

# Solid Fuels – Quality Requirements (typical)

	Coking coal	Semi Soft coal	PCI coal	Petroleum coke	Metallurgical coke	Coke Breeze	Anthracite fines
<b>Minimum requirements</b>	dry basis (db), unless otherwise stated						
<b>chemical (%):</b>							
ash	6 - 10	6 - 10	< 10	< 1	< 10	<13	< 13
volatile matter	20 - 36	20 - 36	12 - 38	> 10	< 0,75	<3	< 3
moisture, as received (a.r.)	< 10	< 10	< 10	< 9	< 5	<10	< 10
sulphur	< 0,8	< 0,8	< 0,7	2 - 3,5	< 0,8	<1	< 1
phosphorous	< 0,04	< 0,04	< 0,025		< 0,025		
alkalis (Na <sub>2</sub> O+K <sub>2</sub> O)	< 0,18	< 0,18	< 0,2		< 0,3	<0,3	< 0,3
chlorine	< 0,1	< 0,1	< 0,1		< 0,03		
fluorine							
<b>mechanical:</b>							
hardgrove grainability index (HGI)			> 45	> 60			
net calorific value, as received (GJ/t)			> 27				
grain size (mm)	< 50	< 50	< 50			<10	< 6
coke strength after reaction (%)					> 65		
IRSID 10 (%)					< 18		
IRSID 40 (%)					> 50		
mean diameter (mm)					> 50		
free swelling index	7,0 - 9,0	> 3,0					
dilatation (%)	50 - 200	> 10					
max. fluidity (ddpm)	100 - 30.000	> 50					