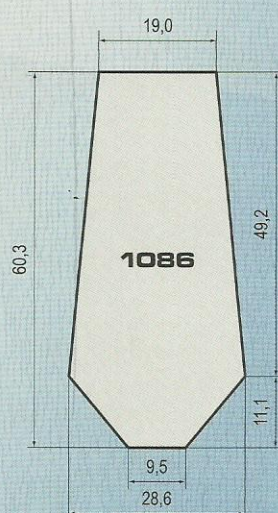
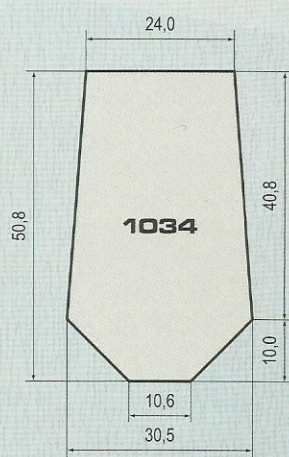
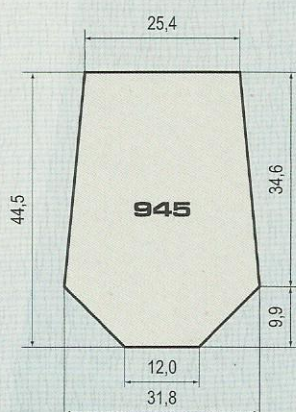
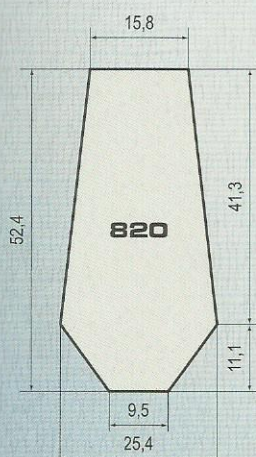
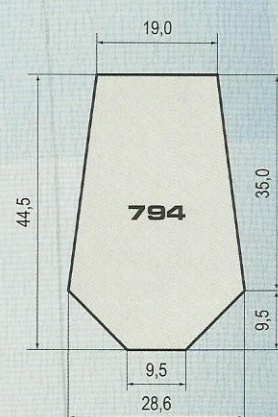
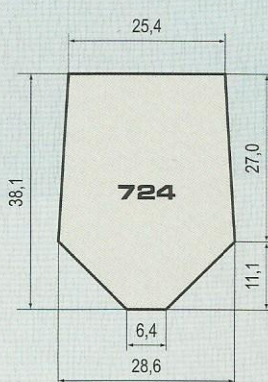
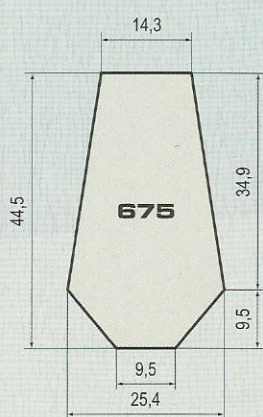
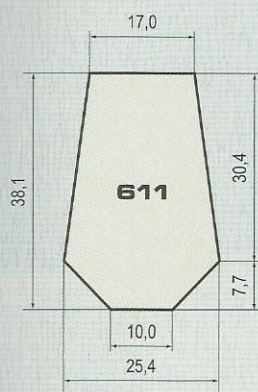
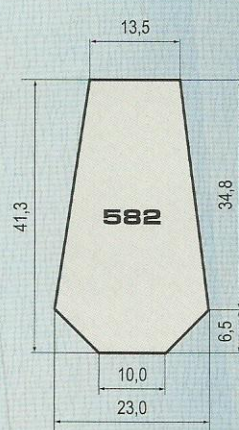
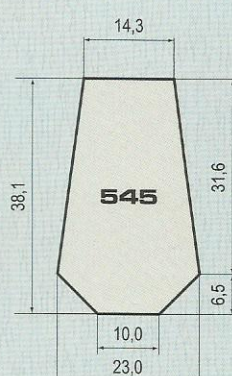
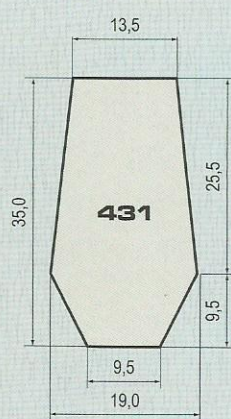
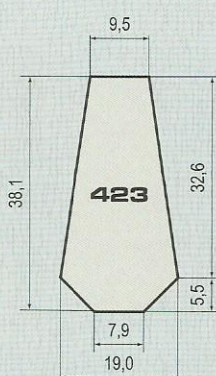
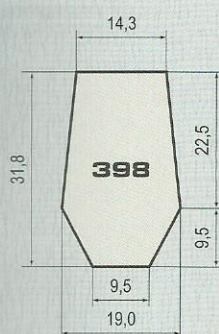
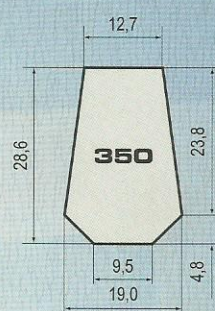
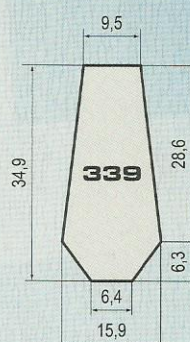
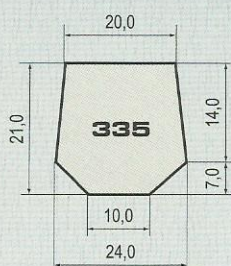
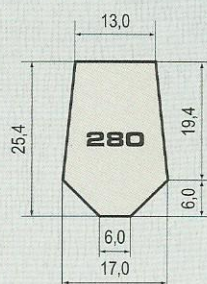
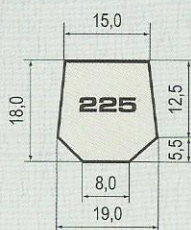
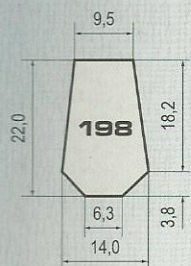


