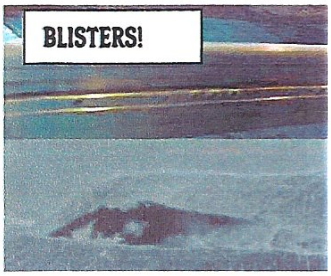
CONDAT
LUBRIFIANTS

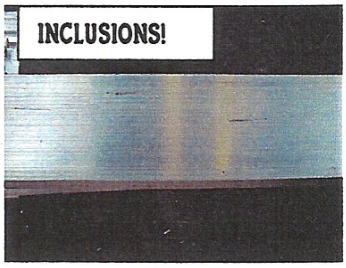
GRAPHITE FREE PRODUCTS for ALUMINUM EXTRUSION OPERATIONS

An ENVIRONMENTALLY FRIENDLY PROPOSAL To REDUCE DEFECTS

? WHICH DEFECTS do you NEED to REDUCE?

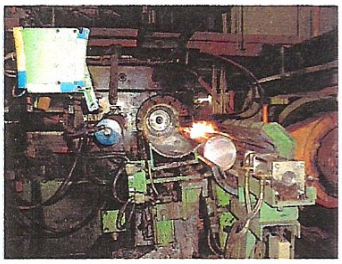


Blisters are generated by organic compounds which decompose and produce gas inside the metal. The pressure which is generated creates "metal bubbles" and major surface defects



Graphite and black particles may impregnate the metal surface creating material defects and cause surface treatment problems during finishing operations.

? WHICH ENVIRONMENTAL HAZARD do you NEED to REPLACE?

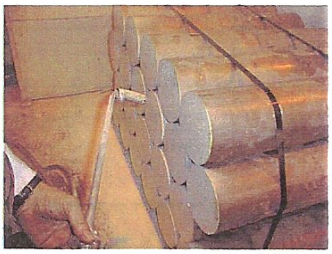


The use of organic based materials, particularly products containing wax, oil and grease create major safety issues: smoke emission, fire hazard and air pollution combine to contaminate the work environment, machines, and electrical components, etc.
Use of acetylene cracking technology pollutes the work environment and small sub micron carbon black particles may be absorbed in the lungs.

Products containing mineral or synthetic oils, greases, pastes, waxes, graphite and carbon black should be eliminated to optimize product quality and cost efficiency!

SOLUTIONS ADAPTABLE TO PRODUCTION REQUIREMENTS.

COLD SURFACE PROTECTION: KMD 97 ~ B-STOP



KMD 97 must be used for coating on only cold back billet face. KMD 97 is designed as a water based paint and may be brushed or spray. Optimal consumption is obtained with standard spray gun. KMD 97 must not be used on front billet face as it might build up on the die. KMD 97 is not recommended for die face start up coating.
B-STOP is designed as a start up coating for the die face. It is also used for die face protection during storage. Used as an aerosol, B-STOP is very convenient for application in machining or maintenance shops after repairing and surface cleaning operations of die.
B-STOP must not be used in areas where it might be exposed to temperatures over 50°C.

HOT SURFACE PROTECTION: GRA 51~ Condafond 195

GRA 51 is designed to be sprayed on hot surfaces and is effective to temperatures over 450°C. GRA 51 is particularly adapted for automatic application to the back surface of hot billets or the dummy block and is extremely efficient for solving the problem of adhesion to hot aluminum surfaces. GRA 51 is water based and safe. GRA 51 MUST NOT BE APPLIED BY BRUSHING and MUST BE SPRAYED. GRA 51 is compatible with airless, air/product mixing systems, and electrostatic systems.
Condafond 195 : this product contains a small amount of graphite and is to be used for mandrel lubrication or shaving tools where lower friction is required. Condafond 195 is water based and must be sprayed. BRUSHING is NOT RECOMMENDED.

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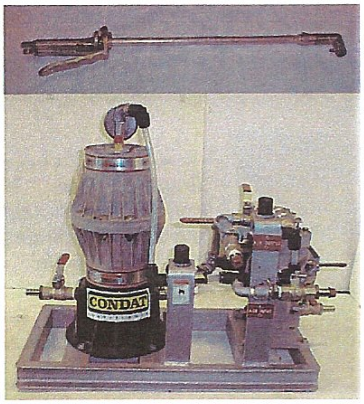
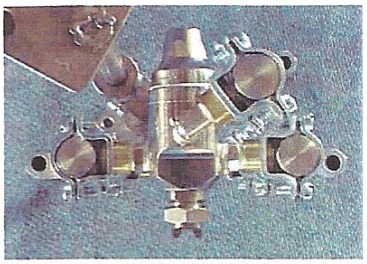
SUGGESTED APPLICATION METHODS.



Either manual or automated application may be used to obtain the best efficiency based upon the press design and layout of the production shop:

- Manual: a spray wand with a venturi spray system is a convenient method to provide good adhesion on a hot surface. Air pressure between 80 and 100 PSI is recommended.
- Automatic: Most presses can be equipped with automated systems either on existing reciprocating or rotating devices, or by replacing acetylene cracking devices. Special anti-blocking nozzles are recommended.



1/4 JAUCO Spraying system nozzle (air/product mix system)

The best results can be obtained by pressurizing the product with an air controlled pumping device as illustrated on the above left photograph.

DUMMY BLOCK PROTECTION: SPRAY the TOOLING or the ALUMINUM?

Dummy blocks and ram noses need optimal protection to prevent aluminum adhesion to the face and outside diameter. Depending upon the press design and equipment layout, it may be convenient to spray the product directly on the dummy block with an automatic system.
Otherwise, spraying the back of the billet may be the only solution.
It is difficult to get good adhesion on a hot aluminum surface; therefore, it is necessary to use the proper equipment to have good results.
Normally, the best results are obtained by using air/product-mixing nozzle with an anti-blocking system to prevent product from drying in the nozzle and blocking it.
Air pressure should be regulated between 80 and 120 PSI with product pressure between 10 and 30 PSI.

APPLICATION SELECTOR GUIDE

WHERE ?	WHICH PRODUCT?	HOW?	HOW OFTEN?	COMMENTS
Transfer tools (rollers Guides, etc.).	GRA 51	Wand.	When adhesion appears.	
Back billet (COLD).	KMD 97	Wand or standard Paint gun.	Every billet.	
Back Billet (HOT).	GRA 51	Anti-blocking nozzle.	Every billet.	
Log shear blade.	GRA 51	Wand.	When adhesion occurs.	
Dummy block and Ram nose.	GRA 51	Wand or Anti-blocking nozzle.	Every extrusion.	
Die ring face.	GRA 51	Wand.	Every 5 to 10 extrusions.	
Die ring ID.	GRA 51	Paint gun.	Every assembly.	Let dry before assembly
Container face.	GRA 51	Wand.	Every 5 to 10 extrusions.	
Die face (Cold).	B-STOP	Aerosol.	After every maintenance operation.	Clean well before applying
Die face (Hot).	GRA 51	Wand	For start up only.	Apply just before assembly
Shear blade.	GRA 51	Wand	Every 10 to 20 extrusions	Restrict product flow
Hot saw blades.	GRA 51	Mist spray system.	During sawing.	Replaces vegetable oil
Mandrels.	Condafond 195	Paint gun or wand.	Every extrusion.	

Never combine back billet coating with dummy block spray. Coating on surface is all that is necessary.
Never combine back billet coating or dummy block spray with an acetylene cracking system: carbon black application system must be switched off.