

## INSTALLATION EQUIPMENT —— FOR —— THERMAL & INTEGRATED MATERIALS



Global Refractory Solutions

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Allied Mineral Products is a world leader in the design and manufacture of monolithic refractories and precast shapes. With strong sales and service teams in the foundry, aluminum, steel, heat treat/forge and industrial markets, our success is based on our dedication to *Being There Worldwide with Refractory Solutions*.

Producing quality, consistent products is top priority at Allied and we have the products to meet your refractory needs. Our extensive product line includes innovative refractory technology and longstanding refractory alternatives.

Allied's focus on quality at every stage in the production process is unparalleled. A stringent raw material standard and global quality control testing before and after each batch is produced, provides customers with consistent products. We provide quick response times to any urgent request through flexible manufacturing systems at all our manufacturing facilities.

## **Global Refractory Solutions**





IDEAD AIR RAMMERS

Air rammers are a rotating air driven device used on the walls or floor of DRI-VIBE<sup>®</sup> installation materials.

## **MINI AIR RAMMERS**

5300000068 AIR 2-ARM WALL RAMMER 13"-20"

## THREE ARM AIR RAMMERS

530000085 AIR 3-ARM WALL RAMMER 20"-35"

5AIR6 AIR 3-ARM WALL RAMMER 20"-35"

530000087 AIR 3-ARM WALL RAMMER 28"-43"

5300002264 AIR 3-ARM WALL RAMMER 32"-47"

5300000089 AIR 3-ARM WALL RAMMER 36"-51"

5300000078 AIR 3-ARM WALL RAMMER 40"-55"

5AIR11 AIR 3-ARM WALL RAMMER 44"-59"

\*Other rammer sizes available for larger furnaces

## **TWO ARM AIR RAMMERS**

5300000077 AIR 2-ARM WALL RAMMER 15"-24"

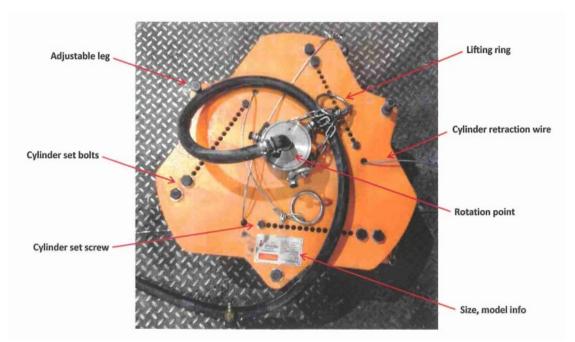
530000083 AIR 2-ARM WALL RAMMER 19"-28"

5AIR3 AIR 2-ARM WALL RAMMER 20"-35"

5300000084 AIR 2-ARM WALL RAMMER 24"-39"

## **FIVE ARM AIR RAMMERS**

| 5AIR12     | AIR 5-ARM WALL RAMMER 36"-51" |
|------------|-------------------------------|
| 5AIR13     | AIR 5-ARM WALL RAMMER 40"-55" |
| 5300000081 | AIR 5-ARM WALL RAMMER 44"-59  |
| 5AIR15     | AIR 5-ARM WALL RAMMER 48"-63" |
| 5AIR16     | AIR 5-ARM WALL RAMMER 52"-67" |
| 5AIR17     | AIR 5-ARM WALL RAMMER 56"-71" |



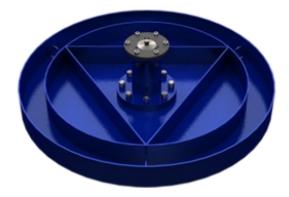




Bottom rammers help to compact refractory to an equal density, while also extending the life of the refractory. This allows manpower to become more efficient and economic – helps save time and reduce risk.

