The Effects of Water Vapour on Diver Physiology

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Supersedes DMAC 13, which is now withdrawn

On-line breathing mixtures which are supplied on site by low pressure compressors (i.e. approximately 250 psi) contain a much higher water vapour content than gases in cylinders filled at a high pressure by a manufacturer. It appears that this variation has caused, and continues to cause, considerable confusion at worksites in relation to the effects of water vapour on a diver’s physiology.

DMAC wishes it to be known that a higher level of water vapour in breathing mixtures is not detrimental to the health of divers and is beneficial to their respiratory system. An example of the practical application of this concept is breathing mixture which is voluntarily humidified to achieve a high water vapour content, administered to hospital patients.

Technical safety factors should continue to be observed.