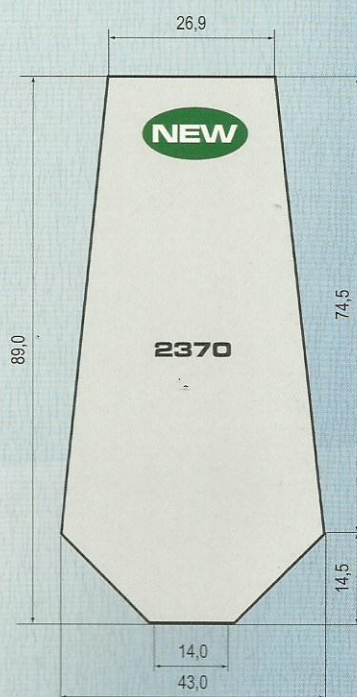
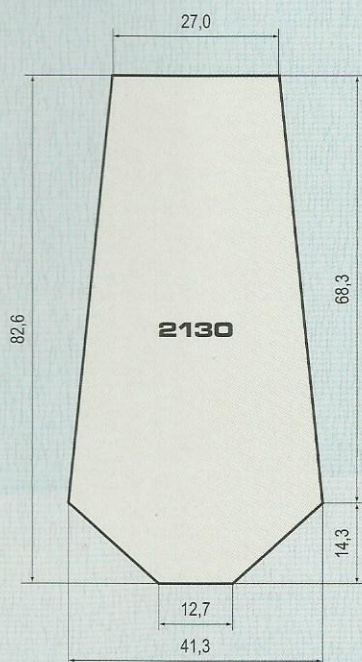
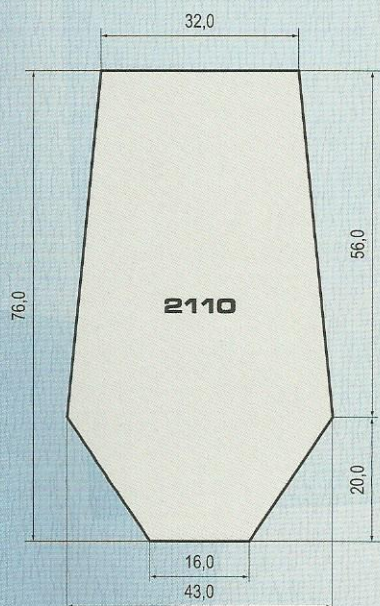
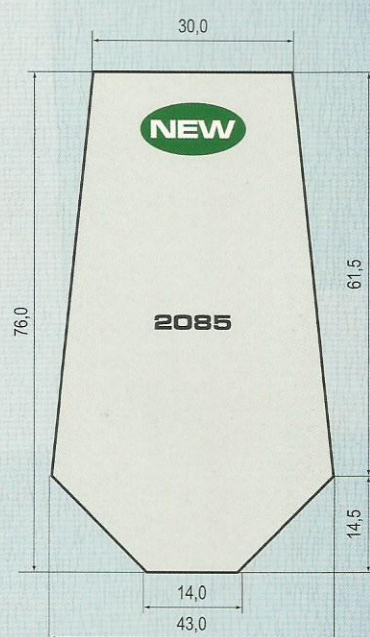
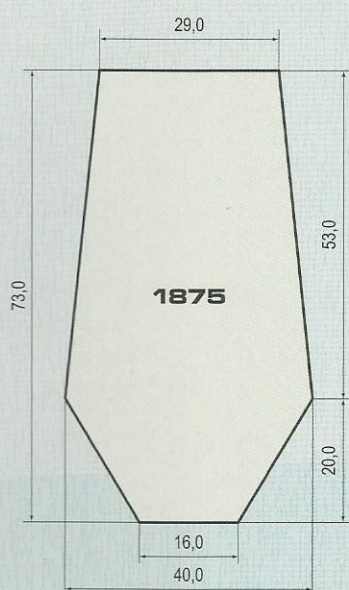
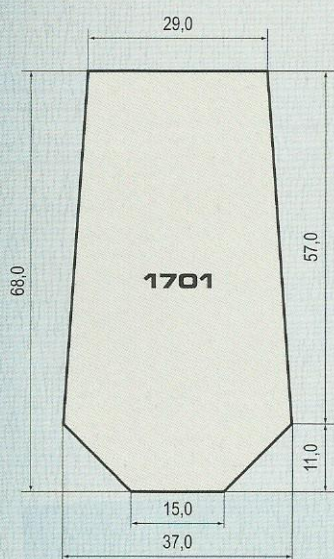
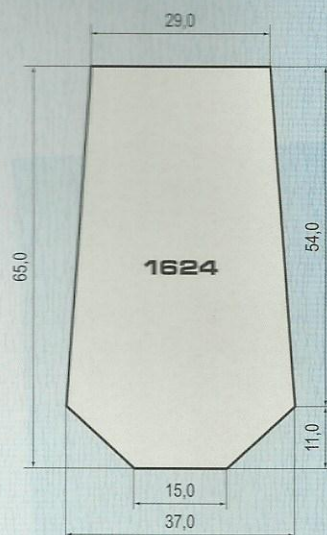
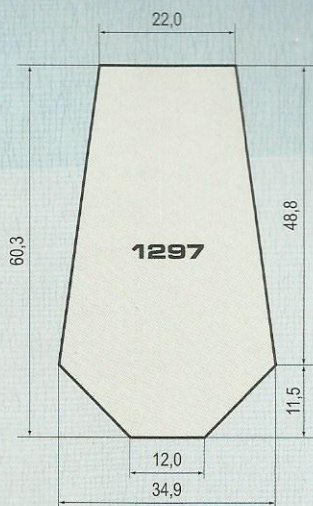
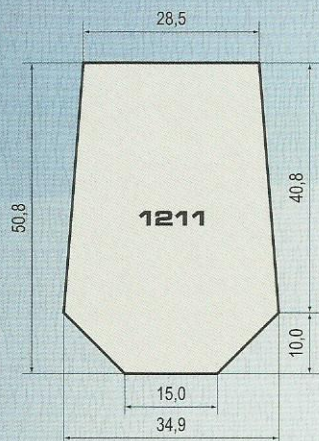