| ITEM CODE  | DESCRIPTION                    |    |
|------------|--------------------------------|----|
|            |                                |    |
| 5AIRBRM1   | AIR BOTTOM RAMMER 12" DIAMETER |    |
| 5AIRBR1    | AIR BOTTOM RAMMER 16" DIAMETER | Δ  |
| 5AIRBR2    | AIR BOTTOM RAMMER 20" DIAMETER | Lo |
| 5AIRBR3    | AIR BOTTOM RAMMER 24" DIAMETER |    |
| 5300002687 | AIR BOTTOM RAMMER 28" DIAMETER |    |
| 5300000062 | AIR BOTTOM RAMMER 32" DIAMETER |    |
| 5300000063 | AIR BOTTOM RAMMER 35" DIAMETER |    |
| SAIRBR10   | AIR BOTTOM RAMMER 51" DIAMETER |    |
| 5AIRBR11   | AIR BOTTOM RAMMER 55" DIAMETER |    |
| SAIRBR12   | AIR BOTTOM RAMMER 59" DIAMETER |    |
| 5AIRBR13   | AIR BOTTOM RAMMER 63" DIAMETER |    |
| 5AIRBR14   | AIR BOTTOM RAMMER 67" DIAMETER |    |
| 5AIRBR15   | AIR BOTTOM RAMMER 26" DIAMETER |    |

\*Other sizes available





## global MF **AIR RAMMER REP** refractory

|               | The second second                              |
|---------------|--|
| ITEM CODE     | DESCRIPTION                                    |
| 5AIRWR.SP.SO1 | PISTON/THRUSTPLATE SO1-SO17                    |
| 5AIRWR.SP.SO2 | PISTON SLOT(BODY) SO1-SO17                     |
| 530000070     | THRUST PLATE SO1-SO17                          |
| 530000071     | THRUST SPRING FOR 12.5" PISTON $=$             |
| 530000072     | THRUST SPRING FOR 10" PISTON thermal expansion |
| 5AIRWR.SP.SO6 | PISTONSLOT CONNECTOR BOLTS (3)                 |
| 5AIRWR.SP.007 | (1) SUPPORT LEG SO1-SO17                       |
| 530000075     | 10" COMPLETE PISTON ASSEMBLY                   |
| 530000076     | 12.5" COMPLETE PISTON ASSEMBLY                 |
| 5AIRWR.SP.010 | WALL RAMMER PISTON ONLY                        |
| 5AIRWR.SP.011 | EA PISTON ONLY W/TP FOR MO1                    |
| 5AIRWR.SP.012 | EA PISTON SLOT FOR MO1                         |
| 5AIRWR.SP.013 | EA PISTON THRUST PLATE FOR MO1                 |
| 5300001406    | COMPLETE PISTON ASSEMBLY-MO1                   |
| 5300001500    | CENTER ROTATION UNIT 3-ARM                     |
| 5300001590    | CENTER ROTATION UNIT-TWO ARM                   |
| 5300001649    | BEARINGS FOR ARM ROTATION UNIT                 |
| 5AIRWR.SP.019 | AIR RAMMER CHAIN+RING+EYEBOLTS                 |
|               |  |

\*Other replacement parts available by request



WYCO PENCIL VIBRATORS

## 994 ELECTRIC MOTOR VIBRATOR

The 994 electric motor vibrator is ready tackle your toughest consolidation jobs. Whip cords available in lengths of 7 or 14 feet and square head sizes of 1' to 2.25'

Features:

- Drives any head and shaft combination—one motor for all your consolidation needs
- Conforms to current UL and OSHA regulations for safety
- Lightweight with ergonomic hand grip and shoulder strap
- Powers through your most challenging concrete applications

| ITEM CODE | DESCRIPTION                       |
|-----------|-----------------------------------|
| 5WYCO10   | WYCO PENCIL VIB 994/7'/1.50"SQ    |
| 5WYCO11   | WYCO PENCIL VIB 994/14'/2"SQHD    |
| 5WYCO4    | WYCO PENCIL VIB 994/7'/2.25"SQ HD |
| 5WYCO8    | WYCO PENCIL VIB 994/7'/2"SQ HD    |
| 5WYCO9    | WYCO PENCIL VIB 994/14'/2.25"     |



