



# Steel grades



**meusburger**<sup>®</sup>

## Steel grades

material no	DIN-designation	indicatory analysis	strength	character	use
1730	C 45 W3	C - 0.45 Si - 0.30 Mn - 0.70	≈ 640 N/mm <sup>2</sup>	<b>tool steel</b> plain steel, stress-relieved	unhardened pieces for the mould, tool, jig and fixture construction
2083	X 42 Cr 13	C - 0.42 Si - 0.40 Mn - 0.30 Cr - 13.00	≈ 780 N/mm <sup>2</sup>	<b>steel for through hardening</b> corrosion resistant	moulding plates and inserts for the processing of plastics, mainly when chemically aggressive plastics are being used
2085	X 33 CrS 16	C - 0.33 Si - 0.30 Mn - 0.80 Cr - 16.00 Mo - 1.20 S - 0.06 Ni - 0.30	≈ 1080 N/mm <sup>2</sup>	<b>tool steel</b> pre-toughend, corrosion resistant, with good cutting properties	moulding plates and frames for corrosion resistant moulds as well as use with chemically aggressive plastics
2162	21 MnCr 5	C - 0.21 Si - 0.25 Mn - 1.25 Cr - 1.20	≈ 660 N/mm <sup>2</sup>	<b>steel for case-hardening</b> alloyed	moulding plates, inserts and machine parts
2210	115 CrV3	C 1.18 Si 0.25 Mn 0.30 Cr 0.70 Ni 0.10 Ti 0.20	≈ 740 N/mm <sup>2</sup>	<b>cold-work steel</b> alloyed, wear-resistant	small turned parts, core pins, punches
2311	40 CrMnMo 7	C - 0.40 Si - 0.40 Mn - 1.50 Cr - 1.90 Mo - 0.20	≈ 1080 N/mm <sup>2</sup>	<b>tool steel</b> alloyed and pre-toughend, good suitability for flame-hardening, nitriding and polishing	moulding plates, inserts and high-tensile machine parts
2312	40 CrMnMoS 86	C - 0.40 Si - 0.40 Mn - 1.50 Cr - 1.90 Mo - 0.20 S - 0.06	≈ 1080 N/mm <sup>2</sup>	<b>tool steel</b> alloyed and pre-toughend. good cutting properties, especially suitable for flame-hardening and nitriding	moulding plates and frames for die casting and injection moulds
2343	X 38 CrMoV 51	C - 0.38 Si - 1.00 Mn - 0.40 Cr - 5.30 Mo - 1.20 V - 0.40	≈ 780 N/mm <sup>2</sup>	<b>hot-work steel</b> alloyed	moulding plates and inserts for die casting (Al, Mg, Zn etc.) and injection mould tools
2343 ESU (ESR)	X 38 CrMoV 51	C - 0.38 Si - 1.00 Mn - 0.40 Cr - 5.30 Mo - 1.20 V - 0.40	≈ 780 N/mm <sup>2</sup>	<b>hot-work steel</b> alloyed	moulding plates and inserts for die casting (Al, Mg, Zn etc.) and injection mould tools
2379	X 155 CrVMo 121	C - 1.55 Cr - 12.00 Mo - 0.70 V - 1.00	≈ 830 N/mm <sup>2</sup>	<b>steel for through hardening</b> wear-resistant cold-work steel	moulding plates and inserts for plastics processing, specially when high wear-resistance is required
2767	X 45 NiCrMo 4	C - 0.45 Si - 0.25 Mn - 0.40 Cr - 1.35 Mo - 0.25 Ni - 4.00	≈ 830 N/mm <sup>2</sup>	<b>steel for through hardening</b> special alloy suitable for polishing, high resistance to pressure and good flexural strength	complex moulding plates and inserts for injection mould tools
2842	90 MnCrV 8	C - 0.90 Si - 0.25 Mn - 2.00 Cr - 0.35 V - 0.10	≈ 775 N/mm <sup>2</sup>	<b>steel for through hardening</b> dimensional steadiness, high hardness, wear-resistant, cold-work steel of very good cutting properties	moulding plates and inserts exposed to abrasion, pressure and guiding rails

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