

# **METALWORKING LUBRICANTS**











LTEC 0 **WRK** 

LTEC 0









Slide way and gear oils



Fluid for maintenance, mixers and aircoolers





oil separators





Air filters for machine tool



41 - 43 Accessories



LTEC 0

# CHEMICAL DIVISION



#### **EUROPEAN TECHNICAL ASSISTANCE**

Thanks to the continuous training of its technicians, the Chemical Division can guarantee technical assistance throughout



#### **CONTAMINATING ANALYSIS**

By means of specific methods, the Chemical Division can check the presence of contaminants in fresh or products in use





#### CHARACTERIZATION OF CHEMICAL **PRODUCTS**

Thanks to the instrumentation of the latest generation, the Chemical Division can characterize almost all the chemical and lubricating products on the market.

# LTEC SELECTION OF LUBRICANT-COOLING OILS

|                               |           | Large chi           | р                        |                         | Small ch        | ip            |
|-------------------------------|-----------|---------------------|--------------------------|-------------------------|-----------------|---------------|
|                               | UNITEC 2K | UNITEC<br>2K STRONG | UNITEC2K<br>CF AEROSPACE | UNITEC<br>GREEN COOLANT | UNITEC<br>HW 30 | UNITEC<br>520 |
|                               | H0010     | H0011               | H0015                    | H0210                   | H0040           | H0125         |
| Page. H                       | 7         | 6                   | 8                        | 5                       | 9               | 10            |
| Grinding                      | 0         | 0                   | 0                        | •                       | •               | •             |
| MILLING                       | •••       | •••                 | •••                      | •••                     | ••              | ••            |
| Turning                       | •••       | •••                 | ••                       | •••                     | ••              | •             |
| DRILLING                      | ••        | ••                  | •                        | •••                     | •               | 0             |
| WATERS                        | <25°f     | <50°f               | <25°f                    | <45°f                   | <50°f           | <25°f         |
| DETERGENCY                    | •         | •                   | •                        | ••                      | ••              | •••           |
| CAST IRON (K)                 | 0         | •                   | 0                        | 0                       | •••             | •••           |
| STAINLESS STEEL (M)           | •••       | •••                 | ••                       | •••                     | ••              | •             |
| ALLOYED STEEL (p<1200 n/mm²)  | •••       | •••                 | ••                       | •••                     | ••              | •             |
| CARBON STEEL (P <850 n/mm²)   | •••       | •••                 | •••                      | •••                     | ••              | •             |
| ALUMINUM (al) ERGAL - AVIONAL | ••        | ••                  | •••                      | •                       | •               | •             |
| MAGNESIUM (mg)                | 0         | 0                   | 0                        | 0                       | ••              | •             |
| COPPER ALLOY (Cu)             | ••        | •••                 | ••                       | •                       | 0               | 0             |
| TITANIUM (ti)                 | ••        | ••                  | ••                       | ••                      | 0               | 0             |
| PRESSURE (Bar)                | <40       | <45                 | <40                      | <30                     | <40             | <40           |
| Refractometric factor         | 1         | 1                   | 1                        | 1.5                     | 1.1             | 2             |

○ = not suited ● suited ● recommended ● excellent

#### Flow charts:

FR (Resistance to Foam): it represents the capacity of the emulsified fluid to resist the formation of foam.

EP (Extreme Pressures): it represents the capacity of the emulsified fluid to provide lubrication in heavy workings.

DT (Detergency): it represents the capacity of the emulsified fluid to decant the waste resulting from processing.

BR (Bacterial Resistance): it represents the capacity of the emulsified fluid to resist the attack of micro-organisms.

**DO (Drag Out)**: it represents the capacity of the emulsified fluid to self-concentrate.

WR (Water Compatibility): it represents the capacity of the emulsified fluid to be stable at different water hardness.

**OP** (**Protective Power**): it represents the capacity of the emulsified fluid to protect the pieces from corrosion.

BC (Biocompatibility): it represents the ability of the product not to cause or cause slight biological response.



# LTEC • FORMATS

Can

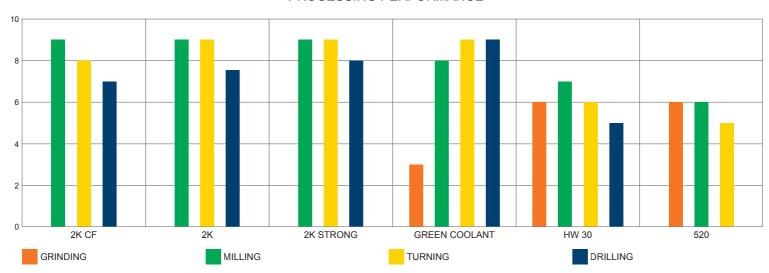


Drum



This graph represents the choice of the most suitable product for the spedific type of processing.

# PROCESSING PERFORMANCE



This graph represents the choice of the most suitable product for the specific type of processed material.

# METAL COMPATIBILITY \*\*METAL COMPATIBILITY \*

# **APPLICATIONS LEGEND**







Hard water ~45°f





MAX HP 250



Grinding



# **LTEC BORON AND FORMALDEHYDE RELEASER-FREE SYNTHETIC FLUIDS**











#### ITEM: UNITEC GREEN COOLANT

UNITEC GREEN COOLANT is a emulsifiable coolant with a medium content of renewable origin base oils and EP additives. It does not contain SVHC substances, chlorine, boro, formaldehyde. The emulsifiable UNITEC GREEN COOLANT oil is an innovative and newly designed product designed to have the maximum biocompatibility with the operators. UNITEC GREEN COOLANT has excellent lubricating capacity thanks to the oil on an ester base, contained within it. This can guarnatee excellent lubricating qualities compared to traditional emulsifiable products. This oil also has excellent cleaning properties compared to old generation oils

# LTEC 6

SAFETY DATA SHEETS ON-LINE

#### ADVANTAGES:

- Excellent compatibility with water from 10 to 45 ° f
- Excellent health profile, compatibility with operator
- Excellent lubrification even in the most demanding operations
- Excellent cleaning of work area
- Long duration of the emulsions
- Foaming contained in the range of water hardness recommended



| Tech. Code       | GR73<br>Euro | Quantity<br>L | Appearance concentrated |               | earance<br>nulsion | Refractometric factor |    | Density DIN 52757<br>Kg/lt |   | pH (5%)<br>DIN 51369 | Storage<br>temperature<br>°C |
|------------------|--------------|---------------|-------------------------|---------------|--------------------|-----------------------|----|----------------------------|---|----------------------|------------------------------|
| H021020          | 194,00       | 20            | Lightuglieu             | v Translucent |                    | 1,5                   |    | 0,980                      |   | 0.5                  | from 5 to 40                 |
| H0210200         | 1609,00      | 200           | Light yellow            |               |                    |                       |    |                            |   | 9,5                  | from 5 to 40                 |
| APPLICATION      | APPLICATIONS |               | INOX                    | P <850        | P <1200            | Al                    | Mg | Cu                         |   | i Recon              | nmended concentration        |
| Grinding         |              | 0             | •                       | •             | •                  | •                     | 0  | 0                          | • | )                    | 5 %                          |
| Turning          |              | 0             | •••                     | •••           | •••                | ••                    | 0  | •                          | • | •                    | 5 - 8 %                      |
| Drilling         |              | 0             | •••                     | •••           | •••                | ••                    | 0  | ••                         | • | •                    | 5 - 10 %                     |
| Drilling, boring |              | 0             | •••                     | •••           | •••                | ••                    | 0  | ••                         | • | )                    | 5 - 10 %                     |

○ = not suited ● suited ●● recommended ●●● excellent

The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

Note: before inserting UNITEC GREEN COOLANT in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.



# LTEC BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS







#### ITEM: UNITEC 2K STRONG

UNITEC 2K STRONG is a multi-material emulsifiable cooling lubricant with a high mineral oil content, free from SVHC, boron and for formaldehyde donor bactercides. UNITEC 2K STRONG is an emulsifiable oil created for the needs of industry where there is water with high hardness and the need for high lubrication. UNITEC 2K STRONG emulsifiable oil has an excellent lubricating and detergent capacity while at the same time having excellent resistance against micro-organisms.

#### ADVANTAGES:

- Excellent compatibility with water hardness from 10 to 50 °f
- Excellent cleaning power of the machine tool and the parts
- Excellent lubrication even in the most difficult operations
- Excellent anti-corrosive action
- Excellent cleaning of work areas
- Long duration of emulsions and excellent resistance to bacterial proliferation
- Excellent resistance to foam





| Tech. Code       | GR70<br>Euro | Quantity<br>L | Appearance concentrated |        | Appearance emulsion |     | Density DIN 52757<br>Kg/lt |   | pH (                    | 5%) DIN 51369 |          | Storage<br>temperature<br>°C |  |
|------------------|--------------|---------------|-------------------------|--------|---------------------|-----|----------------------------|---|-------------------------|---------------|----------|------------------------------|--|
| H001120          | 165,00       | 20            | Auch                    | Amber  |                     |     | 0.050                      |   | 0.25                    |               |          |                              |  |
| H0011200         | 1450,00      | 200           | Amber                   |        | Milky               |     | 0,950                      |   | 9,35                    |               |          | from 5 to 40                 |  |
| APPLICATION      | S            | К             | INOX                    | P <850 | P <1200             | Al  | Al Mg Cu Ti Rec            |   | commended concentration |               |          |                              |  |
| Grinding         |              | 0             | 0                       | 0      | 0                   | 0   | 0                          |   | )                       | 0             |          | 1                            |  |
| Turning          |              | •             | •••                     | •••    | ••                  | ••  | 0                          | • | •                       | ••            | 5 - 8 %  |                              |  |
| Drilling         |              | •             | •••                     | •••    | ••                  | ••• | 0                          | • | •                       | •••           | 5 - 10 % |                              |  |
| Drilling, boring |              | •             | ••                      | •••    | ••                  | ••  | 0                          | • | •                       | ••            | 5 - 10 % |                              |  |

○ = not suited ● suited ●● recommended ●●● excellent

The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

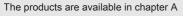
Note: before inserting UNITEC 2K STRONG in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.

# NEW

# Related products

# KERFOLG TO FORMING TAP FOR BLIND THROUGH HOLES - M

| Tech. Code | d x p<br>mm | L<br>mm | l<br>mm |
|------------|-------------|---------|---------|
| A2360M6    | 6 x 1       | 80      | 10      |
| A2360M8    | 8 x 1,25    | 90      | 14      |
| A2360M10   | 10 x 1,5    | 100     | 16      |
| A2360M12   | 12 x 1,75   | 110     | 18      |





5 - 8 %

5 - 10 %

5 - 10 %

# LTEC BORON AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS







ITEM: UNITEC 2K

UNITEC 2K is a emulsifiable coolant with an high content of mineral oil and EP addictives, it does not contain SVHC: substances neither boron nor formaldehyde donor bactercides, formulated for the processing of Iron and non ferrous alloys UNITEC 2K emulsfiable oil has been stuided to give maximum performance with medium-soft water and has an excellent lubricant capacity, thanks to the EP additives.

#### **ADVANTAGES:**

Turning

Drilling

- Excellent compatibility with water hardness from 0 to 30 °f
- Excellent cleaning power of the machine tool and parts
- Excellent health profile and excellent compatibilty with operators
- Excellent lubrication even in the most demanding operations
- Formidable antioxidant and bio-dynamic action
- Excellent cleaning of work areasLong duration of the emulsions
- Foaming contained in the range of water hardness recommended





| Tech. Code  | GR70<br>Euro        | Quantity<br>L | Appearance concentrated | Appearance emulsion |           | Refractometric factor |      | Density DIN 52757<br>Kg/lt |    | pH (5%) DIN | I 51369             | Storage<br>temperature<br>°C |
|-------------|---------------------|---------------|-------------------------|---------------------|-----------|-----------------------|------|----------------------------|----|-------------|---------------------|------------------------------|
| H00105      | 49,00               | 5             |                         |                     |           |                       |      | 0,960                      |    |             |                     |                              |
| H001020     | 169,00              | 20            | Emerald                 | Milky               | Milky 1,0 |                       |      |                            |    | 9,25        |                     | from 5 to 40                 |
| H0010200    | 1358,00             | 200           |                         |                     |           |                       |      |                            |    |             |                     |                              |
| APPLICATION | APPLICATIONS K INOX |               | P <850                  | P <1200             | 1200 AI I |                       | g Cu |                            | Ti | Recommo     | ended concentration |                              |
| Grinding    |                     | 0             | 0                       | 0                   | 0         | 0                     | С    | )                          | 0  | 0           |                     | 1                            |

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The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

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Note: before inserting UNITEC 2K in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.

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<sup>••</sup> Drilling, boring ○ = not suited ● suited ●● recommended ●●● excellent

# LTEC BORON-CHLORINE AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS









#### ITEM: UNITEC 2K CF AEROSPACE

UNITEC 2K CF AEROSPACE is an emulsifiable coolant with an high content of mineral oil. It does not contain chlorine, substances SVHC or boron or bactercides, suitable for machining ferrous alloys, nonferrous and titanium alloys. UNITEC 2K CF AEROSPACE is an emulsifiable oil created for the needs in the aerospace Industry for this reason there is no chlorinated paraffin or halides in this oil. UNITEC 2K OF AEROSPACE emulsifiable oil has been studied to give maximum performance with medium-soft water and has excellent lubricating capacity thanks to EP additives.

#### **ADVANTAGES:**

- Excellent compactibility with water hardness from 0 to 30 °f
- It does not contain chloroparaffin
- Great cleaning power of the machine tool and of workpieces
- Excellent health profile and excellent compatibilty with operators
- Excellent lubrication even in the most demanding operations
- Formidable antioxidant and bio-dynamic
- Excellent cleaning of work areas
- Long duration of the emulsions
- Foaming contained in the range of water hardness recommended





| Tech. Code       | GR73<br>Euro | Quantity<br>L | Appearance concentrated |        | earance<br>nulsion | Refractometric factor |     | Density DIN 52757<br>Kg/lt |       | pH (5%)<br>DIN 51369 |                       | Storage<br>temperature<br>°C |  |
|------------------|--------------|---------------|-------------------------|--------|--------------------|-----------------------|-----|----------------------------|-------|----------------------|-----------------------|------------------------------|--|
| H001520          | 178,00       | 20            |                         |        | 4711               | 4.0                   |     |                            |       |                      |                       |                              |  |
| H0015200         | 1443,00      | 200           | Brown                   | N      | Milky              |                       | 1,0 |                            | 0,960 |                      | ,25                   | from 5 to 40                 |  |
| APPLICATION      | s            | К             | INOX                    | P <850 | P <1200            | Al                    | Mg  | Cu                         |       | Ti                   | Recommended concentra |                              |  |
| Grinding         |              | 0             | 0                       | 0      | 0                  | 0                     | 0   | 0                          |       | 0                    |                       | 1                            |  |
| Turning          |              | 0             | •••                     | •••    | ••                 | •••                   | 0   | ••                         |       | •                    |                       | 5 - 8 %                      |  |
| Drilling         |              | 0             | ••                      | •••    | ••                 | •••                   | 0   | ••                         |       | •                    | • 5 - 10 %            |                              |  |
| Drilling, boring |              | 0             | ••                      | ••     | ••                 | •••                   | 0   | ••                         |       | • 5                  |                       | 5 - 10 %                     |  |

○ = not suited ● suited ●● recommended ●●● excellent

The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

Note: before inserting UNITEC 2K CF in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.

