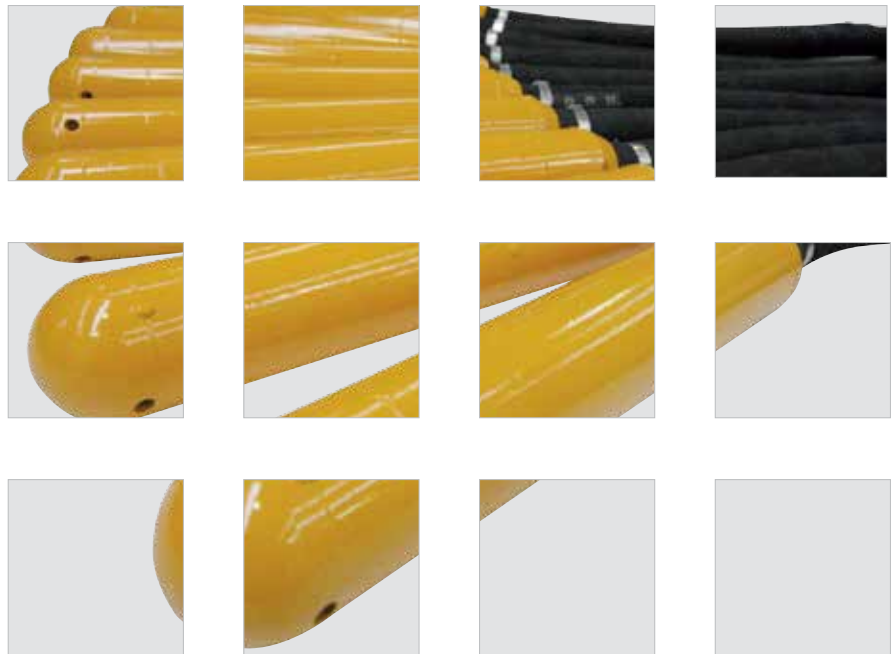


CONCRETE CONSOLIDATION



THE WORLDWIDE LEADER IN VIBRATION TECHNOLOGY







Intro

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In situ concrete consolidation

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Worldwide leader in vibration technology

OLI is the world's top selling manufacturer of Electric and Pneumatic Vibrators.

A high level of customer service is guaranteed through 19 OLI Trading Subsidiaries, 36 local warehouses and 5 manufacturing plants worldwide.

OUR 3 DIVISIONS

PROVIDE CUSTOMERS WITH OPTIMAL SOLUTIONS FOR ALL REQUIREMENTS

| INDUSTRIAL VIBRATORS | FLOW AIDS | CONCRETE CONSOLIDATION |
|---|---|---|
|  <p>Electric motovibrators for vibrating equipments.</p> |  <p>Comprehensive range of electric and pneumatic vibrators to solve any problem of flowability.</p> |  <p>Internal concrete vibrators and converters for reliable and efficient concrete compaction.</p> |

Originally specialising in immersion vibrators for concrete consolidation, OLI is now the worldwide leader in vibration technology, with a **complete range of electric and pneumatic internal and external vibrators**.

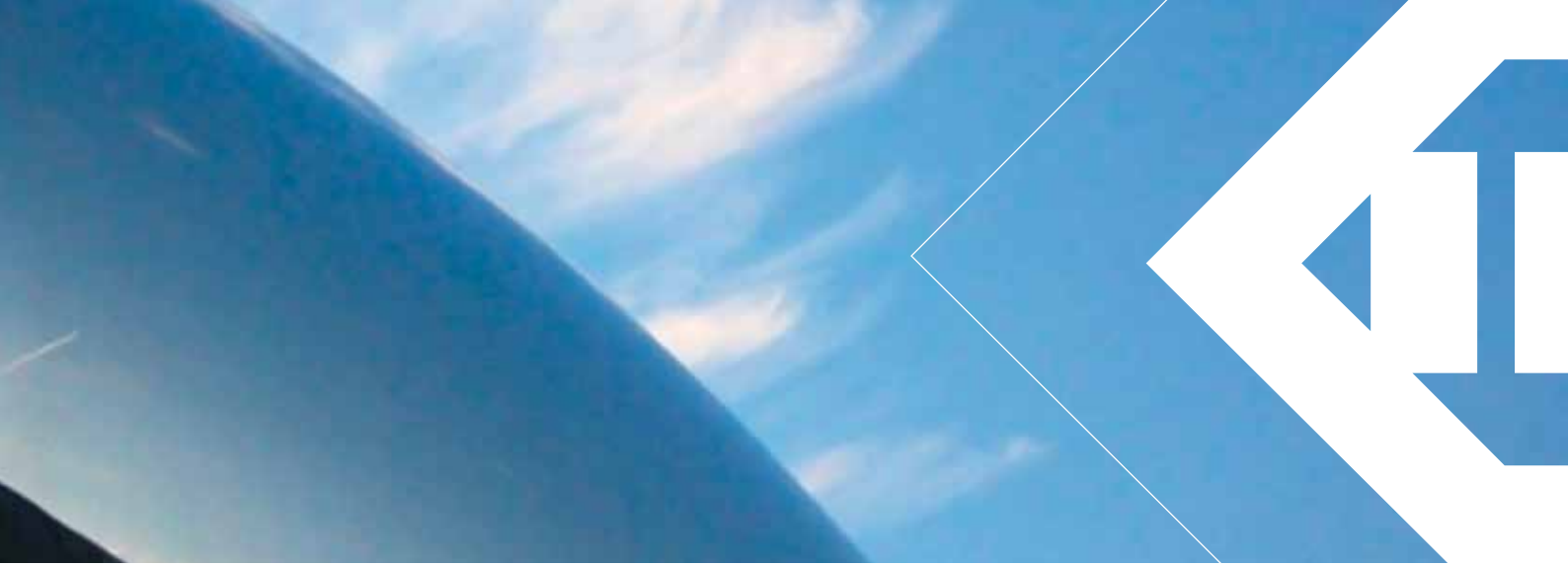
By supplying **competitive, high quality products for wide-ranging applications**, OLI combines **performance** and **reliability** by adapting to the ever-changing market. A strong believer in innovation, OLI is constantly striving to be ahead of the opposition.

As a global player in industrial vibration technology, the key focus of OLI's business strategy is **rapid stock delivery, any time, anywhere in the world**.

Excellent customer service is of pivotal importance: the company guarantees **quick order processing** and customers worldwide can enjoy access to the same high quality product and services.

OLI has access to credible expertise when it comes to finding suitable solutions to customers' requests. A team of engineers specialised in designing efficient, reliable, and safe solutions backed by **globally certified management**.

OLI provides their customers with state-of-the-art equipment and the blueprint for the next generation of products is already in progress.



