

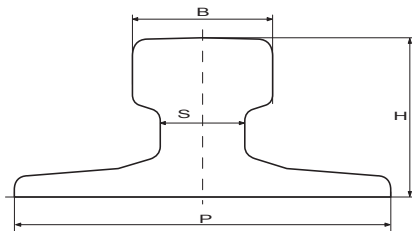
Standard European Profiles A-Rail (A45-A150)*

The DIN "A" type rails (standard European profile) are rolled based on the DIN 536/1991 Specification.

The "A" rails, with their wide base, low center of gravity and wide web, are ideal for high side thrusts.

They are available in several sizes from A45 to A150, where the numbers represent the width of the head in mm. In the past these rails were offered in two types of steel: S700 and S900A.

Recently, due to a progressive increase of the vertical loads of cranes on some special projects, the requirements for a rail with a greater hardening surface was required. These rails are rolled in S1100 steel whose chemical composition and mechanical properties are not governed by the DIN 536/1991 Specification.



Chemical Composition (%)

Type of Steel	C	Elements Mn	Si (max)	P (max)	S (max)
S700 (normal grades)	0.40 - 0.60	0.80 - 1.20	0.35	0.045	0.045
S900A (intermediate grades)	0.60 - 0.80	0.80 - 1.30	0.50	0.045	0.045

Mechanical Properties

Type of Steel	Tensile Strength (N/mm ²)	Approximate Brinell Hardness
S700	min 690	min 204
S900A	min 880	min 261
S1100	min 1080	min 319

Technical Data

Profile	Area of Inertia (cm ²)	Moment Head (cm ²)	Sec. Modulus Base (cm ²)	Sec. Modulus (cm ²)
A45	28.2	90.0	41.5	27.0
A55	40.5	178.0	68.6	45.6
A65	54.9	319.0	105.4	71.3
A75	71.6	531.0	153.6	105.3
A100	94.7	856.0	203.4	161.8
A120	127.4	1361.0	289.1	235.0
A150	191.4	4373.0	601.5	565.7

Profile	Weight		Base (P)		Height (H)		Head (B)		Web (S)	
	lbs/yd	kg/m	inches	mm	inches	mm	inches	mm	inches	mm
A45	44.55	22.1	4.92	125	2.17	55	1.77	45	0.94	24
A55	64.11	31.8	5.91	150	2.56	65	2.17	55	1.22	31
A65	86.89	43.1	6.89	175	2.95	75	2.56	65	1.50	38
A75	113.29	56.2	7.87	200	3.35	85	2.95	75	1.77	45
A100	149.78	74.3	7.87	200	3.74	95	3.94	100	2.36	60
A120	201.59	100.0	8.66	220	4.13	105	4.72	120	2.83	72
A150	302.99	150.3	8.66	220	5.91	150	5.91	150	3.15	80

* Consult Gantrex for clips and pad selection.