# Related products

# **I\_TEC** HAND HELD REFRACTOMETERS

| Tech. Code | Model       | Divisions % |
|------------|-------------|-------------|
| H3631018   | 0 - 18%     | 0.1         |
| H3631032   | 0 - 32%     | 0.2         |
| H3631R1    | Spare plate | -           |

The products are available in chapter H



# BORON-CHLORINE AND FORMALDEHYDE RELEASER-FREE MINERAL FLUIDS









**ITEM: UNITEC HW 30** 

UNITEC HW 30 is a semi-synthetic emulsifiable coolant with a medium content of mineral oil. It does not contain SVHC substances boron or formaldehyde. This emulsifiable oil has a formidable anti-oxidant action and a very high resistance to micro-organisms. UNITEC HW 30 is an emulsifiable oil without chloroparaffin and halides. UNITEC HW30 has been stuided and formulated to give maximum performance on hard water and in difficult working conditions.

#### ADVANTAGES:

- Excellent compatibility with water from 20 to 45 ° f
- Excellent health profile, compatibility with operator
- Excellent detergency of the grinding wheel
- Excellent cleaning of work area
- Long duration of the emulsions
- Foaming contained in the range of water hardness recommended
- Excellent performance in machining cast iron



Unitec



| Tech. Code       | GR73<br>Euro | Quantity<br>L | Appearance concentrated |        |         | Refractometric factor |    | Density DIN 52757<br>Kg/lt |    | pH (5%)<br>DIN 51369 | Storage<br>temperature<br>°C |
|------------------|--------------|---------------|-------------------------|--------|---------|-----------------------|----|----------------------------|----|----------------------|------------------------------|
| H004020          | 183,00       | 20            | Amalaga                 | Tran   | alvaant | 1,1                   |    | 0,980                      |    | 0.00                 | from 5 to 40                 |
| H0040200         | 1536,00      | 200           | Amber                   | Iran   | slucent |                       |    |                            |    | 9,80                 |                              |
| APPLICATION      | APPLICATIONS |               | INOX                    | P <850 | P <1200 | Al                    | Mg | Cu                         | Ti | Recomr               | mended concentration         |
| Grinding         |              | ••            | ••                      | ••     | ••      | •                     | •  | 0                          | 0  |                      | 2.5 - 5 %                    |
| Turning          |              | •••           | •••                     | •••    | •••     | •                     | •  | 0                          | 0  |                      | 5 - 8 %                      |
| Drilling         |              | •••           | •••                     | •••    | ••      | •                     | •  | 0                          | 0  |                      | 5 - 10 %                     |
| Drilling, boring |              | •••           | ••                      | ••     | •       | •                     | •  | 0                          | 0  |                      | 5 - 10 %                     |

○ = not suited ● suited ●● recommended ●●● excellent

The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

Note: before inserting UNITEC HW 30 in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.



# LTEC BORON-CHLORINE AND FORMALDEHYDE RELEASER-FREE SEMI-SYNTHETIC FLUIDS











#### **ITEM: UNITEC 520**

UNITEC 520 is a semi-synthetic emulsifiable coolant with a low content of mineral oil.It does not contain SVHC substances, or boro or formaldehyde donors, it has an excellent anti oxident action and a very high resistance tomicro-organisms. The product has been studied to have its maximum performance on cast Iron, but it is also able to work on materials such as steel, magnesium, aluminum or yellow alloys. UNITEC 520 emulsifiable oil has been designed for all those processes that need an excellent cooling capacity without losing the lubricating and cleaning capacity of the piece.

#### **ADVANTAGES:**

- Excellent compatibility with water from 0 to 30 °f
- Excellent health profile, compatibility with operators
- -Excellent detergency of the grinding wheel
- Excellent cleaning of work area
- Long duration of the emulsions
- Foaming contained in the range of water hardness recommended





| Tech. Code       | GR70<br>Euro | Quantity<br>L | Appearance concentrated |        | earance<br>ulsion | Refractometric factor |    | Density DIN 52757<br>Kg/lt |   | pH (5%)<br>DIN 51369 |        | Storage<br>temperature<br>°C |  |
|------------------|--------------|---------------|-------------------------|--------|-------------------|-----------------------|----|----------------------------|---|----------------------|--------|------------------------------|--|
| H01255           | 42,00        | 5             |                         |        |                   |                       |    |                            |   |                      |        | from 40 to 40                |  |
| H012520          | 124,05       | 20            | Amber                   | Tran   | slucent           | 2,0                   |    | 1,010                      |   | 9,80                 |        | from 10 to 40                |  |
| H0125200         | 1040,00      | 200           |                         |        |                   |                       |    |                            |   |                      |        | from 5 to 40                 |  |
| APPLICATION      | S            | К             | INOX                    | P <850 | P <1200           | Al                    | Mg | Cu                         | - | Гі                   | Recomr | nended concentration         |  |
| Grinding         |              | •••           | •                       | ••     | ••                | •                     | •  | 0                          | ( | )                    |        | 2.5 - 5 %                    |  |
| Turning          |              | ••            | 0                       | ••     | ••                | •                     | •  | 0                          | ( | Э                    |        | 5 - 8 %                      |  |
| Drilling         |              | •             | 0                       | •      | •                 | •                     | •  | 0                          | ( | Э                    |        | 5 - 10 %                     |  |
| Drilling, boring |              | •             | 0                       | 0      | 0                 | 0                     | 0  | 0                          | ( | )                    |        | 5 - 10 %                     |  |

<sup>○ =</sup> not suited ● suited ●● recommended ●●● excellent

The chemical-physical characteristics shown in the table do not constitute in any case an unsubscription for the manufacturer and producer.

Note: before inserting UNITEC 520 in the tank it is necessary to carry out a cleaning process of the machine using CLEAN BATT and CLEAN SUMP following the methodology approved by the chemical Workshop of LINK Gruppo S.p.A.

# Related products

# **GRINDING WHEELS FOR FLAT SURFACE RECTIFYING PROCESSING**

| Tech. Code | DxTxH<br>mm    | Specification | Shape |
|------------|----------------|---------------|-------|
| G7440P205  | 355 x 50 x 127 | GF54E12VXPM   |       |
| G7440P255  | 400 50 407     | GF46F12VXPC   | 05    |
| G7440P305  | 406 x 50 x 127 | GF46IVX       |       |

Product available in index G

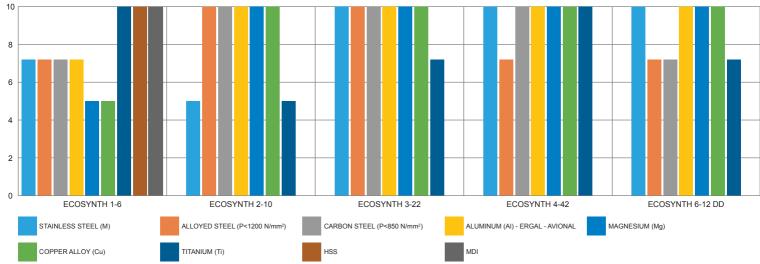


# LTEC • SELECTION OF LUBRICANT-COOLING OILS

|                                 | ECOSYNTH<br>1-6 | ECOSYNTH<br>2-10 | ECOSYNTH<br>3-22 | ECOSYNTH<br>4-42 | ECOSYNTH<br>6-12 DD |
|---------------------------------|-----------------|------------------|------------------|------------------|---------------------|
|                                 | H1160           | H1162            | H1164            | H1166            | H1170               |
| Page. H                         | 12              | 13               | 14               | 15               | 16                  |
| Grinding                        | ••              | ••               | •                | 0                | •••                 |
| MILLING                         | •               | ••               | ••               | •••              | ••                  |
| Turning                         | •               | ••               | •••              | •••              | ••                  |
| DRILLING                        | 0               | •••              | •••              | •••              | •••                 |
| STAINLESS STEEL (M)             | ••              | •                | •••              | •••              | •••                 |
| ALLOYED STEEL (p<1200 n/mm²)    | ••              | •••              | •••              | ••               | ••                  |
| CARBON STEEL (P <850 n/mm²)     | ••              | •••              | •••              | •••              | ••                  |
| ALUMINUM - ERGAL - AVIONAL (al) | ••              | •••              | •••              | •••              | •••                 |
| MAGNESIUM (mg)                  | •               | •••              | •••              | •••              | •••                 |
| COPPER ALLOY (Cu)               | •               | •••              | •••              | •••              | •••                 |
| TITANIUM (ti)                   | •••             | •                | ••               | •••              | ••                  |
| HSS                             | •••             | 0                | 0                | 0                | 0                   |
| MDI                             | •••             | 0                | 0                | 0                | 0                   |
| PRESSURE (Bar)                  | < 70            | < 70             | < 70             | < 70             | < 70                |

<sup>○ =</sup> not suited ● suited ●● recommended ●●● excellent

This graph represents the compatibility of metals for each neat cutting fluid.



# Flow chart:

HZ (Safety): it represents the degree of security guaranteed by the fluid in working conditions.

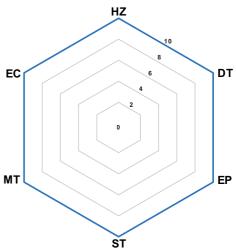
DT (Detergency): it represents the ability of the fluid to decant the waste resulting from the processing.

EP (Power Extreme Pressure): it represents the ability of the fluid to provide lubrication in heavy machining.

ST (Stability): it represents the ability of the fluid to resist thermo-oxidative degradation caused by working conditions

MT (Metals): it represents the compatibility of fluids with metals.

**EC** (Ecology): it represents the renewal and the bio-degradability of the fluid.



# LTEC () SYNTHETIC NEAT CUTTING OIL WITH RENEWABLE PLANT BASED





#### ITEM: ECOSYNTH 1-6

ECOSYNTH 1-6 is a product for cutting created from renewable vegetable bases suitable for grinding and lapping, hardened steel, HSS and hard metal.

The ECOSYNTH 1-6 is a neat cutting oil for mechanical machining which has been studied for all heavy grinding and lapping operations, thanks to its vegetable orgin, it allows an excellent biocompatability with the operators.

ECOSYNTH 1-6 has been formulated for all those customers who need a neat oil for all mechanical processing with high performances of lubrification and detergency, always taking into account for the health profile.

#### **ADVANTAGES:**

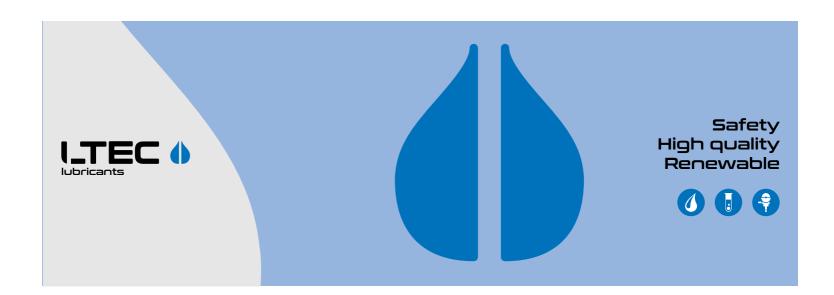
- Excellent cleaning action on diamond wheels
- Easy removal of micro-scrap
- Recommended for manufacturing at high speeds
- Excellent when working where a level of high heat is developed
- Formulated for the processing of grinding of heavy metals
- First choice for lapping





| Tech. Code       | GR73<br>Euro | Quantity<br>L | Appearance   |         | Viscosity at 40°C<br>ASTM D445 cSt |    | / DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storage<br>temperature<br>°C |     | * |
|------------------|--------------|---------------|--------------|---------|------------------------------------|----|----------------------|----------------------------|------------------------------|-----|---|
| H116020          | 225,00       | 20            | Oterson      |         | 6                                  |    | 2 000                | . 4709                     | from 10 to 10                |     |   |
| H1160200         | 1841,00      | 200           | Straw yellow |         |                                    |    | 0,890                | >170°                      | from 10 to 40                |     | 1 |
| APPLICATION      | S            | INOX          | P <850       | P <1200 | Al                                 | Mg | Cu                   | Ti                         | HSS                          | MDI |   |
| Grinding         |              | ••            | ••           | ••      | ••                                 | •  | •                    | •••                        | •••                          | ••• | , |
| Lapping          |              | ••            | •••          | •••     | ••                                 | •  | •                    | •••                        | •••                          | ••• | • |
| Turning,milling  |              | 0             | 0            | •       | ••                                 | •• | 0                    | 0                          | 0                            | 0   |   |
| Drilling         | ·            | 0             | 0            | 0       | 0                                  | 0  | 0                    | 0                          | 0                            | 0   |   |
| Boring,threading |              | 0             | 0            | 0       | 0                                  | 0  | 0                    | 0                          | 0                            | 0   |   |

○ = not suited ● suited ●● recommended ●●● excellent



# LTEC () SYNTHETIC NEAT CUTTING OIL WITH RENEWABLE PLANT BASED









**ITEM: ECOSYNTH 2-10** 

ECOSYNTH 2-10 is a neat oil for the maching of the latest generation created from renewable vegetable bases, suitable for turning, milling, drilling, boring and tapping on metals and designed to give excellent performances for the grinding and lapping of HSS and hard metal neat oil for ECOSYNTH 2-10 is a multi-purpose oil suitable to work on all types of metals with excellent ability to eliminate microsfrido and detergency developes its maximum performances on lathes and grinding. ECOSYNTH 2-10 has been formulated for all those customers who need a neat oil for mechanical processing with high performances of lubrification and detergency always taking in to account the health profile.

# SAFETY DATA SHEETS ON-LINE

**EcoSynth** 

#### **ADVANTAGES:**

Boring,threading

- Excellent cleaning action of diamond wheels
- Specific for construction and tool sharpening im MDI and HSS
- Simple removal of micro scrap
- Formulation suitable for the machining of metal alloys on headstocks



| Tech. Code      | GR73<br>Euro | Quantity<br>L | Appearance   |         | scosity at 40°C<br>STM D445 cSt | ,   | DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Stora<br>tempera<br>°C | 9     | • |
|-----------------|--------------|---------------|--------------|---------|---------------------------------|-----|--------------------|----------------------------|------------------------|-------|---|
| H116220         | 230,00       | 20            | Ctrow vollow |         | 10                              |     | ),880              | >190                       | from 10                | to 40 | 1 |
| H1162200        | 1814,00      | 200           | Straw yellow |         | 10                              |     | 7,000              | >190                       | Trom 10                | 10 40 | ı |
| APPLICATION     | S            | INOX          | P <850       | P <1200 | Al                              | Mg  | Cu                 | Ti                         | HSS                    | MDI   |   |
| Grinding        |              | •             | •••          | •••     | 0                               | 0   | 0                  | •                          | •••                    | •••   | • |
| Lapping         |              | •             | ••           | ••      | 0                               | 0   | 0                  | •                          | •••                    | •••   |   |
| Turning,milling |              | ••            | •••          | ••      | •••                             | ••• | •••                | ••                         | 0                      | 0     |   |
| Drilling        |              | •             | •••          | ••      | •••                             | ••• | •••                | ••                         | 0                      | 0     |   |

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○ = not suited ● suited ●● recommended ●●● excellent

The characteristics chemical and physical listed in the chart are not a sales specification under any circumstances for the manufacturer or producer.

