



S-29020/08/181(3)/A/2016/EHQ
भारत सरकार/Government of India
श्रम एवं रोजगार मंत्रालय
Ministry of Labour & Employment
खान सुरक्षा महाविदेशालय/
Directorate General of Mines Safety

By Registered Air Mail



No. 483/455

/EHQ, Dhanbad, dated the 09-03-2017

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

To
Shri Shri Bhowmik – Country Head
M/s. Joy Global (UK) Ltd.,
Kirkby Lane, Pinxton,
Nottinghamshire NG 16 6HX
United Kingdom.

Sub:- Approval under Regulation 181 (3) of the Coal Mines Regulations, 1957 for Flameproof and Intrinsically safe electrical equipment (as per Annexure-B), associated with the Twin Boom Bolter, Model CHDDR-HDDR, manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India under Regulation 181(3) of the Coal Mines Regulations, 1957.

Ref: Test Reports as per Annexure-B.

IDENTIFICATION MARK
DGMS APPROVAL No. 724...of 2017

Dear Sir,

In reference to the field trial permission issued vide letter No. 450/EHQ dated 02.03.2016 and based on the performance report received from the Agent, Halcoban OG Mine of M/s. South Eastern Coalfields Ltd., Bilaspur and test reports as referred above, I hereby accord approval for Flameproof and Intrinsically Safe electrical equipment (as per Annexure-B), associated with the Twin Boom Bolter, Model CHDDR-HDDR, manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India for a period of **five (05) years from the date of issue of this letter** 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,


(Prasanta Kumar Sarkar)

Annexure-A

DGMS approval no. 724 of 2017 issued by Directorate's letter no. 483/455 /HQ dated 09-03-2017

Conditions for DGMS approval under Regulation 181(3) of the Coal Mines Regulations, 1957 for Flameproof and Intrinsically safe electrical equipment as per Annexure-B associated with the Twin Boom Bolter, Model CHDDR-HDDR manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India under Regulation 181(3) of the Coal Mines Regulations, 1957.

1. Every Twin Boom Bolter, Model: CHDDR-HDDR shall carry conspicuously in a permanent manner the aforesaid identification mark, i.e. "DGMS APPROVAL NO. 724 of 2017 approved by Directorate's letter No. 483/455 /HQ dated 09-03-2017. In addition, every machine shall also carry permanently the 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 equipment, on 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 plug and socket assembly affixed to the motor/panel, if provided, will be so interlocked as to prevent removal of plug from the socket while alive.
6. 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.
7. The electrical equipment associated with the machine shall be checked by the 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.
8. The user shall ensure that

9. (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.
10. The electrical and mechanical personnel who may be entrusted with the responsibility for the use, maintenance and operation of the machine shall be given adequate training.
11. The users in consultation with the manufacturer, shall frame a code of practice to provide the guidance of persons employed for installation, operation and maintenance of Twin Boom Bolter Model: HDDR and associated equipments, as well as to provide safety, health, convenience and discipline of persons so employed.
12. Technical assistance shall be provided by the supplier at the time of initial installation. 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 with regard to the use, maintenance and operation of the equipment.
13. The fire resistant hydraulic fluid shall conform to the standards and parameters as prescribed in the DGMS/Mech/Tech.Cir (Approval) No. 02, Dhanbad, dated 13.02.2015.
14. 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.
15. The cables in Machine shall conform to requirement of provisions of the DGMS Tech. Circular (Electrical) No. 12 dated 25.05.2015 and 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.
16. 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.
17. While seeking renewal of approval, valid BIS license in the case of Indian manufacturers and in case of foreign manufacturers QAR/QAN for the associated flameproof / weatherproof / intrinsically safe apparatus, as may be applicable, shall be submitted and the same shall remain valid as long as the apparatus is manufactured and marketed.
18. 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 shall be suitable for their intended duty and for the special type of cable used in mine. Such cable entry devices shall be

19. The general arrangement drawing of the equipment shall conform to the Drawing No. 13-08-38 and the modifications on the Model CHDOR-HDDK in particular, shall not be carried out without prior approval of this Directorate.
20. Noise survey and whole body vibration survey of the equipment conforming to any internationally accepted standard shall be conducted once in two years by any government approved or NABL accredited laboratory and the report of the same shall be kept available at the mine office.
21. Periodical brake testing shall be conducted as per manufacturer's guidelines and the report of the same shall be kept available at the mine office.
22. The approval is accorded for a period of **five (05) years from the date of issue of this letter.**
23. At the time of applying for renewal, details of supply with name of mines, purchase order and date shall be furnished with the application.
24. 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.
25. 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.
26. 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.


(Prasanta Kumar Sankar)
Chief Inspector of Mines

09/03/17

Annexure - B

List of Flameproof and Intrinsically Safe electrical equipment associated with Twin Room Boltor, Model CHDDR-HDDR manufactured by M/s. Joy Global (UK) Ltd. in belowground coal mines in India under Regulation 181(3) of the Coal Mines Regulations, 1957 issued by Directorate's letter No. 483/455-110, dated 09.03.2017

S. No	Description of electrical equipment	Manufacturer	Test report and date	Standard to which the test is conducted
1.	Flameproof 3 phase, Induction Motor rated at 3/kW, 1100V, 4-pole Ex d.	Baldore	CIMFR/TC/P/H686 dated 29.01.2014	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
2.	Flameproof enclosure for Cable Reeler rated at 300A, 1100V.	Joy	CIMFR/TC/P/H320 dated 26.07.2012	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
3.	Flameproof Connection/Switch Box, Model MA001012-0018.	Joy	ERTL(E) TES/3057/0053 /09-12 dated 10.10.2012	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
4.	Flameproof Switch/Connection Box	Joy	CIMFR/TC/P/H561 dated 13.01.2014	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
5.	Flameproof Controller Station Type C1800, rated 1100V/525V	EMTS	MX-XPI/15.0405 Dated 09.05.2016	IEC 60079-0:2004 IS/IEC 60079-1:2004
6.	FLP/WP LED Mining Luminaire, Type ML100, 12-24V AC/DC.	Victor	CIMFR/TC/P/H552 Dated 28.11.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007 IS/IEC 60528-2001
7.	TLP/WP A42 Range Restrained of Connectors (Plug, socket, plug coupler & test plug) rated upto 250A, 1330V	Victor	CIMFR/TC/P/H475 Dated 23/10/2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007 IS/IEC 60529:2001
8.	FLP/WP Fluorescent Luminaire, Model: 411A	Victor	CIMFR/TC/P/H634 Dated 26.11.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007 IS/IEC 60528-2001
9.	Flameproof Siren Model: HSHC, 110V AC	Hytronic	ERTL(E)/11 S/0057/0002 6/01-13 Dated 05.03.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
10.	STX-3261 Methane sensor	Trox	CIMFR/TC/P/H678 Dated 10.01.2013	IS/IEC 60079-0:2004, IS/IEC60079-1:2007 IS/IEC 60528-2001
11.	X6626 IS Power supply	Trox	CIMFR/TC/P/H731 Dated 06.02.2013	IS/IEC 60079-0:2004, IS/IEC60079-1:2007, IS/IEC 60374:2001
12.	TX9042 Programmable Sensor Controller	Trox	CIMFR/TC/P/H574 Dated 10.01.2013	IS/IEC 60079-0:2004, IS/IEC60079-1:2007 IS/IEC 60529:2001

(Prasanta Kumar Sarika)
Chief Inspector of Mines