

## ALLOY SPRING STEELS AND STABILIZER BARS

Ori Martin is able to satisfy the most stringent specifications concerning micro cleanness, surface decarburization and absence of surface defects.

Ori Martin special steels are used for the production of spiral springs with two process: cold forming of an induction pre-tempered wire and hot forming. Also torsion and stabilizer bars are common field of application of such steel grade.



Suitable for the production of coil springs and torsion bars used in the automobile and railway industries. These grades of steel must have a high yielding point and tenacity after quenching and tempering to withstand stress under flexi-torsion.

Our refining and casting techniques enable us to achieve steel with good hardenability and a high level of micro-cleanliness. Using the controlled rolling process we obtain products with a very low decarburisation level, absence of surface defects, tight tolerances and excellent characteristics of wire plasticity.

### Steel grade

Steel grade	Corresponding standard			Average chemical composition					
	Werkstoff	ORI Martin		C	Mn	Si	Cr	Ni	V
<b>Si</b>	38Si7	1.5023	D38S71	0,38	0,70	1,70	-	-	-
	48Si7	1.5021	D50S72	0,48	0,65	1,80	-	-	-
	51Si7	1.5025	D50S71	0,50	0,70	1,70	-	-	-
	55Si8		D55S81	0,55	0,80	1,90	-	-	-
<b>Mn</b>	38Mn6		B36M61	0,29	1,50	0,20	-	-	-
<b>Si Cr</b>	54SiCr6	1.7102	D55S51	0,54	0,80	1,40	0,70	-	-
	56SiCr7	1.7106	D55S71	0,55	0,70	1,70	0,20	-	-
	61SiCr7	1.7108	D60F81	0,61	0,85	1,80	0,30	-	-
<b>Si Cr V</b>	45SiCrV6-2	1.8151	D45F61	0,45	0,80	1,50	0,60	-	0,15
	54SiCrV6		D56F71	0,54	0,70	1,40	0,70	-	0,10
	61CrSiV5	1.2243	D61F72	0,61	0,75	0,85	1,15	-	0,10
	65CrSiV7		D65F81	0,65	0,85	1,50	0,80	-	0,23
<b>Mn Si Cr V</b>	45MnSiCrV6		D45F66	0,45	1,30	1,40	0,60	-	0,15
<b>Cr</b>	55Cr3	1.7176	D55C31	0,55	0,80	0,30	0,80	-	-
<b>Cr V</b>	50CrV4	1.8159	D50X41	0,50	0,80	0,30	1,00	-	0,15
	58CrV4	1.8161	D58X41	0,58	0,90	0,30	1,00	-	0,15
<b>Si Cr Ni</b>	52SiCrNi5	1.7117	D52R51	0,52	0,85	1,35	0,85	0,60	-