





# CRUSHING & SCREENING RANGE

MMA has a wide range of crushing line consists of jaw and impact crushers as primary, secondary and tertiary purposes. In addition to screen, conveyor belts, washers, rock drill, etc. The following table describes typical uses of commonly used crushers. Under the lights of current mining and crushing/screening technology, IMMA has a range of following machinery and systems to be a complete solution supplier, from medium to hardest stones with a starting 50 tph capacity up to 1200 tph.

various stationary crushing & screening plants with primary, secondary and tertiary crushing including complete auxiliary items as DTH, hammer, dust suppressing and full PLC/PC controlled, ...



#### **JAW CRUSHERS**

IMMA Jaw Crusher consists of a heavy duty single toggle jaw crushers, are constructed of solid fabricated plate frames with reinforcing ribs throughout. The crusher's components are of high strength design to accept high horsepower draw. Austenitic manganese steel is used for both fixed and movable jaw faces. Heavy flywheels allow crushing peaks on tough materials

Single toggle jaw crushers featured by a hydraulic toggle adjusting mechanisms:

- Easy operating and long-lived
- Hydraulic toggle adjustment mechanism
- Various feeding sizes
- AC Motor powered with 1450 rpm
- Austenitic steel jaws and abrasion plates
- Heavy duty steel abrasion alloys made of %16-18 Mn + % 2,2 Cr
- Abrasion materials hardness > 450 HB
- Pitman is made of GG 45 steel casting
- Rotating mile made of Cr-Ni-Mo forging steel
- Heavy duty bearings made of SKF or FAG brand
- Automatic greaser
- Hydraulic jaw adjustment mechanism
- Heat tempered welded main construction to avoid main frame resistance
- Including motor and primary group stable chassis
- Primary group main chassis including bunker, feeder, screws and welded points are build as a single construction and needs to be fixed to the concrete basement.

MODELS:	JK-60	JK-90	JK-110	JK-140
Purpose:	Primary	Primary	Primary	Primary
Size (mm):	600 x 450	900 x 650	1100 x 900	1400 x 1100
Motor Power	45	75	132	160





#### **IMPACT CRUSHERS (VSI - HDK - PDK)**

The impact crushers are usually used as secondary or tertiary crushing purposes. IMMA also supplies a primary impact crusher to use the advantages of impact crushing. Impact crushers involve the use of impact rather than pressure to crush material. The material is contained within a cage, with openings on the bottom, end, or side of the desired size to allow pulverized material to escape.

In Horizontal Shaft Impactor, the incoming feed drops vertically through the chamber, strikes the rotating rotor or impeller bars and is fractured within the chamber. Due to this severe impacting of material, an HSI realizes up to a 20 to 1 reduction ratio. The setting of an HSI is arbitrary and depends on the curtain setting. An HSI with three curtains will tend to yield a finer dischange than one with two curtains. The main types and features of IMMA Impact Crushers are as follows

#### **PRIMARY IMPACT CRUSHER**

- Side and frame thickness: 25 mm
- Rotor plate thickness: 100mm
- Rotor size: Ø1440x1350mm
- Jaw: ST-37 steel with 100mm
- Sides: Cr alloyed steel 300x300x40mm
- Roof: Steel with 16-18% Mn alloyed
- Rotor: With 4 ea pallets of 16-18% Mn alloved steel
- Motor: 2 ea of 160 kW 1500 rpm
- Hydraulic body opening piston
- Hydraulic jaw adjustment system with nitrogen tube springs
- Stone lack proofing system by hydraulic sweeper
- Crane kit for pallet replacement
- Heavy duty bearing system

#### HORIZONTAL IMPACT CRUSHER (With Various Rotors & Pallets)

- Crusher pallets, upper section and linings inside the body are made of special casting consist of %16-18 Mn.+% 2,2 Cr
- Rotors are special steel casting made of GG45
- Has high decreasing and cubic product percentage
- Mill is Cr-Ni-Mo forged steel
- Hydraulic rotor and pallet protection
- Hydraulic door adjustment
- Welded steel construction
- High ratio of crushing
- Heavy duty bearings
- Solid structure

#### SECONDARY / TERTIARY IMPACT CRUSHER (With 3 Rotors, 4 Pallets)

- Body steel: 10 mm
- Crusher steel thickness: 40 mm
- Crusher steel made of 16%-18% Mn-Cr alloyed hammered
- Rotor steel thickness: 60mm
- Rotor steel is made of 16%-18% Mn alloyed 4 lays plated
- Heavy duty bearings
- Solid structure







#### **GRIZZLY SCREENS**

Screens are indispensable components of the mining plants. Our grizzly screenss designed to have a wide range of applications with high capacities under IMMA warranty.

