

SÜDPACK

**GLASS-FIBRE UV-CIPP LINERS FOR NO-DIG PIPE RENOVATION AND THE
IMPORTANCE OF THE INNER TUBULAR FILM FOR THE INSTALLATION**

A joint presentation from RELINEEUROPE & SÜDPACK

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Introduction

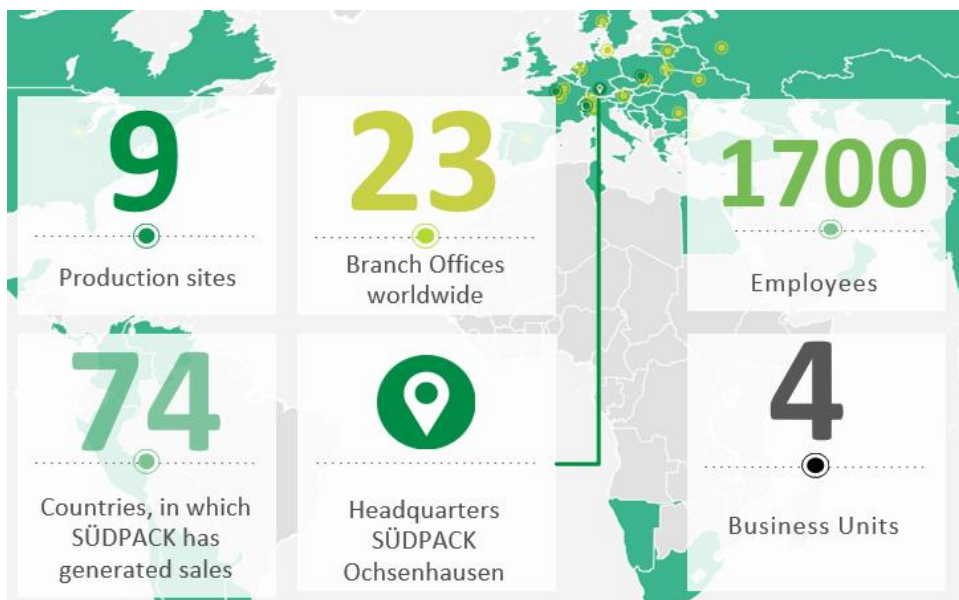
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- Graduation: Bachelor of Engineering
- Almost 20 years experience in the film industry
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About SÜDPACK Verpackungen GmbH & Co. KG

- We are a leading producer of high-performance films
- Portfolio includes films for food, medical & technical applications
- We are family owned since inception in 1964



SÜDPACK Ochsenhausen



SÜDPACK Erolzheim



SÜDPACK Schwendi



SÜDPACK Bioggio



SÜDPACK Kłobuck (PL)



SÜDPACK Oak Creek (USA)



SÜDPACK Gacé (FR)



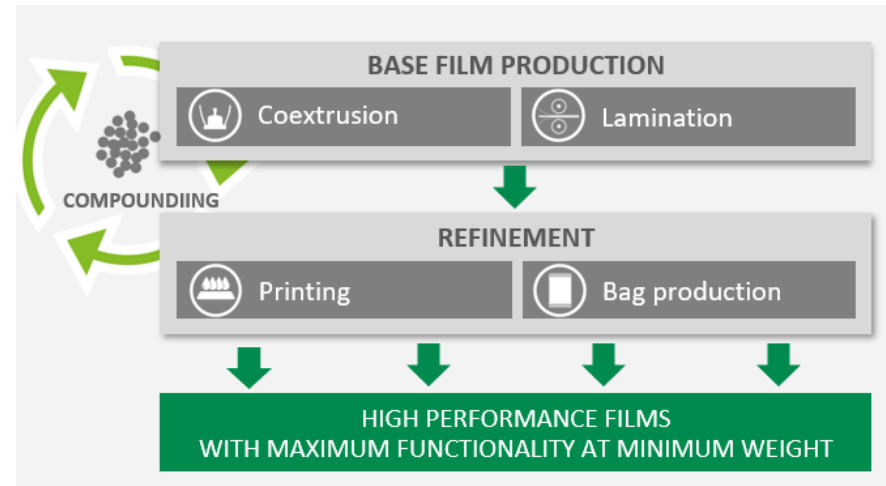
Kamakshi SÜDPACK Ltd. (IND)



