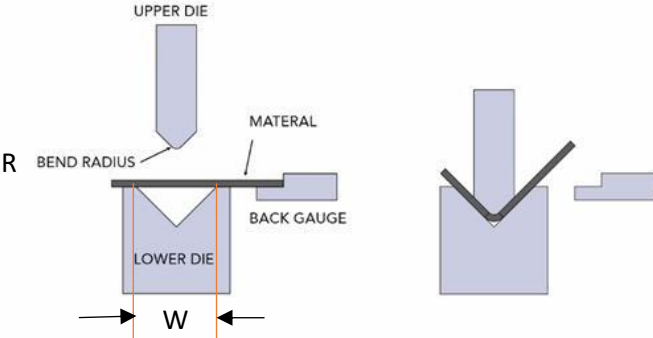


AR400/500/600

Trade Name	Technical Delivery Condition	Quenched Hardness	Typical Chemical Composition Maximum %								
			C	Si	Mn	P	S	Cr	Mo	Ni	B
AR400	Quenched	410 - 490 HB	0.21	0.7	2.0	0.025	0.01	1.2	0.6	1.0	0.005
AR500	Quenched	500 – 550 HB	0.35	0.7	2.0	0.015	0.01	1.2	0.6	1.0	0.005
AR600	Quenched	570 – 640 HB	0.45	0.7	2.0	0.015	0.01	1.2	0.6	1.0	0.005

Werkstoff	DIN standard	ASTM	BS	JIS	SIS	UNI
		A514				

Grade	Yield Strength (R_e) MPa	Tensile Strength (R_m) MPa	Elongation (A_5) %	Impact energy Charpy-V J	Carbon Equivalent C_{ev}
AR400	1,075	1,322	10	45	0.36
AR500	1,373	1,552	8	43	0.42
AR600	1,568	2,058	-	13	0.54



Type of steel and characteristics:

Abrasion resistant steel plate with a hardness of 410 – 640 HB, intended for applications where demands are imposed on abrasion resistance in combination with good cold bending properties. It also offers very good weldability.

Applications:

Crushers, sievers, feeders, measuring pockets, skips, cutting edges, conveyors, buckets, knives, gears, sprockets, dump trucks, loaders, industrial trucks, lorries, bulldozers, excavators, slurry pipe systems, screw conveyors, presses etc.

Bending

Example of minimum values for free bending of different plate thicknesses and different die openings

Plate grade	Thickness [mm]	T Perpend 1 R/t	Parallel 2 R/t	T Perpend 1 W/t	Parallel 2 W/t
AR 400	$t < 8$	2.5	3	8.5	10
	$8 \leq t < 20$	3	4	10	10
	$t \geq 20$	4.5	5	12	10
AR 500	$t < 8$	4	5	10	12
	$8 \leq t < 20$	5	6	12	14
	$t \geq 20$	7	8	16	18

1) Perpendicular to rolling direction. 2) Parallel to rolling direction.