


**MATERIAL DATA SHEET ETG 88/100**

DESCRIPTION: This material is a high-strength special steel, Thanks to the guaranteed yield point across the entire range of dimensions, the area of application of ETG® is extensive.

CHEMICAL COMPOSITION ETG® 88/100, LADLE ANALYSIS IN MASS PERCENT					
%	C	Si	Mn	P	S
Min.	0,42	0,10	1,35		0,24
Max.	0,48	0,30	1,65	0,04	0,33
This analysis complies with SAE1144 respectively 44SMn28 (1.0762). Deviation of product analysis of the ladle analysis according EN 10087, Chart 2.					

MECHANICAL PROPERTIES (GUIDING VALUES)					
				ETG 88	ETG 100
Dimensions		Ø	mm	5,0 – 114,3	6,0 – 70,8
Yield Point	Cold Drawn	R <sub>p</sub> 0,2	N/mm <sup>2</sup>	> 685	> 865
	Polished	R <sub>p</sub> 0,2	N/mm <sup>2</sup>	> 685	> 800
Tensile Strength		R <sub>m</sub>	N/mm <sup>2</sup>	800 – 950	960 – 1100
Ultimate Strain		A <sub>5</sub>	%	> 7	> 6
Reduction Of Cross Section		Z	%	app. 30	app. 20
E Modulus			N/mm <sup>2</sup>	app. 200000	app. 200000
Tensile Strength (diagonally)		R <sub>m</sub>	N/mm <sup>2</sup>	app. 600	app. 720
Hardness					
HRC				app. 28	app. 32
HB 30				app. 280	app.320
Shear Strength (diagonally)		τ <sub>s</sub>	N/mm <sup>2</sup>	app. 510	app.590
Torsional Strength		τ <sub>t</sub>	N/mm <sup>2</sup>	app. 440	app. 540
Notch Bar Impact Value		AvRt	J	app. 25	app.10

NO RESPONSIBILITY IS TAKEN FOR THE CORRECTNESS OF THIS INFORMATION