The vibration of concrete

The freshly mixed concrete does not compact on its own because the poor fluidity is not able to overcome the internal friction; only vibration can overcome such forces.

VIBRATION FAVOURS:

- The **surfacing of the air** trapped in the concrete;
- The **displacement of aggregates**, aligning them to one another, with consequent reduction of cavities, conferring them high density and perfect homogeneity;
- The **adhesion** of the concrete to the bars of the reinforcement armatures or to any internal structural inserts, as well as to the basic anchorages.

BENEFITS:

- High **mechanical resistance**.
- Low porosity and thus **low permeability** to water and to aggressive substances contained therein.
- **Absence of cracks** within the concrete, in the proximity of the reinforcement armatures' bars.
- **Complete filling** of the formwork.
- **Increase in the life cycle** of the concrete.
- High **aesthetic result**.

| TYPES OF VIBRATION | ➔ | EQUIPMENT TO USE |
|--|---|---|
| <p>Direct The vibration is transmitted directly from within the concrete</p> | ➔ | Electric immersion vibrators |
| <p>Indirect The vibration is transmitted from the outside of the concrete</p> | ➔ | External electric and pneumatic vibrators |

NO VOIDS

REDUCED WORKING TIME

MAXIMUM DENSITY

MAXIMUM CONCRETE STRENGTH WITH OLI VIBRATORS



Electric high frequency internal vibrators

When constructing industrial floors, walls, columns, slabs, etc., **flexible and easy-to-use vibrating systems** are required.

In such cases high-frequency immersion vibrators are generally used, known as “poker” or “spud” or simply “vibrating needles”, which come into **direct contact with the concrete**; for this reason, we speak of internal direct vibration.

HOW THE VH VIBRATORS WORK:

An eccentric mass is housed inside the vibrating head (or needle) which is fixed to a shaft rotated by a three-phase asynchronous AC motor.

During rotation, the eccentricity of the mass generates rotational movements to the vibrating head (vibrations).

The **robustness** and the **constant rotation speed** are essential factors in the compaction of the concrete: drops in the centrifugal force heavily reduce the quality of the manufactured article.

The VH is a robust and reliable product, which is suitable for compacting concrete and is appropriate for continuous operation.

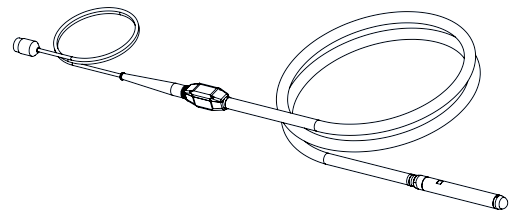
Important:

The VH have to be operated by electric and electronic converters that convert the 50/60 Hz mains frequency to 200 Hz, which is necessary in order for the vibrating head to reach a vibration speed of 12,000 vpm, as it is ideal for the proper compaction.



Benefits

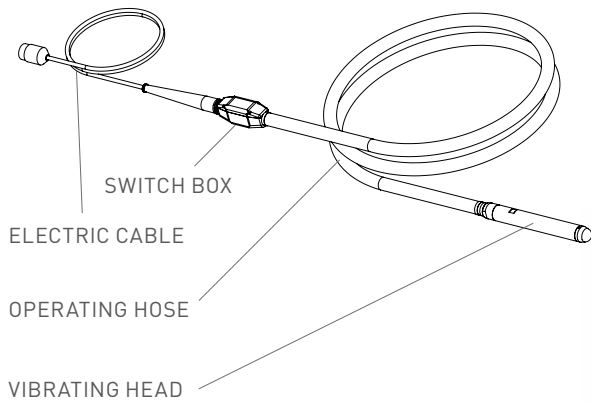
- No overheating
- Easy maintenance
- Long life of the vibration head
- 100% Water Proof



MAXIMUM DURABILITY
HIGH PERFORMANCE



VH - Electric high frequency internal vibrators



| MODEL | HEAD DIAMETER | HEAD LENGTH | HEAD WEIGHT | TOTAL WEIGHT* | CF | RATED CURRENT ** | RATED POWER (42V) | ACTION DIAMETER *** | AMPLITUDE | NOISE LEVEL | COMPACTION POWER*** |
|--------|---------------|-------------|-------------|---------------|-------|------------------|-------------------|---------------------|-----------|-------------|---------------------|
| | mm | mm | kg | kg | N | A | kW | cm | mm | dB A | m³/h |
| VHN 38 | 38 | 404 | 2.4 | 10.6 | 1,700 | 8 | 0.5 | 45 | 1.8 | 70 | 20 |
| VHN 50 | 50 | 403 | 4.4 | 14.8 | 3,080 | 11 | 0.6 | 60 | 2.0 | 76 | 25 |
| VHN 59 | 59 | 420 | 6.8 | 17.4 | 4,560 | 12 | 0.9 | 80 | 2.3 | 76 | 35 |
| VHP 50 | 50 | 468 | 5.4 | 16.4 | 3,760 | 15 | 0.9 | 70 | 2.1 | 76 | 40 |
| VHP 59 | 59 | 498 | 8.2 | 19.6 | 5,640 | 17 | 1.1 | 90 | 2.4 | 79 | 45 |
| VHP 65 | 65 | 484 | 9.4 | 22.4 | 7,330 | 24 | 1.3 | 110 | 2.6 | 79 | 50 |

* Packaging included ** Refer to centrifugal force for amperage assessment *** Measurements vary according to concrete quality and thickness

VH - ELECTRIC HIGH FREQUENCY INTERNAL VIBRATORS

| | |
|-------------|--|
| APPLICATION | Concrete compaction |
| DESCRIPTION | High frequency internal electric vibrators for concrete consolidation characterised by high performance consistent speeds, and remarkable resistance to abrasion |

FEATURES

| | |
|---------------------|--|
| DUTY CYCLE | Continuous S1 |
| INPUT | 42V-3ph - 200Hz |
| NOMINAL FREQUENCY | 12,000 vpm |
| INSULATION CLASS | F (T° max = 155 °C) |
| THERMAL SWITCHES | Inside the stator. Max T °C = 150 °C |
| WORKING TEMPERATURE | From -20 °C to +40 °C |
| HEAD | Equipped with ball bearings greased for life. 2 bearings (VHN 50 - VHN 59), 4 bearings (VHN 38 and complete VHP range) Protection class IP68 Hardening treatment for VHN and chrome plating for VHP |
| SWITCH BOX | Polyamide (nylon +30% fiber glass) with gasket, cable protection, yellow colour IP66 protection Designed for continuous use and resistant to wear and tear |
| OPERATING HOSE | 5m SBR rubber hose with inner textile reinforcement |
| SUPPLY CABLE | 10m neoprene electric cable HO7RN-F with 3 pin plug (42V - 3 phase, IP44) |
| FINISHING | VIBRATING HEAD: painted yellow Ral 1007 (VHN), chromed (VHP) SWITCH BOX: color yellow Ral 1007 |
| CERTIFICATIONS | Community Directives and subsequent modifications: 2006/42/EC - 2006/95/EC Conformity verified according to the standard documents: IEC 60745-1, IEC 60745-2-12, IEC 60034-1 |
| OPTIONS | Cast aluminium switch box Rubber cap |



Frequency and voltage converters

The internal vibrating needles need to be powered via a three-phase electric line at low voltage, therefore it is necessary to use a voltage and frequency converter.