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# LTEC • SYNTHETIC NEAT CUTTING OILS WITH RENEWABLE PLANT BASED



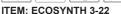












ECOSYNTH 3-22 is a neat oil for mechanical processing of the latest generation created from renewable vegetable bases with EP additives to Increase performance suitable for turning, milling, drilling, boring and tapping on hard metals and designed to give excellent performances on turning and milling.

Neat oil for processing ECOSYNTH 3-22 is a multi-purpose oil suitable for any type of processing work on metals with excellent lubricity even for heavy maching such as molding or toothing and high anti-sealing

ECOSYNTH 3.22 has been formulated for all those customers who need neat oil for mechanical processing with high performance on lubrification and detergency, always taking into account the health profile.

#### ADVANTAGES:

- Excellent lubrification
- First choice in the processing of sliding headstocks
- High anti-welding power
- Fluid designed to be suitable for any machining operation
- Usable on any metallic material
- Outstanding in the rectification of the toothed gears





| Tech. Code        | GR73<br>Euro      | Quantity<br>L | Appearance |         | osity at 40°C<br>M D445 cSt |     | DIN 52757<br>(g/lt | Flash point<br>ASTM D92 °C | Storag<br>temperat<br>°C |      | - |
|-------------------|-------------------|---------------|------------|---------|-----------------------------|-----|--------------------|----------------------------|--------------------------|------|---|
| H116420           | 160,00            | 20            | A l        |         | 00                          |     | 005                | . 000                      |                          |      |   |
| H1164200          | 1330,00           | 200           | Amber      |         | 22                          | U,  | 895                | >220                       | from 10 to               | 0 40 |   |
| APPLICATION       | s                 | INOX          | P <850     | P <1200 | Al                          | Mg  | Cu                 | Ti                         | HSS                      | MDI  | I |
| Grinding          |                   | 0             | 0          | ••      | 0                           | 0   | 0                  | 0                          | 0                        | 0    |   |
| Turning,milling   |                   | ••            | •••        | •••     | ••                          | ••  | ••                 | •                          | 0                        | 0    |   |
| Drilling          |                   | •••           | •••        | •••     | •••                         | ••• | •••                | ••                         | 0                        | 0    |   |
| Boring,threading  |                   | •••           | •••        | •••     | •••                         | ••• | •••                | ••                         | 0                        | 0    |   |
| Broaching         |                   | •••           | •••        | •••     | •••                         | ••• | •••                | ••                         | 0                        | 0    |   |
| Cutting and diam  |                   | •             | ••         | ••      | •••                         | ••  | •••                | •                          | 0                        | 0    |   |
| Cutting, moulding | Cutting, moulding | •             | •          | •       | ••                          | •   | ••                 | •                          | 0                        | 0    |   |

○ = not suited ● suited ●● recommended ●●● excellent



# LTEC • SYNTHETIC NEAT CUTTING OIL WITH RENEWABLE PLANT BASED











#### ITEM: ECOSYNTH 4-42

ECOSYNTH 4-42 is a neat oil for machine processing of the latest generation, created starting from renewable vegetable bases with additives EP added to Increase the performance suitable for turning, milling, drilling, boring and tapping on metals and designed to give an excellent performance on burdensome machining.

The neat oil for ECOSYNTH 4-42 processing is a multi-purpose oil suitable for any type of processing work on metals with exceptional performance of lubrication on extremely heavy workings such as molding or toothing.

ECOSYNTH 4-42 has been formulated for all those customers who need neat oil for mechanical processing with ihigh performance of lubrication and detergency, always taking in to account the health profile.

#### ADVANTAGES:

- Recommended for heavy machining
- Extraordinary lubrification
- High EP power at high and low temperatures
- Formulated to be able to work in diffilcult conditions





| Tech. Code        | GR73<br>Euro | Quantity<br>L | Appearance |         | osity at 40°C<br>M D445 cSt |     | DIN 52757<br>g/lt | Flash point<br>ASTM D92 °C | Storaç<br>tempera<br>°C |       | -  |
|-------------------|--------------|---------------|------------|---------|-----------------------------|-----|-------------------|----------------------------|-------------------------|-------|----|
| H116620           | 149,00       | 20            | Azzkaz     |         | 40                          | 0.  | 000               | . 000                      | f 40                    | ı- 40 |    |
| H1166200          | 1233,00      | 200           | Amber      |         | 42                          | 0,  | 930               | >220                       | from 10                 | (0 40 | 1  |
| APPLICATION       | s            | INOX          | P <850     | P <1200 | Al                          | Mg  | Cu                | Ti                         | HSS                     | MD    | )l |
| Grinding          |              | 0             | 0          | 0       | 0                           | 0   | 0                 | 0                          | 0                       | 0     |    |
| Lapping           |              | 0             | •          | 0       | •                           | •   | •                 | •                          | 0                       | 0     |    |
| Turning,milling   |              | ••            | ••         | •       | •                           | •   | •                 | •                          | 0                       | 0     |    |
| Drilling          |              | •••           | ••         | •       | •••                         | ••• | ••                | •••                        | 0                       | 0     |    |
| Boring,threading  |              | •••           | •••        | ••      | •••                         | ••• | •••               | •••                        | 0                       | 0     |    |
| Broaching         |              | •••           | •••        | •••     | •••                         | ••• | •••               | •••                        | 0                       | 0     |    |
| Cutting, moulding |              | •••           | •••        | •••     | •••                         | ••• | •••               | •••                        | 0                       | 0     |    |

○ = not suited ● suited ●● recommended ●●● excellent



# LTEC ( SYNTHETIC NEAT CUTTING OILS WITH RENEWABLE PLANT BASED



#### ITEM: ECOSYNTH 6-12 DD

ECOSYNTH 6-12 DD a neat oil for mechanical processing of the latest generation created from renewable vegetable bases with additives EP added to Increase the performance on deep drilling.

The neat oil ECOSYNTH 6-12 DD is designed and formulated to give maximum performances in deep drilling applications without losing performance when it is working in turning, milling, drilling, boring, threading, broaching, blanking or molding.

This oil is also suitable for working on multi-spindle mobile headstocks.

ECOSYNTH 6-12 DD has been formulated for all those customers who need neat oil for mechanical

processing with high performance of lubrication and detergency, always taking in to account the health profile.

#### ADVANTAGES:

- Formulated for deep drilling operations
- High EP power at high temperature
- Excellent for boring machining and threading of steel
- Suitable for sliding heads and multi-spindles





| Tech. Code        | GR73<br>Euro | Quantity<br>L | Appearance  |         | cosity at 40°C<br>TM D445 cSt |     | DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storag<br>tempera<br>°C |      | *  |
|-------------------|--------------|---------------|-------------|---------|-------------------------------|-----|--------------------|----------------------------|-------------------------|------|----|
| H117020           | 175,00       | 20            | 0-14        |         | 14                            |     |                    |                            |                         |      |    |
| H1170200          | 1438,00      | 200           | Gold yellow |         | 14                            | · · | ),900              | >200                       | from 10 t               | 0 40 |    |
| APPLICATION       | S            | INOX          | P <850      | P <1200 | Al                            | Mg  | Cu                 | Ti                         | HSS                     | MD   | )l |
| Deep drilling     |              | •••           | •••         | ••      | •••                           | ••  | ••                 | •                          | 0                       | 0    |    |
| Turning,milling   |              | ••            | ••          | •       | ••                            | ••  | •••                | ••                         | 0                       | 0    |    |
| Drilling          |              | •••           | •••         | •••     | •••                           | ••• | •••                | ••                         | 0                       | 0    |    |
| Boring,threading  |              | •••           | •••         | ••      | •••                           | ••• | •••                | ••                         | 0                       | 0    |    |
| Broaching         |              | •••           | ••          | ••      | •••                           | ••• | •••                | ••                         | 0                       | 0    |    |
| Cutting, moulding |              | •••           | •           | •       | •••                           | ••• | •••                | •                          | 0                       | 0    |    |

<sup>○ =</sup> not suited ● suited ●● recommended ●●● excellent



# **\_TEC ♦** NEAT CUTTING FLUIDS-HIGH-PERFORMANCE E.P.







**ITEM: TAP MITIC** 

TAP MITIC is a cutting oil produced from renewable bases, suitable for tapping, broaching, slotting, drilling of an type of material difficult to process.

TAP MITIC cutting oil has been stuidied and formulated to have maximum ease of use and the highest safety features, while maximizinng product performance. Thanks to its exceptional EP qualities, TAP MITIC adhere to the tools surface so as to maximize cutting capacity even under high stress.

#### Advantages:

- High degree of lubrification
- Extradinary ability to adhere to tools
- . Excellent adhesion to the workpiece
- Exceptional EP qualities
- Protects the cutting corrosion
- Prevents formation of build up edges

| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Viscosity at 40°C<br>ASTM D445 cSt | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|------------|------------------------------------|----------------------------|----------------------------|------------------------------|
| H13200,5   | 20,00        | 0,5           | Dark amber | >250                               | 1.00                       | >150                       | from 10 to 10                |
| H13205     | 120,00       | 5             | Dark amber | >250                               | 1,22                       | >150                       | from 10 to 40                |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# PASTE TAPPING COMPOUND

#### ITEM: HI-THREAD

The HI-THREAD paste is specifically designed for use in tapping, threading and drilling of any type of material and thanks to its high adhesive qualities allows the tool to be adhered to. The high adhesive capacity of the HI-THREAD paste allows a perfect lubrication of the tool in any entry position. The product with the addition of powerful EP products ensures maximum lubrication even under high stress and difficultto-machine materials.

#### Advantages:

- Does not drip
- Tenaciously it adheres to all ferrous metal alloys and non-ferrous
- High viscosity lubricant film excellent for extremely heavy machining operations
- Recommended for machining of titanium and its alloys
- Reduction of friction of the tool through the use of the product
- The high viscosity allows for excellent product handling
- Absence of odor
- Excellent adhesiveness of the product on tools

HI-Thresd

SAFETY DATA SHEETS ON-LINE

SAFETY DATA SHEETS ON-LINE

LTEC 0

| Tech. Code | GR70<br>Euro | Weight<br>g | Appearance | Viscosity at 40°C<br>ASTM D445 cSt | Density DIN 52757<br>Kg/lt | VOC<br>g/lt | Storage<br>temperature<br>°C |
|------------|--------------|-------------|------------|------------------------------------|----------------------------|-------------|------------------------------|
| H13260500  | 16,00        | 500         | White      | 2950                               | 1,010                      | 0           | from 10 to 40                |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer..

# Related products

#### **WRK** SPIRAL POINT TAP FOR THROUGH-HOLES - M d x p L 1 Tech. Code mm mm mm A2125M5 5 x 0,8 70 14 A2125M6 6 x 1,0 80 16 A2125M8 8 x 1,25 90 18 A2125M10 10 x 1,5 100 20

The products are available in chapter A





LTECO





SAFETY DATA SHEETS ON-LINE



ALU FLUID is a lubricating oil for tapping and threading studied and formulated to have the best performance on aluminum alloys.

ALU FLUID cutting and tapping oil, thanks to its unique characteristics and the very high-refining petroleum compounds inside it, optimizes tool lubrication and chip discharge.

ALU FLUID cutting oil decreases the friction coefficient, preventing tool wear by cooling and reducing the operating temperature.

#### Advantages:

- High cooling and lubricating power
- Suitable for aluminum alloys
- It does not stain yellow metal
- Free from chlorine
- It prevents the formation of built-up edges

| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storage<br>temperature<br>°C |  |
|------------|--------------|---------------|------------|----------------------------|----------------------------|------------------------------|--|
| H13400,4   | 7,00         | 0,4           | Ocher      | 0.970                      | >61                        | from 10 to 40                |  |
| H13401     | 19,00        | 1             | Ocher      | 0,870                      | >01                        | from 10 to 40                |  |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# LTEC CUTTING FLUIDS FOR STEELS











TAP FLUID is a lubricating oil for tapping and threading studied and formulated to have the maximum performance on alloyed and stainless steel.

This oil for cutting and tapping, thanks to its innovative formulation, allows a lubrication of the optimal tool creating a very thin film that guarantees maximum lubrication during use.

TAP FLUID tapping oil is an excellent universal oil thanks to its mechanical coupling between cutting edge and metal; for this reason it is also suitable for chip removal with bench instruments.



#### Advantages:

- High cooling and lubricating power
- High anti-seize power
- Suitable for lubrication in mechanical couplings
- Suitable for cutting operations

| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|------------|----------------------------|----------------------------|------------------------------|
| H13500,4   | 7,00         | 0,4           |            |                            |                            |                              |
| H13501     | 19,00        | 1             | Ocher      | 0,880                      | >61                        | from 10 to 40                |
| H13505     | 66,00        | 5             |            |                            |                            |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# **WRK** CUTTING FLUIDS

#### ITEM: TOP TOOL III

TOP TOOL III is a universal cutting fluid for all tapping and threading operations of all materials, including aluminum, stainless steels, alloys composites and polymers. Formulated with raw materials of natural origin, entirely biodegradable, TOP TOOL III possesses an exceptional lubricating capacity able to reduce the friction between the tool and the worked piece, at the same time allowing rapid chip decanting.

TOP TOOL can be applied directly on the tool with a brush, an oil can and can also be dispensed with a minimal lubrication unit.

# **ADVANTAGES**

- Maximize lubrication
- Multimetal compatibility
- Excellent on aluminum and stainless steel
- Suitable for special alloys
- Specific for threading



NEW

| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Density DIN 52757<br>Kg/L | Viscosity at 40°C<br>ASTM D445 cSt | Flash point<br>ASTM D92°C | *  |
|------------|--------------|---------------|------------|---------------------------|------------------------------------|---------------------------|----|
| H13310,4   | 15,00        | 0,4           |            |                           |                                    | -                         | 12 |
| H13315     | 80,00        | 5             | Amber      | 0,911                     | 39                                 | 400                       |    |
| H133120    | 225,00       | 20            |            |                           |                                    | 182                       |    |

# LTEC • CUTTING FLUIDS SYNTHETIC-BASED FOR STEELS



#### ITEM: FLUBE MINIMALCUT STEEL 46

FLUBE MINIMALCUT STEEL 46 is a product composed of synthetic esters designed for minimal MQL lubrication. The FLUBE MINIMALCUT STEEL 46 cutting oil has been studied and formulated to maintain maximum lubrication with the minimum product smoke during any type of processing on metals and non metals. Thanks to its characteristics and to the EP additives contained within it, the FLUBE MINIMALCUT STEEL 46 cutting oil allows an optimal lubrication on any type of machining from chip removal torectification; also having exceptional lubrication characteristics for cutting with discs or strips.



- Suitable for processing of ferrous alloys
- Suitable for the processing of non-ferrous alloys
- Suitable for the processing of Hardened steel
- Suitalbe for cutting and deformation of plastic processing



| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance  | Viscosity at 40°C<br>ASTM D445 cSt | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|-------------|------------------------------------|----------------------------|----------------------------|------------------------------|
| H142005    | 51,00        | 5             |             |                                    |                            |                            |                              |
| H1420020   | 159,00       | 20            | Yellow gold | 36                                 | 0,925                      | >250                       | from 10 to 40                |
| H1420200   | 1422,00      | 200           |             |                                    |                            |                            |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

#### ITEM: MICRO DROP

LTEC minimal lubricating systems have been designed to replace traditional lubrication with oil emulsion or neat oil in machining with chip removal, molding and cold deformation. Uses lubricants from renewable bases that replace conventional fluids, eliminating registration requirement and disposal of exhausted liquid. The micro-pneumatic pumps dose the minimum amount of lubricant that is transported by a flow of compressed air towards the tool/workpiece contact point without creating mist or pollution. The lubricant is consumed only during the processing phase.

