

Vibrating Equipment
Nordberg CVB Series screens





Good vibrations and high performances

In addition to being a provider of crushing and complete rock and mineral processing solutions, Metso has also gained a worldwide reputation as a specialist in vibrating equipment. This is demonstrated by thousands of installations worldwide where our screens, feeders and scalpers operate in the most demanding applications, from complete multi-stage plants to highly mobile installations.

All of these installations benefit from Metso's superior know-how and years of field experience.

A history of quality

In 2001, Metso became an even stronger player in the manufacture of vibrating equipment through the merger of Nordberg and Svedala. Metso now offers more than 300 years of collective experience in vibrating equipment.

Whatever your process requirements, Metso has the right solution - from sturdy feeders and scalpers to efficient inclined or horizontal classifying screens. Just name your application, and Metso's professionals will find the most productive and cost-effective vibrating equipment for you.

Why Nordberg CVB screens?

The Nordberg CVB series Screens are well proven for Technical / Final sizing. Their simple and robust design has made them the most popular Metso screen.



CVB1540

CVB1845

CVB2050

CVB2060

CVB2661

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Features and Benefits

Circular motion... simplicity, efficiency, reliability

A single shaft line consists of two MV modular vibrators connected through a cardan shaft. As the shaft line is positioned at the center of gravity, a circular motion results on all points on the screen. Combined with slope angle this circular motion gives very good screening efficiency for all types of screening applications.

Product range... versatile, efficient, reliable

Nordberg CVB screens are versatile because they can be used for secondary & tertiary screening as well as primary screening. Standard slope angle is 18°, however, this can be modified for special cases. Adjustable counterweights allow for stroke adjustment to suit the application requirements.

To accept primary material (up to 400 mm,

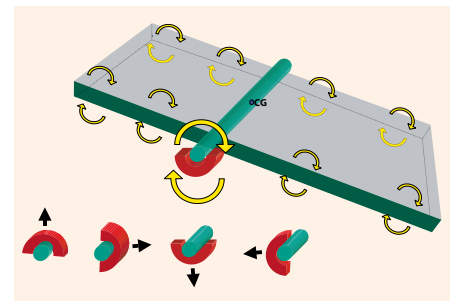
16 inches) the CVB Primary version has a reinforced top deck fitted with flat panels (rubber or steel plate) and the side plates are extended upwards. Screen settings are adjusted accordingly for primary applications (increased stroke).

Available in 2 or 3 or 4 deck configurations, CVB's have a wide application capability.

General design...reliability, ease of maintenance

Nordberg CVB screens consist of modular components assembled with huck bolts (sideplates, deckframes, MV modular vibrators). The huck bolt fastening system has proven to be a very safe and reliable method of fixing.

Space between decks is not compromised to enable easier screen media replacement. It is also possible to gain access to screen media through the back of the screen.



Circular motion for a better screening efficiency.



Environment friendly



Components assembled with huck bolts





Features and Benefits

Spray pipe option... screening efficiency, reliability

For wet screening applications CVB's can be fitted with spray pipes. This system can be easily installed without any modification to the screen (easy retrofit). It comprises of stationary spray pipes (not vibrating) and removable spray nozzles for ease of maintenance.

Screen decks... versatility, reliability

The CVB can be set up for crowned decks to accept side tensioned screen media - whatever the type (woven wire mesh, anti-clogging wire cloth, rubber, polyurethane, etc.) or flat decks to accept modular synthetic media. The top deck of the CVB Primary version is fitted with flat bolted panels (rubber or steel plates).



Panelcord equipment (primary CVB screen)

Dust encapsulation... ease of maintenance, environmental and safety concerns

As an option a dust encapsulation structure can be installed at the top of the sideplates for dust containment. Easy to install, the dust canvas cover can be removed totally or partially for inspection.