The electromechanical rotary converters consist of a motor and a generator, which are coupled together. The motor converts the electrical energy into mechanical energy; the generator converts the mechanical energy into electrical energy, thus generating the required voltage and frequency (42 Volt - 200 Hz).

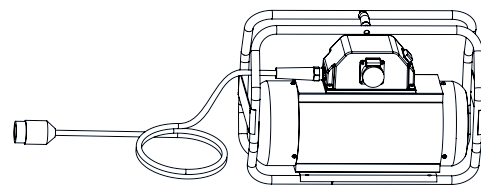
The converters of the CM range are designed to supply simultaneously and in a continuous cycle, one or more high-frequency internal vibrators; they are reliable, durable and do not require maintenance.

The minimal design and the materials used **facilitate the external cleaning**, while the special internal air ducting system **avoids overheating**. The range offers several models, which are **capable of supplying from 1 to 4 immersion vibrators**.



Benefits

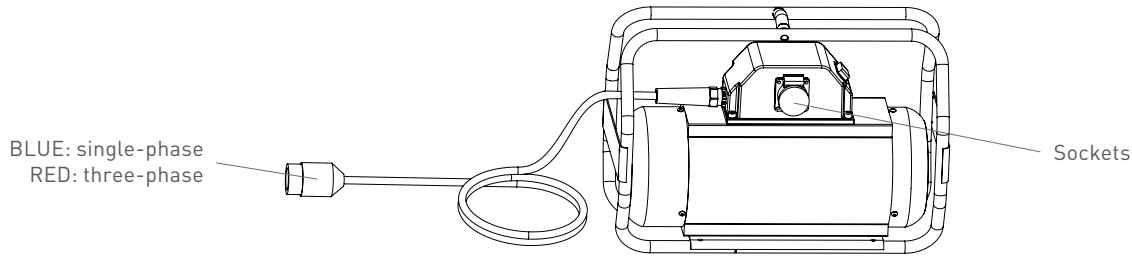
- No overheating
- No maintenance
- Optimal cooling
- Easy cleaning



LONG LIFE
OPTIMUM COOLING



CM - Frequency and voltage converters



| MODEL | FRAME | OUTLETS | SUPPLY ELECTRIC CABLE | WEIGHT | INPUT | | | OUTPUT | | |
|--------|---------|---------|-----------------------|--------|---------------------|---------|-------|---------------------------|---------|-------|
| | | | | | VOLTAGE | CURRENT | POWER | VOLTAGE | CURRENT | POWER |
| | | | | | Type | N° | m | kg | V | A |
| CMM 15 | Handle | 1 | 3.5 | 25 | 230V, 1ph, 50Hz | 6 | 1.1 | 42V ± 10% 3ph 200Hz | 14 | 1.0 |
| CMM 25 | Frame | 2 | 34 | 10 | | 1.8 | 25 | | 1.8 | |
| CMT 25 | Frame | 2 | 3.5 | 33 | 400V 3ph 50Hz | 5 | 2.8 | | 25 | 1.8 |
| CMT 35 | Wheeled | 3 | 5.0 | 41 | | 6 | 3.3 | | 36 | 2.6 |
| CMT 55 | Wheeled | 3 | 5.0 | 50 | | 9 | 5.0 | | 55 | 4.0 |
| CMT 85 | Wheeled | 4 | 5.0 | 56 | | 12 | 6.6 | | 85 | 6.2 |

| COMPATIBILITY TABLE (maximum number of vibrators that can be connected) | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|---|
| CMM 15 | 1x VHN 38 | 1x VHN 50 | 1x VHN 59 | - | - | - | - |
| CMM 25 | 2x VHN 38 | 2x VHN 50 | 2x VHN 59 | 1x VHP 50 | 1x VHP 59 | 1x VHP 65 | |
| CMT 25 | 2x VHN 38 | 2x VHN 50 | 2x VHN 59 | 1x VHP 50 | 1x VHP 59 | 1x VHP 65 | |
| CMT 35 | 3x VHN 38 | 3x VHN 50 | 3x VHN 59 | 2x VHP 50 | 2x VHP 59 | 1x VHP 65 | |
| CMT 55 | 3x VHN 38 | 3x VHN 50 | 3x VHN 59 | 3x VHP 50 | 3x VHP 59 | 2x VHP 65 | |
| CMT 85 | 4x VHN 38 | 4x VHN 50 | 4x VHN 59 | 4x VHP 50 | 4x VHP 59 | 3x VHP 65 | |

CM - FREQUENCY AND VOLTAGE CONVERTERS

| | |
|-------------|---|
| APPLICATION | Concrete compaction |
| DESCRIPTION | Frequency and voltage converters equipped with permanent magnets, specifically designed to power high frequency concrete vibrators continuously |

FEATURES

| | |
|---------------------|--|
| DUTY CYCLE | Continuous S1 |
| INSULATION CLASS | F (T° Max = 155 °C) |
| PROTECTION | Overload protection |
| WORKING TEMPERATURE | From -20 °C to +40 °C |
| CONNECTION BOX | Polyamide (nylon + 30% fibre glass), complete with switch and sockets (42V three phase, IP44 protection) |
| SUPPLY CABLE | Neoprene electric cable H07RN-F with plug |
| FINISHING | Powder coating (body yellow Ral 1007; fan covers, wheels and frame black Ral 9007) |
| CERTIFICATIONS | Community Directives and subsequent modifications: 2006/42/EC - 2006/95/EC Conformity verified according to the standard documents IEC 60034-1, IEC 60745-1, UNI EN ISO 12100 |
| MORE | Smooth and robust cast aluminium body Forced ventilation |



High frequency internal vibrators with built-in converter

On construction sites, during the consolidation of the concrete, a light, flexible and easy-to-use tool is often required, which **can be connected directly to the common, single-phase power lines** (230 or 110 Volt, 50/60 Hz).

In order to solve this necessity, the **EWO** range has been developed: **high-frequency immersion vibrators equipped with an integrated electronic frequency converter** capable of transforming the single-phase input voltage (230V or 110V, 50/60 Hz) into the three-phase voltage (230 V, 200 Hz) necessary to obtain 12,000 vpm.