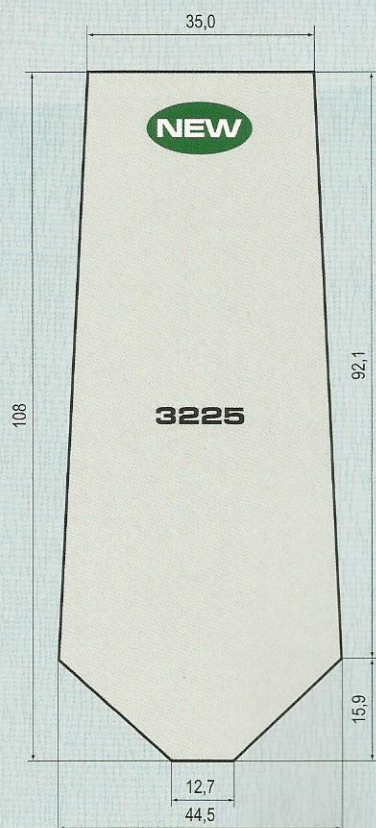
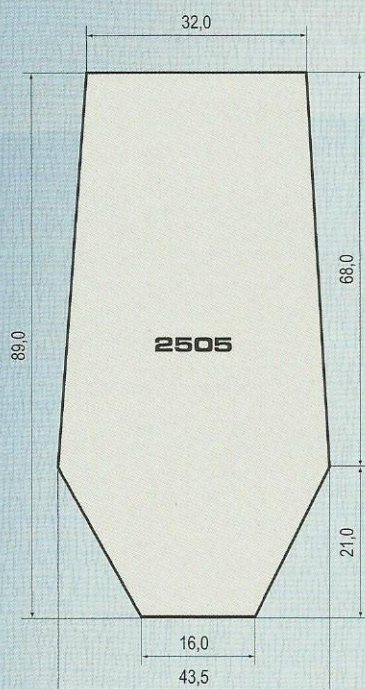
GROUND ENGAGING TOOLS AND UNDERCARRIAGE