Dust encapsulation, Trellex rubber sealing

Stationary plants or portable chassis

As world leader in screen and crushing systems for aggregates and mining, Metso takes advantage of all its knowledge of turnkey Systems: e.g. modular design, ease of assembly, concern for the environment and ease of servicing (screen cloth removal).

Metso has developed a complete range of ancillaries for the Nordberg CVB screen line: e.g. support structures, access platforms, feed chutes, discharge hoppers (under screen) and removable roll-away discharge chutes.

If you have special requirements due to topography, Metso can still meet your needs.

Application

Nordberg CVB screens feature a unique combination of characteristics that result in high capacity and high efficiency screening, as well as long service life.

The Nordberg CVB screens are used for secondary, final sizing or even primary applications.

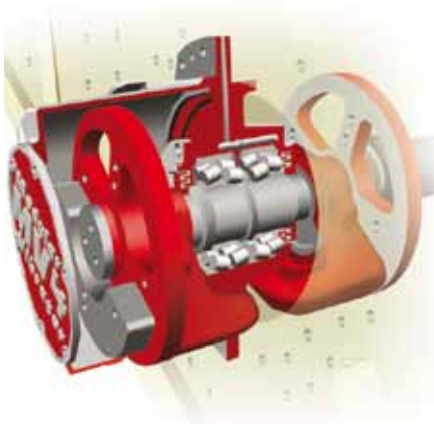


Anticlogging equipment (option)



Washing option





The MV-safer, faster, easier

MV Mechanism

The modular vibrating mechanism is featured in the CVB Screen. This innovative feature is a real cartridge design that maximizes uptime and ease of maintenance. It eliminates timely servicing and replacement of bearings and other components common to most vibrating equipment. The high bearing life offered with four bearings per shaft line allows for a single drive system on most screens that is opposed to the traditional dual-shaft, four-bearing screens.

Real cartridge design

This encapsulated design creates a no-bearing change-out environment. It is a true cartridge that is capable of being removed and a new unit installed within one hour, drastically reducing costs.



Longer bearing life

Four bearings per shaft line provide a longer bearing life, allowing for larger load capacities while lowering operation costs. The bearings are located centerline of the side plate for equal loading.

Adjustable Stroke – Easiest Stroke Adjustment in the Industry!

The lightweight aluminum end cap is easily removed by hand for a quick stroke adjustment.

The MV allows the Metso screens to be adjusted to fit any application.

Grease Lubrication System

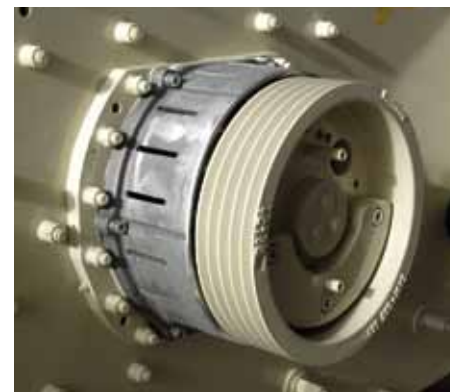
Individual bearing systems eliminate lubrication cross contamination. No refill or draining required. Once a week grease schedule.

Safety

Risk reduction through safer operating and maintenance! The MV is a one-piece modular construction that reduces risk without the traditional multiple parts replacement and repairs.

Exchange Program

The MV Exchange Program allows you to trade your used vibrator for a credit towards a new or factory refurbished unit. This program keeps your screen at peak performance levels.



The Service

The Metso Modular Vibrator (MV) is a real cartridge that is designed to be removed easily and safely with everyday tools. Its advanced technology creates a no cross contamination environment, so only the damaged unit needs to be replaced. After years of operating any Metso Vibrating product with an MV, it is possible to renew the bearing life to startup quality. Simply by replacing the MV Vibrator through the Metso MV Exchange Program, the Metso Vibrating Product will be brought back to original specifications.

