



# MARUMA

## MSR-2

Code No. CE-0552

## TRACK SHOE REBUILDING MACHINE



Worn track shoe grousers can be re-conditioned to regain traction. Re-conditioning usually consists of welding a pre-formed grouser bar onto the track shoe plate. The re-conditioning should be accomplished before the grousers are so worn that the track shoe plate would bend due to loss of structural strength of severely worn grousers. When welding the pre-formed grouser bars, it is important that the old worn grouser be trimmed very flat and evenly. This will assure a good weld securely joining the two pieces without warping or setting up stresses. Such stresses could cause problems in the field later and must be avoided.

Consequently, we recommend that replacement grouser bars be re-welded in a special unit designed for this purpose. MARUMA TRACK SHOE REBUILDING MACHINE (MSR-2) is a complete machine for replacing worn grousers on track shoe plate. The MSR-2 has two-stations that provides for quick and easy handling of the track shoe plate and replacement bars. While the track chain is disassembled for pin and bushing work, the shoes are checked and those requiring replacement grouser bars are shifted to the MSR-2. Each track shoe in turn is clamped into position on the MSR-2. At this point, a gas torch automatically trims the old grouser off. Then, the track shoe plate is moved to the second position where the replacement grouser bar is clamped securely to the flat and even surface of the track shoe plate. A fillet weld is made automatically in a down-hand position. Then, without removing the clamping device, the track shoe (track shoe plate and grouser bar) is turned over for the final fillet weld to be made.

## FEATURES

- (1) Low Rebuilding Costs  
The key to low cost grouser rebuilding is the high speed of Model MSR-2 ----10 track plates per hour.
- (2) High Rebuilding Profits.  
Model MSR-2 will normally pay for itself in just 6 months.
- (3) Tractor Customers Save  
A dealer's customer, the tractor user, can save over a new track shoe with equal life.  
This saving is a very worthwhile contribution to the contractor in lower maintenance costs, decreasing the overall running costs.



- (4) Ideal operation  
Flame trimming is done with high-speed precision workmanship and spring-loaded automatic-racing device guides the cutting torch along the curved contour of worn and bent track shoe plates.  
High pressure 20 ton clamp provides accurate positioning of the new grouser bar and straightens the bent track shoe plate.  
The carriage has a variable speed drive, with a disengaging lever to permit free movement instantly.  
Fillet welding of both sides of the track shoe plate and grouser bar is done without removing the track shoe.

## SPECIFICATIONS

Electric power unit	:	46.6 kVA, three phase.
Welding condition	:	650A/44V, 430 mm/min.
Effective weld track shoe length	:	Max. 760 mm.
Hydraulic power unit	:	0.77 kW, three phase, 700 kg/cm <sup>2</sup> (max).
Clamping force	:	20 tons
Dimensions (L x W x H), approx. (power unit not included)	:	2700 x 1300 x 2080 mm.
Weight approx.	:	790 kg (machine) 260 kg (Electric power unit). 60 kg (Hydraulic power unit).

## TWO WORK STATIONS WITH TURN-OVER MECHANISM SPEED UP THE PERFORMANCE OF SUCCESSIVE OPERATIONS

STATION For flame trimming the worn grouser.

STATION For pressure clamping, straightening, and welding one side of the replacement grouser bar to the track shoe plate and for finish welding on the other side of the grouser bar. The track shoe is turned over by a pivoting mechanism, saving time, space and manpower.

Specifications and illustrations are subject to change without notice.



**MARUMA TECHNICA CO., LTD.**

NO. 2-1, OHNODAI 6-CHOME, SAGAMIHARA CITY, KANAGAWA PREF. 229-0011 JAPAN  
TEL: 81-42-751-3024 FAX: 81-42-751-9065 E-mail: overseas@maruma.co.jp