



ROYER

Bulletin RM57

ROYER MAGNA-SAN

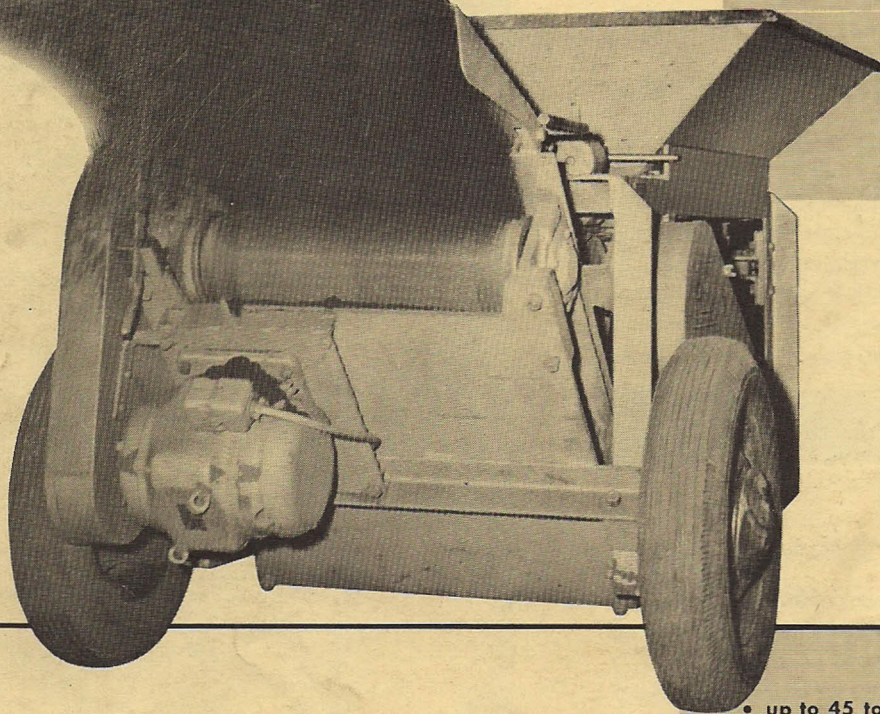
A compact

SAND CONDITIONING UNIT

featuring

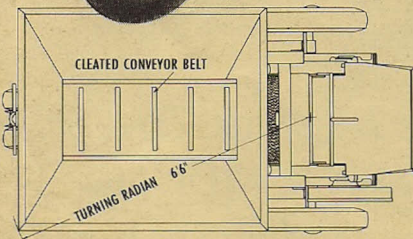
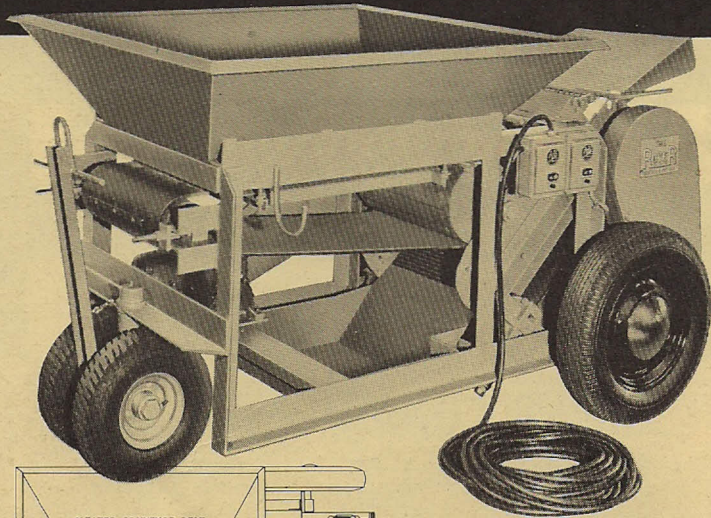
**ROYER AERATION,
BLENDING & MIXING**

