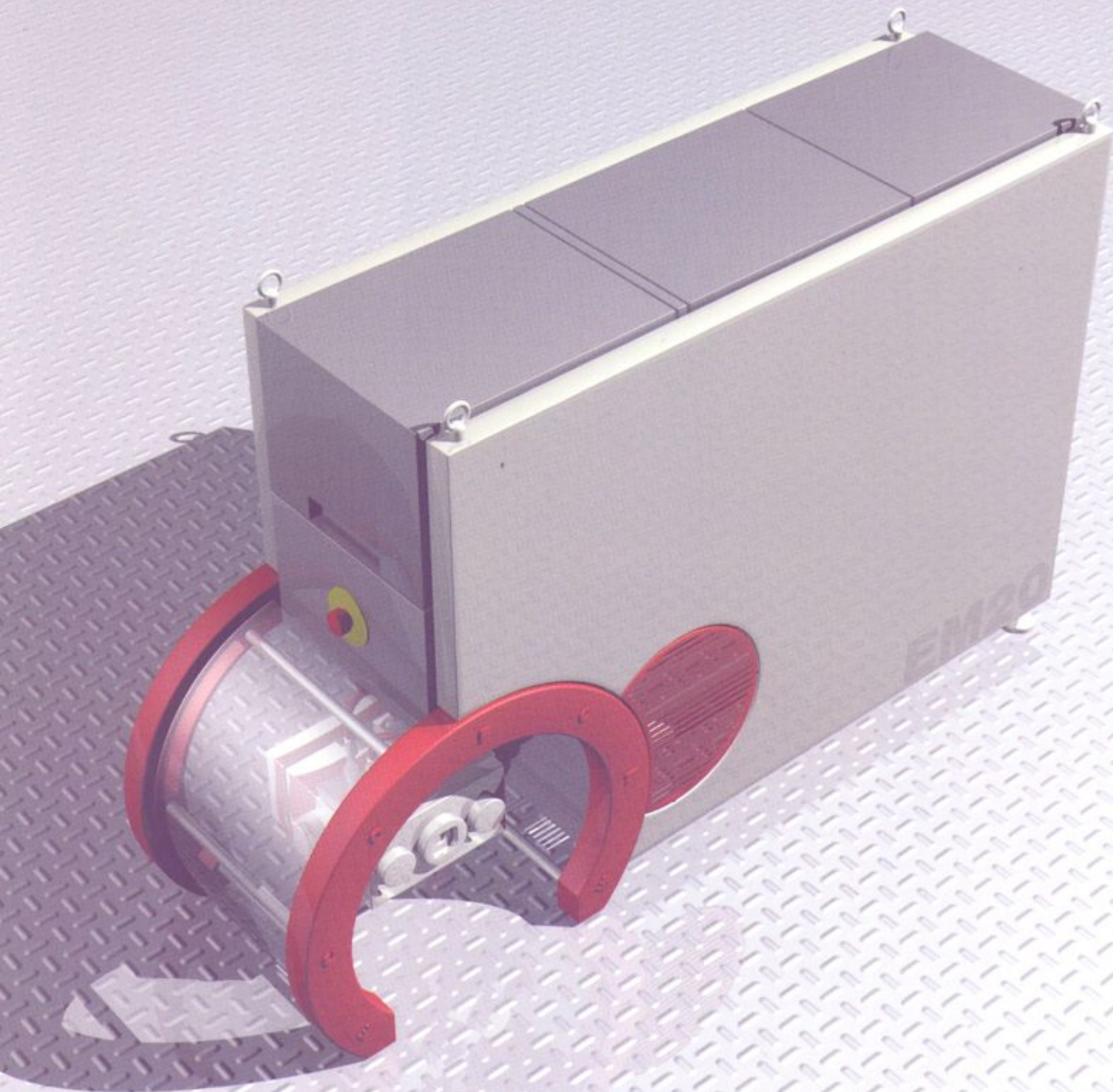
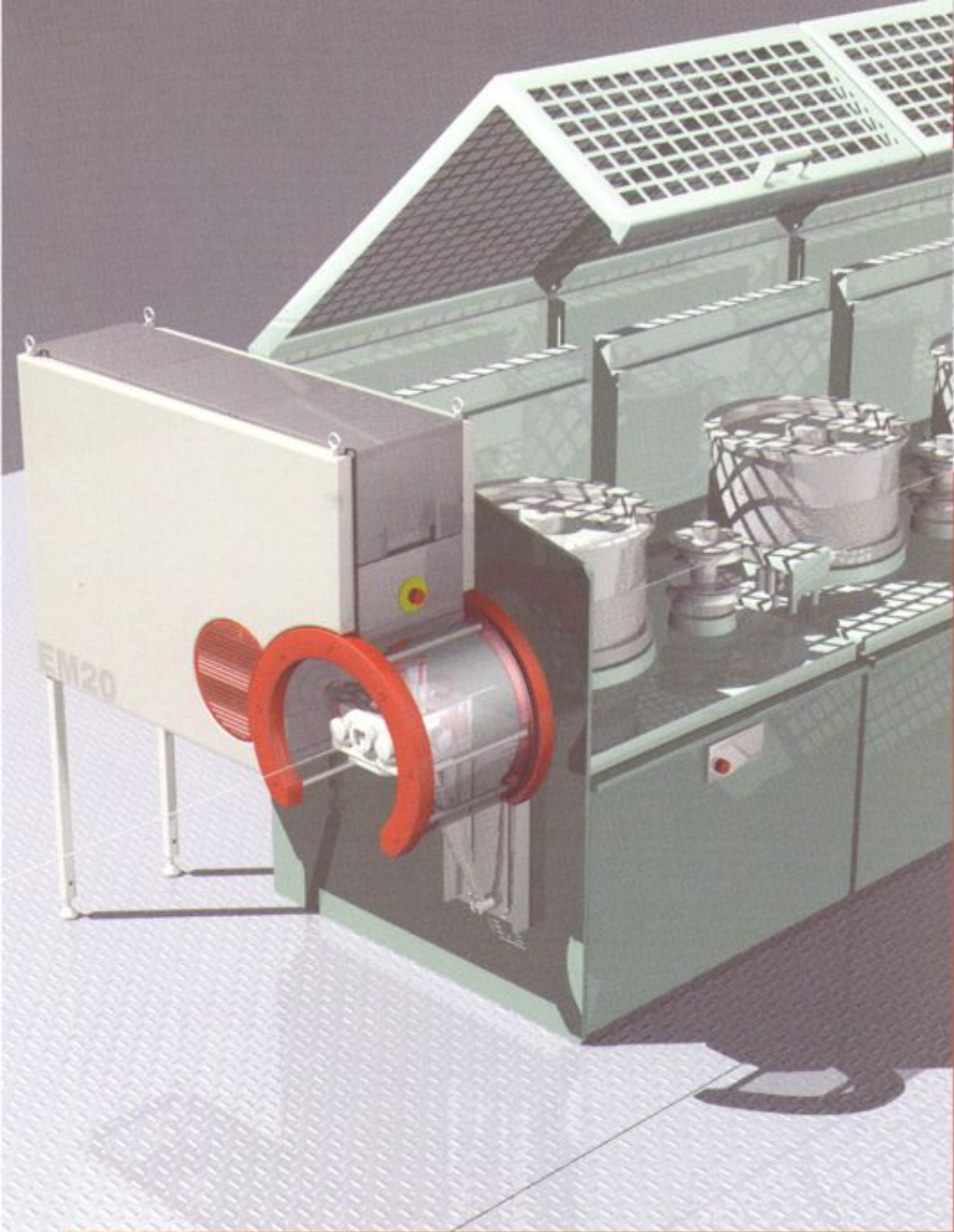