It is possible to obtain an immediate increase in productivity because machine, working area and piece cleaning times are eliminated.

A further advantage in cost reduction is derived from the increase in tool life, which kept at room temperature significantly increases its life; and also eliminates any possible health problems deriving from contact with traditional fluids.

# MODEL FOR BAND SAWS

The ECU consists of a 1.2-liter tank with electric level control, frequency generator, needle valve to regulate the flow of compressed air coming out of the nozzel, micro-pump single-acting pneumatic pump, solenoid valve to start and the stop of the control unit, nozzel for band sawing machine complete with 5 meters of coaxial pipe.



WARNING: Available on request reel with different voltage in CC or AC.



| Tech. Code  | GR71   | Tension | For band saw blades |
|-------------|--------|---------|---------------------|
| recii. Code | Euro   | Volt    | mm                  |
| H145034     | 469,00 | 24 V-CC | ≤ 34                |

# LTEC MINIMAL LUBRICATING CONTROL UNIT FOR MACHINES

#### ITEM: MICRO DROP

LTEC'S minimal lubricating systems have been designed to replace the traditional lubrication with oil emulsion or neat oil in machining with chip removal, molding and cold deformation. These units have been designed to use fluids from renewable bases which replace conventional fluids eliminating the obligation of registration and disposal of used liquids.

The micro pneumatic pumps dose the minimum amount of lubricant transported by a flow of compressed air flow to the contact point tool/ workpiece without creating fog or pollution. The lubricant is consumed only during the processing phase.

It is possible to obtain an instant increase in productivity as it helps eliminate cleaning times usually required by the machine as well as it surrounding working area.

A further advantage in cost reduction is derived from the increase in tool life, which, kept at a room temperature, significantly increases its life, it also eliminates the health problems derived from contact with traditional fluids.

#### MODEL FOR MACHINE TOOLS

The ECU consists of a 1.2-liter tank with electric level control, frequency generator, needle valve to regulate the flow of compressed air coming out of the nozzel, micro-pump single-acting pneumatic pump, solenoid valve to start and stopping the control unit, articulated nozzel (s) with 5 meters of coaxial pipe.

#### Micro



WARNING: Available on request reel with different voltage in CC or AC.



| Tech. Code | GR71<br>Euro | Nozzles<br>n° | Tension<br>Volt |  |
|------------|--------------|---------------|-----------------|--|
| H14521     | 536,00       | 1             | 24.7/.00        |  |
| H14522     | 627,00       | 2             | 24 V-CC         |  |

# LTEC LINEAR GUIDE OILS Waylube

#### ITEM: WAYLUBE EP

WAYLUBE EP guide oil is a product made up of selected oils and special additives without zinc that give high adhesiveness and size of the lubricating film so as to increase the performance of the product. The WAYLUBE EP Linear guide oil thanks to its excellent adhesive power has the ability to lubricate in an efficient manner both horizontal and vertical guides.

The EP additives inside it guarantee lubrication of the WAYLUBE guide oil even under high loads and in lubrication at loss or circulation. WAYLUBE passes the CINCINNATI MILACRON P47, P50 and P53 tests. Classification: ISO-L-HG

# SAFETY DATA SHEETS ON-LINE

#### Advantages:

- Hydrodynamic type friction coefficient
- Suitable for lubricating machine tool guides
- Remains adherent both horizontal and vertical
- Suitable for loss lubrication and motion
- Withstands loads
- Excellent for slow and heavily loaded rolling bearings

| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Viscosity at 40°C<br>ASTM D445 cSt | Viscosity Index | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Pour point<br>°C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|------------|------------------------------------|-----------------|----------------------------|----------------------------|------------------|------------------------------|
| H201532B1  | 145,68       | 20            |            | 32                                 | 100             | 0,870                      |                            | -20              | from 10 to 10                |
| H201568T   | 37,80        | 5             | Yellow.    | 68                                 | 101             | 0,880                      | >220                       | -21              |                              |
| H201568B1  | 132,32       | 20            |            |                                    |                 |                            |                            |                  |                              |
| H201568F   | 1202,30      | 200           | Yellow     |                                    |                 |                            |                            |                  | from 10 to 40                |
| H2015220B1 | 148,08       | 20            |            | 220                                |                 | 0,895                      | × 020                      | -10              |                              |
| H2015220F  | 1357,70      | 200           |            |                                    |                 |                            | >230                       |                  |                              |

The chemical-physical characteristics shown in the chart do not in any case constiture a spedification for the manufacturer and producer.

# LTEC HYDRAULIC OILS

#### ITEM: HYDROPRO

HYDROPRO is a neat oil made up of refined oils and specific additives, which gives this product the ability to respond to multiple needs. HYDROPRO hydraulic oil thanks to its formulation has a multiplicity of uses: from hydraulic controls to the bar pushes of the machine tools. Hydraulic oils of the hydropro series meet the specifications DIN 51524 Part II DENISON HF-0 and pass the IP 281 test on vickers pump, FZG 12° STAGE VICKERS CETOP RP67H.

Classification: ISO-L-HM

# Advantages:

- High multiplicity of use
- Used in hydraulically controlled machine tools
- Used in push-bar for turning and hydraulic presses
- Used in elevators, laminators and trolleys
- Used in ground handling and servo hydraulic machines



| Tech. Code | GR70<br>Euro | Quantity<br>L | Appearance | Viscosity at 40°C<br>ASTM D445 cSt | Viscosity Index | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Pour point<br>°C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|------------|------------------------------------|-----------------|----------------------------|----------------------------|------------------|------------------------------|
| H202032B1  | 126,00       | 20            |            | 20                                 | 400             |                            |                            |                  |                              |
| H202032F   | 1014,30      | 200           |            | 32                                 | 100             | 0,867                      | >220                       | -30              |                              |
| H202046B1  | 33,60        | 5             |            |                                    | 101             |                            |                            |                  |                              |
| H202046B3  | 126,00       | 20            |            | 46                                 |                 |                            |                            |                  |                              |
| H202046F   | 1014,30      | 200           | Yellow     |                                    |                 |                            |                            |                  | from 10 to 40                |
| H202068B1  | 139,20       | 20            |            | 00                                 | 00              | 0.070                      | . 000                      |                  |                              |
| H202068F   | 1289,40      | 200           |            | 68                                 | 99              | 0,870                      | >230                       |                  |                              |
| H2020100B1 | 141,52       | 20            |            | 400                                | 100             | 0.000                      | <b>- 02</b> F              | 07               |                              |
| H2020100F  | (1310,40)    | 200           |            | 100                                | 100             | 0,888                      | >235                       | -27              |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer and producer.

#### ITEM: NEBULIS

NEBULIS is a hydraulic mineral oil with a high natural viscosity index and appropriate additived to enhance the antioxidant and anti-corrosive properties. Thanks to its formulation, NEBULIS hydraulic oil can be used in compressor tubines and hydraulic systems.

NEBULIS, thanks to its characteristics, exceeds the tests AFNOR NFE 48603 and HL DIN 51524 Part 1 HL of oil of high quality hydraulic and is excellent in industrial air filters and bearings.

#### Advantages and uses:

- Outstanding protective properties
- Incorporated additives which prevent rust and corrosion even if water is present
- Can be utilized in turbines and compressors
- Can be utilized in vacuum pumps, hydraulic systems
- Excellent for industrial air filters and tool machines
- Usable plain and rolling bearings light loads



Oleol

| Tech. Code | GR70<br>Euro | Quantity<br>L | Viscosity at 40°C<br>ASTM D445 cSt | Viscosity Index | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Pour point °C | Storage<br>temperature<br>°C |
|------------|--------------|---------------|------------------------------------|-----------------|----------------------------|----------------------------|---------------|------------------------------|
| H2010B     | 10,50        | 1             |                                    |                 |                            |                            |               |                              |
| H2010T1    | 44,10        | 5             | 32                                 | 100             | 0,875                      | 220                        | -15           | from 10 to 40                |
| H2010T3    | 156,40       | 20            |                                    |                 |                            |                            |               |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# MULTIFUNCTIONAL HYDRAULIC OILS

SAFETY DATA SHEETS ON-LINE





OLEOL HM multifunctional oil is a lubricant for hydraulic circuits formulated with paraffinic mineral bases additives and appropriate anti-wear additives. Thanks to its excellent viscosity index, the OLEOL HM multifunctional oil is suitable for various types of applications from fast heads to refrigerators. The multifunctional oil OLEOL HM thanks to its innovative formulation is classified as L-HM in the ISO classification exceeds DIN 51524 PART II, DENSION HF-0,HF-1, HF-2 AND AFNOR E48-603 tests; SUPPORTS VICKERS CETOP TESTS RP67H, VICKERS I-286 S AND M2950 S, FZG 12TH STADIUM, CINCINNATI MACHINE USS-127, USS-136.



- Wear resistant
- Anti-corrosion additives
- Excellent viscosity
- Mainly used on high speed machines
- Excellent heat exchanges and refrigerators
- Ideal for hyhdraulic power units

| Tech. Code | e GR70 Quantity L Appearance |    | Appearance | Viscosity at 40°C<br>ASTM D445 cSt |       |             | Flash point<br>ASTM D92 °C | Pour point °C | Storage<br>temperature<br>°C |
|------------|------------------------------|----|------------|------------------------------------|-------|-------------|----------------------------|---------------|------------------------------|
| H20451020  | 138,96                       |    |            | 10                                 | 100   | 0,825       | >165                       | -32           |                              |
| H20451520  | 135,12                       | 20 | Yellow     | 15                                 | 0,850 | <b>\100</b> | 20                         | from 10 to 40 |                              |
| H20452220  | 137,92                       |    |            | 22                                 | 101   | 0,865       | >180                       | -30           |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# LTEC GEAR OILS Oilgear

#### ITEM: OILGEAR

OILGEAR is a mineral oil designed for lubrification of gears, oil bath with additives for working at extreme pressures. Thanks to its formulation oil for gears OILGEAR passes the tests DIN51517 CLP, CINCINNATI P59 and P63, US STEEL 224, FLENDER GEAR BOXES.

The Anti-wear additives in OILGEAR gear oil is lead-free and guarantees a superior wear effect resistance compared to other products.

#### Advantages:

- Usable in oil baths and circulating lubrications
- Usable in lubrifications of splash and sparys
- Usable in enclosed gear groups, chain drives, bearings, reduction gears
- Contains EP (estreme pressure) lead-free additives
- Wear resistant additive more wear resistant than normal gear oils



| Tech. Code | GR70<br>Euro | Quantity | Appearance | Viscosity at 40°C<br>ASTM D445 cSt | Viscosity Index | Density DIN 52757<br>Kg/lt | Flash point<br>ASTM D92 °C | Pour point °C | Storage<br>temperature<br>°C |
|------------|--------------|----------|------------|------------------------------------|-----------------|----------------------------|----------------------------|---------------|------------------------------|
| H203068B1  | 140,64       | 20       |            | 68                                 | 101             | 0,885                      | >230                       | -20           |                              |
| H2030150B1 | 152,40       | 20       | Amber      | 450                                | 00              | 0.800                      |                            | -15           |                              |
| H2030150F  | 1375,50      | 200      |            | 150                                | 99              | 0,890                      | >235                       | -15           | f 40 t- 40                   |
| H2030220B1 | 154,72       | 00       |            | 220                                | 100             |                            |                            | -10           | from 10 to 40                |
| H2030320B1 | 160,56       | 20       |            | 220                                | 101             | 0,900                      | >240                       | F             |                              |
| H2030320F  | 1329,30      | 200      |            | 320                                | 101             |                            | >240                       | -5            |                              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer

# LTEC ANTIFREEZE CONCENTRATION

# AntiFreeze

#### **ITEM: ANTIFREEZE PRO**

Anti-freezing agent for heat exchangers, a new concept product formulated free of amines and nitrities. ANTIFREEZE PRO is a product based on propylene glycol, less polluting than traditional products. Given its formulation, it can be used in the food, sanitary and solar panel industries.

# Advantages and use:

- Maximum protection system of corrosion
- Maximum capacity anti-foam
- Formulated to have the maximum stability during use and storage
- No problem if diluted in hard water



SAFETY DATA SHEETS ON-LINE

| Tech. Code | GR70<br>Euro | Quantity<br>L | Specific weight<br>Kg/lt | pH<br>Solution 50% v/v | Alkalinity<br>HCIN/10/10 ml | Boiling point °C | Flash point<br>°C | Concentration<br>ANTIFREEZE PRO<br>% | H2O<br>%             | Freezing point °C |
|------------|--------------|---------------|--------------------------|------------------------|-----------------------------|------------------|-------------------|--------------------------------------|----------------------|-------------------|
| H20555     | 31,50        | 5             |                          |                        |                             |                  |                   | 25% Vol.<br>33% Vol.                 | 75% Vol.<br>67% Vol. | -10<br>-15        |
| H205520    | 109,40       |               | 1.054                    | 9.7                    | 17                          | 160              | 110               | 50% Vol.<br>60% Vol.                 | 50% Vol.<br>40% Vol. | -15<br>-32<br>-47 |

The chemical-physical characteristics shown in the chart do not in any case constitute a spedification for the manufacturer and producer.

# LTEC • STOPPERS WITH TAP FOR 30 LT TANK

#### ITEM: H2013

Stopper with tap, perfect to use on plastic tanks.

|            |              | ·       |
|------------|--------------|---------|
| Tech. Code | GR70<br>Euro | Package |
| H2013CAP   | 5,00         | 1 piece |



The DOUBLE ACTION product is an emulsion stabilizer that has the task of rebalancing the water system oil after prolonged use of the cooling lubricant. Thanks to its innovative formulation, DOUBLE ACTION is able to protect the machine surfaces of oxidation. Thanks to the components contained inside the DOUBLE ACTION manages to have a clensing action on sludge and extraneous oils.







#### Advantages:

- It protects the staining of non-ferrous alloys
- It improves the stability of the emulsion
- Solubilization of sludge
- Cleansing action

Notes: Pour the product into the tank before preparing the emulsion or during processing concentration. Recommended concentrations:

- Before preparing the emulsion 0,1 0.3%
- In the operating emulsion 0.1 0.2%

| Tec | ch. Code | GR70<br>Euro | Quantity | Appearance concentrated | Density DIN 52757<br>Kg/lt | pH (5%) DIN 51369 | Flash point<br>ASTM D92 °C | Solubility        | Storage<br>temperature<br>°C |
|-----|----------|--------------|----------|-------------------------|----------------------------|-------------------|----------------------------|-------------------|------------------------------|
| Н   | 13560250 | 26,00        | 250 ml   | Amber                   | 1,195                      | 0.2               | >100                       | Soluble in water  | from 10 to 40                |
| ı   | H356010  | 91,00        | 5 Kg.    | Ambei                   | 1,195                      | 8,3               | 7100                       | Soluble III water | 110111 10 to 40              |

The chemical-physical characteristics shown in the chart do not in any case constitute a specification for the manufacturer or producer.

# **LTEC** BIOCIDE ADDITIVE FORMALDEHYDE FREE

Clean SAFETY DATA SHEETS ON-LINE



CLEAN BATT II is a bactericidal, fungicidal and algaecide product with a wide spectrum, which can be used on any type of emulsion.