plus **MAGNETIC
SEPARATION**

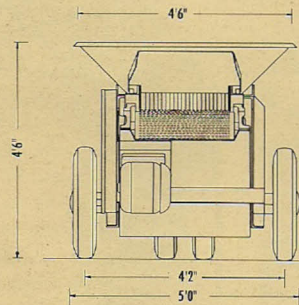
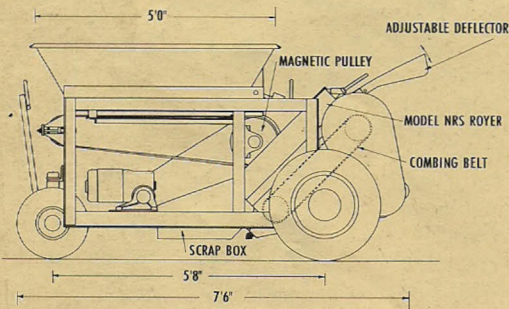


*These Royer MAGNA-SAN features
cut sand conditioning costs,
increase yield
and quality of castings:*

- up to 45 tons of magnetically cleaned sand per hour
- famous Royerated mixing, blending and aeration
- ample 15 cu ft hopper fed from three sides
- adjustable discharge stream, for piling or windrowing from 5 to 20 feet
- compact—only 7½ feet long
- portable or stationary models to serve any need
- sturdy welded angle iron and steel plate construction

ROYER**MAGNA-SAN**

Portable
MAGNA-SAN



The Royer MAGNA-SAN, Stationary and Portable, is a highly efficient, compact unit designed to reduce sand conditioning costs, increase foundry yield and make the entire foundry operation more clean-cut and straightforward. With MAGNA-SAN up to 45 tons of sand per hour can be magnetically cleaned, mixed, blended and aerated—at a lower initial cost and with much less upkeep than any other mechanical method.

MAGNA-SAN helps cut pattern damage to rock bottom, reduces casting rejects, increases yield of finest quality castings. Users are experiencing greatly reduced man-hour requirements for sand conditioning operations. In most installations, facing sand requirements have been cut 50% or more.

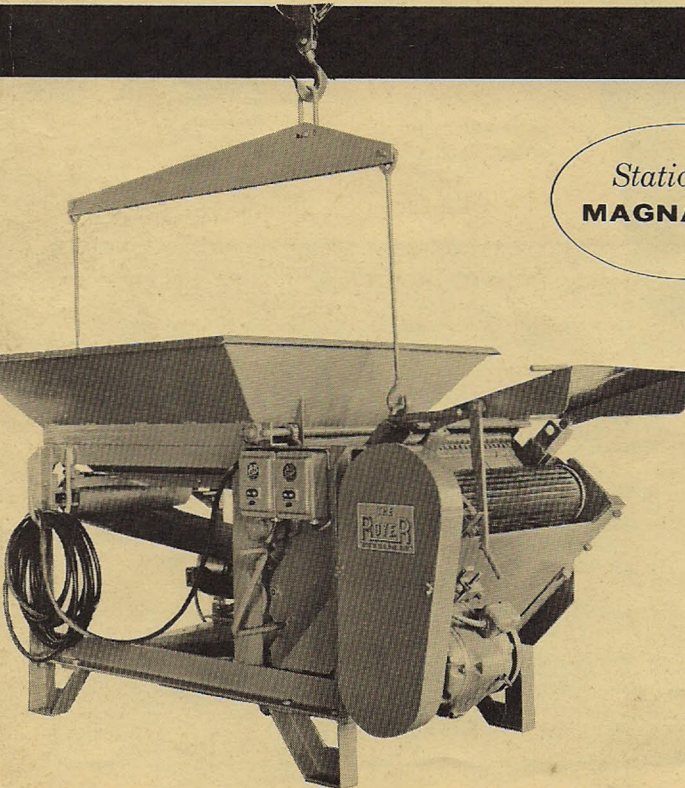
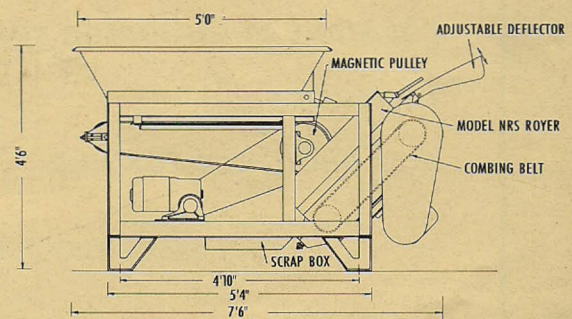
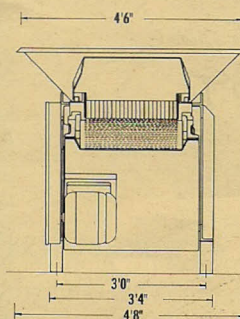
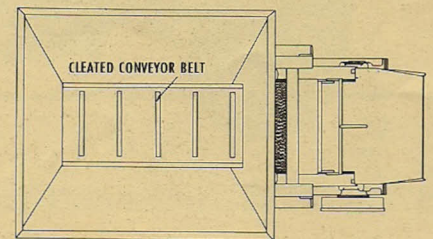
Portable MAGNA-SAN

