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Aerospace — Hydraulic fluid components — Expression of particulate contamination levels

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National foreword

This British Standard is the UK implementation of ISO 12584:2013.

The UK participation in its preparation was entrusted to Technical Committee ACE/69, Aerospace hydraulic systems, fluids and components.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Aerospace — Hydraulic fluid components — Expression of particulate contamination levels

*Aéronautique et espace — Composants pour fluides hydrauliques —
Expression des niveaux de contamination particulaire*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The committee responsible for this document is ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

Introduction

The reliability of fluid circuits depends largely on the quantity and size of the particles conveyed by the fluid.

The cleanliness of the operating fluid is obtained and maintained by filtration at a level consistent with the sensitivity of the system components to particulate contamination and the life and reliability required by the operator of the system.

The cleanliness of the system at start-up is dependent on the cleanliness of the components as delivered, the amount of contamination added during the build process, the cleanliness of the hydraulic liquid used to fill the system, and how successful the liquid was in penetrating the clearances. The amount of contamination added from these processes must be controlled to minimize the damage to the system during the initial running period. Cleanliness specifications are fundamental to this.

This International Standard defines the terminology used in and the method of reporting and communicating the cleanliness of components used in aerospace fluid systems. This will ensure consistent and unambiguous reporting.

It also presents a coding system which allows cleanliness data to be reported either in a shortened manner or in a complete manner for communication purposes or for specifying cleanliness requirements.