To guarantee this service the spare parts department of Metso keep Modular Vibrators in stock to insure easy and fast replacement and reduce customer down time. Metso will send all your tools, accessories and a six-month/1,000 hour warranty with the new vibrator unit. Once the old MV has been returned to Metso a credit will be issued.

Metso offers a quality rebuilt product with all new bearings, seals and hardware that has been inspected and are backed by the same 6month/1,000 hour parts warranty.

Contact your Metso Dealer for your new or rebuilt replacement MV Unit.

There is a Core Charge in the price for all MV units. Once the damaged MV Unit is returned through your dealer, a credit will be issued.

You will receive from Metso:

- New or Rebuilt MV Unit (Core Only)
- Installation Instructions
- Tool Kit*
- Reusable Box for Return of the old core

Returning your MV unit back to your Metso Dealer insures the Core Credit will be issued. Only the Core must be returned to Metso, the counterweights should be removed prior to shipping. If counterweights are returned with the MV Unit, then there will be an applicable removal and return charge. The returned MV Core is not subject to inspection.

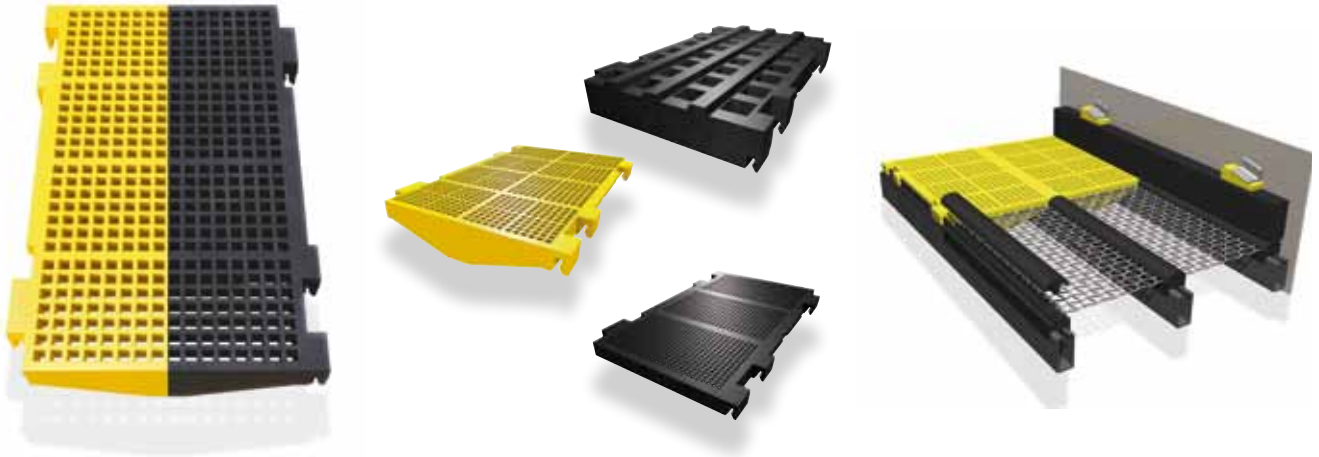
The Benefits

The Metso MV Exchange Program is a quality program that benefits dealers and customers.



* All required accessories and tools are included in the package.

	MV vibrators: real cartridge design	Conventional shaft line
Comments	Only the damaged vibrator must be replaced because of the modular grease lubrication design	All the bearings must be replaced because of common oil bath communication.
Total downtime	4 to 8 hours	12 to 24 hours
Expertise required	Low	High
Tools required*	Lift tool, hand tools	Crane, workshop facility, fitting press, etc.
Contamination risk for new bearings	No contamination risk	Possible oil contamination
Warranty	Yes, 6 months / 1 000 hours	No



Trellex LS modular solution consist of standard modules in both polyurethane and rubber compounds for different application needs. For specific and common screening application needs, LS system also offers a high performance range ; Trellex LS HiPer Life, Trellex LS HiPer Flow and Trellex LS HiPer Clean.