The bactericide CLEAN BATT II is a specific formulation to counteract the degradation phenomena that cause bad smells in systems such as emulsions and washing water.

#### Advantages:

- Broad-spectrum of action
- Suitable for eliminating any micro-organism - Easy use
- Elimates fungi, algae and bacteria

Concentration recommended: 0,1 = 100 ml per 100 liter



SAFETY DATA SHEETS ON-LINE



| Tech. Code | GR70<br>Euro | Quantity | Appearance concentrated | Density<br>DIN 52757<br>Kg/lt | pH (5%) DIN 51369 | Flash point<br>ASTM D92 °C | Solubility       | Storage<br>temperature<br>°C |
|------------|--------------|----------|-------------------------|-------------------------------|-------------------|----------------------------|------------------|------------------------------|
| H3515250   | 20,00        | 250 ml   | Valley                  | 1,060                         | 2 50              | >100                       | Soluble in water | from 10 to 40                |
| H35155     | 129,00       | 5 Kg     |                         | 1,000                         | 3,50              | >100                       | Soluble In Water | from 10 to 40                |

The chemical and physical characteristics indicated in the table do not in any way constiture a specification for the manufacturer or producer.

# LTEC SILICON ANTIFOAM

# Zero

#### ITEM: ZERO FOAM

ZERO FOAM is a silicone anti-foaming product specific for emulsions and alkaline systems. Thanks to its innovative structure, ZERO FOAM emulsion antifoam has the ability to break down the frothiness of the cooling lubricant in the long and short term. The ZERO FOAM antifoam is suitable for both the mechanical and electronic industries.

#### Advantages:

- Specifically for mechanical and electrical engineering Industries
- Sprayable on foam to be reduced
- Insertable in the tank without damaging the emulsion
- Usefull to avoid formation of foam

Concentration recommended: 0,1% - 02%



The chemical and physical characteristics indicated in the table do not in any way constiture a specification for the manufacturer or producer.

# SILICON FREE DEFOAMER

#### ITEM: ANTI FOAM

ANTI FOAM is a 100% NON-SILICON anti-foaming product, which is used in the metal industry. ANTI FOAM is a highly effective antifoam formulated specifically for systems with stable foaming, persistent difficult to break down. The ANTI FOAM is a product free of ions within it thanks to its formulation it is stable even in the long term. Thanks to its innovative formulation, ANTI FOAM does not interfere in any system of water in which it is placed and thanks to the silicone products contained inside it does not clog the filters. ANTI FOAM is able to act on foams produced by surfactants, vinyl finishing resins, acrylics and mixtures, waxes, protein derivatives, foaming products in any kind of sistuation.

# LTECO

Clean

SAFETY DATA SHEETS ON-LINE

#### **ADVANTAGES:**

- Non-silione anti-foam
- Does not clog the filters
- Specific for the mechanical Industries
- Sprayable on foams to break down
- It can be inserted in the tank without damaging the emulsion
- Instant foam reduction

| Tech. Code | GR70<br>Euro | Quantity | Appearance concentrated | Density DIN 52757<br>Kg/lt | pH (5%) DIN 51369 | Solubility                           | Storage<br>temperature<br>°C |
|------------|--------------|----------|-------------------------|----------------------------|-------------------|--------------------------------------|------------------------------|
| H35455     | 158,00       | 5 Kg     | Amber                   | 0,912                      | -                 | Soluble in water<br>Partially in oil | from 10 to 40                |

The chemical/physical characteristics shown in the table do not in any case constitute a specification for the manufacturer or producer.

# **I\_TEC** FLUIDS FOR MACHINE CLEANING

#### ITEM: CLEAN SUMP

CLEAN SUMP is a cleaning product for cleaning and sanitizing machine tools before replacement of cooling lubricant. Thanks to the powerful additives inside it has an excellent ability to solubilize the sludge and degreasing of surfaces. Through the use of CLEAN SUMP detergent for tanks it is possible to continue working even after the introduction without creating problems to the stability of the cooling lubricant.

# SAFETY DATA SHEETS ON-LINE

#### Advantages:

- Excellent capacity of tank cleaning
- Excellent capacity of sludge solubilize
- Excellent capacity to sanitize the machine tools
- Limits the volume of disposal of polluted emulsions
- It is used in the emulsion prior to disposal

|   | Tech. Code | GR70<br>Euro | Quantity Appearance concentrated |        | Density DIN 52757<br>Kg/lt | pH (5%) DIN 51369 | Flash point<br>ASTM D92 °C | Solubility           | Storage<br>temperature<br>°C |
|---|------------|--------------|----------------------------------|--------|----------------------------|-------------------|----------------------------|----------------------|------------------------------|
|   | H351010    | 53,00        | 10                               | Oharra | 1,065                      | 12,5              | >100                       | Soluble in water     | from 10 to 40                |
| ĺ | H351020    | 99,00        | 20                               | Straw  | 1,005                      | 12,5              | >100                       | Partially in acetone | 110m 10 to 40                |

Note: Use method of 2% for polluted emulsions and 4% for very polluted emulsions. Pour in the appropriate percentage of Clean Sump directly into the polluted emulsion before emptying the tank leave 48 hours in circulation in the machine tool so as to clean the pumps and filters and moving parts after which empty in the tank.

The chemical and physical characteristics indicated in the table do not in any way constitute a specification for the manufacturer or producer.

# Related products

# ILTEC () INDUSTRIAL ASPIRATOR/SEPARATORS TWISTOIL 280

| Tech. Code | Tank capacity<br>L | Solids container<br>L |  |
|------------|--------------------|-----------------------|--|
| N6008280   | 280                | 40                    |  |



Product available in index N

# **PH-CONTROL PAPERS**

#### ITEM: H3609

The emulsion pH-control papers are used to verify that the value lies between 8.5 and 9.5. A too low pH value can generate oxidation processes, be a symptom of the formation of bacterial colonies and/or of the presence of extraneous elements, while a too high pH value is among the main causes of operator skin irritation; daily use is recommended.

| Tech. Code | GR70<br>Euro | рН     | Package | Pieces |
|------------|--------------|--------|---------|--------|
| H3609714   | 28,50        | 7 - 14 | Box     | 100    |



# WATER HARDNESS CONTROL PAPERS

#### ITEM: H3615

Papers for controlling the emulsion water hardness are used to verify this value. If the value is higher than 50° French, the emulsion may separate; it is advisable to top up with emulsion prepared with demineralised water. The emulsion hardness tends to increase during use due to the evaporation of water and the high concentration of minerals dissolved in it; so we recommend a weekly control of this parameter.

| Tech. Code | GR70<br>Euro | Package | Pieces |
|------------|--------------|---------|--------|
| H3615100   | 52,00        | Jar     | 100    |



# LTEC HAND HELD REFRACTOMETERS

# ITEM: H3631

The refractometer is an optical instrument that measures the refractive index of a fluid in order to determine the concentration percentage of cooling lubricant emulsions. Its daily use allows verification of the correct concentration of the emulsion in the tank in order to avoid waste, protect the machine tools and reduce the total production costs.

CAUTION: Do not immerse in any liquid or emulsion.

| Tech. Code | GR70<br>Euro | Model       | Divisions % |
|------------|--------------|-------------|-------------|
| H3631018   | 89,00        | 0 - 18%     | 0.1         |
| H3631032   | 109,00       | 0 - 32%     | 0.2         |
| H3631R1    | 7,00         | Spare plate | -           |



# **I\_TEC ♦ VOLUMETRIC MIXER**

# ITEM: H3618

The volumetric mixer is an Instrument driven by water pressure alone which guarantees the formation of stable emulsions at the desired concentration. Through the use of a volumetric mixer it is possible to reduce the time for filling and topping the tanks of machine tools, this reducing time and costs. Using the volumetric mixer it is also possible to top- up by defining the concentration with ease and precision. The LTEC volumetric mixer is built in Italy and all the appliances are tested one by one before sale to the end user. The mixer H361812 is complete with filter, pressure reducer, suction tube, stainless steel container, to prevent the product from accidental impacts and 2 taps so as to be ready for use

Concentration range from 1 to 10 %

# ADVANTAGES

- Easy to use
- Cost reduction
- Product tested before sale
- Rapid topping up
- Top-up precision

| Tech. Code | GR71<br>Euro | Concentration | Flow<br>lt/h | Water pressure bar | Model    |
|------------|--------------|---------------|--------------|--------------------|----------|
| H361810    | 990,00       | 1 - 10%       | 1600         | from 0,7 to 8      | Base     |
| H361812    | 1377,00      | 1 - 10%       |              |                    | Complete |





# LTEC VENTURI MIXER

#### ITEM: H3619

The venturimetric mixer gives every customer the possibility to quickly fill and top-up the machine tool tanks. It is recommended to perodically check the concentration at the outlet of the mixer. The simplicity of the product guarantees each user its use.

Concentration range from 1 to 10 %

# **ADVANTAGES**

- Easy to use
- Cost reduction
- Rapid topping up

| Tech. Code | GR71<br>Euro | Concentration | Flow<br>lt/h | Water pressure<br>bar |
|------------|--------------|---------------|--------------|-----------------------|
| H3619V     | 363,00       | 0 - 10%       | 1000         | min 2                 |





# Related products

# **WRK** COWHIDE GRAIN LEATHER GLOVES

| Tech. Code | Size | EU size |
|------------|------|---------|
| K21007     | М    | 7       |
| K21008     | L    | 8       |
| K21009     | XL   | 9       |
| K210010    | XXL  | 10      |

Product available in index K



# LTEC AIR COOLERS

#### ITEM: DELTA 40

DELTA 40 is a patented compressed air cooling device that converts the air into two flows: one of hot air and one of very cold air. The jets and the hot or cold air temperatures are adjustable by means of a valve that allows control. It is light, compact and economical and operates easily. It is made of corrosion resistant materials. The support is made of plastic material (nylon 6.6) which allows it to be installed using a dedicated, adaptable bracket. It does not use electricity or chemicals, it does not generate sparks or interference. Reduces pollution and increases tool processing speed by extending its service life.

Equipment: DELTA 40 is provided with a 160mm - 1/4" articulated tube.



| Tech. Code  | GR71               | Pressure | Outlet temperature* | Air    | Weight |
|-------------|--------------------|----------|---------------------|--------|--------|
| recii. Code | Euro               | bar      | °C                  | NL/min | g      |
|             |                    | 1,5      | - 8,0               | 46     |        |
| H362210     | 165,00 3<br>4<br>5 | 3        | -18,5               | 80     | 150    |
|             |                    | 4        | -21,5               | 100    | 150    |
|             |                    | 5        | -23,0               | 125    |        |

<sup>\*</sup>Temperature detected on exit nozzle with an inlet air temperature of 20°C.



Delta 40

Delta 40

Delta 40



# LTEC **♦** DELTA 40 SUPPORT-SINGLE

#### ITEM: H3626

Special support with a 8mm stem for holding DELTA 40 with a magnetic stand. It can be fix to body of the DELTA 40 with 2 screws already included.

| Tech, Code  | GR71  | Plate   | Stem       |
|-------------|-------|---------|------------|
| recii. Code | Euro  | mm      | mm         |
| H362610     | 23,00 | 23 x 30 | Ø 8 x 25 h |



# LTEC AIR COOLING UNITS

#### **ITEM: DELTA 40 TRIPLO**

DELTA 40 TRIPLO offers, in addition to the traditional refrigeration of the air, a flow three times higher. This allows, in addition to the cooling of the pieces, shaving and tools also the blowing of the chips away from the work area. Furthermore, developing a triple voloume of cold air can be used on larger tools. Turning the adjustment screw clockwise or counterclockwise allows adjustment of the compressed air flow.

Equipment: DELTA 40 TRIPLO is provided with a 320mm - 1/2" articulated tube.



| Tech. Code  | GR71   | Pressure | Outlet. Temp* | Air    | Weight |
|-------------|--------|----------|---------------|--------|--------|
| recii. Code | Euro   | bar      | °C            | NL/min | g      |
|             |        | 1,5      | - 8,0         | 138    |        |
| 1100040     | 402.00 | 3        | -18,5         | 240    | 700    |
| H36243      | 493,00 | 4        | -21,5         | 300    | 760    |
|             |        | 5        | -23,0         | 375    |        |

<sup>\*</sup>Temperature detected on exit nozzle with an inlet air temperature of 20°C.

# 

# ITFM: H3627

A support rod specifically designed to orientate the DELTA 40 TRIPLE unit as desired. Firmly secured to the magnet mounted onto the DELTA 40 TRIPLE main body.

| Tech. Code | GR71  | Plate | Stem       |
|------------|-------|-------|------------|
|            | Euro  | Ø mm  | mm         |
| H362730    | 23,00 | 38    | Ø 8 x 25 h |

# Delta 40



Delta 40

Delta 40

DELTA 40 TURBO is a patented compressed air cooling device. DELTA 40 TURBO converts the air into two flows: one of hot air and one of very cold air.

The jets of the hot and cold temperatures are adjustable by means of a valve that allows control.It is Lightweight, compact and economical and operates easily, it is made of anti-corrosion resistant material. The support is in Aluminum that allows the installation of the DELTA 40 TURBO through two magnets. Uses no electricity or chemicals and it does not generate sparks or interference.

It reduces pollution and increases the speed of the tool machining by increasing the duration.



Equipment: provided with a 320mm - 1/2" articulated tube.

| Tech. Code | GR71<br>Euro | Pressure<br>bar | Outlet temperature* | Air consumption<br>NL/min | Cooling power<br>W - Kcal/h - BTU/h |
|------------|--------------|-----------------|---------------------|---------------------------|-------------------------------------|
| H3629TURBO | 671,00       | 5<br>6<br>7     | -16<br>-17<br>-19   | 633<br>783<br>900         | 730<br>630<br>2500                  |

<sup>\*</sup> Outlet temperature partly of cold air regulated about 50%.

# LTEC COOLERS FOR ELECTRIC PANELS

ITEM: AIR COOLING CABINET

AIR COOLING CABINET is a cooling system for electrical panels with and innovative system for extracting hot air from the panel and blowing cold air. It is possible to direct the ject directly on the critical components.

Equipment: AIR COOLING CABINET provided with a long, complete 320mm - 1/2" articulated tube.



| Tech. Code | GR71<br>Euro | Pres.<br>bar | Outlet temperature* | Flow rate<br>NL/min | Air consumption<br>NL/min | Depression<br>mbar | Exit rate<br>NL/min  |
|------------|--------------|--------------|---------------------|---------------------|---------------------------|--------------------|----------------------|
| H35301000  | (1000,00)    | 5<br>6<br>7  | -16<br>-17<br>-19   | 300<br>358<br>417   | 633<br>783<br>900         | -58<br>-72<br>-87  | 1766<br>2000<br>2200 |

<sup>\*</sup> Outlet temperature partly of cold air regulated about 50%.

# LTEC AIR COOLER FOR SAWING MACHINES

ITEM: DELTA 40 SAW

DELTA 40 SAW is an air cooling device formed of two DELTA 40, two 90° nozzles and a connecting support.

DELTA 40 SAW is used on sawing machines to cool their blade and allow a clean cut on metals as well as on a wide range of plastic materials.

