



S-29020/87/181(3)/R/2011/EHQ
भारत सरकार/Government of India
श्रम एवं रोजगार मंत्रालय
Ministry of Labour & Employment
खान सुरक्षा महानिदेशालय/
Directorate General of Mines Safety

By Registered Airmail.



No. 566/2125

/EHQ, Dhanbad, dated

20-10--2016

From:
Director General of Mines Safety
Directorate General of Mines Safety,
P.O & Distt: Dhanbad - 826 016,
Jharkhand (India).

To
Shri Einar Bronlund – Managing Director
M/s. MHWirth
Kolner Strasse 71-73, 41812 Erkelenz
Germany.

Sub:- Renewal of DGMS approval No. 640 of 2012 under Regulation 181(3) of the Coal Mines Regulations, 1957 for Flameproof and Intrinsically Safe electrical equipment (as mentioned in Annexure-B) associated with Road Header, model no. T1.14 manufactured by M/s. MHWirth, Germany for use in belowground Coal Mines in India.

IDENTIFICATION MARK
DGMS APPROVAL No. 640 of 2012

Dear Sir,

Please refer to your letter no. nil dated 14.04.2015 and subsequent correspondence thereupon the above subject.

Based on approval no. 640 of 2012 issued by this Directorate's letter no. 566/1621/EHQ dated 04.07.2012 and test certificates of various Flameproof and Intrinsically Safe electrical equipment (mentioned in Annexure-B) associated with Road Header, Model No. T1.14, I hereby renew the approval **upto 04.07.2019 from the date of expiry i.e. from 04.07.2014** for use in belowground coal mines in India, subject to compliance with conditions stipulated in Annexure-A.

The application for renewal should be made at least **three (03) months** before the date of expiry of the approval.

Yours faithfully,


(Rahul Guha)

Director General of Mines Safety

Encl : Annexures - A&B.

Annexure-A

Approval No 640 of 2012 renewed by Directorate's letter No. 566/2125/EHQ dated 26-10-2016

Conditions for approval under Regulation 181(3) of the Coal Mines Regulations, 1957 for Flameproof and Intrinsically Safe electrical equipment (as mentioned in Annexure-B) associated with Road Header, model no. T1.14 manufactured by M/s. MHWirth, Germany for use in belowground Coal Mines in India.

1. Every Road Header, model no. T1.14 shall carry conspicuously in a permanent manner the aforesaid identification mark, i.e. "DGMS APPROVAL No.. 640 of 2012 approved by Directorate's letter No. 566/2125/EHQ dated 26-10-2016"

In addition, every machine shall also carry permanently this Directorate's approval mark as below:



2. The relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 shall be complied with in all matter relating to the installation, operation and maintenance of the equipment.
3. The electric supply to the machine shall be controlled from flameproof Gate-end-Box with intrinsically safe supply for control circuit of suitable rating along with sensitive earth leakage protection.
4. All covers, doors/access covers of the electrical equipment mounted on the machine, the opening/removal, which may expose live internal conductors, shall have warning instructions either by raised lettering or by other suitable means against such opening/removal of covers, doors and access covers without isolating supply of energy to the equipment from its source.
5. The user shall furnish the performance report of the equipment directly to this Directorate after one (01) year of actual use.
6. The plug and socket assembly affixed to the motors/panel, if provided, will be so interlocked as to prevent removal of plug from the socket while alive.
7. Any replacement of part required for maintenance of the equipment which is directly or indirectly connected to the flameproof features thereof shall be supplied by the manufacturer as and when required.
8. The personnel who may be entrusted with the responsibility for the use, maintenance and operation of the machine shall be given adequate training.