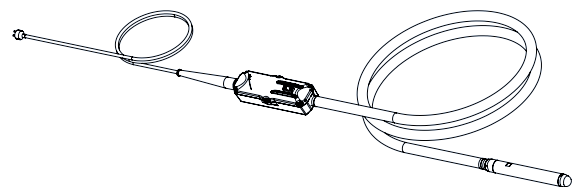
Compared to the common vibrating needles powered by electromechanical converters, the EWO has several advantages:

- they are **light and flexible**;
- the constant output frequency maintains the maximum centrifugal force and thus a **high and consistent performance**;
- there is **protection** against short circuits, excessive temperature, voltage and current above or below the nominal values.



Benefits

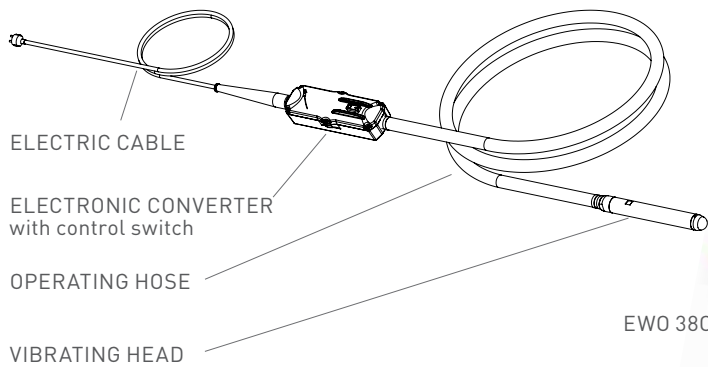
- Reliable
- Safe & easy to handle
- No overheating
- Easy maintenance



COMPACT SOLUTION



EWO – High frequency internal vibrators with built-in converter



EWO 50C
EWO 59C
EWO 65C



| MODEL | HEAD DIAMETER | HEAD LENGTH | HEAD WEIGHT | TOTAL WEIGHT* | CF | RATED CURRENT ** | RATED POWER [42V] | ACTION DIAMETER *** | AMPLITUDE | NOISE LEVEL **** | COMPACTION POWER *** |
|---------|---------------|-------------|-------------|---------------|-------|------------------|-------------------|---------------------|-----------|------------------|----------------------|
| | mm | mm | kg | kg | N | A | kW | cm | mm | DB A | m3/h |
| EWO 38C | 38 | 404 | 2.4 | 14.5 | 1,700 | 1.5 | 0.5 | 45 | 1.8 | 70 | 20 |
| EWO 50C | 50 | 468 | 5.2 | 20.0 | 3,760 | 2.7 | 0.9 | 70 | 2.1 | 76 | 40 |
| EWO 59C | 59 | 499 | 8.2 | 22.8 | 5,640 | 3.0 | 1.1 | 90 | 2.4 | 79 | 45 |
| EWO 65C | 65 | 484 | 9.4 | 24.8 | 7,330 | 4.5 | 1.3 | 110 | 2.6 | 79 | 50 |

* Packaging included

** Refer to centrifugal force for amperage assessment

*** Measurements vary according to concrete quality and thickness

**** Measured at 1 mt distance

| | Input Voltage | Input Frequency | Input Amperage |
|-----------|--------------------|-----------------|----------------|
| Converter | 230V +10% -15% 1ph | 50/60Hz ± 5% | 5.5 A |
| Converter | 115V +10% -15% 1ph | 50/60Hz ± 5% | 11.0 A |

EWO - HIGH FREQUENCY INTERNAL VIBRATORS WITH BUILT-IN CONVERTER

| | |
|-------------|--|
| APPLICATION | Concrete compaction |
| DESCRIPTION | Equipped with compact electronic frequency converters integrated into the supply cable, characterised by high centrifugal forces, constant speeds and high wear resistance |

FEATURES

| | |
|---------------------|--|
| DUTY CYCLE | Continuous S1 |
| INPUT | 230V + 10% - 15% 50/60 Hz -1 ph |
| NOMINAL FREQUENCY | 12.000 vpm |
| INSULATION CLASS | F (T° max = 155 °C) |
| PROTECTION CLASS | Head protection IP68 Converter protection IP66 The inverter is protected against overload, overvoltage, excess temperature and short circuit. A LED light shows the presence of a fault |
| WORKING TEMPERATURE | From -20 °C to +40 °C |
| HEAD | Equipped with 4 ball bearings greased for life Hardening treatment (EWO 38C), chrome plating (EWO 50C, EWO 59C, EWO 65C) |
| SWITCH BUILT-IN | Complete with reinforced gasket |
| PROTECTION HOSE | 5m SBR rubber hose with textile reinforcement |
| SUPPLY CABLE | 10m neoprene electric cable H07RN-F with SCHUKO 220V 2P+1T 16A plug |
| CONVERTER | Sturdy cast aluminium box Ergonomic and lightweight (3 Kg) |
| INVERTER | Tropicalised and protected against vibration, moisture and shocks with a special resin |
| FINISHING | Painted yellow RAL 1007 (EWO 38C) and chrome plating (EWO 50C - EWO 59C - EWO 65C) |
| CERTIFICATIONS | Community Directives and subsequent modifications: 2006/42/EC, 2014/30/EU, 2006/95/EC Conformity verified according to the standard documents IEC 60745-1, IEC 60745-2-12, UNI EN ISO 12100 |
| OPTIONS | Rubber cap |



External electric vibrators

High frequency electric vibrators are used on construction sites and in precast companies to obtain high-quality products (exposed concrete), with **excellent aesthetic results and weather resistance**. The vibration is transmitted to the concrete **indirectly** through formworks or mould.

Just like the internal vibrators, the external ones are also based on the principle of the vibration produced by the rotation of an eccentric mass started by a three phase electric motor.

The OLI range of external electric vibrators includes fixed frequency models, 3,000 and 6,000 vpm, and variable frequency models, from 0 to 6,000 vpm.

Low speed vibration is used on high-density and unreactive concretes mostly, as they allow a fast displacement of the aggregates.

High speed vibration (6,000 vpm) is recommended with low-density concretes and in applications where high surface quality is required.

Variable frequency allows to find the correct vibration speed in relation to the density of the concrete to be treated. They are obviously more flexible than earlier.

The OLI external electric vibrators are characterised by **high operating efficiency** and **ease of installation**. Specially designed attachment devices (quick-coupling clamps) reduce the time required for installing and repositioning.

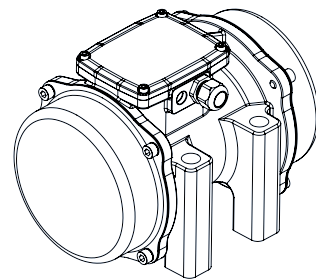
This vibration system is recommended when:

- High construction elements and narrow walls (partitions, columns, beams) are to be compacted, which are difficult to vibrate with other systems.
- The reinforcement density inside the housing is high.