(Model RMP) is designed for use at the molding station. Compact design and 6'6" turning radius give easy maneuvering about cramped or crowded foundry floors. The four pneumatic tired wheels (6.00 x 16 in front; 5.00 x 8 in rear) run in automotive Timken Bearings for easy turning and towing. A yoke hitch can be attached to main frame for quick, easy crane moving. Takes charge of a front-end loader, cleans and conditions the sand and deposits it in piles or windrows up to 20' long.

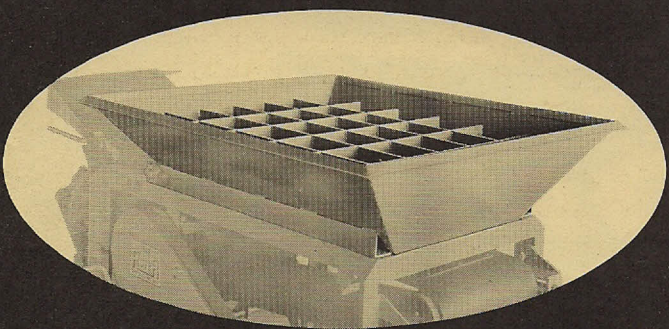
Stationary MAGNA-SAN

(Model RMS) is designed for use as an integral part of a system or for independent operation. It is identical with the Portable Model, except that it is equipped with heavy angle iron feet instead of wheels. It can be bolted into place for permanent installation or moved by crane as a portable unit. (Base area required is 5'4" x 3'4". Feet are provided with bolt holes on 4'10" and 3'0" centers.)