 $\frac{\Delta L}{L_0} = \mathcal{O}_L \Delta T$ thermal expansion



# BRECON BOSCH VIBRATORS

The BRECON Tamper is the ideal handheld tool for powerful compaction of any material and is light and easy to handle. The Tamper is made to fulfill the highest requirements when it comes to precise compaction combined with durability in rough work places like foundries. Its proven design assures a powerful compaction while reducing transmission of the vibration to the operator. The quick tool change combined with various accessories provides a very flexible and accurate work result.

| ITEM CODE  | DESCRIPTION                       | CENTIFUGAL<br>FORCE (lbf) | FREQUENCY<br>(Hz) | VOLTAGE<br>(V) | PHASE | WEIGHT<br>(lbs) |
|------------|-----------------------------------|---------------------------|-------------------|----------------|-------|-----------------|
| 5300000115 | BOSCH/BRECON TAMPER<br>18902-60HZ | 315 lbf                   | 3600              | 220-265        | 3     | 25              |
| 5300000118 | BOSCH/BRECON TAMPER               | 315 lbf                   | 3000              | 220-260        |       | 25              |

## BOSCH VIBRATOR ATTACHMENTS

| ITEM CODE  | DESCRIPTION                    |
|------------|--------------------------------|
| 5300002462 | EACH BOSCH FOOT #1 10X5        |
| 5300000384 | EACH BOSCH FOOT #2 10X4        |
| 5300000385 | EACH BOSCH FOOT #3 8X3         |
| 5300000386 | EACH BOSCH FOOT #4 6X2         |
| 5300000387 | EACH BOSCH FOOT #5 6" ROUND    |
| 5FOOT6     | EACH BRECON FOOT 100X80 MM     |
| 5300002647 | EA BOSCH SIDEWALL FOOT 6"X1.5" |
| 5300001858 | EA BOSCH SPADE TOOL 4"WIDE     |
| 5300000389 | EACH FORKING TOOL #1           |
| 5300000391 | EACH SMALL FORKING TOOL (1.5") |
|            |                                |



Dimensions without accessories: Height 9.4" x Width 17.0" x Depth 7.2" All models include 12.8 ft power cable without plug.



## HIGH FREQUENCY PNEUMATIC VIBRATORS

This simple, long-lasting High-Frequency Pneumatic Vibrator provides effective high-frequency vibration at an economical price. Apply to hoppers, bins, railcars, chutes, molds, screens, and tables to keep materials flowing as they should. Also great for use in pre-cast concrete applications. These vibrators offer many benefits which include, multiple vibrations on each orbit, a bearing free design which eliminates wear problems and extends service life.

| ITEM CODE  | DESCRIPTION                   |
|------------|-------------------------------|
| 5CCR2600   | EACH MARTIN VIBRATOR CCR-2600 |
| 5CCR4400   | EACH MARTIN VIBRATOR CCR-4400 |
| 5300000278 | EACH MARTIN VIBRATOR CCR-6500 |



## BRUTE VIBRATORS CCV SERIES

With an integral clamp foot, these powerful vibrators suit portable applications like railcar unloading. Brute Vibrators are also available for hydraulic power.

| ITEM CODE  | DESCRIPTION                   |  |  |
|------------|-------------------------------|--|--|
| 5CCV4-2A   | EA MARTIN VIBTR CCV4-2A BRUTE |  |  |
| 5300000279 | EA MARTIN VIBTR CCV6-6A BRUTE |  |  |



- High-Grade Ductile Iron Case provides maximum durability
- Low-Maintenance Bearings require lubrication after 500 hours of service
- Integral Clamp Foot on CCV Series provides portability and positive mounting
- Powerful, Efficient Motor for long service life, minimal power consumption
- Tapped Exhaust Port allows muffler installation to reduce operating noise
- Adjustable Eccentrics allow tuning of force output of most models to match applications



## ement ELECTRIC VIBRATI ON SYS refractory

Allied's Electric Vibration System and Sled utilize patented technology designed to eliminate air pressure and air quality problems associated with pneumatic or air-driven piston vibrators. The EVS can be used to install linings in coreless furnaces, inductors and forging/heat treat furnace, car deck and hearths. Benefits of the systems include high installed density with a moisture-free refractory ceramic, reduced installation time, labor savings and lower dust levels.