Benefits

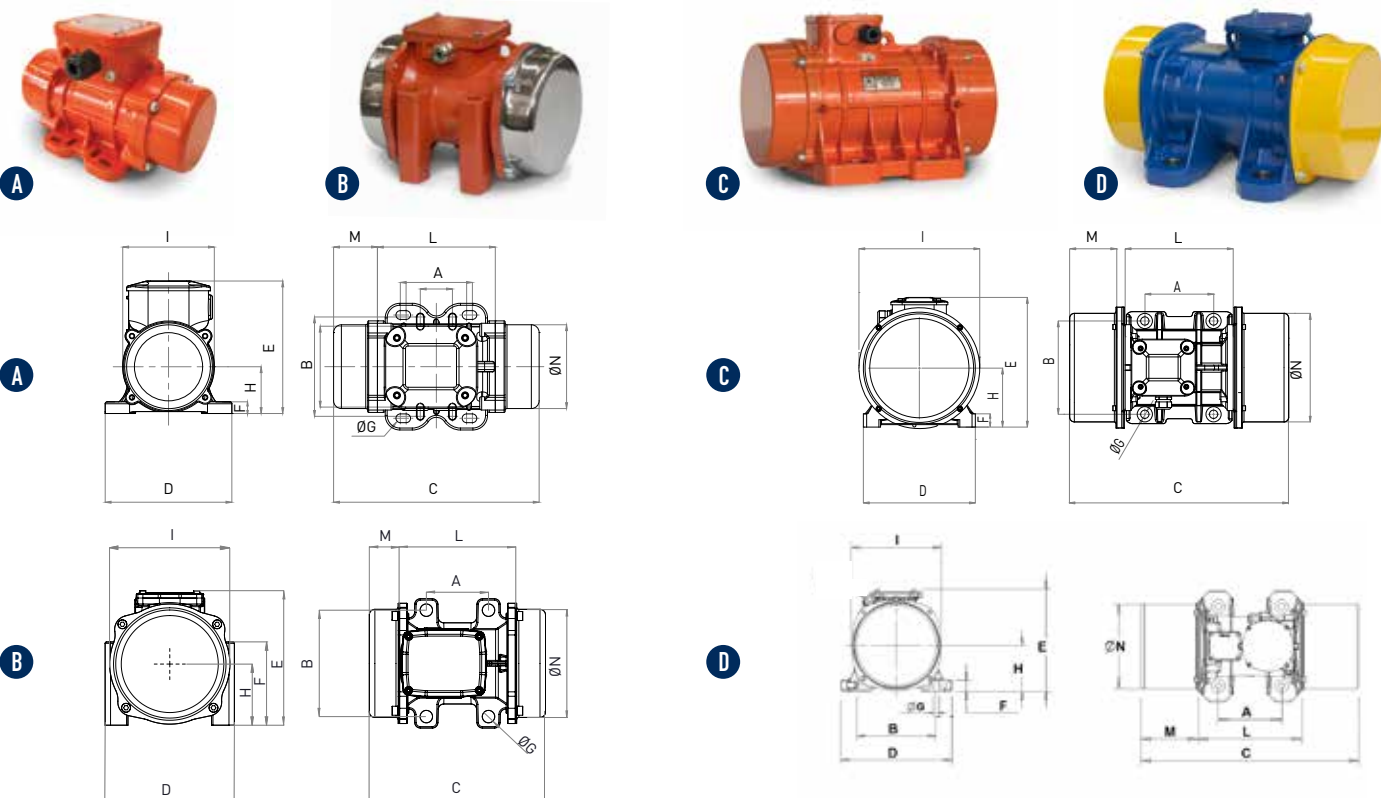
- Sturdy design, made to last
- High operating efficiency
- Easy to install



RELIABLE



Electric vibrators - FOOT



| Wm kgcm | MODEL | WEIGHT kg | CENTRIFUGAL FORCE kg | RPM | ELECTRICAL SPECIFICATIONS | | | | | | CERTIFICATE | |
|------------|--------------------|--------------|-------------------------|---------|---------------------------|-----------------|---------------------------|------------|-------|---------|-----------------------|------------|
| | | | | | INPUT POWER kW | FREQUENCY Hz | NOMINAL CURRENT A max. | | COS Ø | Ia / In | CABLE GLAND Metric | Ex II3D |
| 1.47 | MVE 290/6 | 4.6 | 294 | 6,000 | 0.27 | 200Hz | 5.00 | 0.91/0.53A | 0.75 | 2.00 | M20 | 100 °C |
| 7.00 | MVE 1530/6N-HF-38E | 12.0 | 1,385 | 6,000 | 1.00 | 200Hz | 18.00 | 2.80/1.60 | 0.90 | 4.00 | M20 | 100 °C |
| 7.32 | MVE 1300/6 | 24.0 | 1,474 | 0÷6,000 | 1.30 | 0÷100Hz | on request | 4.24/2.44 | 0.77 | 3.10 | M20 | 100 °C |
| 13.00 | VFV 100 25/6 | 42.0 | 2,600 | 0÷6,000 | 2.25 | 0÷100Hz | on request | 7.96/4.60 | 0.71 | 5.50 | M20 | on request |

| MODEL | DRAWING | SIZE | DIMENSIONAL SPECIFICATIONS (mm) | | | | | | | | | | | | |
|--------------------|---------|------|---------------------------------|----|------------|--------------|-------|-------|-----|-----|-----|-----|-----|-----|-----|
| | | | C | M | A | B | Ø G | HOLES | D | E | F | H | I | L | N |
| MVE 290/6 | A | 10 | 211 | 45 | 62-75 / 33 | 106 / 83-102 | 9 / 7 | 4 | 130 | 136 | 12 | 48 | 94 | 121 | 85 |
| MVE 1530/6N-HF-38E | B | 38 | 255 | 43 | 90 | 154 | 18 | 4 | 187 | 195 | 121 | 89 | 174 | 169 | 156 |
| MVE 1300/6 | C | 50 | 321 | 58 | 120 | 170 | 17 | 4 | 208 | 210 | 22 | 94 | 180 | 205 | 170 |
| VFV 100 25/6 | D | 8 | 410 | 74 | 150 | 190 | 17 | 4 | 280 | 258 | 30 | 117 | 227 | 260 | 212 |

