



# JAW CRUSHER

## MTJ SERIES



Mechtech Inframine was incorporated by a group of qualified and well trained engineers with a vast experience in the field of design, manufacturing, supply and commissioning of different types of crushing & screening equipments and plants. The Company was established way back in 1987 with a view to manufacture and supply various Crushing equipments to cater to the core sector of crushing of Coal, Iron Ore, Lime Stone, Stone Aggregates for Construction of Roads and Buildings, etc.

In the last three decades, we have designed, developed and supplied an enviable number of crushing equipments throughout the country and abroad to handle a variety of minerals. Today we can boast of a comprehensive range of products comprising of Single & Double Toggle JawCrushers, Hammer Mills, Smooth and Tootheed Roll Crushers, Horizontal and Vertical Shaft Impactors, Cone Crushers, Reciprocating & Vibrating Feeders, Grizzly Feeders, Vibrating Screens, Sand Washers etc.



# WHERE ENGINEERING SURPASSES TRADES



QUALITY



SERVICE



EXPERIENCE

# WORKING PRINCIPLE

Mechtech's top-of-the-line MTJ-type jaw crushers are designed specifically for primary applications where resizing is the primary goal. They allow the material to be handled within the confines of your crushing plant. The jaw crusher must have a good and homogeneous feed level to perform optimally.

These single-toggle jaw crushers have a deep, symmetrical crushing chamber, a large feed opening for their size, and an ideal nip angle that provides smooth material flow and high reduction efficiency. Jaw crushers typically have a reduction ratio of 1:2 or 1:3. This ratio is influenced by the bulk density, crushability, size distribution, and moisture content of the feed material, among other factors, and will affect the performance of the crushing chamber.

Compressive and rubbing pressures are used in a single-toggle grease-lubricated jaw crusher to break material. The two jaw plates of the crusher, one of which is immovable and the other movable, work together to exert this mechanical pressure. The crushing chamber is a V-shaped cavity formed by these two vertical manganese jaw plates, with the top of the chamber being larger than the bottom. Jaw crushers are sized by the crushing chamber's top opening. A 41" x 33" jaw crusher, for instance, has two jaw dies that are 41" wide and 33" apart at the top opening, also known as the gape opening.

The discharge material is sized using the narrower opening at the bottom of the crushing chamber. A toggle plate and tension and pull-back rods keep the swing jaw tight near the bottom.

Since the crushing of the material is not performed in one stroke of the eccentric shaft, massively weighted flywheels are attached to the shaft and powered by a motor. The flywheels transfer the inertia required to crush the material until it passes the discharge opening. Generally, the motion of swing jaw is elliptical.



# SALIENT FEATURES

## HYDRAULIC JACKS



Hydraulic jacks help in the CSS range which has a significant effect on product gradation, capacity, and power draw.



## HIGH CAPACITY WITH A HIGH REDUCTION RATIO

The jaw crusher's bulk density, crushability, and size distribution result in a high capacity and reduction ratio.



## HEAVY-DUTY WELDED FRAME DESIGN

The plate takes heavy impacts from the material and protects the swing jaw, shaft, and bearing during crushing. It also helps to direct material into the crushing chamber.



## LARGE FEED ACCEPTANCE CAPABILITIES

The large feed enables crush both tough feed materials like rocks in quarry fields and hard material lumps in the mineral industry effectively and economically



## OPTIMIZED NIP ANGLES

Jaw crushers have nip angles between 16–23°. A good nip angle means a high throughput capacity of the crusher

# APPLICATIONS



# SPECIFICATIONS

DESCRIPTION	UNIT	MTJ-153	MTJ-131	MTJ-128	MTJ-118	MTJ-117	MTJ-906	MTJ-806	MTJ-122	MTJ-902	MTJ-753
APPLICATION		PRIMARY									SECONDARY
FEED OPENING	mm inch	1500x1300 59x51	1300x1130 51x45	1200x830 47x33	1041x838 41x33	1092x685 43x27	914x609 36x24	800x550 32x22	1219x254 48x10	914x254 36x10	762x381 30x15
FEED SIZE	mm inch	1170 46	1070 42	750 30	750 30	650 25	550 22	508 20	200 8	200 8	300 12
CAPACITY	Tph	480 - 1160	330-960	165-790	150-565	150-400	80-300	75-285	45-150	25-90	30-90
CSS RANGE	mm inch	150 - 300 5.1-5.9	125-300 4.9-11.8	75-275 2.9-10.8	75-225 2.9-8.8	75-185 2.9-7.2	75-150 2.9-5.9	50-180 2-7	30-75 1.1-2.9	25-60 1-2.3	35-75 1.3-2.9
LUBRICATION		GREASE									
POWER	kW Hp	200 270	160 215	132 180	110 150	90 120	75 100	55 75	55 75	37 50	30 40
MECHANISM		SINGLE TOGGLE OVER HEAD ACCENTRIC									

## ADVANTAGES

Mechtech's Jaw Crusher MTJ Series can be used for crushing even the hardest and toughest of minerals and is the most ideal for sand manufacturing. It produces desired finer output of high quality as the amount of fines present is minimal. Our VSI's are engineered at higher capacity, low maintenance costs and least power consumption.



Safe and easy operation and maintenance



Welded design offer a reliable operation



High capacity & High reduction ratio



Wider intake opening offers possibility to handle larger feed



High Crushing Force



## WHY MECHTECH JAW-MTJ SERIES?

Customers remain permanently associated with 'MECHTECH' to meet their production goals due to engineering experience spanning three decades and excellent after-sales service.

Mechtech jaw crushers are proudly made in India and have numerous installations both domestically and internationally.

Our engineering expertise, combined with the use of lean manufacturing techniques, has enabled MechTech to respond to the changing needs of our customers and applications.

Mechtech provides a comprehensive range of double-toggle jaw crushers and single-toggle jaw crushers to provide primary and secondary crushing solutions with a high return on investment and low operating costs.



# INSTALLATIONS

We at Mechtech are bringing our designs and engineering to life, and to the plants for high quality outputs that surpasses the expectations.





Formerly



#### Mechtech Engineers

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Scan to visit  
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Product features and specifications are subject to change without prior notice or obligation.

Due to continuous product development, we reserve the right to change the specifications without notice. Photographs and drawings are provided for illustrative purposes only and may vary from the standard product. Mechtech's liability shall be limited to the equipment.