

CIMTECH[®] A30-05

Medium duty synthetic
metalworking fluid



PRODUCT INFORMATION FLYER

Description

Cimtech A30-05 is a new type of synthetic fluid for medium duty grinding and machining operations, including milling and high speed machining. It is designed primarily for demanding operations in hard and difficult alloys where it has proven to create substantial productivity improvements. Cimtech A30-05 can be used in individual machines as well as in central systems.

Features and benefits

Cimtech A30-05 is designed primarily to improve productivity in grinding and also machining operations in hard and difficult alloys such as stainless steel, titanium, nickel and other aerospace alloys. For use with other metals and processes please consult the compatibility guide on page two, or contact your local Cimcool representative.

Cimtech A30-05 is highly cost effective, due to its low make-up rates and long fluid life. Cimtech A30-05 provides excellent lubrication and cooling, and does not foam when used at recommended concentration. The complete transparency of the mix enables good visibility in the cutting zone, and it has a magnificent washing action and superior cleanliness. In addition, Cimtech A30-05 rejects tramp oil and is low misting. The ingredients in Cimtech A30-05 provide no nourishment for bacteria ensuring exceptional long fluid life. Operators, otherwise sensitive to traditional fluids, generally appreciate the low pH (8.2), complete transparency and neutral smelling properties of Cimtech A30-05.

Cimtech A30-05 does not contain sulphur, chlorine, formaldehyde, diethanolamine or boron.

Additives should only be used after consulting a Cimcool representative.

Physical and chemical properties

Density:	1,067
pH (concentrate):	8,5
pH (operating):	8,2

Methods of application

Cimtech A30-05 is easy to mix, normal stirring only. For automatic mixing, the use of the Cimcool® Mix Master or Cimcool Mix Master S is recommended. Typical starting water temperature conditions should be 5 - 25°C.

Recommended starting concentration

Milling, drilling, turning, reaming and grinding	5%
Wrought and cast aluminium alloys, carbon and stainless steel, titanium and exotic alloy	5%

Use of lower concentrations than recommended above may cause foaming, corrosion and/or rancidity.

Metal and water compatibility					
Type of metal	Copper and Copper alloys such as brass and bronze	Aluminium	Cast iron	Steel, carbon- & stainless steel	Titanium and other 'hard' alloys
Compatibility	Compatible only for occasional application, but beware of risk of staining of parts, residue formation in machines and/or discoloration of mix. Regular addition of Inhibitor EC can reduce, but not eliminate this risk.	Excellent with hard Al (typically wrought and cast Al). In soft Al beware of chip build up on tools in high-speed threading, tapping and deep hole drilling operations compared to oil based fluids. For use with very special grades of Al a staining test is recommended before using the product.	Compatible, but beware of increased risk of dip, corrosion - compared to conventional oil based fluids.	Excellent	Excellent
Water compatibility	It is advised to mix only with demineralised water or good quality tap water: maximum 10°GH; maximum 25 ppm chloride. Exceeding these limits may, in time, cause lime deposits and/or corrosion. It is recommended to keep the chloride concentration in the mix below 350 ppm to ensure satisfactory ferrous corrosion control.				
Remarks	Being free of mineral oil Cimtech A30-05 may have a tendency of leaving a more sticky residue than traditional oil based fluids, in particular on open machines. However, regular spraying with a 1% solution of Cimclean 51 followed by wiping with a cloth (prevent fluid contamination) will easily remove such residue. Beware of residue when using measuring instruments and clean moving parts frequently. Applying a thin coat of Cimguard 20 may prevent such problems, and will not interfere with instrument measuring accuracy.				

Mix Master S

Concentration** can easily be obtained by setting the regulator to the correct number.

** The concentration may vary depending on local conditions. It is therefore always advised to check using the refractometer.

Concentration analysis

For concentration analysis, use the below given method or an appropriate laboratory procedure available from your local stockist.

Refractometer factor:	2.0
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If the refractometer is used, the resultant reading multiplied by a factor of 2.0 will only be relevant when applied to a fresh mix.

Cimcool TA kit	Use 2 ml. mix							*: next syringe		
%	1	2	3	4	5	6	7	8	9	10
Reading	0.73	0.63	0.52	0.42	0.32	0.21	0.11	0.01	*.91	*.80

Handling and storage Protect from freezing, direct sun and store between 5 - 35°C.

Packaging type 200 and 1.000 litre.

Safety Data Sheet The Safety Data Sheet should be consulted for specific information and information on Health, Safety and Environment when handling this product.



Cimcool Industrial Products
 Schiedamsedijk 20
 3134 KK Vlaardingen
 The Netherlands
 Tel: (0)10-4600660
 cimcool.eu@duboischchemicals.com
 www.cimcool.com

