

SILICON METAL (Si)

Panadyne offers industrial grade Silicon Metal in the form of powders, grains or chunks for use in a wide range of applications including Reaction Bonded Silicon Carbide, Siliconized Recrystallized Silicon Carbide, and Reaction Bonded Boron Carbide parts. Silicon Metal is also largely used by the fine-chemical and aluminum industries, and has become a vital material in thousands of industrial and consumer goods. Higher purity Silicon Metal has also become an indispensable component for the solar energy and high-speed communication industries. In addition to reaction bonded ceramic parts, silicones, stronger and lighter weight aluminums, solar cells, and electronic semiconductors are all major end products of Silicon Metal.

Panadyne offers a wide range of sizes ranging from 2" to -20 μm . Custom screen sizes are available upon request.



TYPICAL ANALYSIS

	H1	H2	H3
(Si)	≥ 99.6	≥ 99.1	≥ 98.5
(Fe)	≤ 0.05	≤ 0.30	≤ 0.50
(Al)	≤ 0.12	≤ 0.30	≤ 0.50
(Ca)	≤ 0.01	≤ 0.05	≤ 0.30
(Ti)	≤ 0.005	≤ 0.05	-
(C)	≤ 0.12	≤ 0.15	-

TYPICAL APPLICATIONS

Reaction Bonding	Photovoltaics	Glass
Aluminum Industry	Filler	Fiber Optics
Iron and Steel Industry	Ceramics	Pharmaceutical Substrates
Chemical Industry	Abrasives	Refractory Materials
Silicones	Cosmetics	

TYPICAL INDUSTRIAL GRADES

- 200 F

- 325 F

- 20 μm

Custom Screen sizes available upon request

TYPICAL PROPERTIES

Chemical Reaction

Filler

Bonding