ELECTRIC VIBRATORS FOR CONCRETE CONSOLIDATION - FOOT VERSION

APPLICATION Concrete compaction

FEATURES

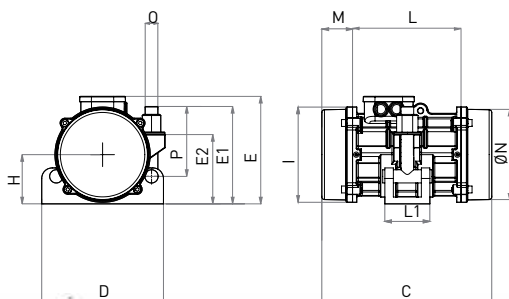
| | |
|---------------------|---|
| DUTY CYCLE | Continuous S1 |
| MULTIVOLTAGE | 3ph 42V - 3ph 230/400V [* voltage tolerance ± 10%] |
| FIXED FREQUENCY | 50Hz and 200Hz |
| VARIABLE FREQUENCY | 0÷100Hz |
| WORKING TEMPERATURE | -10 °C / +40 °C |
| MAX NOISE LEVEL | 85 dB(A) at 1 meter distance |
| MATERIAL | Cast aluminium or iron |
| FINISHING | Painted: A, B, C: orange RAL 2009; D: blue RAL 5010, yellow RAL 1003 |
| CERTIFICATIONS | Community Directives and subsequent modifications: 2006/42/EC - 2006/95/EC Conformity verified according to the standard documents IEC 60034 |
| OPTIONS | Power cable |
| ACCESSORIES | Fixing brackets: CLW (Clamp for Wooden formworks); CLS (Clamp for Steel formworks) |



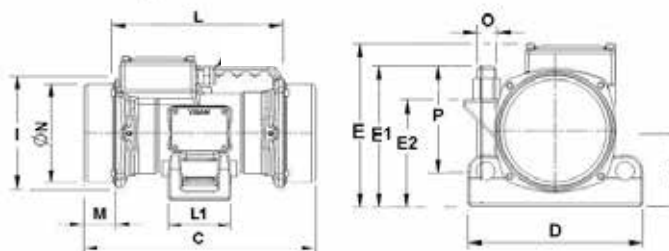


Electric vibrators - CRADLE

E



F



*Cradle not included



*Cradle not included

STANDARD FREQUENCY ELECTRIC MOTORS

| Wm kgcm | MODEL | WEIGHT kg | CENTRIFUGAL FORCE kg | RPM | ELECTRICAL SPECIFICATIONS | | | | | | CERTIFICATE Ex II3D Temp. Class | |
|------------|-----------------|--------------|-------------------------|-------|---------------------------|-----------------|---------------------------|-----------|-------|---------|---------------------------------------|-----------------------|
| | | | | | INPUT POWER kW | FREQUENCY Hz | NOMINAL CURRENT A max. | | COS φ | Ia / In | | CABLE GLAND Metric |
| 16.00 | SPC 50 7.0 A-00 | 23.5 | 800 | 3,000 | 0.75 | 50 | on request | 2.25/1.30 | | | 0.84 | |
| 20.00 | SPC 50 9.0 A-00 | 24.5 | 1,000 | 3,000 | 0.85 | 50 | on request | 2.42/1.40 | 0.88 | 5.0 | M20 | on request |

HIGH FREQUENCY ELECTRIC MOTORS

| Wm kgcm | MODEL | WEIGHT kg | CENTRIFUGAL FORCE kg | RPM | ELECTRICAL SPECIFICATIONS | | | | | | CERTIFICATE Ex II3D Temp. Class | |
|------------|-----------------|--------------|-------------------------|---------|---------------------------|-----------------|---------------------------|-----------|-------|---------|---------------------------------------|-----------------------|
| | | | | | INPUT POWER kW | FREQUENCY Hz | NOMINAL CURRENT A max. | | COS φ | Ia / In | | CABLE GLAND Metric |
| 7.40 | HFC-200 6000/15 | 21.5 | 1,500 | 6,000 | 1.00 | 200 | 19.70 | 3.60/2.10 | | | 0.70 | |
| 14.66 | MVE 1300/6C | 29.0 | 1,474 | 0÷6,000 | 1.30 | 0÷100 | on request | 4.24/2.44 | 0.77 | 3.10 | M20 | 100 ° C |
| 10.00 | VFC 100 20/6 | 24.0 | 2,000 | 0÷6,000 | 1.25 | 0÷100 | on request | 4.00/2.30 | 0.79 | 5.50 | M20 | on request |

DIMENSIONAL SPECIFICATIONS (mm)

| MODEL | DRAWING | SIZE | C | M | L | L1 | O | P | D | E | E1 | E2 | I | H | N |
|-----------------|---------|------|-----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|
| SPC 50 7.0 A-00 | F | 05 | 390 | 83 | 224 | 85 | M24 | 132 | 230 | 212 | 184 | 136 | 163 | 95 | 148 |
| SPC 50 9.0 A-00 | F | 05 | 390 | 83 | 224 | 85 | M24 | 132 | 230 | 212 | 184 | 136 | 163 | 95 | 148 |
| HFC-200 6000/15 | F | 05 | 312 | 44 | 224 | 85 | M24 | 132 | 230 | 212 | 184 | 136 | 163 | 95 | 148 |
| MVE 1300/6C | E | 50 | 321 | 58 | 205 | 85 | M24 | 132 | 230 | 203 | 184 | 131 | 180 | 93 | 170 |
| VFC 100 20/6 | F | 05 | 390 | 83 | 224 | 85 | M24 | 132 | 230 | 212 | 184 | 136 | 163 | 95 | 148 |

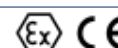
ELECTRIC VIBRATORS - CRADLE VERSION

APPLICATION Concrete compaction

FEATURES

| | |
|---------------------|---|
| DUTY CYCLE | Continuous S1 |
| MULTIVOLTAGE | 3ph 42V - 3ph 230/400V (voltage tolerance ± 10%) |
| FIXED FREQUENCY | 50Hz and 200Hz |
| VARIABLE FREQUENCY | 0÷100Hz |
| WORKING TEMPERATURE | -10 °C / +40 °C |
| MAX NOISE LEVEL | 85 dB(A) at 1 meter distance |
| MATERIAL | Cast aluminium or iron |
| FINISHING | Painted: model E: orange RAL 2007, model D: blue RAL 5010, yellow RAL 1003 |
| CERTIFICATIONS | Community Directives and subsequent modifications: 2006/42/EC, 2006/95/EC Conformity verified according to the standard document IEC 60034-1 |
| OPTIONS | Power cable |
| ACCESSORIES | Fixing bracket: CRS (Cradle for Steel concrete moulds) |

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Fastening systems for external vibrators

▶ CLW - Clamp for Wooden formworks

CLW

| | |
|-------------|---|
| APPLICATION | Quick mounting of vibrators on wooden formworks |
| SAFETY BELT | Included |
| FINISHING | Galvanized |

SUITABLE FOR

| | |
|-----------|-------------------------|
| DOKA | H20, Top50, FF20 |
| PERI | VT20K, GT24, VARIO GT24 |
| MEVA | H20 |
| PASCAL | H20 |
| NOE | H20 |
| HÜNNEBECK | H20, R24, GF24, ES24 |



