PYROTEK LPDC FS80LP STALK AND RISER TUBE

LOW-PRESSURE DIE CASTING

Pyrotek offers complete feeding system consumables, including sprue filters, sprue bushings, inserts, intermediate tubes, and stalk tubes, providing an air-tight pathway for clean molten metal to travel from the holding reservoir to the casting dies.

FS80LP stalk tubes are fused silica based castables used in low-permeability molten metal applications. This formulation is engineered to provide both strong performance and cost-efficiency.

COMPOSITION

Material	Approximate Percentage of Weight
SiO_2	85%
CaO	1.5%
Al_2O_3	1%
Proprietary Compounds	12.5%

BENEFITS

- Excellent abrasion resistance
- Thermal shock resistant
- Non-wetting to aluminium and aluminium alloys

FEATURES

- Custom shapes and designs
- Coated or non-coated
- With or without filter

PREHEAT

FS80LP stalk tubes must be preheated before use to remove residual moisture and/or to reduce cracking from thermal shock.

Stalk tubes should be uniformally preheated to 200°C (392°F) in a furnace for a minium of 30 minutes.

Do NOT use a direct flame as it will likely cause uneven thermal gradients within the material.

HEALTH AND SAFETY

Prior to use, refer to the product safety datasheet for proper handling and required personal protective equipment.

PHYSICAL PROPERTIES

Property	Value
Permanent Linear Change–after firing at 730°C (1350°F)	0.16%
Cold Modulus of Rupture–MPa (psi) after firing at 730°C (1350°F)	19 (2756)
Cold Crushing Strength–MPa (psi) after firing at 730°C (1350°F)	54 (7832)
Bulk Density–g/cm³ (lb/ft³)	2 (121)
Coefficient of Thermal Expansion	0.7 x 10^{-6} / C
Abrasion Resistance–cm³ (in^3)	4.7 (0.29)
Permeability–mD	<0.07
Maximum Operation Temperature	800°C (1472°F)
Thermal Conductivity–W/m·K (BTU·in/ft^2·hr·°F) at 98°C (208°F) at 194°C (381°F) at 400°C (752°F) at 605°C (1121°F) at 807°C (1485°F)	 0.472 (3.28) 0.523 (3.63) 0.693 (4.81) 0.852 (5.91) 1.019 (7.07)

JAN-24-EN-1543

Product Type: 174
Commodity Code: 02700