LS system offers the possibility to install wire insert on existing stringers. For new screen installations and during commissioning, this can be a helpful tool for fintuning a final product.

Experience makes the match

Trellex screening media and Metso screens

Make sure your Metso screen is always producing at its cost effective best. Match it with Trellex screening media.

Trellex LS modular solutions

Trellex LS modules are the result of more than 50 years of experience and development. Optimized for Metso Screens, Trellex LS helps you achieve higher volume processing with minimal interruptions. And thanks to the industry's only true global sales and support network, Trellex LS modules are always available quickly and conveniently wherever you are.

Trellex LS

- open cast polyurethane for exceptional performance and durability
- injection moulded rubber ensures consistent material performance properties throughout
- wide range of aperture pattern and opening choices
- minimal maintenance design keeps cost down and production up

Trellex LS HiPer Life

“Built tough for maximum load handling”. In application with sliding wear Trellex LS HiPer Life modules is the best choice. A special wear resistant rubber compound together with an optimal design guarantees a long service life.

- Injection moulded wear resistant rubber compound T60S - lasts up to 30% longer
- Riding bars for higher capacity and longer life (not available for all apertures)
- Moulded apertures to reduce risk of pegging

Trellex LS HiPer Flow

“At least 20% more active screening surface”.

- More moulded apertures on every module
- Saves time and money. More open area = more material processed
- Long-lasting, dual hardness open cast-polyurethane design

Trellex LS HiPer Clean

“Precision production without interruptions”

- Flexible membrane and moulded apertures prevent blinding and pegging
- GUARANTEED to stay clean, even for high moisture material
- Injection moulded flexible rubber construction ensures consistent material performance properties throughout
- Highly accurate, ideal for finer separations

Product	Module dimensions [W x L mm]	Aperture range [mm]	Thickness [mm]	Wear material
Trellex LS	300x500, 300x610, 305x610	0.5 - 80	30, 40 ,60	PU, T60, T40
Trellex LS HiPer Life	300x500, 300x610, 305x610	12 - 70	40, 60	T60S
Trellex LS HiPer Clean	300x500, 300x610, 305x610	3.2 - 19	30	T40
Trellex LS HiPer Flow	300x500, 300x610, 305x610	3 - 30	30	PU

Machine	W x L (m / ft)	Decks	Power (kW / hp)	MV vibrator	Weight (kg / lb)	Capacity (mtp / stph)	Top deck maximum opening (mm / in)
CVB1540-1	1.5 x 4 / 5 x 13	1	11 / 15	MV1	2800 / 6200	300 / 330	75 / 3
CVB1540-2	1.5 x 4 / 5 x 13	2	15 / 20	MV2	3150 / 6950	300 / 330	75 / 3
CVB1540-3	1.5 x 4 / 5 x 13	3	15 / 20	MV2	4050 / 8950	300 / 330	75 / 3
CVB1540-4	1.5 x 4 / 5 x 13	4	15 / 20	MV2	5000 / 11000	300 / 330	75 / 3
CVB1845-1	1.8 x 4.5 / 6 x 15	1	15 / 20	MV2	3300 / 7300	400 / 440	75 / 3
CVB1845-2	1.8 x 4.5 / 6 x 15	2	15 / 20	MV2	4200 / 9300	400 / 440	75 / 3
CVB1845-3	1.8 x 4.5 / 6 x 15	3	15 / 20	MV2	5200 / 11500	400 / 440	75 / 3
CVB1845-4	1.8 x 4.5 / 6 x 15	4	22 / 30	MV3	6800 / 15000	400 / 440	75 / 3
CVB2050-1	2 x 5 / 6.5 x 16.5	1	15 / 20	MV2	3800 / 8400	600 / 660	75 / 3
CVB2050-2	2 x 5 / 6.5 x 16.5	2	15 / 20	MV2	4700 / 10400	600 / 660	75 / 3
CVB2050-3	2 x 5 / 6.5 x 16.5	3	22 / 30	MV3	6300 / 13900	600 / 660	75 / 3
CVB2050-4	2 x 5 / 6.5 x 16.5	4	22 / 30	MV3	7600 / 16750	600 / 660	75 / 3
CVB2060-1	2 x 6 / 6.5 x 20	1	15 / 20	MV2	5100 / 11250	800 / 880	75 / 3
CVB2060-2	2 x 6 / 6.5 x 20	2	22 / 30	MV3	6500 / 14350	800 / 880	75 / 3
CVB2060-3	2 x 6 / 6.5 x 20	3	22 / 30	MV3	8500 / 18750	800 / 880	75 / 3
CVB2060-4	2 x 6 / 6.5 x 20	4	30 / 40	MV4	10400 / 22950	800 / 880	75 / 3
CVB2661-1	2.6 x 6.1 / 8.5 x 20	1	22 / 30	MV3	6500 / 14350	1000 / 1100	75 / 3
CVB2661-2	2.6 x 6.1 / 8.5 x 20	2	22 / 30	MV3	11000 / 24250	1000 / 1100	75 / 3
CVB2661-3	2.6 x 6.1 / 8.5 x 20	3	30 / 40	MV4	13000 / 28700	1000 / 1100	75 / 3
CVB2661-4	2.6 x 6.1 / 8.5 x 20	4	30 / 40	MV4	15000 / 33100	1000 / 1100	75 / 3