Such cooling device is successfully applied also on vertical band saws for metals, wood, plastic and on circular saws when cutting the pouring spout of aluminum moulds as well as for all other material cutting applications where the use of metalworking fluids is either unadvisable or impossible.

\*Temperature detected on exit nozzle with an inlet air temperature of 20°C.



| Tech. Code | GR71<br>Euro | Pressure<br>bar    | Outlet temperature*                  | Air<br>NL/min.          | Weight<br>g |
|------------|--------------|--------------------|--------------------------------------|-------------------------|-------------|
| H362310    | 297,00       | 1.5<br>3<br>4<br>5 | - 8.0°<br>-18.5°<br>-21.5°<br>-23.0° | 92<br>160<br>200<br>250 | 280         |

#### Air Blade

Air Blade

#### ITEM: AIR BLADE MINI

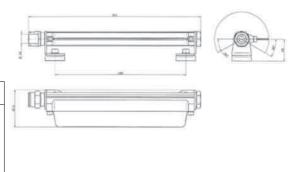
AIR BLADE MINI Air blades produces a straight air flow. The flow remains constantly rectilinear, thus allowing a multiplicity of applications.

Taking advantage of the KOANDA effect, the flow amplifies its range aspirating surrounding air; the effect consists of a mass air flow greater than the one provided by the compressed air installation used for the feeding.

# APPLICATIONS:

- Protection barrier for chips
- Protection barrier for fumes or oily mists cleaning interior windows
- Cleaning workpieces from chips and lubricants
- Chips evacuation or coated pieces drying
- Molded parts cooling

| Tech. Code  | GR71   | Pressure | Air consumption | Thrust force* |
|-------------|--------|----------|-----------------|---------------|
| recii. Code | Euro   | bar      | NL/min          | g             |
|             |        | 1        | 765             | 42            |
|             |        | 2        | 978             | 238           |
|             |        | 3        | 1360            | 595           |
| H3635100    | 293,00 | 4        | 1573            | 722           |
|             |        | 5        | 1955            | 1105          |
|             |        | 6        | 2380            | 1490          |
|             |        | 7        | 2663            | 1900          |



Alleros MI

# LTEC AIR BLADES

#### ITEM: H3625

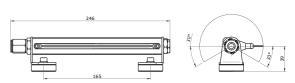
AIR BLADE MINI air blades produces a straight air flow. The flow remains constantly rectilinear, thus allowing a multiplicity of applications.

Taking advantage of the KOANDA effect, the flow amplifies its range aspirating surrounding air, the effect consists of a mass air flow greater than the one provided by the compressed air installation used for the feeding.

#### APPLICATIONS:

- Protection barrier for chips
- Protection barrier for fumes or oily mists cleaning interior windows
- Cleaning of pieces machined from shavings and/or cooling lubricants
- Chip evacuation, drying painted parts
- Cooling of molded parts





| Tech. Code  | GR71   | Pressure | Air consumption | Thrust force* |
|-------------|--------|----------|-----------------|---------------|
| iecii. Code | Euro   | bar      | NL/min          | g             |
|             |        | 1        | 900             | 50            |
|             |        | 2        | 1150            | 280           |
|             |        | 3        | 1600            | 700           |
| H3625100    | 441,00 | 4        | 1850            | 850           |
|             |        | 5        | 2300            | 1300          |
|             |        | 6        | 2800            | 1750          |
|             |        | 7        | 3200            | 2250          |
|             |        |          |                 |               |



# Related products

# **ALPAN MAGNETIC DIAL INDICATOR STANDS**

| Tech. Code | Locking      | Base<br>mm   | Magnetic force<br>Kg |  |
|------------|--------------|--------------|----------------------|--|
| D2516MEC60 | Mechanical   |              | 60                   |  |
| D2516MEC80 | iviecnanicai | 60 x 50 x 55 | 00                   |  |
| D2516R80   | Only base    |              | 80                   |  |

The products are available in chapter D



<sup>\*</sup> Thrust force (grammes) measured at the distance of 150/200 mm.

<sup>\*</sup> Thrust force (grams) measured at a distance of 150/200 mm.

# **LTEC** EMULSION OXYGENATORS

# ITEM: OXI COOLER

OXI COOLER is a combined oxygenation and cooling system featuring a DELTA 40 cooling unit, which can also be mounted onto a TOS 2.0 tramp oil separator so to accelerate separation of lubricant oil from emulsion itself.

The neodymium magnet is designed to provide a safe and tight fastening of the OXI COOLER onto a steel wall, simply by inserting its bubbler tube in the bottom of the tank and coupling it to the compressed air unit.

The flux valve is designed to optmise cooling air flux in relation to tank emulsion levels.

- Longer emulsion life without chemical supplement
- Enhanced tool performance
- Preventing unpleasant odours due to microbial metabolism
   Emulsion provide from oxygenation kept at optimum PH levels.
   Gradually ihibits bacterial growth
- Protecting ferrous alloys against oxidation
- Cooled down emulsion ensures reduced fume and fog
- Significantly reduced cost of disposal

| Tech. Code | GR71   | Pressure           | Outlet. Temp                     | Air                    | Weight |
|------------|--------|--------------------|----------------------------------|------------------------|--------|
|            | Euro   | bar                | °C                               | NL/min.                | Kg     |
| H3266OXI   | 261,00 | 1,5<br>3<br>4<br>5 | - 8,0<br>-18,5<br>-21,5<br>-23,0 | 46<br>80<br>100<br>125 | 1,2    |



Oxi



#### ITEM: RASEN D.1

RASEN D.1 is Ideal for tools machines, washing pieces machines, condenser compressors and in general where it is necessary to separate the superficial oil from the fluid below. Easily applicable even in restricted spaces, the most advanced equipment for the mechanical removal of oils pollutants from the surface of the emulsion coolants. The highest technical standards to provide: a long life, does not require maintenance.

The LTEC range of oil separators today represents the best removal solution to solve the problems caused by the presence of pollutants in oil emulsion cooling lubricants and of water in washing pieces machines.

- Avoid microbial degradation of the fluid in operating
- Improve standards of production
- Inhibiting the production of noxious fumes and mists
- · Reduce contamination of the machine
- Eliminate downtime due to the need for manual oil removal
- Built and assembled in Italy from high quality industrial products
- · Industrial ratio- motor
- · Illuminated switch
- Electronic timer with 4 positions
- Single key for assembly and adjustment (E27005 WRK)
- · Easy and safe to use thanks to the oil collection tank with level sensor
- Upon request, disc type may also be supplied in sizes other than standard ones

#### Features:

- Band polyurethane polymer
- Recovery of oil up to 8 kg/h as a function of viscosity



| Tech. Code  | GR71   | ø Disc | Mono- phase motor | Power cable<br>m       |  |
|-------------|--------|--------|-------------------|------------------------|--|
| recii. Code | Euro   | mm     | V - Hz            |                        |  |
| H4045D320   | 613,00 | 320    | 230 - 50/60       | 2 with also 16A IDSE   |  |
| H4045D500   | 762,00 | 500    | 230 - 50/60       | 2 with plug 16A - IP65 |  |
| H4045DIS320 | 93,00  | 320    | Donlagement dies  | -                      |  |
| H4045DIS500 | 134,00 | 500    | Replacement disc  |                        |  |

# **I\_TEC** • HEAVY DUTY BELT OIL SKIMMERS

#### ITEM: RASEN B.2

Ideal for tool machines, washing machines for pieces, condenser compressors and, in general, when it is necessary to separate the surface oil from the fluid below.

Easy to apply even in tight spaces, it is the most advanced equipment for the mechanical removal of oil pollutants from the surface of coolant emulsions.

The highest technical standards to provide:

- · reliable operation
- · durability
- no maintenance

#### **BENEFITS OF USE**

- · Prevents microbial degradation of fluid in operation
- Improves production standards
- · Inhibits the production of noxious fumes and mists
- Reduces machine contamination
- Eliminates downtime caused by the need for manual oil removal
- · Built and assembled with industrial-quality products in Italy
- Industrial ratio-motor
- · Illuminated switch
- Electronic 4-position timer
- Single key for assembly and adjustment (E27005 WRK)
- · Easy and safe to use thanks to the oil collection tank with level sensor
- · Non-standard size bands available on request

#### Features:

- · Polyurethane polymer band
- · Self-adjusting band tension
- Recovers up to 8 kg/h of oil in relation to the viscosity

| Tech. Code                         | GR71   | Tape                 | Mono- phase motor          | Power cable                |  |
|------------------------------------|--------|----------------------|----------------------------|----------------------------|--|
| recii. Code                        | Euro   | mm                   | V - Hz                     | m                          |  |
| H4040N400                          | 623,00 | 400 x 50             | 230 - 50/60                | 2 with alug 16A            |  |
| H4040N700                          | 741,00 | 700 x 50             | 230 - 50/60                | 2 with plug 16A            |  |
| H4040NAS400                        | 93,00  | 400 x 50             | Replacement belts complete | Replacement belts complete |  |
| <b>H4040NAS700 146,00</b> 700 x 50 |        | with tension springs | with tension springs       |                            |  |

# Rasen



#### ITEM: TOS 2.0

Tramp oil separator suitable for separating from the emulsions in the tank foreign oils, sludge and foam. You can use tank turbulence and degrease on a 24 hour basis. During the aspiration phase a superficial motion is formed in the emulsion thanks to this all the foreign oils floating are aspirated and decanted, the clean emulsion is drained into the tank by gravity. The operation also creates a beneficial oxygenation effect.

The self leveling float allows for a swift installation even in tight spaces, immediate functionality. The new filter sack supplied as standard with TOS 2.0, enhances its reliability and is very easy to clean.

TOS 2.0 does not have material consumption and works without the presence of an operator.

Through the use of the TOS 2.0 HOT oil separator, a product conceived and designed for the specific needs of the washing tanks and tunnels, it is possible to de-oil all those fluids at high temperature and aggressive for the operator or for the materials. During the design of the TOS 2.0 HOT oil separator, the safety of the operators who may come into accidental contact with the machine has also been taken into consideration, thanks to the partition wall inside it, keeping the external plate of the machine at a lower temperature than the fluid flowing

# Features:

- Electrical panel with PLC with display in 6 languages: English, Italian, French, German, Spanish, Russian
- Electrical panel protection IP65
- Maximum liquid temperature aspirated: 90° C
- Operating temperature: +5°C +40°C
- Rated motor power KW 0.25
- Funnels with tap for emptying and cleaning
- Emergency stop button

#### Advantages:

- Decreases the production failure time caused by machine stops
- Lengthens the interval between one disposal and the other
- Lengthens the life of the emulsion and reduces the chemical and biological risks
- Reduces bad smells by improving the working environment
- It blocks the reproduction of mold and bacteria while preserving the health of the operators
- Reduces the fumes generated by oil

#### Supplied with:

- 1 Dynamic float H400P70

#### On request:

- Cam attachment for exhaust pipe

| Tech. Code   | GR71<br>Euro | Container<br>capacity<br>L | Flow<br>I/h | Power<br>kw | Tension<br>V | Dimensions<br>mm    | Empty weight kg |
|--------------|--------------|----------------------------|-------------|-------------|--------------|---------------------|-----------------|
| H4000TOS2.0  | 3850,00      | 105                        | 250         | 0.20        | 230          | 570 x 550 x<br>980h | 90              |
| H4000TOS2.0H | (7950,00)    | 105                        |             | 0,29        | at 50 Hz     |                     | 80              |



| Tech, Code  | GR71   | Description               | Dimension |
|-------------|--------|---------------------------|-----------|
| recii. Code | Euro   | Description               | mm        |
| H4002P070   | 324,00 | Dynamic float with magnet | h 70      |
| H4002P250   | 345,00 | Dynamic float with magnet | h 250/500 |







#### UNIVERSAL ABSORBENTS FOR OILS AND LIQUIDS

ITEM: H4150



#### SAFETY DATA SHEETS ON-LINE

Aluminium oxide-based product for oil, emulsion, grease, tar, solvent, paint and hydrocarbon in general; rapidly absorbs all liquid substances from surfaces without leaving a trace. Remains stable up to temperatures of 1500°, offers excellent adhesion to the floor, it remains dry to the touch, non-slippery and non-toxic even when it is completely soaked. Absorption ratio from 1:1 to 1:1.5

| Tech. Code GR70<br>Euro |       | Package | Weight<br>Kg |  |
|-------------------------|-------|---------|--------------|--|
| H415010                 | 59,00 | Bucket  | 10           |  |



# LTEC () UNIVERSAL ABSORBENT GRANULES FOR OILS

ITEM: DRY GRAIN



#### SAFETY DATA SHEETS ON-LINE

DRY GRAIN is a granulated ecological product based on natural components for the absorption of oil, grease, hydrocarbon and chemical products present in the workplace. It is unalterable when in contact with moisture and water, it does not create slippery and dangerous mixtures. It is non-flammable, it does not release the absorbed substances over time. If stored in a dry place, DRY GRAIN has no expiry date. It can be disposed of as urban waste, however the disposal must follow the norms indicated for the absorbed substance, supplied in two granulometries, the fine grained is ideal for polluting films and is usually the widely used in the Industrial field; the coarse grained is more suitable in the presence of large quantities of pollutants where a fine composition is not effective. It absorbs around 130% of its weight.

Complies with the EU CEN standards TS 15366: 2010 Complies with the standard Fr NF P 98.190

| Tech. Code | GR70<br>Euro | Package     | Grain size<br>mm | Weight<br>Kg |
|------------|--------------|-------------|------------------|--------------|
| H415145G   | 12,40        | Sack Lt. 10 | 2,0 - 4,8        | 4,5          |
| H415170F   | 15,50        | SAUK LT. 10 | 0,8 - 2,0        | 7,0          |

# LTEC • UNIVERSAL ABSORBENTS FOR OILS AND LIQUIDS

ITEM: H4155



#### SAFETY DATA SHEETS ON-LINE

Professional high-purity Sepiolite-based absorbent. The Sepiolite has internal channels called "zeolitic channels" that cross the entire structure of the material up to the outer surface forming pores of various sizes. The result is a highly porous mineral with low specific weight, ideal for absorbing all types of liquids (oil, petrol, water, etc.). It is an essential product for factories, workshops, roadbeds and work areas where spilled liquids can cause accidents, fermentation, danger and unwanted odours. It is very safe because it is a flame-retardant material. It also acts as a anti-slip agent in road maintenance in case of slippery bottoms due to the presence of spilled liquids.

| Tech. Code | GR70<br>Euro | Grain        | Package | Weight<br>Kg |
|------------|--------------|--------------|---------|--------------|
| H415515/30 | 27,80        | Medium 15/30 | Dog     | 20           |
| H415530/60 | 26,80        | Fine 30/60   | Bag     | 20           |

# **ILTEC BATTERY ACID NEUTRALIZER**

# ITEM: SAFETY SAND



#### SAFETY DATA SHEETS ON-LINE

SAFETY SAND is a mixture of sand of natural origin. Especially recommended for use to neutralize acid liquids and particular for sulphuric acid. Eco-friendly product, does not contain any irritant, toxic, corrosive or hazardous substances. It does not require special storage containers. The product has a expiring date of of 7 years. When the product expires, it must be disposed of as non-hazardous Special Rejection (RS)

Absorbance ratio: Kg 0,54 per Lt 1 of sulphuric acid Acid base neutralization ratio: Kg 0,54 per Lt 1 of sulphuric acid

Test reports available upon request, in compliance with Decree n. 20 issued by the Ministry of Environment.

