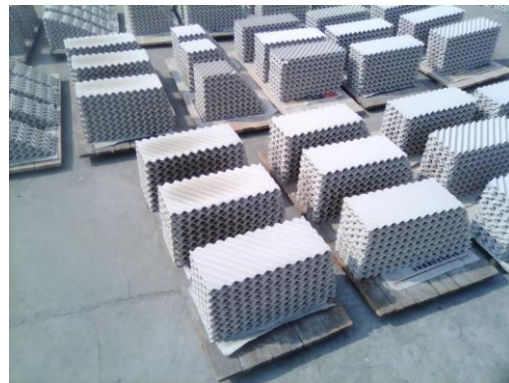
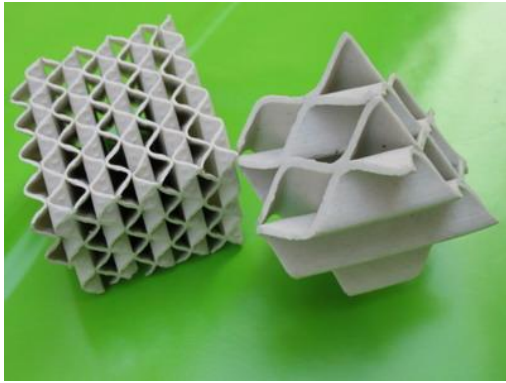


## JINTAI Ceramic Structured Packing

- Product No.: JT-CSP

### Brief Introduction

JINTAI Ceramic Structured Packing (Ceramic Corrugated structured column packing) is constructed of corrugated sheets of ceramic. The angle of inclination of the corrugations of adjacent sheets is reversed with respect to the vertical column axis, forming mixing cells at every point where the corrugation intersect. This promotes intimate mixing and radial distribution of the liquid and gas streams. Each subsequent element is rotated about the column axis so that the sheets of one element are opposed to the sheets of the elements above and below. In passing through each element, gas and liquid are thoroughly mixed in the direction parallel to the plane of the sheets. By rotating subsequent elements, excellent mixing and spreading, both side to side and front to back are obtained over the entire cross section of the tower. The flow characteristics developed by the structured geometrical arrangement creates high effective surface area resulting in good efficiency as compared to other mass transfer devices. (Data for our products follows: X and Y stand for the corrugation dip of 30 and 45 respectively; the Arabic numerals stand for the specific area of their series.)



JT-CSP

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## Advantage

- The most economical range is F-factor 1.5-2
- Improve capacity by up to 50% over standard ceramic saddle Column packing
- Excellent Resistance to Plugging
- Improve efficiency up to 25% over standard ceramic saddle Column packing
- Greater Heat Recovery in RTO Applications than any Random Packing
- The corrugated sheets of ceramic are vertically oriented in the packed Column, eliminating any horizontal surfaces which create resistance to fluid flow
- Pressure drop of each theoretical sheet is 0.3-1mbar Lower pressure drop by 60% or more over standard ceramic saddle Column packing
- JT<sup>®</sup>CSP Column Packing geometric construction greatly reduces the channeling of both the liquid and vapor and provides for more effective contact of sulfuric acid and SO<sub>3</sub> gas.

## Application

- Fining process of corrosive mixtures, which have strict requirements for pressure drop and number of theoretical sheets
- Vacuum treatment under absolute pressure higher than 1 m bar
- Fining and distillation of halogen organic compounds. Rectifying organic halide
- Rectifying and absorbing some corrosive mixtures, which are definitely regulated in pressure drop and theoretic plate number
- Applied in some towers that contain a large quantity of natural media used to absorb nitric acid and concentrated sulfuric acid, as well as for purifying the air in chemical plants
- Operating in vacuum conditions at a bottom absolute pressure of 100pa
- Used in heat exchanger and demisting, or as a catalyst carrier

## Technical Parameter

TYPICAL CHEMICAL ANALYSIS (wt. %)	JT-CSP
SiO <sub>2</sub>	≥72
Al <sub>2</sub> O <sub>3</sub>	≥23
Calcium, CaO	≤1.0
MgO	≤1.0
Fe <sub>2</sub> O <sub>3</sub>	≤0.5
Other	2

Typical chemical analysis of JT-CSP

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TYPICAL PHYSICAL PROPERTIES	JT-CSP
Specific gravity (g/cm <sup>3</sup> )	2.5
Water absorption (wt%)	≤0.5
Acid resistance (wt%)	≥99.5
Loss in burn (wt%)	≤5.0
Max. operating Temp. (°C)	800
Crush strength (MPa)	≥130
Moh's Hardness (Scale)	≥7

Typical physical properties of JT-CSP

Model.	Specific surface m <sup>2</sup> /m <sup>3</sup>	Bulk density Kg/ m <sup>3</sup>	Void ratio %	Obl. angle	Pressure drop mmHg/m	Theo. plate m <sup>-1</sup>	Hydraulic diameter mm	Liquid load m <sup>3</sup> /m <sup>2</sup> h	Max. Factor m/s (Kg/m <sup>3</sup> ) <sup>-1</sup>
JT-CSP-125Y	125	320	90	45 <sup>0</sup>	1.8	1.8	28	0.2~100	3.0
JT-CSP-160Y	160	370	85	45 <sup>0</sup>	2	2	15	0.2~100	2.8
JT-CSP-250Y	250	420	80	45 <sup>0</sup>	2	2.5	12	0.2~100	2.6
JT-CSP-350Y	350	470	78	45 <sup>0</sup>	2.5	2.8	10	0.2~100	2.5
JT-CSP-400Y	400	500	75	45 <sup>0</sup>	3	3	8	0.2~100	2.0
JT-CSP-450Y	450	520	72	45 <sup>0</sup>	4	4	7	0.2~100	1.8
JT-CSP-550Y	550	620	74	45 <sup>0</sup>	5.5	5~6	6	0.18~100	1.4
JT-CSP-700Y	700	650	72	45 <sup>0</sup>	6	7	5	0.15~100	1.3
JT-CSP-100X	100	280	92	30 <sup>0</sup>	1.5	1	30	0.2~100	3.5
JT-CSP-125X	125	300	90	30 <sup>0</sup>	1.8	1.5	28	0.2~100	3.2
JT-CSP-160X	160	350	85	30 <sup>0</sup>	2	1.8	15	0.2~100	3.0
JT-CSP-250X	250	380	80	30 <sup>0</sup>	2.5	2.3	12	0.2~100	2.8
JT-CSP-350X	350	450	78	30 <sup>0</sup>	3	2.5	10	0.2~100	2.6
JT-CSP-400X	400	480	75	30 <sup>0</sup>	4	2.8	8	0.2~100	2.2
JT-CSP-450X	450	500	72	30 <sup>0</sup>	4.5	3~4	7	0.2~100	2.0
JT-CSP-470X	470	440	75	30 <sup>0</sup>	5	5	7	0.2~100	1.8
JT-CSP-550X	550	620	74	30 <sup>0</sup>	5.5	5~6	6	0.18~100	1.4
JT-CSP-700X	700	650	72	30 <sup>0</sup>	6	7	5	0.15~100	1.3

Geometric characteristic data for JT-CSP

Tower Diameter Φmm	200	200~400	400~800	800~1200	1200~2000	2000~4000	4000~6000	>6000
A (mm)	-10	-12	-15	-18	-20	-25	-28	-32
B (mm)	-5	-6	-8	-10	-12	-15	-18	-20

Tolerance for JT-CSP

(A is the direction of parallel the corrugate ; B is the direction of vertical the corrugate)

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