Repuestos para Maquináries
Viales de Movimiento de Tierra

XXX METISA







Dimensional Tolerances: $\pm 0,8\text{mm}$

Nominal Weights And Areas

GROUSER	AREA		WEIGHT		HEIGHT		WIDTH		METERS PER TONNE	Weight/Kg P/ 10' Bar
	SQ.mm.	SQ.inches	Kg/m	Lb/FT	mm	inches	mm	inches		
198	252,00	0,391	1,98	1,33	22,0	7/8	14,0	9/16	505,00	6,03
225	287,00	0,445	2,25	1,51	18,0	23/32	19,0	3/4	444,00	6,85
280	357,00	0,553	2,80	1,88	25,4	1	17,0	43/64	357,00	8,53
335	427,00	0,662	3,35	2,25	21,0	13/16	24,0	15/16	299,00	10,20
339	432,00	0,670	3,39	2,27	34,9	1.3/8	15,9	5/8	295,00	10,32
350	446,00	0,691	3,50	2,35	28,6	1.1/8	19,0	3/4	286,00	10,66
398	507,00	0,786	3,98	2,67	31,8	1.1/4	19,0	3/4	251,00	12,12
423	539,00	0,835	4,23	2,84	38,1	1.1/2	19,0	3/4	236,00	12,88
431	549,00	0,851	4,31	2,89	35,0	1.3/8	19,0	3/4	232,00	13,12
545	694,00	1,076	5,45	3,66	38,1	1.1/2	23,0	29/32	183,00	16,60
582	742,00	1,150	5,82	3,91	41,2	1.5/8	23,0	29/32	172,00	17,72
611	778,00	1,206	6,11	4,10	38,1	1.1/2	25,4	1	164,00	18,60
675	860,00	1,333	6,75	4,53	44,5	1.3/4	25,4	1	148,00	20,55
724	922,00	1,429	7,24	4,86	38,1	1.1/2	28,6	1.1/8	138,00	22,05
794	1011,00	1,567	7,94	5,33	44,5	1.3/4	28,6	1.1/8	126,00	24,18
820	1045,00	1,620	8,20	5,50	52,4	2.1/16	25,4	1	122,00	24,97
945	1204,00	1,866	9,45	6,34	44,5	1.3/4	31,8	1.1/4	106,00	28,78
1034	1317,00	2,041	10,34	6,94	50,8	2	30,5	1.13/64	97,00	31,49
1086	1383,00	2,144	10,86	7,29	60,3	2.3/8	28,6	1.1/8	92,00	33,07
1211	1543,00	2,392	12,11	8,13	50,8	2	34,9	1.3/8	83,00	36,87
1297	1652,00	2,561	12,97	8,70	60,3	2.3/8	34,9	1.3/8	77,00	39,49
1624	2069,00	3,207	16,24	10,90	65,0	2.9/16	37,0	1.29/64	62,00	49,45
1701	2167,00	3,359	17,01	11,42	68,0	2.11/16	37,0	1.29/64	59,00	51,80
1875	2388,00	3,701	18,75	12,58	73,0	2.7/8	40,0	1.37/64	53,00	57,09
2085	2656,60	4,118	20,85	13,99	76,0	3	43,0	1.11/16	48,00	63,49
2110	2688,00	4,166	21,10	14,16	76,0	3	43,0	1.1/16	47,00	64,25
2130	2713,60	4,206	21,30	14,29	82,5	3.1/4	41,2	1.5/8	47,00	64,86
2370	3019,00	4,679	23,70	15,90	89,0	3.1/2	43,0	1.11/16	42,00	72,17
2505	3191,00	4,946	25,05	16,81	89,0	3.1/2	43,5	1.23/32	40,00	76,28
3225	4117,00	6,381	32,25	21,64	108,0	4.1/4	44,5	1.3/4	31,00	98,20