Machine	W x L (m / ft)	Decks	Power (kW / hp)	MV vibrator	Weight (kg / lb)	Capacity (mtp / stph)	Top deck maximum opening (mm / in)
CVB1540-1P	1.5 x 4 / 5 x 13	1	15 / 20	MV2	3200 / 7100	400 / 440	175 / 7
CVB1540-2P	1.5 x 4 / 5 x 13	2	15 / 20	MV2	3650 / 8050	400 / 440	175 / 7
CVB1540-3P	1.5 x 4 / 5 x 13	3	15 / 20	MV2	4500 / 9950	400 / 440	175 / 7
CVB1845-1P	1.8 x 4.5 / 6 x 15	1	15 / 20	MV2	3600 / 7950	600 / 660	175 / 7
CVB1845-2P	1.8 x 4.5 / 6 x 15	2	15 / 20	MV2	4500 / 9950	600 / 660	175 / 7
CVB1845-3P	1.8 x 4.5 / 6 x 15	3	15 / 20	MV2	5800 / 12800	600 / 660	175 / 7
CVB2050-1P	2 x 5 / 6.5 x 16.5	1	15 / 20	MV2	4100 / 9050	800 / 880	175 / 7
CVB2050-2P	2 x 5 / 6.5 x 16.5	2	22 / 30	MV3	4900 / 10800	800 / 880	175 / 7
CVB2050-3P	2 x 5 / 6.5 x 16.5	3	22 / 30	MV3	6650 / 14700	800 / 880	175 / 7
CVB2060-1P	2 x 6 / 6.5 x 20	1	15 / 20	MV2	5350 / 11800	1000 / 1100	175 / 7
CVB2060-2P	2 x 6 / 6.5 x 20	2	22 / 30	MV3	6700 / 14800	1000 / 1100	175 / 7
CVB2060-3P	2 x 6 / 6.5 x 20	3	22 / 30	MV3	9100 / 20100	1000 / 1100	175 / 7
CVB2661-1P	2.6 x 6.1 / 8.5 x 20	1	22 / 30	MV3	6800 / 15000	1200 / 1300	175 / 7
CVB2661-2P	2.6 x 6.1 / 8.5 x 20	2	22 / 30	MV3	11900 / 26250	1200 / 1300	175 / 7
CVB2661-3P	2.6 x 6.1 / 8.5 x 20	3	30 / 40	MV4	13000 / 30650	1200 / 1300	175 / 7

Indicative values depending on applications

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