Your partner in

EXTRUSION
COATING

Laboratory Coextrusion Coating Line
50 Years Experience in Technical Service Extrusion Coating

INEOS Olefins & Polymers Europe
Longterm Experience

To deliver the right solutions for you, INEOS has a world class laboratory extrusion coating line and a dedicated team of technical experts with a wealth of experience and knowledge. This team is committed to supporting and working alongside you to make best use of INEOS products in maximising the performance of your extrusion plants as well as resolving any day to day issues that you may encounter.

Our extrusion coating line is one of the most advanced laboratory based systems in Europe. With a line speed of 1111m/min it is capable of replicating full-scale production and provides a maximum 5-layer co-extrusion facility. With our portable IR-temperature measurement device, which measures the melt temperature and distribution over the die width of the melt curtain, we can show you how the melt temperature is affected by varying the parameters on our machinery. In addition, our extrusion coating line enables investigations to be carried out on the application of polymers and different polymer coex-structures as well as various substrates.

As you would expect, our close contact with the leading machinery suppliers and suppliers of ancillary equipment (Corona, Flame or Ozone treatment) ensures we are up to date with the latest technologies which we can make available to you, demonstrating our continuous drive and commitment to providing a first class service to our customers.

Working in partnership with INEOS and utilising our unrivaled experience and technology not only gives you the opportunity to develop new and innovative products, it also enables you to investigate and find solutions to any of your production line issues.

We look forward to working with you.
Technical Drawing of the INEOS Coextrusion Coating Line

**Turret winder**
- centre winding
- contact or gap winding
- automatic roll change and splice
- chucks with core diameter 70 mm (3”), 150 mm (6”)
- max. speed 1111 m/min

**Treatments**
- flame treatment for paper and board
- corona pre treatment (40kW on 960mm operating width) with 22 ceramic elecrodies with patented elastic mounting system and with a watercooled driven ceramic roll
- corona pre treatment with ceramic roll for film and foil from sandwich unwinder
- ozone treatment for the melt

**Hydraulic Laminator**
- working width 550 - 850 mm
- max. speed 1111 m/min
- cooling rolls gloss and matt diameter 900 mm
- various pressure rolls with different diameters (110 - 350 mm) and hardness (80° - 95° Shore A)
- line pressure max. 200 kg/cm linear
- teflon belt
Extruder A:
3.5” x 32 D
/ output max. 330 kg/h LDPE
/ drive 110 kW
/ heaters 112 kW

Extruder B:
2.5” x 30 D
/ output max. 150 kg/h LDPE
/ drive 60 kW
/ heaters 62.5 kW

Extruder C:
2” x 24 D
/ output max. 80 kg/h LDPE
/ drive 30 kW
/ heaters 33.5 kW

Extruder D:
2” x 24 D
/ output max. 80 kg/h LDPE
/ drive 30 kW
/ heaters 33.5 kW

gravimetric control for all extruders

Feed block, die and measurements

310A IV coat hanger
die with automatic lip
control and thermo-
couple feedback and
automatic die gap
variations
external deckling
system with a work-
ing width of 550 -
1150mm mm

Extruder A:
3.5” x 32 D
/ output max.
330 kg/h LDPE
/ drive 110 kW
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Extruder B:
2.5” x 30 D
/ output max.
150 kg/h LDPE
/ drive 60 kW
/ heaters 62.5 kW

Extruder C:
2” x 24 D
/ output max.
80 kg/h LDPE
/ drive 30 kW
/ heaters 33.5 kW

Extruder D:
2” x 24 D
/ output max.
80 kg/h LDPE
/ drive 30 kW
/ heaters 33.5 kW

gravimetric control for
all extruders

Unwinders

turret unwinder
max. speed
1111 m/min
max. roll diameter
1250 mm

chucks with core
diameter 70 mm (3”),
150 mm (6”) flying
splice

sandwich and auxiliary
unwinder

max. speed 600 m/min
max. roll diameter
600 mm

airshaft with internal
core diameter 70 mm
(3”), 150 mm (6”)

Thermo

S C I E N T I F I C

thickness measurement

/ 2 B-sensors for
thickness differen-
tial measurement
same spot

/ FSIR-sensor
in line infrared mea-
surement of the melt
temperature
Feed Block Inserts

I
Extruder A: 3,5"
A : 100%

II
Extruder B: 2,5"
A : 59%
B : 27%
C : 14%

III
Extruder C: 2"
A : 63%
C : 9%
B : 28%

IV
Extruder D: 2"
A : 60%
D : 10%
B : 20%
C : 10%

V
Extruder A: 3,5"
A : 62%
C : 5%
D : 12%
B : 16%

VI
Extruder B: 2,5"
A : 65%
B : 35%

VII
Extruder C: 2"
A : 65%
B : 35%

VIII
Extruder D: 2"
B : 100%

IX
Extruder A: 3,5"
A : 33%
B : 34%
A : 33%
Get in Touch

The extrusion coating line is available for trials for different co-extrusion coating structures, technologies, new polymers and for training sessions.

For further information please contact us at:

Extrusion Coating Technical Service

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About us

INEOS is one of the world’s largest chemical companies, founded in 1998. INEOS Olefins & Polymers Europe is a leading producer of olefins and polyolefins.

**INEOS Olefins & Polymers Europe** offers a full range of high value polyolefins solutions for market applications such as food and industrial packaging, pipe and automotive through dedicated sales, and technical service teams.

INEOS is a safe and environmentally responsible company. We are engaged in developing our sustainable agenda to improve our operations and to implement sustainable solutions for our customers. This includes products that offer lightweighting, energy efficiency, durability (extended lifetime) or conservation of resources. We care.

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