SÜDPACK Grootegast (NL)

About SÜDPACK Verpackungen GmbH & Co. KG

- Our core technologies comprise compounding, extrusion, lamination, printing, slitting & bag production
- These technologies will be supplemented by recycling capabilities (mechanical & chemical)



BASE FILM PRODUCTION



Blown film extrusion



Cast film extrusion



Lamination

CONVERSION



Printing



Bag production

COMPOUNDING



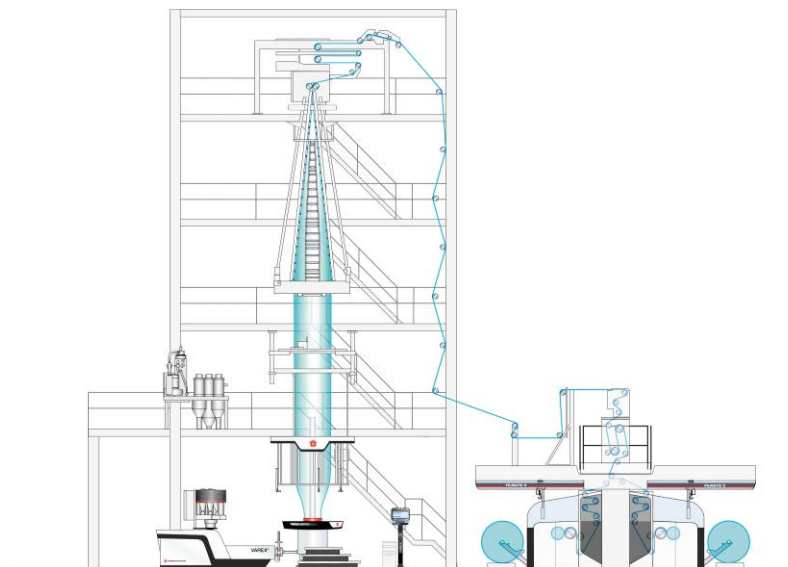
Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – from granulates to film

Raw materials:

Granulates like e.g.:

