

## D1600SC and D1650SC

HASLE D1600SC and D1650SC are low cement castables based on high quality silicon carbide mixed with alumina-silicates. These castables exhibit an extraordinary abrasion- and shock resistance, and at the same time a high resistance to alkalis, chlorines and sulfates, which make D1600SC and D1650SC valuable in many industries. The high thermal conductivity of these materials helps to cool down casted linings which reduce the stickiness of slags and simultaneously the silicon carbide forms a protective surface layer which all together prevents infiltration of chemicals.

	Chemical composition (%)		Thermal conductivity (W/mK)		
	Al <sub>2</sub> O <sub>3</sub>	SiC	400°C	800°C	1200°C
D1600SC	26	53	7.15	6.80	6.65
D1650SC	34	40	5.87	5.41	5.19

### Applications

In cement kilns, castables with high content of silicon carbide are beneficial in case assorted waste- or secondary fuels (e.g. petcoke) are used, due to their chemical- and thermal resistance. In this case D1650SC is useful in the burning zone.

HASLE D1600SC is successfully used in waste incinerators and in wood-fired boilers in areas where a high thermal conductivity is requested. Both castables have a high resistance to carbon monoxide (CO) and can be used in reducing atmospheres which may occur in these plants. Furthermore, the high content of silicon carbide makes these castables resistant to sulfur-containing hot melting slag in aggressive environments.

These castables are perfect for walking beam furnaces thanks to the good compression and bending strength at high temperatures (Hot M.O.R.) combined with superb thermal shock- and wear resistance. Precast elements of D1600SC have proven to be an excellent solution in steelworks where high thermal shock resistance, mechanical strength and stability at high temperature are essentials.