Corus Special Profiles

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Track Shoes

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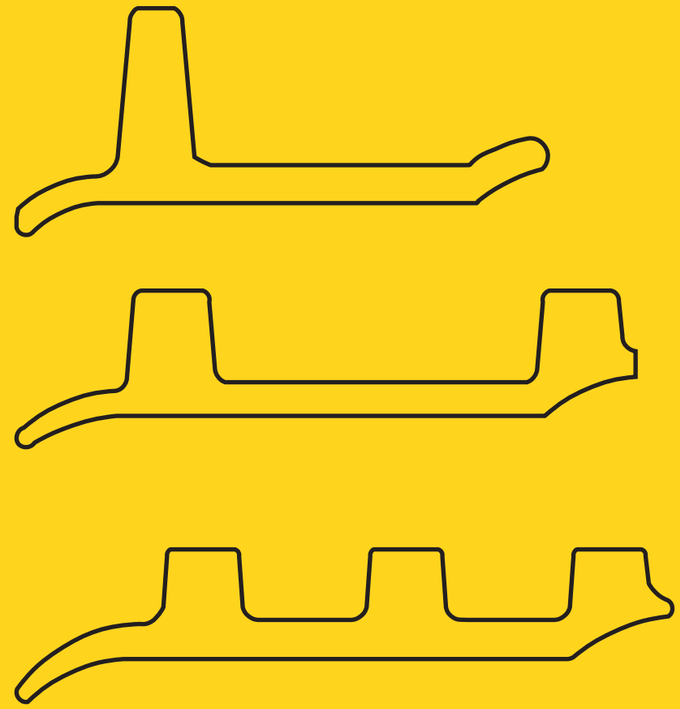
Version 2
01 2003



Track Shoes

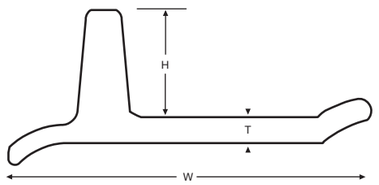
Corus Special Profiles is a business within Corus, the international metals company. We specialise in the manufacture of hot rolled special profiles in steel for a variety of industries around the world. This includes a wide range of profiles for earth moving equipment industry.

Corus offers the most extensive range of track shoe profiles available anywhere in the world. We have the capability to roll single, double and triple grouser (spike) designs from 150mm to over 300mm wide. Customers can choose from a comprehensive range of "open roll" profiles, or specify unique designs, where rolls and tooling will be reserved for individual customer use. Please refer to the open roll profiles in this leaflet for further information.

Our latest development is to offer a new range of steels aimed at improving shoe performance in the field. We recognise that "down time" is a significant cost. A new range of lower carbon and sulphur steels improves crack resistance and provides higher levels of fracture toughness, aimed at prolonging shoe life. These are particularly beneficial for track shoes for track type tractors (dozers) in extreme operating environments and low ground pressure track shoes.

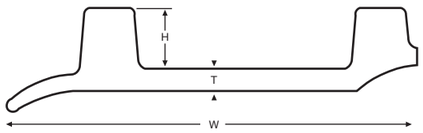
Single Grousers

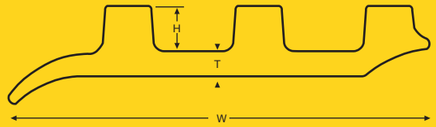
Section	W	H	T	KG/M	Link Pitch (mm)
SK179	179	63	9.1	19.4	165
SK180	180	47	9.0	18.1	156
SK193	193	52	11.2	22.0	159
SK121	197	57	12.7	25.6	171
SK121A	197	57	11.5	23.7	171
SK223B	223	65	11.0	29.4	190
SK223A	223	65	12.7	32.3	190
SK62	237	58	13.8	32.5	203
SK239	239	64	14.0	34.5	203
SK56	245	71	14.7	38.8	203
SK55	248	71	16.7	48.5	216
SK24C	249	67	13.5	37.3	216
SK24	249	67	16.0	41.8	216
SK25D	249	76	17.0	51.3	216
SK25A	249	76	19.0	54.9	216
SK80	250	65	14.3	40.9	216
SK253	253	65	16.5	43.3	216
SK51	263	78	19.1	57.3	229
SK98	266	75	16.0	46.6	229
SK155	268	80	19.0	59.3	229
SK97	276	77	17.5	48.3	229
SK289	289	79	19.0	64.3	251
SK292	292	76	17.0	54.8	251
SK43	303	89	20.6	74.9	260
SK120	304	88	22.0	77.5	260
SK320	320	106	24.0	88.5	286
SK322	322	93	23.0	82.6	280