DIMENSIONAL SPECIFICATION

| MODEL | LENGTH | WIDTH | HEIGHT | WEIGHT | MULTIPLE FOOTPRINT (mm) | | | |
|---------|--------|-------|--------|--------|-------------------------|---------|-----------|-----|
| | mm | mm | mm | kg | ELECTRIC | | PNEUMATIC | |
| CLW 001 | 389 | 291 | 122 | 6 | 65x106 | 135x115 | 90x125 | 180 |

▶ CLS - Clamp for Steel formworks

CLS

| | |
|--------------|--|
| APPLICATION | Quick mounting of vibrators on steel formworks |
| SAFETY CABLE | Included |
| FINISHING | Galvanized |

SUITABLE FOR

| | |
|------|--------------------------------|
| DOKA | Framax XLife, Alu Framax XLife |
| PERI | Trio |
| MEVA | StarTec, Mammut |
| NOE | NOEtop |



DIMENSIONAL SPECIFICATION

| MODEL | LENGTH | WIDTH | HEIGHT | WEIGHT | MULTIPLE FOOTPRINT (mm) | | | |
|---------|--------|-------|--------|--------|-------------------------|---------|-----------|-----|
| | mm | mm | mm | kg | ELECTRIC | | PNEUMATIC | |
| CLS 001 | 389 | 291 | 122 | 6.5 | 68x106 | 135x115 | 90x125 | 180 |

▶ CRS - Cradle for Steel concrete moulds

CRS

| | |
|-------------|--|
| APPLICATION | Quick mounting of vibrators on steel concrete moulds |
|-------------|--|

SUITABLE FOR

STEEL CONCRETE MOULDS
All OLI fastening systems are designed to be used with electric and pneumatic vibrators



DIMENSIONAL SPECIFICATIONS

| MODEL | LENGTH | WIDTH | HEIGHT | RADIUS | WEIGHT |
|---------|--------|-------|--------|--------|--------|
| | mm | mm | mm | mm | kg |
| CRS 055 | 180 | 105 | 140 | 55 | 3.5 |
| CRS 080 | 230 | 85 | 184 | 80 | 5 |



External pneumatic vibrators

The external pneumatic vibrators have **no electrical components**.

They are powered via **air compressor** that spins the rotors inside the vibrator at a very high speed (generally between 10,000 and 17,000 vpm), this generates a circular vibration that spreads in all directions.

The optimum frequency varies depending on the dimensions of the aggregates: a low frequency (approximately 10,000 vpm) favours the vibration of large granules (pebbles and gravel), while a high frequency (approximately 20,000 vpm) favours the vibration of fine granules (sand, cement and others).

They are used especially in the construction of concrete segments for tunnels, viaducts and bridges.

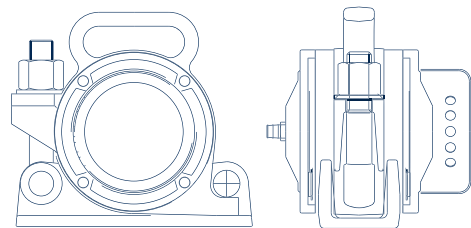
The pneumatic vibrators offered by OLI have a **solid and durable body** in ductile cast iron. They are characterised by **high reliability and efficiency** as well as its **compact size**.

Just like the electric vibrators, they may also be bolted or attached via quick-coupling clamps to formworks or moulds for the purpose of easy movement.



Benefits

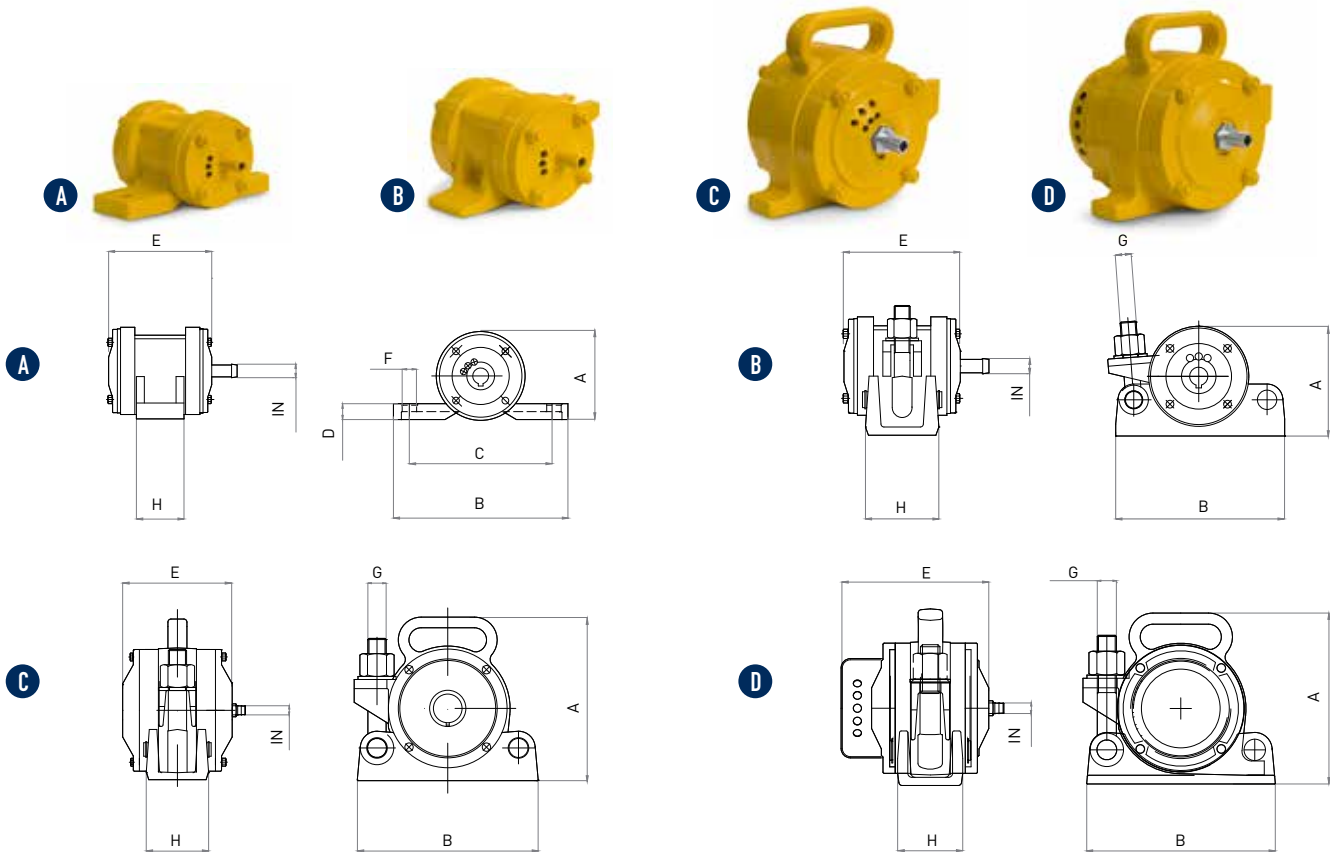
- Easy handle
- No electric component
- No maintenance