- Industrial protected vibromotor,
- Steel spring wire,
- Labyrinth tapped SS 4140 screen gears,
- Welded solid structure
- Constant chassis and solid structure
- Reliable spare parts and tools,
- Long-lived and minimized operation cost,

#### **Standard Models:**

Model 2TE1640
1600 mm x 4000 mm with 2 decks
Model 3TE1650
1600 mm x 5000 mm with 3 decks
Model 3TE2050
2000 mm x 5000 mm with 3 decks
Model 3TE2060
2000 mm x 6000 mm with 3 decks

Model 4TE2060 2000 mm x 6000 mm with 4 decks Model 4TE2060 2000 mm x 6000 mm with 4 decks Model 3TE2460 2400 mm x 6000 mm with 3 decks Model 4TE2460 2400 mm x 6000 mm with 4 decks



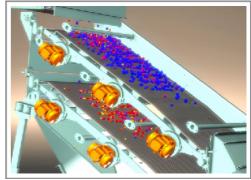


#### **"VCR" TECHNOLOGY**

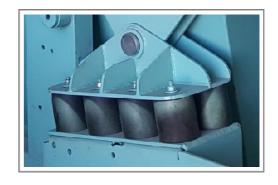
# Welcome to the Extraordinary VCR Technology for

### micronized screening

- Vibration, is only seen on the screen-wires, not in the machinery. Non-vibrating structure body
- \* Less vibrating structure enables long lifetime!
- Multi-vibration Units to create a controlled resonance on the screen-wire (VCR Tech)
- Customized calibration for each mineral and screening purpose at startup only
- Sandwich Sealing helps to protect the screen-wires and side panels
- \* Energy saving up to 60%
- No blockage of mineral / material during processing at the screen-wires
- Extended screen-wire lifetime
- \* Adjustable screen-wire slope angle
- Adjustable machine legs & angle (Optional: Hydraulic Slope Adjustment)
- \* Adjustable remaining material for screening
- \* VSS -Innovative Vibration Suppressing System: Suspension supports to suppress the vibration between the screen-wire and machine body! Less vibration much more comfort& efficiency!
- Screen-wire replacement in 30 mins
- \* Easy and quick repairs and maintenance
- No lubrication is required at any VCR!
- Vibrating motor replacement while the machine works
- \* Easy maintenance via the poles/holes between decks
- Extended screen-wire lifetime as a fact of VCR
   Technology
- Special designed, low-costed PU screen-wire designed for VCR!



VCR Tech



Suspension



Easy Maintenance



Side vs. Screen-wire Protection



## "VCR" DRY SCREENS

With various sizes (S), decks (D), vibromotor(M) and Vibration Units (U):



**VCR D-1530/11206** S:1.500x3.000mm/D:3,/M:10 /U:6



**VCR D-1540/21206** S:1.500x4.000mm/D:2,/M:12 /U:6



**VCR D-1560/32010** S:1.500x6.000mm/D:3,/M:20 /U:10



**VCR D-1530/22412** S:1.500x3.000mm/D:2,/M:24 /U:12



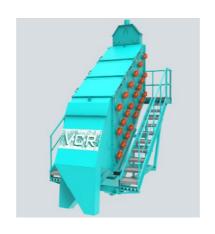
**VCR D-1540/43216** S:1.500x4.000mm/D:4,/M:32 /U:16



**VCR D-1550/42814** S:1.500x5.000mm/D:4,/M:28 /U:14



VCR D-1530/32814 S:1.500x3.000mm/D:3,/M:28 /U:14



**VCR D-1540/64420** S:1.500x4.000mm/D:6,/M:44 /U:20



**VCR D-1560/64020** S:1.500x6.000mm/D:6,/M:40 /U:20



#### **"VCR" WET SCREENS**

With various sizes (S), decks (D), vibromotor(M) and Vibration Units (U):



VCR W1530/21206 S:1.500x3.000mm/D:2,/M:12 /U:6



VCR W-1540/21206 S:1.500x4.000mm/D:2,/M:12 /U:6



VCR W-1560/32412 S:1.500x6.000mm/D:3,/M:24 /U:12

#### **"VCR" ZIG-ZAG SCREENS**



VCR D-1530/32814 S:1.500x3.000mm/D:3,/M:28 /U:14



**VCR D-1540/64420** S:1.500x4.000mm/D:6,/M:44 /U:20



#### **IMMA MINING SOLUTIONS**







**Bunkers & Hopper** 

Washers

Conveyors







**Pre-Crushers** 

**Mobile Units** 

Optimization



Standardization









#### IMMA Global Technick S.A.

Barbaros Bulv., 102/5, Zincirlikuyu, 34340 Istanbul, Turkiye

Drève de l'Infante 27A5, 1410 Waterloo-Belgique

Tel: +90 212 337 36 57

Fax: +90 212 337 36 10

E-mail: info@immaglobal.com

Web: www.immaglobal.com