Gradually poor the product onto the spilled area. Wait a few minutes for the effervescent reaction to be completed which generates a mortar-like, easily removable mix. Clean up and dispose of as a nonhazardous special waste.

| Tech. Code | GR70<br>Euro | Package | Weight<br>Kg |
|------------|--------------|---------|--------------|
| H421010    | (37,10)      | Bucket  | 10           |



# Sepiolite



# Safety



# LTEC () ABSORBENT FOR OILS AND HYDROCARBONS

#### ITEM: WHITE DRY

SAFETY DATA SHEETS ON-LINE

WHITE DRY is a water repellent and floating absorbent, effective for spilled pollutants both on the ground and on water as in the case of wet weather- It is suitable for all hydrocarbons and their derivatives, such as oils, solvents, petrol etc.

WHITE DRY is a hydropobic absorbent that doen not absorb water, It rapidly impregnates and absorbs up to 20 times its weight. The sheets are ideal for treating leaks on machinery, the sleeves are indispensable for absorbing damaging spills.

| Tech. Code | GR70<br>Euro | Description            | Dimensions<br>cm | Absorption<br>L |
|------------|--------------|------------------------|------------------|-----------------|
| H41315040F | 122,00       | Sheets package 200 pcs | 50 x 40          | 145             |
| H41318120  | 131,00       | Tubes package 24 pcs   | 8 x 120          | 168             |
| H41318240  | 131,00       | Tubes package 12 pcs   | 8 x 240          | 100             |



# LTEC • EMERGENCY KIT ANTI-OIL SPILL

#### ITEM: WHITE DRY KIT

Emergency Kit consisting of: - 30 pads 50 x 40

- 6 socks Ø 8 x 120
- 6 socks Ø 8 x 60
- 1 pair of gloves
- 1 mask
- 3 disposal bags

Supplied in a plastic trunk

| Tech. Code | GR70<br>Euro | Package       | Dimensions<br>cm | Absorption<br>L |  |
|------------|--------------|---------------|------------------|-----------------|--|
| H4132KIT75 | 167,00       | Plastic trunk | 60 x 40 x 32 h   | 75              |  |



# LTEC • UNIVERSAL ABSORBENT PADS

#### ITEM: GRAY DRY



SAFETY DATA SHEETS ON-LINE

SAFETY DATA SHEETS ON-LINE

SAFETY DATA SHEETS ON-LINE

GRAY DRY is a Universal product ideal for absorbing industrial liquids, oils, refrigerants, solvents etc. Absorbs instantly by capillary method up to 19 times its weight. Also suitable for water.

| Tech. Code       | GR70<br>Euro | Description            | Dimensions<br>cm | Absorption<br>L |  |
|------------------|--------------|------------------------|------------------|-----------------|--|
| H41335040F       | 127,00       | Sheets package 100 pcs | 50 x 40 105      |                 |  |
| H41338120        | 131,00       | Tubes package 24 pcs   | 8 x 120          | 444             |  |
| H41338240 131,00 |              | Tubes package 12 pcs   | 8 x 240          | 144             |  |



# **LTEC 1** UNIVERSAL EMERGENCY KIT ANTI-SPILL

#### ITEM: GRAY DRY KIT

Emergency Kit consisting of:

- 30 pads 50 x 40
- 3 socks Ø 8 x 120
- 3 socks Ø 8 x 60
- 1 bag of fine absorbent granules 10l
- 1 pair of gloves
- 1 mask
- 3 disposal bags

#### Supplied in a plastic trunk

|            | •      |               |                |            |
|------------|--------|---------------|----------------|------------|
| Tech. Code | GR70   | Package       | Dimensions     | Absorption |
| lech. Code | Euro   | ackage        | cm             | L          |
| H4134KIT65 | 166,00 | Plastic trunk | 60 x 40 x 32 h | 65         |



# LTEC COVER DRAIN PROTECTIVE MAT

# ITEM: COVER DRAIN



**SAFETY DATA SHEETS ON-LINE** 

COVER DRAIN is a Protective that prevents the infiltration of pollutants in the drains and in the water supply.

| Tech. Code | GR70<br>Euro | Description | Dimensions<br>cm |
|------------|--------------|-------------|------------------|
| H413760    | 143,00       | Carpet      | 60 x 60          |



# **ILTEC 1** NON-WOVEN MATERIAL FOR FILTER MATS

ITEM: H4110

SAFETY DATA SHEETS ON-LINE

Viscose BTZ offers higher filtration quality because porosity is uniform over the whole surface; it is more suitable for filtering emulsions.

The polypropylene BTK is more economical, but offers lower pore uniformity; it is also suitable for filtering

The polyester is based of polyethylene which has the features to offer a perfect filtration for neat cutting oils on mineral based and synthetic fluids.

The weight per square meter is directly proportional to the filtration quality; a higher weight retains the finer dust, while a lighter weight allows the micro-scrap to pass through.

| Tech. Code   | GR70   | Material   | Length | Height | Weight |
|--------------|--------|------------|--------|--------|--------|
| recii. Code  | Euro   | iviateriai | m      | mm     | g/m²   |
| H4110Z25500  | 28,46  |            |        |        | 25     |
| H4110Z30500  | 31,52  |            |        | 500    | 30     |
| H4110Z35500  | 36,41  | 500        | 35     |        |        |
| H4110Z50500  | 50,18  |            | 100    |        | 50     |
| H4110Z25700  | 35,39  |            |        | 700    | 25     |
| H4110Z30700  | 41,92  | Viscose    |        |        | 30     |
| H4110Z35700  | 48,14  | VISCOSE    |        |        | 35     |
| H4110Z50700  | 66,91  |            |        |        | 50     |
| H4110Z251000 | 50,18  |            |        |        | 25     |
| H4110Z301000 | 56,10  |            |        | 1000   | 30     |
| H4110Z351000 | 69,87  |            |        | 1000   | 35     |
| H4110Z501000 | 101,29 |            |        |        | 50     |

| Tech. Code  | GR70  | Material       | Length | Height | Weight |
|-------------|-------|----------------|--------|--------|--------|
| recii. Oode | Euro  | Material       | m      | mm     | g/m²   |
| H4110K2500  | 18,67 |                |        | 500    | 20     |
| H4110K3500  | 25,19 |                |        | 500    | 35     |
| H4110K2700  | 25,60 |                | 100    | 700    | 20     |
| H4110K3700  | 32,44 |                |        |        | 30     |
| H4110K5700  | 40,70 | Polypropylene  |        |        | 50     |
| H4110K7700  | 72,52 | Folyplopyletie |        |        | 70     |
| H4110K21000 | 32,44 |                |        |        | 20     |
| H4110K31000 | 39,37 |                |        | 1000   | 30     |
| H4110K51000 | 48,96 |                |        | 1000   | 50     |
| H4110K71000 | 92,41 |                |        |        | 70     |

| Tech. Code   | GR70<br>Euro | Material  | Length<br>m | Height<br>mm | Weight g/m² |
|--------------|--------------|-----------|-------------|--------------|-------------|
| H4110P30700  | 35,90        |           | 100         |              | 30          |
| H4110P45700  | 55,28        |           |             | 700          | 45          |
| H4110P70700  | 81,40        | Delvester |             |              | 70          |
| H4110P301000 | 52,33        | Polyester |             | 1000         | 30          |
| H4110P451000 | 79,46        |           |             |              | 45          |
| H4110P701000 | 97,92        |           |             |              | 70          |





# EMULSION 45' WATCH THE VIDEO ON YOUTUBE







# LTEC () OIL MIST COLLECTORS FOR MIST AND OIL SMOKE

#### ITEM: H5405

New solution of superior quality to eliminate oil mists, fumes and vapors generated by mechanical processing with the use of emulsion.

It has an Innovative integrated "SELF-CLEANING" centrifugal system for effective removal of the polluting particles directly at the source, which significantly increases the life of the subsequent filters.

The post filters with a high filtering surface are suitable for eliminating micro-organisms and harmful fumes and guarantee an emission reduction efficiency up to 99.98% (according to EN 779 - EN1822 standards HEPA).

Moreover, their versatility is able to solve all customer needs at 360°.

Maintenance costs halved thanks to innovative abatement systems and healthier and cleaner working environments, in compliance with current regulations on hygiene and safety in industrial work environments (Legislative Decree 25/02 -Legislative Decree (81/2008). Supply voltage 400 V / 50 Hz three-phase.

Complete with filter clogging detection device.

# **AFM**



#### THE MACHINE IS SUPPLIED WITH A UNIVERSAL INSTALLATION KIT



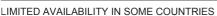
| Tech. Code | GR71<br>Euro | Model       | Suction system           | Suction<br>m³/h | Power<br>kw | ø Suction<br>mm | Noise level<br>dBA | Static pressure<br>Pa | Weight<br>Kg |
|------------|--------------|-------------|--------------------------|-----------------|-------------|-----------------|--------------------|-----------------------|--------------|
| H5405500   | (2579,00)    | AFM-PX 500  |                          | 530             | 0,37        | 125             | 62                 | 740                   | 50           |
| H54051000  | (2964,00)    | AFM-PX 1000 | Contributed . Machanical | 960             | 0,55        | 150             | 64                 | 920                   | 65           |
| H54052000  | (3483,00)    | AFM-PX 2000 | Centrifugal + Mechanical | 1380            | 1,5         | 200             | 68                 | 1200                  | 80           |
| H54053000  | (3886,00)    | AFM-PX 3000 |                          | 1750            | 2,2         | 250             | 72                 | 1700                  | 97           |

LIMITED AVAILABILITY IN SOME COUNTRIES

# LTEC • INTERNAL FILTER CARTRIDGE

The spare part consists of a high performance cartridge in class F9. The clogged Filter Detection Device, installed on the blast chiller, warns the user, blinking, that 15% of the filters remain active, thus allowing the time required to order the spare part. The replacement of this part is done simply by removing the body of the post filter, accessing the cover of the base body, unscrewing the screws that fix the cover and extracting the cardridge complete with filter socks. The new cartridge is assembled by repeating the operation in the opposite direction.

| Tech. Code | GR71<br>Euro | Replacement recommended every | Compatible with Model |
|------------|--------------|-------------------------------|-----------------------|
| H5412KIT1  | 26,00        |                               | AFM 500               |
| H5412KIT2  | 31,00        | 2000 h                        | AFM 1000              |
| H5412KIT3  | 41,00        | 2000 11                       | AFM 2000              |
| H5412KIT4  | (54,00)      |                               | AFM 3000              |





TO ORDER SPARE PARTS OF BLAST CHILLER ACCESSORIES IT IS NECESSARY TO ALWAYS SUPPLY THE NUMBER AND SERIES OF THE MACHINE

# LTEC ( SYNTHETIC FILTER KIT FOR INTERNAL CARTRIDGE OF MIST ASPIRATORS

#### ITEM: H5415

The spare part is composed of a pair of tubular filters placed on the filtering cartridge with coalescence. The spare part lasts more than 3000 hours when used correctly. The Clogged Filter Detection Device installed on the electric panel of the aspirator flashes to alert the user that only 15% of filter operability is left allowing ample time to order the spare part. To replace this part, open the door of the Post-Filter and pull out the filters from the rails; next access the base body cap, unscrew the screws that secure the cover and remove the metal cartridge together with the tubular synthetic filters and lastly pull out both tubular filters from metal cartridge. To install the new cartridge and the new tubular filters, repeat the procedure in reverse order.





| Tech. Code | GR71<br>Euro | Recommended replacement every | Compatible with<br>Model |
|------------|--------------|-------------------------------|--------------------------|
| H5415500   | (122,00)     |                               | AFM 500                  |
| H54151000  | (142,00)     | 2000 h                        | AFM 1000                 |
| H54152000  | (182,00)     | 2000 N                        | AFM 2000                 |
| H54153000  | (213,00)     |                               | AFM 3000                 |

LIMITED AVAILABILITY IN SOME COUNTRIES

# LTEC • FINAL FILTER CARTRIDGE

#### ITEM: H5418

The spare part consists of a filter element of superior quality, in class H10. The clogged Filter Detection Device, installed on the oil mist collector, warns the user, blinking that 15% of the filters remain active, thus giving the necessary time to order the spare part. The replacement of this part is carried out by opening the Post-filter door and extracting the exhaust filter from the tracks. The assembly of the new part is carried out by repeating the operation in the opposite direction.

|   | Tech. Code  | GR71     | Decemmended replacement every | Compatible with |
|---|-------------|----------|-------------------------------|-----------------|
| l | recii. Code | Euro     | Recommended replacement every | Model           |
|   | H5418500    | (182,00) |                               | AFM - PX 500    |
|   | H54181000   | (203,00) | 2000 h                        | AFM - PX 1000   |
|   | H54182000   | (233,00) | 2000 Π                        | AFM - PX 2000   |
| ſ | H54183000   | (340,00) |                               | AFM - PX 3000   |

LIMITED AVAILABILITY IN SOME COUNTRIES



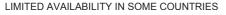
**AFM** 

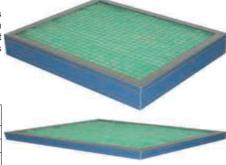
# LTEC • PRE-FILTER SYNTHETIC CELLS FOR MIST ASPIRATORS

#### ITEM: H5422

The spare part is composed of a pair of synthetic filters mounted on a metal frame, except for the 500 and 1000 models which has only one filter. The spare part lasts more than 3000 hours when used correctly. The Clogged Filter Detection Device installed on the electric panel of the aspirator flashes to alert the user that only 15% of filter operability is left allowing ample time to order the spare part. To replace this part, open the door of the Pre-Filter and pull out the filters from the rails. To install the new part, repeat the procedure in reverse order.

| Tech. Code | GR71<br>Euro | Replacement recommended every | Compatible with Model |
|------------|--------------|-------------------------------|-----------------------|
| H5422RIC1  | (22,00)      |                               | AFM 500               |
| H5422RIC2  | (40,00)      | 1500 h                        | AFM 1000              |
| H5422RIC3  | (67,00)      | 150011                        | AFM 2000              |
| H5422RIC4  | (88,00)      |                               | AFM 3000              |





TO ORDER SPARE PARTS OF BLAST CHILLER ACCESSORIES IT IS NECESSARY TO ALWAYS SUPPLY THE NUMBER AND SERIES OF THE MACHINE

#### ITEM: H5430

New solution of superior quality to eliminate oil mists, fumes and vapors generated by mechanical processing with the use of neat oils.Innovative integrated "SELF-CLEANING" centrifugal system for effective removal of the polluting particles directly at the source, which significantly increases the life of the subsequent filters.Moduler Post filters with a high filtering surface, suitable for eliminating microbursts, oil fumes and harmful fumes, guarantee an emission reduction efficiency up to 99.98% (according to EN 779 - EN1822 standards HEPA).

Moreover, their versatility is able to solve all customer needs at 360 °.Maintenance costs halved thanks to innovative abatement systems and healthier and cleaner working environments, in compliance with current regulations on hygiene and safety in industrial work environments (Legislative Decree 25/02 - Legislative Decree 626-94). Supply voltage 400 V / 50 Hz three-phase.

Complete with filter clogging detection device.

