How to Conduct a Successful CIMCOOL Metalworking Fluid Trial:

1. Select a representative machine or grinder where the customer seeks improvements.

2. Define the key application questions such as:
   • type of metal
   • severity of operation
   • water quality
   • current competitive product name or fluid type
   • customer issues

3. Select the best CIMCOOL Metalworking Fluid for the customer application. Call your local CIMCOOL Technical Service Engineer, Application Specialist or 513-458-8199 for more information.

4. Use CIMCLEAN 30 for a thorough machine cleanup prior to changing the machine with the clean CIMCOOL Metalworking fluid. Consult the CIMCLEAN 30 Pit for clean out procedures.

5. Charge the fluid at the recommended mix concentration. Consult the CIMCOOL Metalworking Fluid Product Information Folder for details. Maintain the fluid at the proper level in the sump.

6. Identify the test machine with a CIMCOOL Test Placard. Use the CIMCOOL MIX MASTER II Proprietary or the CIMCOOL MIX STATION and CIMCOOL Refractometer to maintain the fluid mix concentration. Check the concentration daily.

7. Maintain close contact with the customer to insure the test is successful.


CIMCOOL® Metalworking Fluid Replacement Guide

CIMTECH 320-HFP Metalworking Fluid replaces...
   • Castrol’s SYNTELLO 9913, 9918, 9928
   • Master Chemical’s TRIM 9106CS
   • VALCOOL VNT 930

CIMTECH 400 with MSL Metalworking Fluid replaces...
   • ATOGUARD’s RS
   • Castrol’s SYNTELLO 9951, 9954
   • Henkel’s 5555
   • Master Chemical’s TRIM 9106CS, TRIM C275
   • Nalco’s TECHCOOL 3700, 3900
   • Spartan Chemical’s CEDDER
   • VALCOOL VNT 900
   • Wynn’s Ultra 941, 951

CIMTECH 410C Metalworking Fluid replaces...
   • Castrol’s 990A
   • Master Chemical’s TRIM Regular
   • VALCOOL VNT 910

CIMSTAR 10-565 VLCB Metalworking Fluid replaces...
   • Castrol’s SYNTELLO 9002, 9904, 9930
   • Fuchs’s ECDOL 3n 96
   • IWM’s RUSTOL 0.2 251
   • Master Chemical’s TRIM 9106CS
   • Monrose’s ASTRO-GRIND A
   • Nalco’s TECHCOOL 3500C
   • Spartan Chemical’s GRINDER
   • VALCOOL VNT 920

CIMSTAR 700 Metalworking Fluid replaces...
   • Castrol’s 6000 Series
   • Fuchs’s RENDOCOL 007
   • Fuchs’s RENDOCOL 207
   • Henkel’s ATOGUARD XL
   • Houghton’s HOCUT 767
   • Houghton’s HOCUT 795
   • Master Chemical’s SC 210
   • Quaker’s MICROGRIND 560’s
   • Quaker’s MICROFLUID Series
   • VALCOOL VNT 710
   • VALCOOL VNT 780
   • VALCOOL VNT 785
   • VALCOOL VNT 790

CIMSTAR QUAL STAR XL Metalworking Fluid replaces...
   • Castrol’s 6000 Series
   • Monrose’s ASTRO CUT 2001B, ASTROCUT B
   • VALCOOL VNT 800 C

CIMPERIAL 1060CF-HFP Metalworking Fluid replaces...
   • Blaser Swisslube’s BLAGOLUT 2000, 4000, 4000CF
   • Castrol’s CLEAREDGE 5510C, ALSDOL AL38, AL39
   • Fuchs’s RENDOCOL 1120
   • Hangstoffer’s 5500
   • Henkel’s SWORDCUT
   • Houghton’s HOCUT 795, 7958
   • Master Chemical’s TRIM SOL Family, E206, TRIM VIP E210
   • Mobil’s MOBILMET 5122, 5126
   • Quaker’s MICRODUT Series
   • Rustlack’s WS 5050
   • Spartan Chemical’s CUTTER
   • Texaco Soluble D
   • VALCOOL VNT 600
   • VALCOOL VNT 650
   • VALCOOL VNT 650 C

PRODUCT APPLICATION GUIDE

CIMTECH® 320-HFP Metalworking Fluid
Moderate to Heavy-Duty
Synthetic

CIMTECH 400 with MSL Metalworking Fluid
Heavy-Duty
Synthetic

CIMTECH 41OC Metalworking Fluid
Moderate Duty
Synthetic

CIMSTAR 10-565 VLCB Metalworking Fluid
Moderate to Heavy-Duty
Semi-Synthetic

CIMSTAR 700 Metalworking Fluid
Moderate Duty
Semi-Synthetic

CIMSTAR Qual Star® XL Metalworking Fluid
Moderate to Heavy-Duty
Semi-Synthetic

CIMPERIAL® 1060CF-HFP
(Clorine Free) Metalworking Fluid
Moderate to Heavy-Duty
Soluble Oil

The key criteria for selecting a CIMCOOL Metalworking Fluid are the:
• metal type
• severity of operation

Use the Machining and Grinding Application Guide charts (inside) to specify a CIMCOOL Metalworking Fluid for your application.

3000 Disney Street • Cincinnati, Ohio 45209
513-458-8199 • 888.CIMCOOL

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CIMCOOL® Metalworking Fluid Application Guide

**MACHINING**

1. Select type of metal to be machined
2. Determine severity of operation
3. Select appropriate fluid, contact CIMCOOL Technical Service for more in-depth details
4. Customer should always verify compatibility with alloy/application

<table>
<thead>
<tr>
<th>1 Metal</th>
<th>STEELS 400 Series Stainless Carbon Tool Steels</th>
<th>IRON</th>
<th>ALUMINUM High Silicon (Automotive)</th>
<th>ALUMINUM Low Silicon (Aerospace)</th>
<th>NON-FERROUS Copper Brass Other</th>
<th>STAINLESS STEEL 300 Series</th>
<th>2 HIGH TEMP ALLOYS Nickel Base Iron Base</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2 Severity</strong></td>
<td><strong>3 Appropriate Fluid</strong></td>
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<tr>
<td>VHD</td>
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<td>CIMSTAR 700</td>
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**KEY**
- VHD: Very Heavy Duty (Example: Broaching, Form Tapping, Reaming)
- HD: Heavy Duty (Example: Drilling, Cut Tapping, Sawing)
- MD: Medium Duty (Example: Turning)

CIMCOOL® Metalworking Fluid Application Guide

**GRINDING**

1. Select type of metal for grinding
2. Determine severity of operation
3. Select appropriate fluid, contact CIMCOOL Technical Service for more in-depth details
4. Customer should always verify compatibility with alloy/application

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**KEY**
- VHD: Very Heavy Duty
- HD: Heavy Duty
- MD: Medium Duty

Contact CIMCOOL Technical Service at 513.458.8196