Double Grousers

Section	W	H	T	KG/M	Link Pitch (mm)
SK202	202	31	13.0	28.4	171
SK202A	202	31	11.5	26.2	171
SK219	219	35	13.0	33.0	190
SK99	250	37	16.5	48.1	216





Triple Grousers

Section	W	H	T	KG/M	Link Pitch (mm)
SK218	173	19	7.9	19.0	151
SK187	187	21	9.5	22.8	159
SK193	193	21	11.2	25.6	159
SK197A	197	25.5	8.0	22.3	171
SK197B	197	25.5	9.5	24.7	171
SK199	199	25	9.5	24.9	171
SK216	203	25	12.7	29.3	171
SK116A	203	25	12.7	30.0	171
SK116B	203	25	16.0	35.4	171
SK76A	206	25	11.0	27.9	171
SK76B	206	25	12.7	30.3	171
SK213B	213	28	11.0	31.5	190
SK213A	213	28	13.0	34.9	190
SK316A	216	26	12.0	31.9	190
SK316B	216	26	13.0	33.6	190
SK74A	245	27	20.0	50.8	216
SK74B	245	27	22.5	56.4	216
SK71	266	30	30.0	70.2	229

Standard steels

We offer three boron treated steels with a nominal carbon content of 0.3%. Increasing levels of alloy content are available to allow customers to match hardenability, section size and heat treatment quench severity. This ensures a suitable core hardness is achieved in the finished track shoe. The hardness of track shoe profiles in the "as rolled" condition from the mill is controlled to a maximum value of H_b260. This ensures suitability for processing operations such as shearing.

Steel Spec.	C	Si	S	P	Mn	Ni	Cr	Mo	B	Jominy Hardenability (mm)	J3	J5	J10	J15	J20	J25	J30
SK-16-1	0.28	0.15			1.00				0.0005	**R_c max.**	55	54	50	41			
	0.34	0.35	0.040	0.040	1.30	0.20	0.20	0.06	0.0030	**R_c min.**	48	46	25				
SK-16-2	0.28	0.15			1.00		0.10		0.0005	**R_c max.**		55	53	47	41		
	0.34	0.35	0.040	0.040	1.30	0.20	0.30	0.06	0.0030	**R_c min.**		48	42	22			
SK-16-3	0.27	0.15			1.00		0.35		0.0005	**R_c max.**		56	54	50	45	40	37
	0.33	0.35	0.040	0.040	1.30	0.20	0.55	0.06	0.0030	**R_c min.**		48	43	38	32	27	22
										Approx Jominy distance $^1/_{16}$"	2	3	6	9	13	16	19

Lower Carbon steels

A new range of boron treated steels is available with a lower nominal carbon content of 0.25%. This improves crack resistance, and has already provided many customers with enhanced field performance.

Steel Spec.	C	Si	S	P	Mn	Cr	Mo	B	Jominy Hardenability ($^1/_{16}$")	J1	J5	J8	J10	J12	J16
SK1311	0.23	0.15			1.00			0.0005	**R_c max.**	52			35		
	0.28	0.35	0.040	0.040	1.30			0.0030	**R_c min.**	45	37				
SK1335	0.23	0.15			1.10	0.30		0.0005	**R_c max.**	52					36
	0.28	0.35	0.040	0.040	1.40	0.45	0.06	0.0030	**R_c min.**	45		35			
SK1336	0.23	0.15			1.00	0.45	0.05	0.0005	**R_c max.**	52					43
	0.28	0.35	0.035	0.035	1.30	0.65	0.10	0.0030	**R_c min.**	45				34	

To provide further improvements to machine performance in the field, Corus offers a range of steels with enhanced resistance to impact conditions. Levels of fracture toughness are increased by more than 15%, by reducing the sulphur content of these steels, and by incorporating other special treatments during the steel making process.

These three lower carbon steels can be supplied with a maximum sulphur content of 0.01%, compared with a typical level of 0.025% in normal steels. Extreme service shoes for track type tractors (dozers) and low ground pressure shoes have particularly benefited from these steels.