GREATER TRACTION AND STABILITY

METISA GROUSER BARS

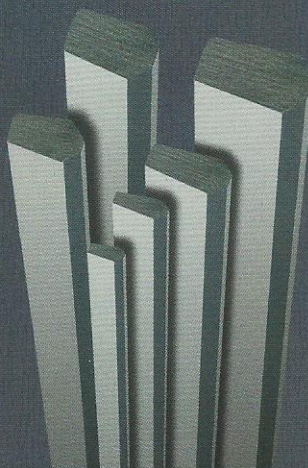
Available lengths

Profiles from 198 up to 2110:

- Maximum length 5m w/out heat treatment;
 - Maximum length 3m with heat treatment.
-
- Have high hardness and resistance to abrasion.
 - Are straightened with special equipment, thus assuring excellent working and use conditions.
 - Are conveniently packed, making handling easier.
 - Laboratory tests assure the standard quality of the steel used.
 - The material has good welding properties.
 - Special lengths available upon request.

Profile 2505:

- Maximum length 4m w/out heat treatment;
- Maximum length 3m with heat treatment.



Can be supplied in the following options:

Material	Hardness
CARBON	As Rolled
	260-300 HB
BORON	With Treatment
	440-500 HB

When a tractor is working with worn out grouser bars on its track shoes, it loses traction which results in waste of time and fuel. The replacement with METISA grouser bars will restore the tractor to its original yield. With its special design and shape, it assures a quick and economic welding process, with a perfect finish and consequent money saving.





Since 1942 / Desde 1942

A Solid Firm

METISA, Metalurgica Timboense S.A., installed in an area of 210.000 m² of which 25.000 m² is the industrial plant itself, guarantees the production of 45.000 tons per year of hot rolled steel products. METISA has seven lines of products:

- Ground Engaging Tools and Undercarriage Parts
- Agricultural Implements such as Disc Blades, and Tractor Parts
- Hand Tools
- Granite Saw Blades
- Railroad Accessories
- Washers
- Parts for Truck Bodies and Articulated Buses.

Una Empresa Sólida

METISA- Metalúrgica Timboense S.A., está instalada en una área de 210.000 m² de los cuales 25.000 m² corresponden a su planta industrial, con capacidad de fabricación de 45.000 toneladas al año en productos de acero laminados:

- Repuestos para Maquináries Viales de Movimento de Tierra
- Discos e Implementos Agrícolas
- Herramientas Manuales
- Láminas para Corte de Granito
- Acessórios Ferroviários
- Arandelas
- Peças para Equipos Camineros.

METISA Services

METISA exports products to more than 40 countries on the 5 continents, and is apt to give pre and post-sales service by qualified professionals.

Servicios METISA

METISA exporta sus productos para más de 40 países de los 5 continentes y ofrece servicios de pre y post ventas con profesionales cualificados.

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