

BRADKEN

SUCCESS STORY

Crawler Systems EVOLUTION®



Terex O&K RH200 Face Shovel



Custom designed wide body Evolution shoe



Increased track roller life

Location	Alberta, Canada
Machine	RH200 Face Shovel
Conditions	Soft Pit – High Flotation
Product	Evolution RH200 Wide Body Shoe

The minus 40°C temperatures and soft pit floor conditions have demanded some unique solutions for track systems in the Oil Sands of Alberta, Canada.

Bradken custom-designed a wide-body Evolution shoe to ensure that the customer's high flotation and ground pressure requirements would be met.

The set of Evolution shoes were installed in June 2004 and as of June 2007 had accumulated more than 19,000 hours. This compares with previous OEM shoes which have typically lasted between 15,000-18,000 hours and have shown signs of deterioration in the roller path at approximately 12,500 hours.

The Evolution shoes provide a number of innovative enhancements to provide superior wear life.

- The continuous case-hardened roller path reduces material flow and extends roller life.
- The un-bushed, case-hardened pin bores eliminate pin bush failure and reduce pin lug stretch.
- A conventional nut and bolt pin retention system is used to provide a simpler, safer and more cost effective alternative to the traditional circlip method.
- The heavy duty structural integrity of the shoe significantly reduces the incidence of wing breakage.

The shovel operators have commented that the undercarriage propels quieter and smoother with the Evolution shoe. Maintenance staff have reported a significant improvement in load roller life. This is due to the reduction of the hinge effect between shoes, made possible by the continuous roller path design. The loading on each roller is more even and shock loads are reduced as the roller passes from shoe to shoe. The Evolution design provides the option of being re-pinned and re-bushed to further extend shoe life.