### **CONTROL PANEL FEATURES**

- Operates in manual or automatic mode
- Programmable unit can be preset with 7 process timers to operate at multiple frequencies (vpm)
- Can be mounted for easy usage

### **ELECTRIC VIBRATOR FEATURES**

- Can be operated for 240 or 280 voltages
- Vibrator is supplied 60 Hz compatible, but can be used in 50 Hz applications with the control panel
- Life expectancy is 2x longer than pneumatic vibrators

## 480 VOLT KIT

| ITEM CODE  | DESCRIPTION                   |
|------------|-------------------------------|
| 5300000359 | EA EVS SYSTEM 480V W/G5 PANEL |

#### Kit contains (1) of the following items:

| ITEM CODE  | DESCRIPTION                    |
|------------|--------------------------------|
| 5300000262 | EA WELD-ON BRACKET FOR EVS     |
| 5300001374 | EA EVS GEN4 CONTOL PANEL 480V  |
| 5300000581 | EA ELECTRIC VIB/MOTOR FOR EVS  |
| 5300000735 | SIROMETER VIBRATION TACHOMETER |
|            |                                |

#### Optional:

530000263 EACH CLAMP-ON BRACKET-EVS





## process **MUDHOG MIXERS** refractory **S**

| MODEL  | RMH 9            | RMH 12           | RMH 12HD         | RMH 20            | RMH 29            |  |
|--|------------------|------------------|------------------|-------------------|-------------------|--|
| ITEM CODE                                    | 5300002807       | 5300000577       | 5300002658       | 5300002657        | 5300002491        |  |
| DIMENSIONS<br>(L x W x H)                    | 75" x 36" x 46"  | 82" x 42" x 49"  | 88" x 42" x 49"  | 122" x 44" x 56"  | 137" x 44" 56"    |  |
| DRUM CAPACITY                                | 300 lb (114 kg)  | 500 lb (227 kg)  | 750 lb (340 kg)  | 1000 lb (454 kg)  | 2000 lb (907 kg)  |  |
| HYDAULIC RESERVOIR                           | 15 gallon        | 15 gallon        | 15 gallon        | 30 gallon         | 60 gallon         |  |
| WILL MIX AGGREGATE<br>SIZE UP TO             | 3/4" (1.9 cm)    | 3/4" (1.9 cm)    | 3/4" (1.9 cm)    | 3/4" (1.9 cm)     | 3/4" (1.9 cm)     |  |
| EMPTY WEIGHT                                 | 1500 lb (681 kg) | 2000 lb (909 kg) | 2200 lb (998 kg) | 3600 lb (1632 kg) | 4600 lb (2090 kg) |  |
| AXLE KIT<br>FOR PORTABILITY AND TOWING)      | $\checkmark$     | $\checkmark$     | $\checkmark$     |                   | - (00)-           |  |
| HYDRAULIC DUMP<br>SYSTEM                     | $\checkmark$     | $\checkmark$     | $\checkmark$     | $\checkmark$      |                   |  |
| HYDRALUIC DRIVE                              | $\checkmark$     | $\checkmark$     | $\checkmark$     | $\checkmark$      | √ <sup>−</sup> 0/ |  |
| CUSTOM<br>MODIFICATIONS<br>AVAILABLE         | $\checkmark$     | $\checkmark$     | $\checkmark$     | $\checkmark$      | √ 2               |  |
| BOLT-IN ABRASION<br>RESISTANT DRUM<br>LINERS | $\checkmark$     | $\checkmark$     | $\checkmark$     | $\checkmark$      | $\checkmark$      |  |





The Allied Difference Being There Worldwide with Refractory Solutions

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