EFFICIENT AND RELIABLE



Pneumatic vibrators



| MODEL | WORKING PRESSURE bar | VIBRATION vpm | CENTR. FORCE kg | AIR CONSUMP. l/min | NOISE LEVEL* dB [A] | OVERALL DIMENSIONS | | | | | | | | | | |
|------------|-------------------------|------------------|--------------------|-----------------------|------------------------|--------------------|-----|-----|-----|----|-----|----|----|----|----|--------|
| | | | | | | DRAWING | A | B | C | D | E | F | G | H | IN | WEIGHT |
| | | | | | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| HFP 600P | 6 | 17,000 | 720 | 1,000 | 100 | A | 111 | 220 | 180 | 20 | 164 | 20 | - | 60 | 15 | 6.3 |
| HFP 1000P | 6 | 16,500 | 1,122 | 1,100 | 100 | | 111 | 220 | 180 | 20 | 164 | 20 | - | 60 | 15 | 7.2 |
| HFP 1400P | 6 | 16,000 | 1,453 | 1,200 | 100 | | 111 | 220 | 180 | 20 | 164 | 20 | - | 60 | 15 | 7.3 |
| HFP 600C | 6 | 17,000 | 720 | 1,000 | 100 | B | 120 | 180 | - | - | 164 | - | 18 | 94 | 15 | 6.3 |
| HFP 1000C | 6 | 16,500 | 1,122 | 1,100 | 100 | | 120 | 180 | - | - | 164 | - | 18 | 94 | 15 | 7.2 |
| HFP 1400C | 6 | 16,000 | 1,453 | 1,200 | 100 | | 120 | 180 | - | - | 164 | - | 18 | 94 | 15 | 7.3 |
| HFP 2700C | 6 | 16,000 | 2,753 | 1,600 | 103 | C | 224 | 235 | - | - | 160 | - | 24 | 84 | 15 | 14 |
| HFP 4000C | 6 | 15,200 | 4,079 | 1,800 | 103 | | 224 | 235 | - | - | 160 | - | 24 | 84 | 15 | 14.5 |
| HFP 6000C | 6 | 14,500 | 6,118 | 1,800 | 103 | | 224 | 235 | - | - | 160 | - | 24 | 84 | 15 | 16.3 |
| HFP 4001C* | 6 | 10,200 | 4,079 | 1,800 | 90 | D | 215 | 235 | - | - | 180 | - | 24 | 84 | 15 | 18 |

* Measured at 1 mt distance

PNEUMATIC VIBRATORS FOR CONCRETE CONSOLIDATION

APPLICATION Concrete formworks on site
Concrete moulds in precast industry

FEATURES

WORKING PRESSURE 6 bar

AIR SUPPLY QUALITY Class 5.4.4

WORKING TEMPERATURE -10 °C / +60 °C

MAX NOISE LEVEL 103 dB(A)
Silent version HFC 4001C: 90 dB(A) at 1 meter distance

TECHNOLOGY Eccentric rotor

MATERIALS Steel and cast iron

FINISHING Painted yellow RAL 1007

CERTIFICATIONS Conformity verified according to the standard document UNI EN ISO 12100

ACCESSORIES Fastening systems:
CLW (Clamp for Wooden formworks);
CLS (Clamp for Steel formworks);
CRS (Cradle for Steel concrete moulds)





Tips and recommendations for use

TIPS FOR CHOOSING THE INTERNAL VIBRATOR

Selection of the vibrating head length

Must never exceed the thickness of the concrete layer.

Selection of the needle diameter

Factors involved when selecting a model:

- composition of the concrete
- quantity of reinforcements (percentage of reinforcement inside the article)
- size of the spaces existing between the various reinforcements (mesh sizes)
- thickness of the concrete layer

The diameter to be used must allow the guidance of the vibrator inside the reinforcement, without sticking out of and/or getting stuck in the mesh.

Definition of the operating tube length

Must be greater than the depth of the manufactured article in order to allow the vibration of deeper layers.

TIPS FOR CHOOSING THE EXTERNAL VIBRATOR

Pneumatic or electric?

The selection depends on the type of power available (electricity grid or compressed air).

What type of fastening?

It depends on the construction material and the shape of the profiles to which the vibrators are to be fastened.

Definition of the positioning

Distribution of vibrators on the formwork.

Definition of the operating cycle

How many vibrators, running simultaneously, are needed?

Definition of the power (electric vibrators)

Electrical or electronic converter (with or without inverter).

MAIN RECOMMENDATIONS OF USE

Repeated vibration

It means vibrating again the already compacted concrete. This technique is used to mix successive layers of concrete in order to improve the surface finish quality of columns and walls and to increase their strength and wear resistance.

Vibration inside the formwork

Make sure that the vibrating head does not touch the interior walls, because besides damaging them, it can generate depressions in the manufactured article, thus deteriorating the quality of the surfaces. Vibrators with rubber tips may be used for protection.

Insufficient vibration

It is the most common problem. Insufficient vibration can alter the structural properties, such as: lower resistance, higher abrasion, higher permeability, therefore shorter duration and poor surface quality.

Excessive vibration

The use of oversized equipment generates the segregation and subsequent detachment in time of dust and concrete chips, in addition to the damage incurred by the formwork and moulds.

SOLID FOUNDATIONS

Since 1961 OLI has been committed to delivering market-oriented products. Specialising originally in immersion vibrators, in the late 1980s the company started the production of external electric and pneumatic vibrators. Today OLI is a global player in industrial vibration technology.

OLI, the worldwide leader in vibration technology.

Choosing OLI means

PRODUCTS YOU CAN TRUST

Reliable. Efficient. Safe.

SERVICES YOU CAN COUNT ON

OLI's approach is based on consultancy, quick response and "ex-stock" delivery. Local competent and direct customer assistance is available worldwide, through the OLI Group's own subsidiaries.



WHEN YOU NEED IT, WHERE YOU NEED IT.

THE WORLDWIDE LEADER IN VIBRATION TECHNOLOGY

WWW.OLIVIBRA.COM



OLI Headquarters

Via Canalazzo, 35
41036 Medolla (MO) - Italy

+39 0535 41 06 11

info@olivibra.com

OLI worldwide

OLI Australia
OLI Benelux
OLI Brazil
OLI China
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