

Structured Packing

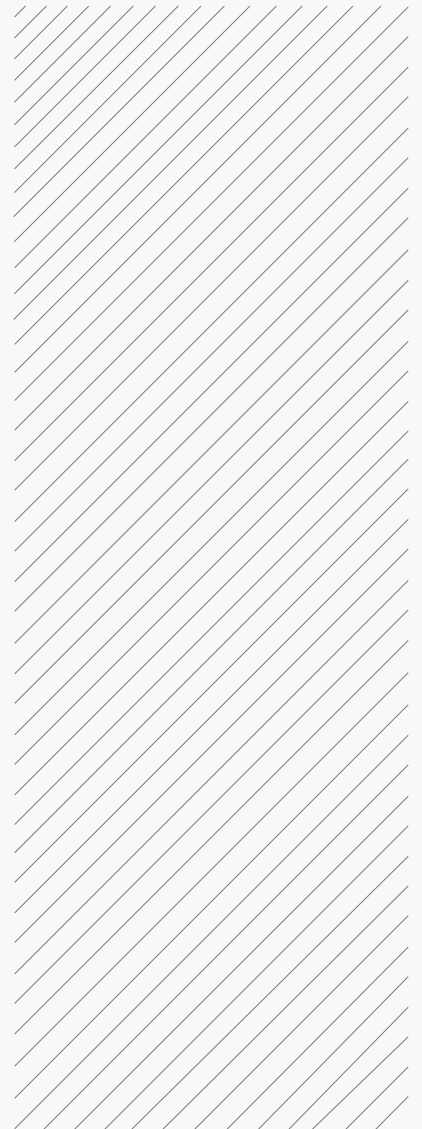
Weave Impossible to Possible



BOEDON Industech Limited

www.boedon.com | sales@boedon.com

BOEDON Brochure

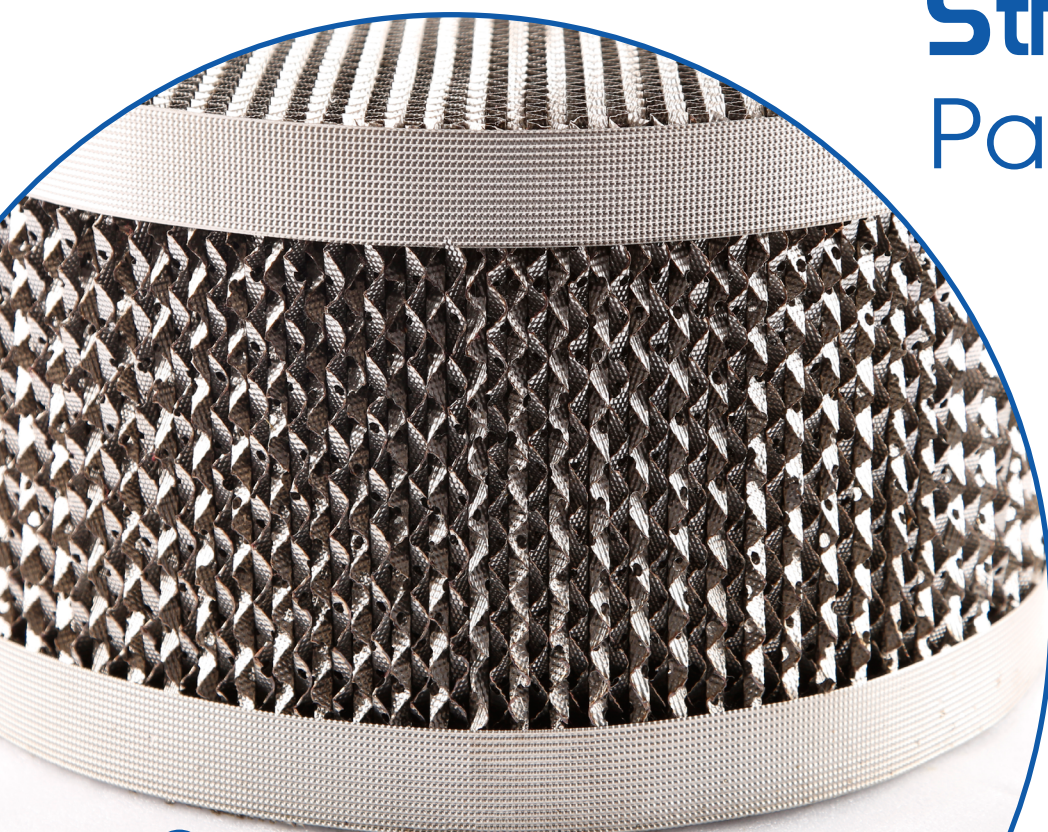


We supply a wide range of metal, ceramic and plastic structured packing to meet your various industrial separation and distillation demands.