THE MACHINE IS SUPPLIED WITH A UNIVERSAL INSTALLATION KIT.





| Tech. Code | GR71      | I Model      | Suction system           | Suction | Power | ø Suction | Noise level | Static pressure | Weight |
|------------|-----------|--------------|--------------------------|---------|-------|-----------|-------------|-----------------|--------|
|            | Euro      |              |                          | m³/h    | kw    | mm        | dBA         | mm/H2O          | Kg     |
| H5430500   | (2895,00) | AFM-PFH 500  |                          | 470     | 0,37  | 125       | 62          | 84              | 50     |
| H54301000  | (3390,00) | AFM-PFH 1000 |                          | 950     | 0,55  | 150       | 64          | 89              | 65     |
| H54302000  | (3940,00) | AFM-PFH 2000 | Centrifugal + Mechanical | 1920    | 1,1   | 200       | 68          | 96              | 80     |
| H54303000  | (4450,00) | AFM-PFH 3000 |                          | 2900    | 2,2   | 250       | 72          | 122             | 97     |

LIMITED AVAILABILITY IN SOME COUNTRIES

# LTEC • SYNTHETIC CELLS AND CARTRIDGES FOR NEAT OIL MIST COLLECTORS

# ITEM: H5457

The post filter replacement kit is composed of two elements: internal diffuser and upper filtering element (Class H13 HEPA). The average change interval of the replacement kit is over 1000h, in case of correct use. The Clogged Filters Detection Device, installed on the electric panel of the mist collector, with it's blinking, warns that the filter has only 15% efficiency left, so there is enough time to order a new replacement kit and install it. To replace these post filter cells, it's needed to open the post-filter door, remove the used filters from the slides and replacing them with the new ones, repeating the operation in the opposite direction.

| Tech. Code | GR71<br>Euro | Recommended replacement every | Compatible with<br>Model |
|------------|--------------|-------------------------------|--------------------------|
| H5457KIT1  | (376,00)     |                               | AFM - PFH 500            |
| H5457KIT2  | (452,00)     | 1000 h                        | AFM - PFH 1000           |
| H5457KIT3  | (528,00)     | 1000 h                        | AFM - PFH 2000           |
| H5457KIT4  | (863,00)     |                               | AFM - PFH 3000           |



# LITEC () BASE STAND INSTALLATION KIT FOR MIST COLLECTORS

#### ITEM: H5466

The base stand kit consists of a 1 meter or 2 meter high base stand with 4 anti-vibration feet and a condensation tank. This kit allows you to install the blast chiller even in situations where it is not possible to mount it on the machine tool. With the 1 meter high kit the blast chiller remains at a height where it is possible to carry out ground maintenance operations.

| Tech. Code  | GR71     | Base stand height |
|-------------|----------|-------------------|
| recii. Code | Euro     | m                 |
| H54661000   | (395,00) | 1                 |
| H54662000   | (395,00) | 2                 |

LIMITED AVAILABILITY IN SOME COUNTRIES



TO ORDER SPARE PARTS OF BLAST CHILLER ACCESSORIES IT IS NECESSARY TO ALWAYS SUPPLY THE NUMBER AND SERIES OF THE MACHINE

# **LOC-LINE MODULAR FLEXO HOSE 1/4"**

# ITEM: H6060

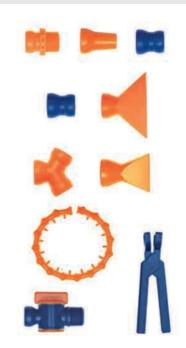
| Tech. Code | GR70<br>Euro | Supplier code | Description   |  |  |
|------------|--------------|---------------|---|--|--|
| H606001    | 17,24        | 40413         | Standard pack of 20 modular segments<br>3 nozzles Ø 1.6 - 3.17 to 6.35<br>2 connections 1/4" and 1/8" NPT<br>Total length. 330 mm |  |  |
| H606002    | 0,65         | 41401/1       | 1/4" segment  |  |  |
| H606003    | 2,24         | 41402/1       | Nozzle ø 16   |  |  |
| H606004    | 2,24         | 41403/1       | Nozzle ø 3.17   |  |  |
| H606005    | 2,24         | 41404/1       | Nozzle ø 6.35   |  |  |
| H606006    | 6,53         | 41407/1       | Flat nozzle 24 x 0.8  |  |  |
| H606007    | 6,53         | 41489/1       | Flat direct flow nozzle 25 x 1.3  |  |  |
| H606008    | 9,59         | 41481/1       | 16-hole flat nozzle ø 1   |  |  |
| H606009    | 9,59         | 41482/1       | 16-hole flat nozzle ø 1.5   |  |  |
| H606010    | 3,37         | 41483/1       | Flat nozzle 11 x 1  |  |  |
| H606011    | 3,37         | 41484/1       | Flat nozzle 11 x 1.5  |  |  |
| H606012    | 3,37         | 41485/1       | 5-hole flat nozzle ø 1.5  |  |  |
| H606013    | 3,37         | 41486/1       | 7-hole flat nozzle ø 1  |  |  |
| H606014    | 2,24         | 41405/1       | Connection 1/8" NPT   |  |  |
| H606015    | 2,24         | 41406/1       | Connection 1/4" NPT   |  |  |
| H606016    | 6,53         | 41408/1       | 6 mm Y-coupling   |  |  |
| H606017    | 2,65         | 41470/1       | 90° nozzle ø 1.6  |  |  |
| H606018    | 33,56        | 41479         | 15 assembled radial nozzles and 1 cap package   |  |  |
| H606019    | 9,59         | 21191/1       | 1/4" valve  |  |  |
| H606020    | 9,59         | 21192/1       | Flow regulator 1/4" NPT male  |  |  |
| H606021    | 9,59         | 21193/1       | Flow regulator 1/4" NPT female  |  |  |
| H606022    | 9,59         | 21194/1       | Intermediate flow regulator for 6 mm hose   |  |  |
| H606023    | 90,78        | 40400         | Magnetic base with 4 1/4" outputs   |  |  |
| H606024    | 23,36        | 78001         | Pliers 1/4"   |  |  |
| H607019    | 41,21        | 78003         | 2 pliers 1/4" and 1/2" package  |  |  |



# **LOC-LINE MODULAR FLEXO HOSE 1/2"**

# ITEM: H6070

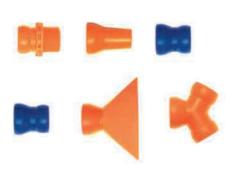
| Tech. Code | GR70<br>Euro | Supplier code | Description  |  |
|------------|--------------|---------------|--|--|
| H607001    | 19,79        | 50813         | Standard pack of 12 modular segments<br>3 nozzles Ø 6.35 - 9.3 - 12.7<br>2 connections 1/2" and 3/8" NPT<br>Total length. 330 mm |  |
| H607002    | 1,33         | 51801/1       | 1/2" segment   |  |
| H607003    | 2,55         | 51806/1       | Nozzle ø 6.35  |  |
| H607004    | 2,55         | 51802/1       | Nozzle ø 9.3   |  |
| H607005    | 2,55         | 51803/1       | Nozzle ø 12.7  |  |
| H607006    | 6,94         | 51807/1       | Flat nozzle 32 x 4.5   |  |
| H607007    | 7,45         | 51809/1       | Flat nozzle 60 x 3   |  |
| H607008    | 2,55         | 51804/1       | Connection 3/8" NPT  |  |
| H607009    | 2,55         | 51805/1       | Connection 1/2" NPT  |  |
| H607010    | 6,94         | 51808/1       | 12 mm Y-coupling   |  |
| H607011    | 6,94         | 51822/1       | Y-Reducer from 1/2" to 1/4"  |  |
| H607012    | 6,94         | 51821/1       | Reducer from 1/2" to 1/4"  |  |
| H607014    | 11,42        | 32091/1       | 1/2" valve   |  |
| H607015    | 11,42        | 32092/1       | Flow regulator 1/2" NPT male   |  |
| H607016    | 11,42        | 32093/1       | Flow regulator 1/2" NPT female   |  |
| H607017    | 11,42        | 32094/1       | Intermediate flow regulator for 1/2" hose  |  |
| H607018    | 23,36        | 78002         | Pliers 1/2"  |  |
| H607019    | 41,21        | 78003         | 2 pliers 1/4" and 1/2" package   |  |



# **LOC-LINE MODULAR FLEXO HOSE 3/4"**

# ITEM: H6080

| Tech. Code | GR70<br>Euro | Supplier code | Description  |  |
|------------|--------------|---------------|--|--|
| H608001    | 24,79        | 60513         | Standard pack of 12 modular segments<br>2 nozzles Ø 16 - 20<br>1 connection 3/4" NPT<br>Total length. 350 mm |  |
| H608002    | 1,53         | 61501/1       | 3/4" segment   |  |
| H608003    | 8,47         | 61507/1       | Flat nozzle 75 x 5   |  |
| H608004    | 8,47         | 61511/1       | 20 mm Y-coupling   |  |





# **NOZZLE FOR SB LATHES - 10 BARS**

#### ITEM: H6085

Nozzles to be pressed, just drill and ream with H9 tolerance. Nozzles with threaded hole for use with SBT-ST ET nozzles and pipe.

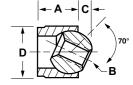
Acetal resin body - Stainless steel sphere - Max. operating temperature  $70^\circ$ 

| Tech. Code | GR70<br>Euro | Supplier code | Thread<br>B | D<br>mm | A<br>mm | C<br>mm |
|------------|--------------|---------------|-------------|---------|---------|---------|
| H608510    | 22,34        | SB 9510       | M4 x 0.7    | 10      | 7       | 2       |
| H608512    | 23,26        | SB 9520       | M5 x 0.8    | 12      | 8       | 2.5     |
| H608514    | 25,91        | SB 9530       | MG v 1      | 14      | 10      | 2       |
| H608515    | 25,91        | SB 9540       | M6 x 1      | 15      | 6       | ٦       |











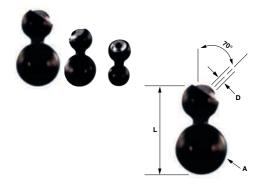
# **NOZZLE FOR CNC LATHES - 10 BARS**

# ITEM: H6093

Nozzles for CNC lathes, ideal for employment when it is not possible to use standard nozzles with spheres.

Acetal resin body - Stainless steel sphere - Max. operating temperature 70°

| Tech. Code | GR70<br>Euro | Supplier code | Diameter A<br>mm | D<br>mm | L<br>mm |
|------------|--------------|---------------|------------------|---------|---------|
| H609312/4  | 30,50        | BU 2310       | 12               |         | 28      |
| H609314/4  | 30,50        | BU 2320       | 14               | 4       | 30.5    |
| H609315/4  | 30,50        | BU 2330       | 15               | ·       | 31      |





# **NOZZLE FOR JJ LATHES - 10 BARS**

# ITEM: H6094

These nozzles are particularly suited for special applications on equipment and tool machines. Just drill a passage for the liquid, ream the hole with a tolerance of 0 + 0.05 and then press the nozzle in the

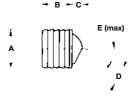
Acetal resin body - Stainless steel sphere - Max. operating temperature 70°

| Tech. Code | GR70 Supplier cod | Supplier code | Diameter A    | D  | В   | С    | E   |         |
|------------|-------------------|---------------|---------------|----|-----|------|-----|---------|
|            | recii. Code       | Euro          | Supplier code | mm | mm  | mm   | mm  | Degrees |
|            | H60948            | 20,60         | JJ 0119       | 8  | 3.2 | 6.35 | 1.5 | 250     |
|            | H609410           | 21,22         | JJ 0113       | 10 | 4   | 8    | 2   | - 35°   |









# QPM

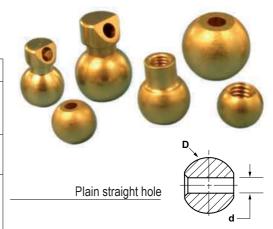
# **NOZZLE FOR LATHES – 33 BARS**

# ITEM: H6095

Nozzles with brass sphere and smooth threaded hole, ideal for CNC lathes.

Brass sphere – Max operating temperature 150°

| Tech. Code | GR70    | Supplier code | Diameter D | d        | L    | Hole                   |                     |
|------------|---------|---------------|------------|----------|------|------------------------|---------------------|
| recn. Code | Euro    | g             | mm         | mm       | mm   | поје                   |                     |
| H609510/4  | (14,48) | BB 1007       | 10         |          |      |                        |                     |
| H609512/4  | (19,99) | BB 1024       | 12         |          |      |                        | Dlain atraight hala |
| H609514/4  | (20,09) | BB 1037       | 14         |          | -    | Plain straight hole    |                     |
| H609515/4  | (21,11) | BB 1049       | 15         | 4        |      |                        |                     |
| H609512/4A | (27,13) | BB 1021       | 12         |          |      | Plain angled hole      |                     |
| H609514/4A | (28,87) | BB 1034       | 14         |          | 9.15 |                        |                     |
| H609515/4A | (29,48) | BB 1046       | 15         |          |      |                        |                     |
| H609510M6  | (16,73) | BB 1001       | 10         | M6 x 1   | 0    |                        |                     |
| H609512M5  | (21,62) | BB 1018       | 12         | M5 x 0.8 | 6    |                        |                     |
| H609514M6  | (23,66) | BB 1031       | 14         | M6 x 1   | 7.9  | Straight threaded hole |                     |
| H609515M6  | (24,28) | BB 1043       | 15         |          |      |                        |                     |
| H609522M6  | (28,15) | BB 1065       | 22         |          |      |                        |                     |







#### QPM)

# **NOZZLE FOR LATHES - 100 BARS**

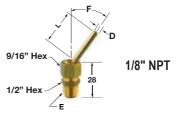
# ITEM: H6097

Nozzles for high-pressure CNC machines.

Brass body – Stainless steel sphere and extension - Max. operating temperature 150°

| Tech. Code | GR70    | Supplier code | Thread E | D   | L    | F       |
|------------|---------|---------------|----------|-----|------|---------|
| rcon. oodc | Euro    | Supplier code | THICAG L | mm  | mm   | Degrees |
| H60973     | (48,04) | LJ 18130      |          | 2.2 | 6.35 | 33°     |
| H60974     | (53,86) | LJ 18140      |          | 2.2 | 31.7 | 28°     |
| H60975     | (49,67) | LJ 18150      | 1/8" NPT | 3.0 | 12.7 | 33°     |
| H60976     | (53,86) | LJ 18160      |          |     | 31.7 | 28°     |
| H60977     | (56,51) | LJ 18165      |          |     | 152  |         |
| H60978     | (49,67) | LJ 18170      |          | 4.0 | 12.7 |         |
| H60979     | (53,86) | LJ 18180      |          |     | 31.7 |         |





# QPM

# **NOZZLE FOR LATHES - 100 BARS**

# ITEM: H6098

Nozzles for high-pressure CNC machines.

Brass body – Stainless steel sphere and extension - Max. operating temperature 150  $\!^\circ$ 

| Tech. Code | GR70<br>Euro | Supplier code | Thread E     | D<br>mm | L<br>mm | F<br>Degrees |
|------------|--------------|---------------|--------------|---------|---------|--------------|
| H60988     | (54,98)      | LJ 18260      | - 1/4" NPT - | 3.0     | 12.7    | 33°          |
| H60989     | (59,16)      | LJ 18265      |              |         | 31.7    | ) 33         |
| H609810    | (54,98)      | LJ 18270      |              | 5.6     | 12.7    | 27°          |
| H609811    | (59,16)      | LJ 18275      |              | 5.0     | 31.7    | 21           |