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9. The electrical equipment associated with the machine shall be checked by Electrical Supervisor of the mine for their flameproofness. The condition of cables in the machine shall be checked at the beginning of each working shift and the findings thereof entered in a bound-paged book maintained for that purpose, which shall be duly signed by the Electrical Supervisor with the date.
10. (a) The customer shall be supplied the copy of this approval letter, the test report from the testing laboratory with the lab certified drawing , an extract of the condition & special conditions, maintenance schedule, if any, recommended by the testing laboratory in their test report(s) so as to maintain safety features of apparatus/equipment.

(b) The customer shall also be provided a copy of factory test report along with drawings, instruction manual on the installation, operation and maintenance of the equipment and spares parts catalogue at the time of delivery of the equipment.
11. The users in consultation with the manufacturer, shall frame a code of practice for the control and guidance of persons employed for the installation, operation and maintenance of Road Header, model no. T1.14 and associated equipments, as well as for prevention of accident and to provide safety, health, convenience and discipline of persons so employed. The code of practice duly approved by the concerned zonal office of this Directorate shall be strictly complied with.
12. All technical assistance shall be rendered by the supplier at the time of initial installation of the machine at underground. The supplier shall also maintain close contact with the users to get themselves fully apprised of any difficulty that may be faced by the user during operation and maintenance of the machine.
13. The cable entry devices, threaded adaptors and stopping plugs shall be suitable for the equipment and be considered as a part of equipment (not a component). The cable entry device and cabling methods used in service shall be suitable for their intended duty and special types of cable used in mining. Such cable entry devices shall be duly certified as per relevant IS/IEC standards.
14. The Fire Resistant Hydraulic Fluid supplied with the machine shall conform to the standards and parameters as prescribed in DGMS/Mech/Tech.Cir (Approval) No. 02, Dhanbad, dated 13.02.2015.
15. The high pressure hydraulic hoses supplied with the machine shall conform to the standards and parameters as prescribed in the DGMS/Mech/Tech.Cir (Approval) No. 04, Dhanbad, dated 13.02.2015.
16. The cables in Machine shall conform to requirement of provisions of the DGMS Tech. Circular (Electrical) No. 12 dated 25.05.2015 and corrigendum vide DGMS Tech. Circular (Electrical) Approval No. 01 dated 19.02.2016 in addition to the special requirement, if any, specifically for the safe operation of the machine.

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17. The Audio Visual Alarm used in the machine shall conform to the standards and parameters as prescribed in the DGMS Tech. Circular (Electrical), Approval No. 21 dated 05.10.2015.
18. Test certificate of FLP/WP Series 251 Enclosure Head Light Model: ATF 251 conforming to latest standard shall be submitted within a period of six months from the date of issue of this letter.
19. If there occurs any revision of standards applicable to the product/equipment, the manufacturer shall get the product/equipment tested as per revised standards and submit test reports to the customer for information and to this Directorate for further approval/renewal.
20. In case of any permissible variations issued from this Directorate, they shall also be read along with this letter and the original approval letter.
21. The approval is renewed **upto 04.07.2019 from the date of expiry i.e. from 04.07.2014.**
22. At the time of applying for renewal, details of supply with name of mines, purchase order and date shall be furnished with the application.
23. Any modification/alteration to the machine that might be considered necessary at a later date in the interest of safety or/and efficient handling, operation, maintenance and maneuverability of the machine shall be carried out upon being so directed.
24. If at any time any of the conditions subject to which this approval has been granted, is violated or not complied with, this approval shall be deemed to have been revoked with immediate effect.
25. The above approval may be amended or withdrawn at any time, if considered so necessary in the interest of safety and is being issued without prejudice to any other provisions of law which may be or may become applicable at any time.