Structured packing is a kind of a geometrically shaped and corrugated packing. Differing from random packing, structured packing is neatly piled in the tower. A series corrugated layers make up each packing element, so that gas/liquid is spread and distributed radially from layer to layer within the element and creates a large contact area between the gas/liquid and the packing. Structured packing features large surface area, low pressure drop, uniform fluids, high efficient thermal and mass transfer, etc. It is widely used for the rectification, absorption and extraction in various fields.

According to the corrugated angle, it is divided into X type and Y type. X type stands for the 30° angle and the Y type stands for the 45° angle. X type structured packing has low pressure drop and Y type structured packing has better mass transfer property.

Structured Packing



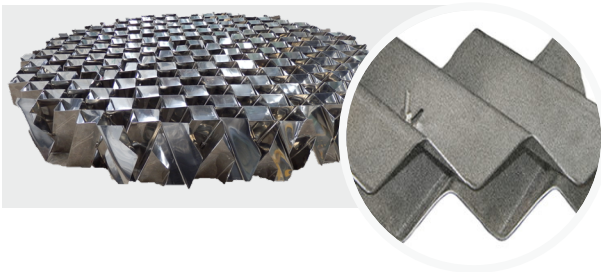
STRUCTURED PACKING

Metal Structured Packing

It can be made of various metal materials, such as low carbon steel, stainless steel, duplex stainless steel, Monel, Titanium alloy and others. The stainless steel structured packing is the most widely used due to its excellent corrosion and rust resistance and durable properties. Metal structured packing has different packing types, which can be divided into grid structured packing, woven structured packing, perforated structured packing and protruded structured packing.

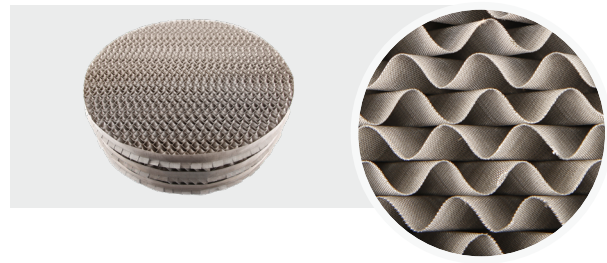
Metal grid structured packing

Features smooth surface and large contact area.



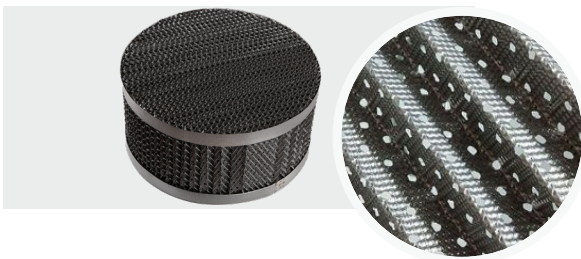
Metal woven structured packing

Is used for distillation of thermosenstive products



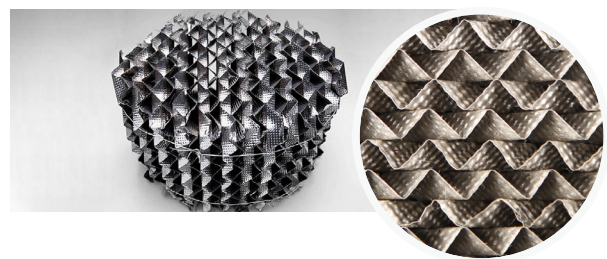
Metal perforated structured packing

Is used for rectification and absorption applications.



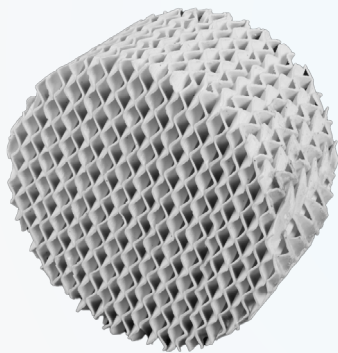
Metal protruded structured packing

Improves its lubricating property and ensures efficient filtration.



