



H&MT INTERNATIONAL

HEAT & MASS TRANSFER SOLUTIONS



+91-9920812153



info@hnmtinternational.com

Contents

Introduction	Page 1
Services Offered	Page 1
Random Packing	Page 1
Structured Packing	Page 1
Column Internals	Page 1
Column Trays	Page 1
Demister Pads	Page 1
Column Internals & Tray Hardware	Page 1

Introduction



About Us

We, H&MT International, are proud to introduce ourselves as one of the finest manufacturers of Column Internals, Trays and Packings in India. We also provide process engineering and mechanical design related services for Column Internals and Trays. We have been providing detailed engineering services for Chemical/Petrochemical/Fertilizer/Specialty Chemicals and Oil & Gas plants in India and abroad. We have resources and ability to perform process simulation for all kinds of projects.

Our Products

Random Packings (Metal & Plastic)

Structured Packings (Metal)

Column Internals (Metal & Plastic)

Column Trays (Metal)

Demister Pads (Metal & Plastic)

Column Internals & Tray Hardware

Our Services

Detail Engineering Services for Process Plants

Process Simulation Studies

Process and Hydraulic Design of Column Internals & Trays

Mechanical Design of Column Internals & Trays

Supervision only or full installation service

Random Packing

HMT-RR -Raschig Ring

HMT-RR is first generation random packing. These are the oldest, cheapest, and previously most widely used packings. The height of the ring is equal to its diameter. The rings are cut from pipes, but in case of metal they are also rolled from metal strips. These are available in various MOCs – Metal, Plastic, Carbon and Ceramic.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
25mm	200	91.9	137
38mm	127	94.9	82
50mm	100	95.1	57

HMT-PR-Pall Ring

HMT-PR is the second generation random packings. These were developed by cutting windows in the Raschig rings and bending the window tongues inward. This opened up the ring, lowered its friction, and improved packing area distribution, wetting, and distribution of liquid. Pall rings have higher capacity and efficiency and lower pressure drop. Pall rings are available in metal, plastic and ceramic material.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
16mm	345	93.4	71
25mm	209	94.2	48
38mm	136	95.6	28
50mm	100	95.6	20
75mm	70	95.6	18
90mm	65	96.5	16

Random Packing

HMT-HP Rings-Hy-Pak

Similar to Pall ring, HMT-HP has more internal tongues in an effort to improve the spread of surface area. The resulting claimed efficiency improvement was traded off for greater capacity by making the ring slightly larger than the equivalent Pall ring. Compared to the Pall Ring, HMT-HP has been shown to give better capacity at an equivalent efficiency. HMT-HP is available in metal only.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
30mm	179	96	43
45mm	125	96.4	26
60mm	98	97	18
90mm	85	97.5	15

HMT-CR -CMR

HMT-CR is third generation packings. These rings are similar to the Pall ring, but have an aspect ratio (height to diameter ratio) of 1:3, compared to 1:1 in the Pall ring. The lower aspect ratio orients the particles with their open side facing the vapor flow, thus reducing friction, and exposing more surfaces to mass transfer. HMT-CR is available in metal, plastic and ceramics.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
#1	251	96.4	40
#1.5	202	96.4	29
#2	145	97	22
#2.5	123	97	17
#3	103	97	14
#4	76	98.5	10
#5	43	98.9	8

Random Packing

HMT-IR -IMTP

HMT-IR is third generation packings. It combines the high void fraction and the well distributed surface area of the Pall Ring with the low aerodynamic drag of the saddle shape. Compared to the Pall Ring, it provides a more open shape and improved liquid spread, while incorporating adequate mechanical strength and entanglement resistance. HMT-IR is available in metals only.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
HMT-IR-15	290	94.7	51
HMT-IR-25	230	96.7	41
HMT-IR-40	150	97.3	24
HMT-IR-50	98	97.3	18
HMT-IR-60	59	98.1	12

HMT-IS -Intalox Saddles

HMT-PR is the second generation random packings. These were developed by cutting windows in the Raschig rings and bending the window tongues inward. This opened up the ring, lowered its friction, and improved packing area distribution, wetting, and distribution of liquid. Pall rings have higher capacity and efficiency and lower pressure drop. Pall rings are available in metal, plastic and ceramic material.



Nominal Size	Surface Area m ² /m ³	Void Space %	Packing Factor F
25mm	206	91	33
38mm	140	91	25
50mm	108	93	21

Random Packing

1.HMT-SIS-Super Intalox Saddles

The HMT-SIS is an improved version of HMT-IS packing that provides better liquid distribution, low liquid hold up, high capacity and improved efficiency for mass transfer.



Nominal Size	Surface Area m2/m3	Void Space %	Packing Factor F
25mm	210	90	33
50mm	110	93	21
75mm	89	94	16

HMT-Telpak-Tellerette

HMT-Telpak are a high efficiency plastic tower packing designed for use in wet scrubbers, cooling towers, mist eliminators, absorption columns and gas strippers. They provide a surface area equal to many other packings but with much greater liquid surface availability.



Nominal Size	Surface Area m2/m3	Void Space %	Packing Factor F
25mm	345	93.4	71
38mm	209	94.2	48
50mm	136	95.6	28