Stationary
MAGNA-SAN

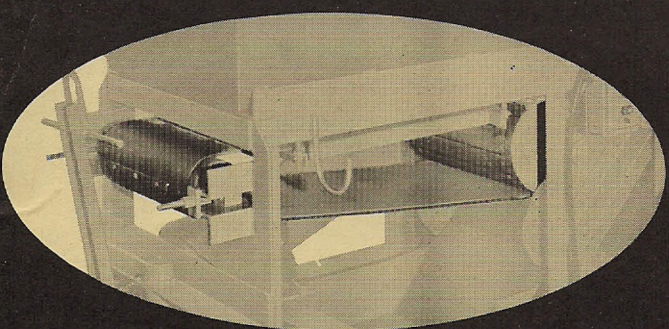


GENERAL SPECIFICATIONS—*Portable and Stationary Models*



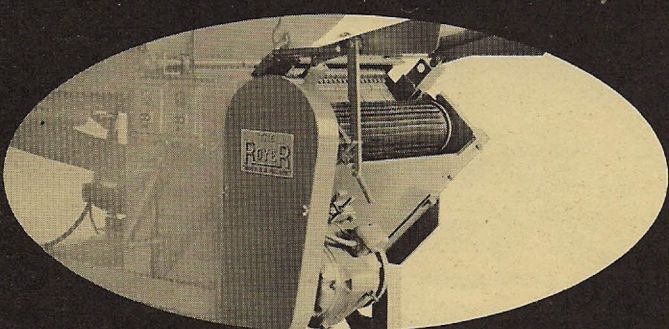
HOPPER

4'6" x 5'0", approx. 15 cu ft, designed for mechanized feeding. Constructed of $\frac{3}{16}$ " steel plate. Hopper grate has openings $6\frac{5}{8}$ " x $8\frac{5}{8}$ " to segregate spills and sprues.



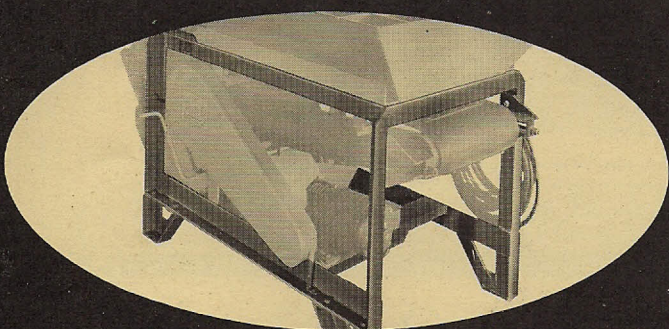
MAGNETIC SEPARATOR

Magnetic separation of ferrous scrap is achieved by a solid Alnico permanent magnetic pulley, 12" dia. x $21\frac{1}{2}$ " face. Composition endless-type conveyor belt is 21" wide, cleated. Slightly crowned rear pulley has take-up adjustment. Driven by $1\frac{1}{2}$ hp, 96 RPM gear-motor. Pulleys run in anti-friction type, fully enclosed, dust proof bearings.



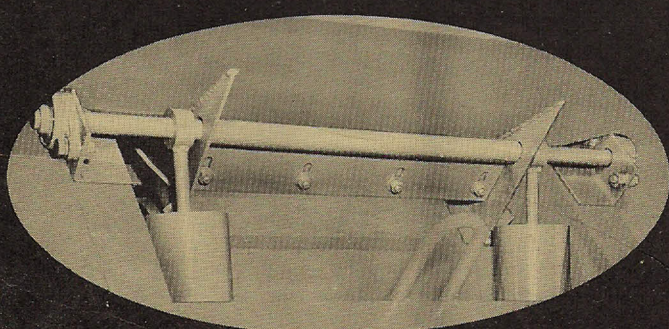
AERATOR, SEPARATOR & BLENDER

Breaks soft lumps and removes non-ferrous scrap in addition to functions described by name. 6" dia. top and bottom pulleys run in anti-friction type, fully enclosed, dust-proof bearings. Endless-type composition combing belt, 25" wide, operates at 45° angle. Heat-treated alloy steel sprigs (teeth) spaced in staggered rows to form pockets. Adjustable, spring-loaded retarding sweep regulates churning and mixing action. Adjustable steel deflector regulates length of discharge stream. Driven by 5 hp, 1750 RPM electric motor.



MAIN FRAME

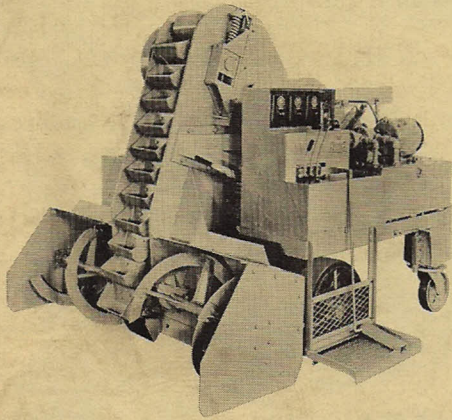
Heavy duty welded box frame constructed of $\frac{3}{8}$ " angle iron and steel plate. Designed for easy access to components for quick maintenance or repairs. Box frame construction eliminates need for leveling operation and the use of special foundation.



