62.5	15	28.43	Ok											
84512137	17.613	63.5	63.5	16	29.43	Ok											
84512138	18.613	64.5	64.5	17	30.43	Ok											
84512139	19.613	65.5	65.5	18	31.43	Ok											
84512140	20.613	66.5	66.5	19	32.43	Ok											
84512141	21.613	67.5	67.5	20	33.43	Ok											
84512142	22.613	68.5	68.5	21	34.43	Ok											
84512143	23.613	69.5	69.5	22	35.43	Ok											
84512144	24.613	70.5	70.5	23	36.43	Ok											
84512145	25.613	71.5	71.5	24	37.43	Ok											
84512146	26.613	72.5	72.5	25	38.43	Ok											
84512147	27.613	73.5	73.5	26	39.43	Ok											
84512148	28.613	74.5	74.5	27	40.43	Ok											



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		Da	atos maca	nicos								%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512149	29.613	75.5	75.5	28	41.43	Ok											
84512150	30.613	76.5	76.5	29	42.43	Ok											
84512151	31.613	77.5	77.5	30	43.43	Ok											
84512152	32.613	78.5	78.5	31	44.43	Ok											
84512153	33.613	79.5	79.5	32	45.43	Ok											
84512154	34.613	80.5	80.5	33	46.43	Ok											
84512155	35.613	81.5	81.5	34	47.43	Ok											
84512156	36.613	82.5	82.5	35	48.43	Ok											
84512157	37.613	83.5	83.5	36	49.43	Ok											
84512158	38.613	84.5	84.5	37	50.43	Ok											
84512159	39.613	85.5	85.5	38	51.43	Ok											
84512160	40.613	86.5	86.5	39	52.43	Ok											
84512161	41.613	87.5	87.5	40	53.43	Ok											
84512162	42.613	88.5	88.5	41	54.43	Ok											
84512163	43.613	89.5	89.5	42	55.43	Ok											
84512164	44.613	90.5	90.5	43	56.43	Ok											



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		Da	atos maca	nicos								%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512165	45.613	91.5	91.5	44	57.43	Ok											
84512166	46.613	92.5	92.5	45	58.43	Ok											
84512167	47.613	93.5	93.5	46	59.43	Ok											
84512168	48.613	94.5	94.5	47	60.43	Ok											
84512169	49.613	95.5	95.5	48	61.43	Ok											
84512170	50.613	96.5	96.5	49	62.43	Ok											
84512171	51.613	97.5	97.5	50	63.43	Ok											
84512172	52.613	98.5	98.5	51	64.43	Ok											
84512173	53.613	99.5	99.5	52	65.43	Ok											
84512174	54.613	100.5	100.5	53	66.43	Ok											
84512175	55.613	101.5	101.5	54	67.43	Ok											
84512176	56.613	102.5	102.5	55	68.43	Ok											
84512177	57.613	103.5	103.5	56	69.43	Ok											
84512178	58.613	104.5	104.5	57	70.43	Ok											
84512179	59.613	105.5	105.5	58	71.43	Ok											
84512180	60.613	106.5	106.5	59	72.43	Ok											



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		Da	atos maca	nicos								%					
Colada	Masa Lineal	Fy(MPa)	Fs(MPa)	Fs/Fy	ALARGAM.	Doblado	6	7	8	9	10	12	13	14	15	16	17
84512181	61.613	107.5	107.5	60	73.43	Ok											
84512182	62.613	108.5	108.5	61	74.43	Ok											
84512183	63.613	109.5	109.5	62	75.43	Ok											
84512184	64.613	110.5	110.5	63	76.43	Ok											
84512185	65.613	111.5	111.5	64	77.43	Ok											
84512186	66.613	112.5	112.5	65	78.43	Ok											
84512187	67.613	113.5	113.5	66	79.43	Ok											