



AUSTRALIAN RAIL TRACK CORPORATION

INFRASTRUCTURE, STRATEGY AND PERFORMANCE

Engineering Standards and Documents

The following recommendation, together with attached supporting documentation, has been considered by the Manager Standards & Systems on 2nd February 2007.

Documents:

| | |
|----------|---|
| Ref No: | 08-08-10-052 - Systems & Equipment Approval |
| Subject: | 'ERICO' Rail Drilling and Bonding Tools |
| Dated: | 22 nd January 2007. |

Prepared By: Arthur Haberlin, Signal Engineer - Equipment

Endorsed by: Trevor Moore, Signal Standards Engineer

Items Considered for Approval:

| | |
|----------------------|--------------------------------|
| Manufacturer: | ERICO Rail Electrical Products |
| Product: | Track bonding tools. |
| Item Identification: | See list 09-0611-037a |

The items in the form they were presented at the review date were approved for System & Equipment Approval to be used on all ARTC jurisdictions in accordance with the manufacturers published performance criteria and subject to the following.

Relevant ARTC Specifications:

| Ref. No. | Title | Status | Date |
|----------|--|--------------------|-------------|
| SCSP 02 | Environmental Conditions | Issue 1 Revision 2 | May '05 |
| SC 02 01 | Installation of Equipment Racks & Termination of Cables and Wiring | Issue 1 Revision 3 | October '06 |

Specific Conditions of Approval:

No conditions of approval.

Certificate Issued to:

ERICO Products Australia
6 Chilvers Road
Thornleigh
New South Wales 2120

A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011:2003.

Any subsequent change to the design, materials or manufacturing process is not covered by this approval.

Approved for use in the ARTC.



John Cowie

APPROVAL No: 08-08-10-052

Manager Standards & Systems

Approval Date: **2nd February 2007**



AUSTRALIAN RAIL TRACK CORPORATION LTD

Ref No: 09-0611-037a

Date: 22nd January 2007

System & Equipment Approval

Subject: 'ERICO' Rail drilling & bonding tools

The following lists the individual items (by catalogue number) of Rail drilling & bonding tools manufactured by ERICO which are approved for use in signalling circuits on ARTC infrastructure under System & Equipment Approval Certificate 00-00-10-052 subject only to any conditions shown on that Certificate and the Conditions of Use shown against individual items.

| Part No. | System | Description | Conditions of Use |
|---------------------------------|---------------|--|--------------------------|
| Stud-Weld Mould Tools | | | |
| SBC105C | CADWELD | T-21 Rail mould clamp connector frame. | |
| MFU11032 | CADWELD | Magnetic handle clamp. | |
| SBT320 | CADWELD | Flint ignitor | |
| SBB32130 | CADWELD | Flint ignitor with extension handle. | |
| PLUSCU | CADWELD Plus | Ignition Control Unit | |
| PLSCULD | CADWELD Plus | Replacement cable 4.6m | |
| PLSCULD15 | CADWELD Plus | Replacement cable 15m | |
| Mechanical Bonding Tools | | | |
| <i>ERICONTACT system</i> | | | |
| 715345 | All SK.. | HSKE manual Insertion Tool. | |
| 715218 | SK8 | Hydraulic head adaptor. | |
| 715216 | SK8 | Mandrel. | |
| 715215 | SK19 / SK22 | | |
| 716338 | SK8 | Extraction bush / mandrel. | |
| 716336 | SK19 / SK22 | | |
| 716540 | SK8 | Test-gauge. | |
| 715645 | SK19 | | |
| 716542 | SK22 | | |



AUSTRALIAN RAIL TRACK CORPORATION LTD

| Part No. | System | Description | Conditions of Use |
|-------------------------------|----------------------|---|---|
| Rail Drilling Machine | | | |
| 715685 | | SBM-VS Rail drilling machine. | |
| 715360 | SBM-VS | BSK-1 Rail clamp. | |
| 715375 | SBM-VS | Coolant tank with pump. | Spare parts only, set supplied with SBM-VS machine |
| 715695 | SBM-VS | Metal case. | |
| 715395 | SBM-VS | Tooling set. | |
| Rail Drill accessories | | | |
| 716315 | SK 8 | SSB 8 drill | Cooling adaptor suitable for all above drill sizes. |
| 716074 | | ASB 8 mounting adaptor | |
| 716320 | Siemens axle counter | SSB 13 drill | |
| 716185 | SK19 | SSB 19 drill | |
| 715520 | SK8 / SK19 | ZSP cooling adaptor | |
| 715305 | SK22 | SBHM 22 drill | For hollow core drill. |
| 715660 | | 83mm Cooling pin | |
| 715075 | SBM-VS | LR-1 Coolant | Concentrate to be mixed (7%) with water. |
| Rail Drill Gauges | | | |
| 715365 | SBM-VS | Rail web neutral axis bonding height template. | Adjustable gauge for various rail sections. |
| 715542 | SBM-VS | | For AS60 rail section. |
| 715545 | SBM-VS | | For AS50 & AS53 rail section. |
| 716534 | Frauscher | Axle Counter head mounting inter-hole distance gauge. | Drill diameter to suit Axle-Counter manufacturers' installation requirements. |
| 716527 | Siemens | | Use 13mm diameter drill. |
| 715537 | Axle counter systems | Axle Counter head height template. | For UIC60 rail section. |
| 715526 | | | For AS53 rail section |
| 715527 | | | For AS60 rail section |