STAG 11

Water based release agent for Extrusion of metals and alloys

DESCRIPTION

Compound of innovative release agents, in aqueous solution, formulated for the treatment of dummy block and billet in Extrusion of metals and alloys. It has been especially studied for Aluminium Extrusion.

TECHNICAL DETAILS

Physical state:	liquid	*Density (20°C):*	appr.1.20 g/ml
Colour:	light to dark blue	*Flammability:*	non-flammable
Odour:	very mild	*Solubility:*	water
pH (pure):	approx. 9.0		

SPECIFICATIONS

TEST	METHOD	STANDARD LIMIT
Appearance	Visual (AO/1)	light to dark blue
pH (pure)	Potentiom. (PM/1)	8.0 - 9.5
Density (20°C)	Densim. (DE/2)	1.10 – 1.25 g/ml

CHARACTERISTICS

✓ Very high releasing power at high process temperature: the product forms a highly thermal resistant film on the treated surfaces.

✓ The Leidenfrost effect is greatly reduced, making possible the instantaneous deposition of a continuous film on hot surfaces with excellent adhesion.

✓ The films formed by STAG 11 is soluble in water and is thus, easily washed out by a jet of water, leaving the machine perfectly clean.

✓ STAG 11 is a non-flammable product. It has an increased protective and anticorrosive power.

HOW TO USE

DILUTION

It is advisable to dilute the product in water.
The suggested range of dilution ratios is from 1:1 (50%) to max 1:3 (25% product + 75% water).
It is possible either to pour the product into the water or add water to the product. Then stir or shake briefly to get immediately a homogeneous solution. In any case, the product dissolves in water spontaneously and quickly.

APPLICATION

General Indications

Spray the diluted product each shot, on the bottom surface of the billet or on the dummy block (or both the surfaces that will keep in contact). Spray for a time long enough to cover the whole surface with a homogeneous, thin layer of product. Normally a few seconds of spray are enough. For the application it is suggested to use systems able to atomize the product.

Starting trials

Apply the product manually by means of a simple sprinkler or better, by means of a manual pneumatic painting gun. During and after the spraying, check if the film is really deposited: very low or no dripping should take place, the product should not bounced away from the surface. A whitish film on the surface, quite homogeneous and complete, should be observed. The film becomes slowly yellowish or slightly brown in the following seconds after the application. If abundant dripping of the sprayed product takes place, or the surface remains naked or almost naked (no film), application parameters should be changed: in that case could be indicated to check the following points:
-apply on the billet instead of the dummy block (when possible),
-increase the pressure of sprayer or reduce the distance nozzle/surface,
-change the dilution ratio till a good filming capacity is reached.
Rarely happens that the product works for many shots and after that starts failing. In those cases, check if blocking of the nozzles has taken place, after many applications.

Standard application

With automatic devices (see our Automatic Spray System) provided of atomization air, it is suggested to prolong the air blowing 1 second more, after the liquid spraying, according to the following timeline:

1. Open atomization air
2. Open liquid spray
3. Close liquid spray
4. Close atomization air

This way encrustations in the nozzle and dripping will be prevented.
In case of clogging of the nozzle or encrustation on the machine parts, washing with water (a jet of water or a wet sponge) can dissolve the residues.

STORAGE

☼ Avoid long stockage under the sun.

Shelf life: not less than 18 months, in original closed containers.

PACKAGING

Pail: 25 Kg net weight
Drum: 220 Kg net weight
IBC: 1100 Kg net weight

FURTHER INFORMAT.

For information regarding safety, transport and disposal refer to the Safety Data Sheet of the product.

The data in this technical information sheet correspond to the properties of the product at the time of the sale and with regard to the specified application. It is on the responsibility of the user to make sure that the product is suitable for the use to which he intends to apply it.