# EM20

## PRESSURE COATING SYSTEM





## **THE NEW PRESSURE COATING TECHNOLOGY**

Continuous coating of metallic rod or wire with a solid lubricant film as a preparation for subsequent wire drawing.

Intermediate re-coating during a multi hole drawing process for demanding applications involving difficult materials, large reductions, high speeds etc.

The elimination of wet applied carrier coatings for many applications.

Lower coefficient of friction between wire and die.

Greatly reduced lubricant consumption and consequently reduced waste management costs.

Reduction in die wear.

Lower energy consumption for similar drafting schedules.

Higher speed and increased reduction between heat treatment steps.

Improved internal stress distribution resulting in better mechanical properties.

Optimisation of residual lubricant coating weight.

Smaller diameter tolerances achievable.

Less dust generation eliminating the need for dust extraction in many cases.

## **WIRE DRAWING TECHNOLOGY BREAKTHROUGH**

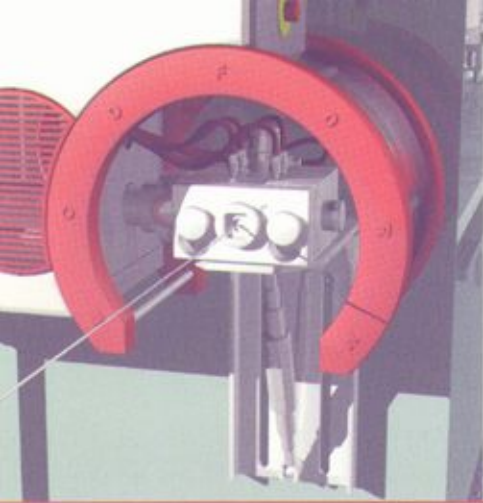
After long and thorough testing we can offer this breakthrough technology to the wire industry.

The EM 20 rod and wire coating system is designed to be fitted easily to either new or existing wire drawing machines.

The compact design means that it can be moved from machine to machine when required.

A further advantage of the compact design is that it easily fits between a mechanical descaler and a drawing machine.

