



## Speno 4

Since the inception in 1968 in South Africa of in-track rail rectification, Aveng Manufacturing Lennings Rail Services has been operating and maintaining grinding machines designed by Speno International of Geneva. Rail rectification includes all the aspects of surface fatigue treatment, corrugation removal, profile restoration for rail/wheel contact and wheel burn removal.

The RR16 – E Switch Grinder is available for re-profiling of rails in all types of turnouts used by Transnet Freight Rail and in the private rail industry (1 in 9, 1 in 12 and 1 in 20 wood or concrete). The machine is fitted with a computerised control system that makes it possible to achieve a high degree of accuracy on all turnout components.

The URR32E-SB 32 stone grinding machine and the two RR24-24 stone machines are equipped with the latest technology necessary for rail re-profiling and rectification to achieve the best technical and economic benefits.

The operational performance of these machines has been brought to new heights thanks to a number of state of the art innovations:

- Computer controlled angular positioning of the grinding units with automatic pre-selection of a wide range of patterns according to surface defects and the required transverse profile
- Automatic grinding load control
- Higher performance grinding stones
- Transverse profile measuring equipment for quality control and operator interface
- Water canons for efficient fire fighting together with passive spark deflectors
- Dust aspiration for maintenance and environmental reasons

Economic benefits that can be achieved are:

- Better track stability – extending track geometry durability
- Extending wheel life – improved rail/wheel contact
- Reducing noise levels – elimination of corrugations and surface defects
- Extending rail life – reducing surface fatigue and wear
- Reduction in tractive effort – fuel and energy savings.