ADJUSTABLE SAFETY GATE

Prevents belt damage by large pieces of scrap small enough to get through hopper grate. Weight permits gate to free itself, then return to pre-set height. Adjust to control rate of sand entering Aerator, Separator and Blender.

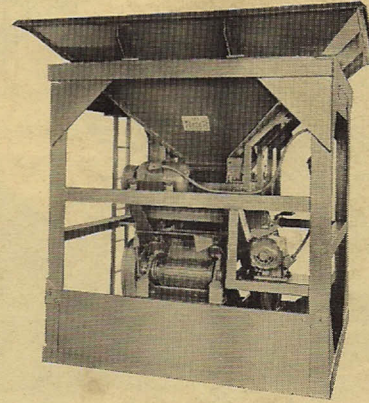
ROYER, FOREMOST IN SAND CONDITIONING EQUIPMENT,
also manufactures these cost cutting, foundry units . . .



**THE ROYER
 SAND-HOG**

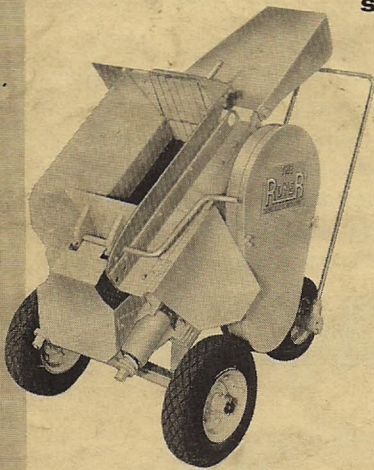
A one-man operated, highly maneuverable, self-propelled and self-loaded sand conditioning unit. Moves into the sand heap, scoops up, *completely con-*

ditions and discharges from 40 to 60 tons of sand per hour. Complete conditioning includes magnetic separation of *all* ferrous scrap and elimination of core butts, wedges and other refuse, thorough mixing and blending for even distribution of moisture and *two* aeration operations. Completely described in Bulletin SH-54.



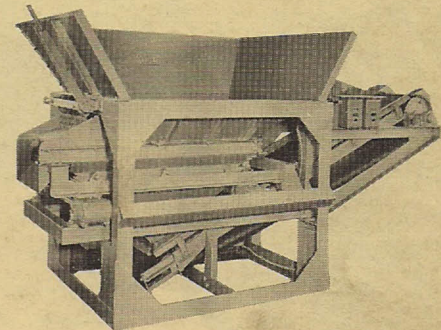
THE ROYER COMBINATION

A portable unit, designed for grab bucket feeding. Removes scrap, separates and blends in one operation. Ask for Bulletin C-54.



**THE ROYER SAND
 SEPARATOR AND BLENDER**

Royer Sand Separators and Blenders are manufactured in a wide range of sizes to provide fast, efficient sand preparation in tonnages suitable for the small foundry, or the core room and side floors of the production shop. Portable models are available to handle capacities of 4-7, 8-10, 10-15, 15-25, 40-60 and 120-180 tons of sand per hour. Stationary models begin with the 15-25 ton size. Complete information is contained in Bulletin SS-61.



THE ROYER SCRAP CONTROL

Royer Scrap Control Units are foundry-designed to provide immediate cost-saving mechanization of shake-out and sand cleaning operations with the lowest possible cost. Intended for use with a front-end loader. Pit-less design permits relocation by moving with an overhead crane. (*All* equipment is above floor level.) Cleans 60 tons of sand per hour. Bulletin SC-61.

*In this area
 Royer Magna-San
 is sold and
 serviced by*

Belt 300°

PATTY



ROYER FOUNDRY & MACHINE CO.

158 PRINGLE STREET / KINGSTON, PENNA.

FOREMOST IN SAND CONDITIONING EQUIPMENT