STRUCTURED PACKING

Ceramic Structured Packing

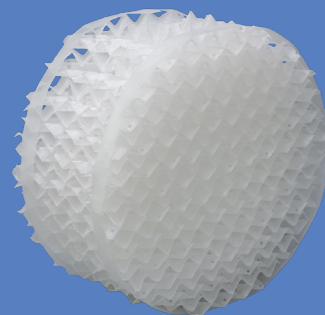


It consists of many similar geometric design packing units. The geometric design is a series of corrugated sheets, which are placed in parallel. Ceramic structured packing has high filtering and separating efficiency to suit the complex applications. It also has low pressure drop, increased operating elasticity, and maximum liquid treatment. Ceramic structured packing can be made into round or rectangular shapes to suit different applications. It can be made into various independent units to facilitate the transportation and assembly of structured packing with large diameters.

STRUCTURED PACKING

Plastic Structured Packing

It is generally plastic perforated structured packing. The perforated structured packing is made of PP and PE materials and the plate packing is made of PP or PVDF materials. Openings can be added onto the plate to improve the mass transfer efficiency. Plastic wire gauze packing made of PP or PE materials are also available. Similar to the ceramic structure packing and metal structured packing, the plastic structured packing can also be made into round or rectangular shapes. Special shapes can be customized.



STRUCTURED PACKING

Specification

Material

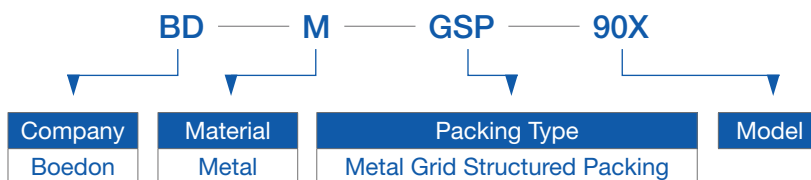
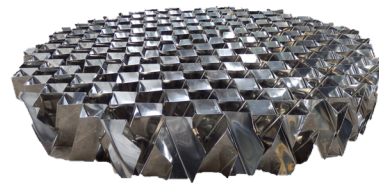
metal (stainless steel, low carbon steel, duplex stainless steel, Monel, Titanium alloy, etc.), plastic, ceramic

Arrangement

X type (30°) and Y type (45°) corrugated angle geometrical shape.

STRUCTURED PACKING

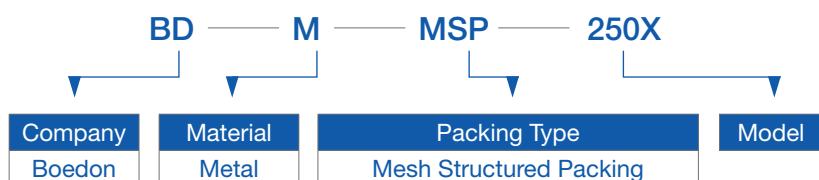
Metal Grid



Model	Mould	Surface Area	Height (mm)	Surface Structure	Material Thickness
-	-	m ² /m ³	mm	-	mm
BD-M-GSP-90X	90X	90	140	Smooth	0.5–2
BD-M-GSP-64X	64X	64	220	Smooth	0.5–2
BD-M-GSP-64Y	64Y	64	130	Smooth	0.5–2
BD-M-GSP-40Y	40Y	40	200	Smooth	0.5–2

STRUCTURED PACKING

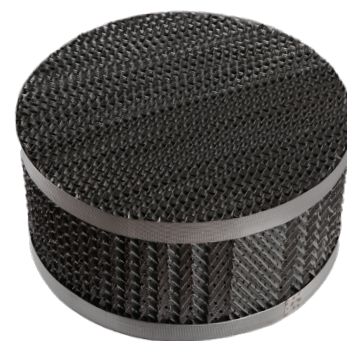
Metal Woven



Model	Mould	Surface Area m ² /m ³	Bulk Density kg/m ³	Voidage %	Pressure Drop Pa/m ³	Theoretical Plate Number m ⁻¹
-	-					
BD-M-MSP-250X	250X	250	125	95	100–400	2.5–3
BD-M-MSP-500X	500X	500	250	90	400	4–5
BD-M-MSP-700Y	700Y	700	280	85	600–700	8–10