# **EM20**



# THE PRESSURE COATING SYSTEM

In comparison with the lubricant film produced by conventional powdered lubricants the coating produced by the EM 20 is more adherent, completely covers the surface and has a consistent coating thickness that can be altered to suit requirements.

This leads to a higher and more reliable pressure in the deformation zone of the die with consequently better separation of wire and die.

This means: lower friction; less die wear; better internal stress distribution; lower power consumption.

The EM 20 minimises the costs of producing a reliable and effective lubricant film on wire. At the same time the equipment can optimise the lubrication film for each application.

The ability to control the residual lubricant whilst achieving the lubrication required for efficient production is a plus for both wire producer and customer.

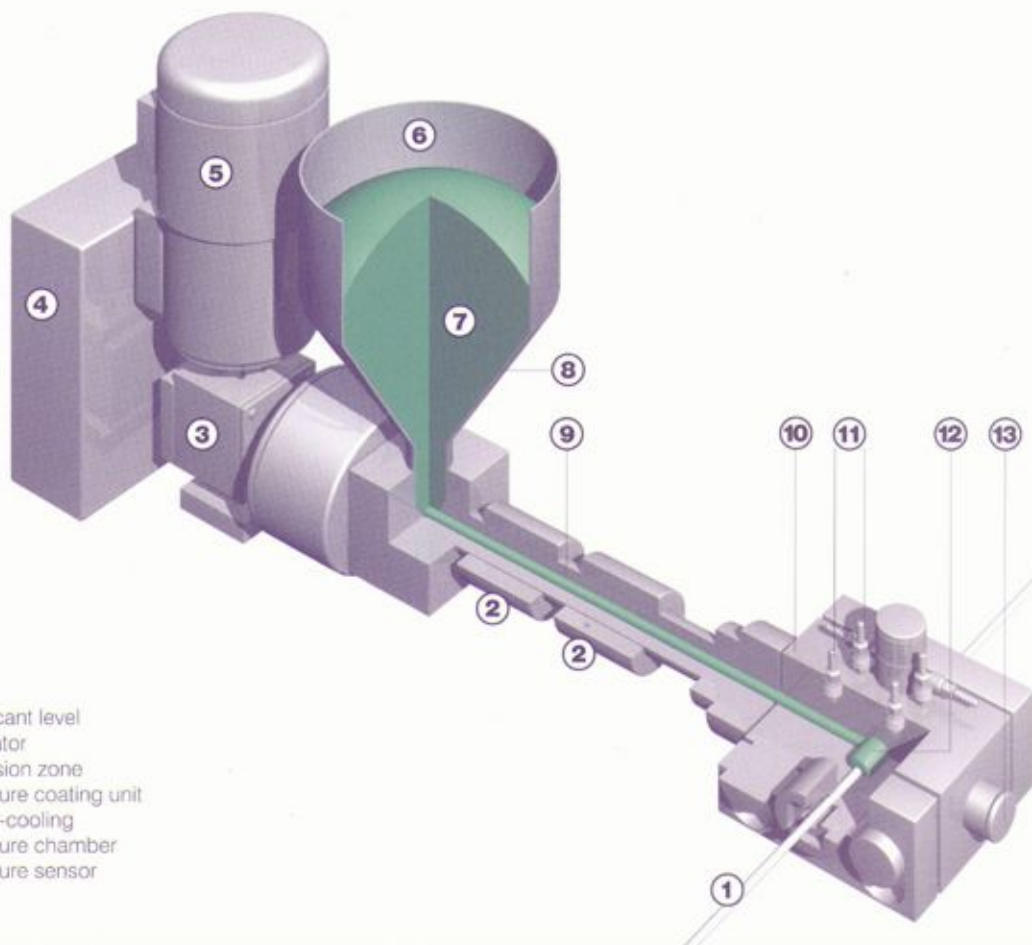
The combination of pressure application and the heat generated during cold work enables the new method to achieve continuous, controlled and reproducible lubricant coatings. The new system is based

on the properties of the lubricants themselves.

Wire drawing lubricants are based on the alkali salts of long chain fatty acids. These materials are almost incompressible and in the context of the pressure coating system can be regarded as fluids.

The pressure coating system produces a film that is so thick, strong and stable that the lubrication film is not only suitable for the first draft but depending on the application will achieve up to 6 further drafts without failure.

For further information please visit our web-site: [www.ecoform.de](http://www.ecoform.de)



**EM 20  
Pressure Coating System -  
Layout Diagram**

- |                      |                               |
|----------------------|-------------------------------|
| 01. Wire Inlet       | 08. Lubricant level indicator |
| 02. Heating          | 09. Extrusion zone            |
| 03. Gearbox          | 10. Pressure coating unit     |
| 04. Control system   | 11. Water-cooling             |
| 05. Motor            | 12. Pressure chamber          |
| 06. Lubricant holder | 13. Pressure sensor           |
| 07. Lubricant        |                               |