(Rahul Guha)

Director General of Mines Safety

ANNEXURE-B

List of Flameproof and Intrinsically Safe electrical equipment associated with Road Header, model no. T1.14 manufactured by M/s. MHWith, Germany for use in belowground Coal Mines in India vide DGMS approval no. 640 of 2012 issued by Directorate's letter no. 566/2125 /EHQ dated 26-10-2016

Sl. No.	Description of FLP/WP electrical equipment/cables	Manufacturer (M/S)	DGMS no./Test nos.	Approval Certificate
1.	Flameproof & weatherproof electrical main Panel, in fabricated steel construction suitable for rated 600 A, 1100 V AC designated by type FPB-01 conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	AKER WIRTH GmbH, Germany	CIMFR/TC/P/H155	dated 16.06.2011
2.	Flameproof & weatherproof Emergency Stop Switch, in steel construction suitable for rated upto 220 V, designated by Part no. 11080028 conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	AKER WIRTH GmbH, Germany	CIMFR/TC/P/H118	dated 03.06.2011
3.	Flameproof & weatherproof Enclosure for Belt Monitoring Switches, in cast iron construction, rated upto 16 A, 250 V AC, designated by type no. SW-40T/H/FP/11/22 conforming to IS/IEC 60079-0:2004 and IS/IEC 60079-1:2007.	Jayshree Electrodevices Pvt. Ltd., Pune	CMRI/TC/SR/276	dated 29.07.2015
4.	Flameproof/Weatherproof Plug for Main Switch, suitable for 1300/600 V AC, 350 A, designated by type : A40PR in brass construction conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	Victor Products Ltd., Great Britain	CIMFR/TC/P/H195	dated 12.07.2011
5.	Flameproof/Weatherproof Socket for Main Switch, suitable for 1300/600 V AC, 350 A, designated by type : A40SR in brass construction conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	Victor Products Ltd., Great Britain	CIMFR/TC/P/H216	dated 18.07.2011
6.	Flameproof/Weatherproof Terminal Box, in Steel construction suitable for ratd 50 A, 230 V, designated by type no. FPB-02/2010 conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	AKER WIRTH GmbH, Germany	CIMFR/TC/P/H142	dated 10.06.2011
7.	Flameproof & Weatherproof (IP-55) Pilot Solenoid Enclosure, in Electroless Nickel Plated Ferritic Ductile Iron grade 65-45-12 construction rated at 24 V, DC designated by Model : M4-12/15 conforming to IS/IEC 60079-0:2004 and IS/IEC 60079-1:2007-04	Bosch Rexroth Pty Ltd., Australia	IECEX TSA Issue No.3	09.0019X dated 14.11.2012.
8.	Flameproof/Weatherproof Squirrel Cage Induction Motor, in fabricated Mild Steel construction suitable for rated 180 KW, 1100 V AC, 50/60 Hz, designated by type no. 15390L conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	Trans Vaal Electric, Johannesburg, South Africa.	CIMFR/TC/P/H119	dated 03.06.2011.