STRUCTURED PACKING

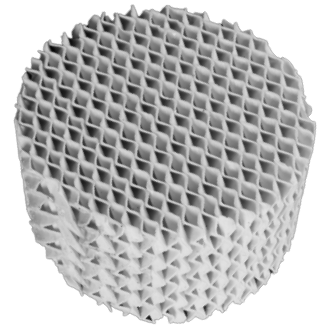
Metal Perforated



Model	Mould	Surface Area m ² /m ³	Bulk Density kg/m ³	Voidage %	Pressure Drop Pa/m ³	Theoretical Plate Number m ⁻¹
-	-					
BD-M-PSP-125Y	125Y	125	100	98	200	1–1.2
BD-M-PSP-250Y	250Y	250	200	97	300	2–2.5
BD-M-PSP-350Y	350Y	350	280	94	350	3.5–4
BD-M-PSP-500Y	500Y	500	360	92	400	4–4.5
BD-M-PSP-125X	125X	125	100	98	140	0.8–0.9
BD-M-PSP-250X	250X	250	200	97	180	1.6–2
BD-M-PSP-350X	350X	350	280	94	230	2.3–2.8
BD-M-PSP-500X	500X	500	360	92	280	2.8–3.2

STRUCTURED PACKING

Ceramic Structured Packing



BD — C — SP — 125Y

Company	Material	Packing Type	Model
Boedon	Ceramic	Structured Packing	

Model	Mould	Voidage	Plate Thickness	Bulk Density	Peak Height	Corrugation Distance	F Factor m/s	Theoretical Plate Number
-	-	%	mm	kg/m ³	mm	%	(kg/m ³) ^{0.5}	m ⁻¹
BD-C-SP-125Y	125Y	85	2.5±0.5	490	23	42	3	1–1.5
BD-C-SP-150Y	150Y	84	2.2±0.2	520	17	30	2.8	1.5–2
BD-C-SP-250Y	250Y	82	1.4±0.2	580	13	22	2.5	2–3
BD-C-SP-350Y	350Y	80	1.2±0.2	590	9	15	2	3.5–4
BD-C-SP-450Y	450Y	76	1±0.2	630	6.5	11	1.5–2	4–5
BD-C-SP-500Y	500Y	72	0.8±0.2	650	6	10-10.5	9–12	5–6
BD-C-SP-550Y(X)	550Y(X)	74	0.8±0.2	680	5	10	1–1.3	5–6
BD-C-SP-700Y(X)	700Y(X)	72	0.8±0.2	700	4.5	8	1.2–1.4	6–7

STRUCTURED PACKING

Plastic Structured Packing



BD — P — SP — 125Y

Company	Material	Packing Type	Model
Boedon	Plastic	Structured Packing	

Model	Mould	Voidage	Plate Thickness	Bulk Density	Peak Height	Corrugation Distance	F Factor m/s	Theoretical Plate Number
-	-	%	mm	kg/m ³	mm	%	(kg/m ³) ^{0.5}	m ⁻¹
BD-P-SP-125Y	125Y	125	98.5	37.5	200	0.2–100	3	1.0–2.0
BD-P-SP-125X	125X	125	98.5	37.5	140	0.2–100	3.5	0.8–0.9
BD-P-SP-250Y	250Y	250	97	75	300	0.2–100	2.6	2.0–2.5
BD-P-SP-250X	250X	250	97	75	180	0.2–100	2.8	1.5–2.0
BD-P-SP-350Y	350Y	350	95	105	200	0.2–100	2	3.5–4.0
BD-P-SP-350X	350X	350	95	105	130	0.2–100	2.2	2.3–2.8
BD-P-SP-550Y	550Y	550	93	150	300	0.2–100	1.8	4.0–4.5
BD-P-SP-500X	500X	500	93	150	180	0.2–100	2	2.8–3.2

STRUCTURED PACKING

Features & Application

Features

- Low pressure drop
- Large contact area
- High separation and filtering efficiency
- High capacity
- Reduced liquid hold-up performance
- Corrosion and high temperature resistance

Application



Chemical

- Degasification
- Extraction
- Degasification, etc.



Oil & Gas

- Dehydration
- Separation
- Absorption, etc.



Pharmaceutical

- Dehydration
- Extraction, etc.



BOEDON Industech Limited

Weave Impossible to Possible



E-Mail: sales@boedon.com

www.boedon.com