

Use of portable electrical deck equipment

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A Member has highlighted some recent examples of portable electrical deck equipment being used with incorrect plugs and sockets.

What happened?

This safety flash serves to bring to members' attention the issue of plugs and sockets for electrical equipment used in the outdoor marine environment.

During 'routine' portable appliance testing, it was found that plugs and sockets on portable electrical equipment used in the deck environment had an IP44 ingress and integrity rating, which is not sufficient for use on the back deck or an open deck marine environment. Also, it was found that 9" grinders with a rating of 2000W and 19A had their 32A plugs removed and 16A plugs fitted instead, with subsequent potential for overheating, burns or electric shock.

Actions

The following actions were recommended:

- Socket outlets, appliance inlets and portable equipment operated in an open marine environment should have a minimum IP rating of IP56; alternatively the socket should be located inside an enclosure with a minimum ingress integrity rating of IP56.
- Regular checks should be made of hand tools and extension leads, to ensure portable equipment and extension leads to be used on the back deck are fitted with suitable IP 56 plugs and sockets, (IEC plugs and sockets are usually rated IP44 or IP67; the more robust IP67 ones should be used).
- Incorrect equipment should either be removed from use and fitted with the correctly rated plugs/sockets, or substituted with equipment that is correctly rated (i.e. the appliance in use may have been taken from a workshop to be used on the open deck, the IP rating is adequate for indoors, but not outdoors).
- Ensure personnel are fully aware and informed with regard to the appliance voltage and load rating current, size and type of plug fitted, condition of flex/cable, and same for any extension leads, including plug and socket and the fixed socket outlet.

- Ensure that personnel always check and inspect equipment before use, to ensure the equipment is fit for use and purpose. All deficient equipment should be removed from use and either repaired or disposed of.
- Check and ensure that deck power sockets and circuits are fitted with correctly rated plugs and sockets, or swap/replace appliances with equipment that is fit for purpose.

Members may wish to refer to IMCA's handy pocket card on *Electrical hazards*.

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