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Sl. No.	Description of FLP/WP electrical equipment/cables	Manufacturer (M/S)	DGMS no./Test nos.	Approval Certificate
9.	FLP/WP (IP-65) Series 251 Enclosure Head Light, in high tensile brass construction rated at 110 V/220 V/550 V, 35 W lamp designated by Model : ATF 251 conforming to IS/IEC 60079-0:2000 and IS/IEC 60079-1:2003	ATF Mining Electrics Pty Ltd., Australia	IECEX SIM 06.0004	Issue No. 3 dated 15.08.2011.
10.	Flammable Gas Sensor (CH ₄) rated at input supply (max) U _i =14.4 VDC, Signal output=0.4 VDC to 2 VDC, model no. STX3261.01.11.240 conforming to IS/IEC 60079-0:2004 and IS/IEC 60079-11:2006.	Trolex Limited, UK	ERTL(E)/TES/T238/0063/11-12	dated 12.03.2013
11.	IS Power Supply Unit rated at input supply=110 VAC, IS output : 12 VDC/1A, model no. TX6648 conforming to IEC 60079-0:2007-10, IEC 60079-11:2006 and 60079-7:2006-07.	Trolex Limited	IECEX SIR 10.0108X	Issue No. 0 dated 18.10.2010.
12.	Trip Amplifier rated at input supply U _i =16.5 VDC, input signal (Sensor)=4 to 20 mA, model no. TX9131 IS/IEC 60079-0:2004 and IS/IEC 60079-11:2006.	Trolex Limited, UK	ERTL(E)/TES/T238/0002/12-12	dated 12.03.2013
13.	FLP/WP Temperature Sensor, rated at 12 V DC : 3 mA in Stainless Steel construction designated by Wirth Part no. 21056457 conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	Dittmer	CIMFR/TC/P/H217	dated 18.07.2011
14.	FLP/WP Combo Siren Flasher, rated at 12 V DC in steel construction designated by type HAFC conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987)	AKER WIRTH GmbH, Germany	CIMFR/TC/P/H194	dated 12.07.2011
15.	Flameproof/weatherproof Proximity Switch, designated by type no. LS10 in Brass construction suitable for rated upto 10 A, 220 V conforming to IS/IEC 60079-1:2007 and IEC 60529:1989 (IS:12063-1987).	AKER WIRTH GmbH, Germany	CIMFR/TC/P/H156	dated 16.06.2011
16.	Intrinsically Safe DC-Lifting type magnet coil, type no. GE45B-2-A housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987.	Bosch Rexroth AG, Germany	CIMFR/TC/P/H227	dated 22.07.2011
17.	Intrinsically Safe LOKN 19 Radio Remote Console housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Pempek Systems Control & Automation, Australia	CIMFR/TC/P/H246	dated 04.08.2011
18.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/A.0101-004 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H123	dated 06.06.2011

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Sl. No.	Description of FLP/WP electrical equipment/cables	Manufacturer (M/S)	DGMS no./Test nos.	Approval Certificate
19.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/C.0101-005 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H120 dated 03.05.2011	
20.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/C.0101-001 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H157 dated 16.06.2011	
21.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/C.0505-001 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H158 dated 16.06.2011	
22.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/L.2505-001 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H100 dated 30.05.2011	
23.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/B.1015-001 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H101 dated 30.05.2011	
24.	Intrinsically Safe Terminal Box (Control Unit) as designated by HR-iSAV10/C.0703-001 in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Hansen Bergbautechnik, Germany	CIMFR/TC/P/H159 dated 16.06.2011	
25.	Intrinsically Safe Flow switch with magnetic actuation of a reed switch (switch head) as designated by HD1K+A-H2.1-5-9(HD1KO-020GM030A-1026) in steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Honsberg Instruments GmbH, Germany	CIMFR/TC/P/H106 dated 31.05.2011	
26.	Intrinsically Safe Multipole Connectors housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Wieland Electric GmbH, Germany	CIMFR/TC/P/H160 dated 16.06.2011	
27.	Intrinsically Safe LOCF QUAD IS Power Supply housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Pempek Systems Pty Ltd., Australia	CIMFR/TC/P/H289 dated 24.08.2011	

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Sl. No.	Description of FLP/WP electrical equipment/cables	Manufacturer (M/S)	DGMS no./Test nos.	Approval Certificate
28.	Intrinsically Safe Antenna Barrier, type no. L09W01/02 housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987	Pempek Systems Control & Automation, Australia	CIMFR/TC/P/H226 dated 22.07.2011	
29.	Intrinsically Safe I/O Module, type no. LOLW5101 (Part of Jagannath I.S. Control System) housed in a housing of steel material of construction conforming to IS/IEC 60079-11:2006, IS/IEC 60079-0:2004 & IS:12063-1987.	Pempek Systems Control & Automation, Australia	CIMFR/TC/P/H245 dated 04.08.2011	
30.	Intrinsically Safe Inductive Proximity Switches NPN & PNP type housed in a housing of steel material of construction conforming to IS/IEC 60079-0:2004 and IS/IEC 60079-11:2006.	Katlax Enterprises Pvt. Ltd., Gandhinagar	CIMFR/TC/P/1213 dated 29.12.2010.	


(Rahul Guha)

Director General of Mines Safety