PE, PP, PA, EVOH, PLA



Tubular films

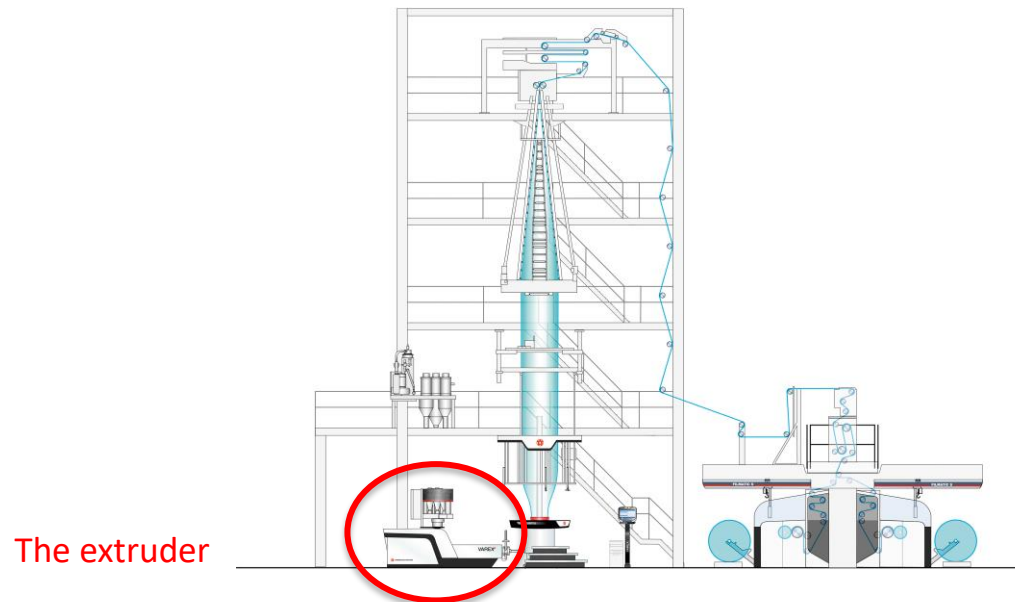
based on multilayer
structures

-> up to 11 layers



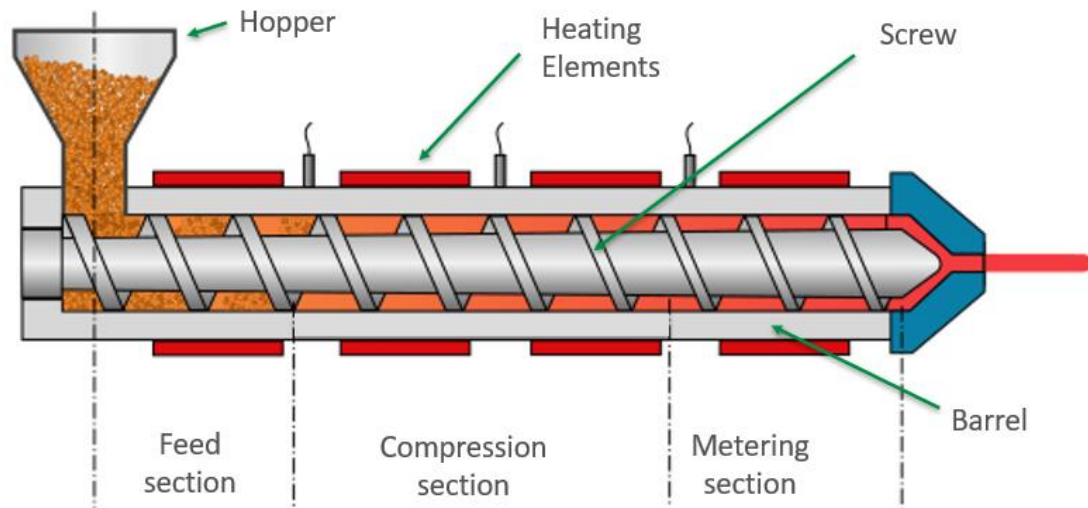
Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – extrusion process



Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – the extruder

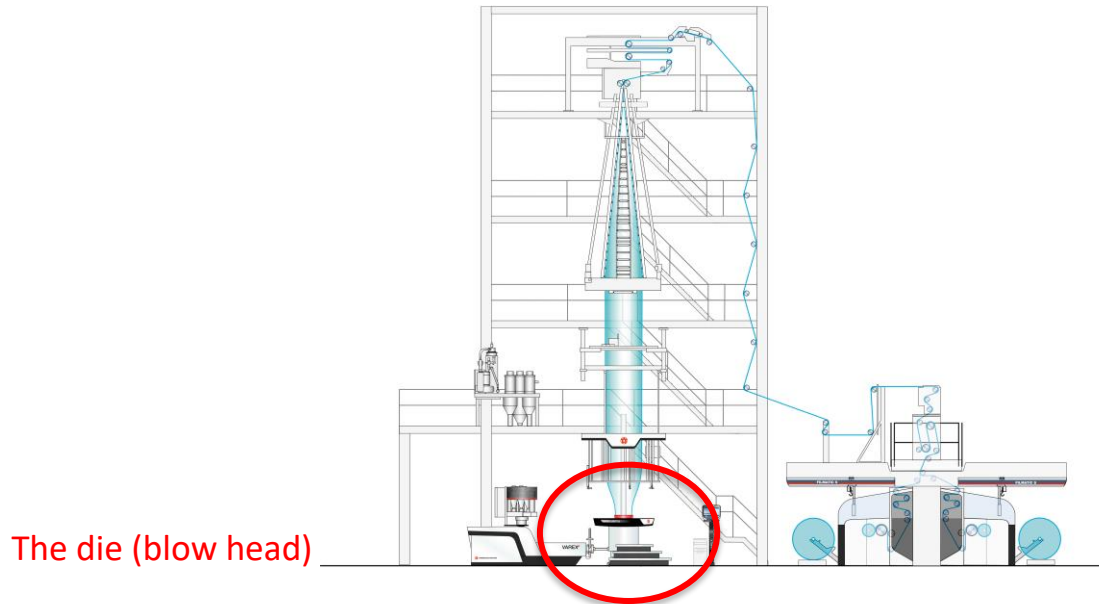


The extruder

- Main function: melting & homogenizing the granulates
- Depending on throughput and the type of polymer requires a different screw design
- One extruder for each layer in the total film structure

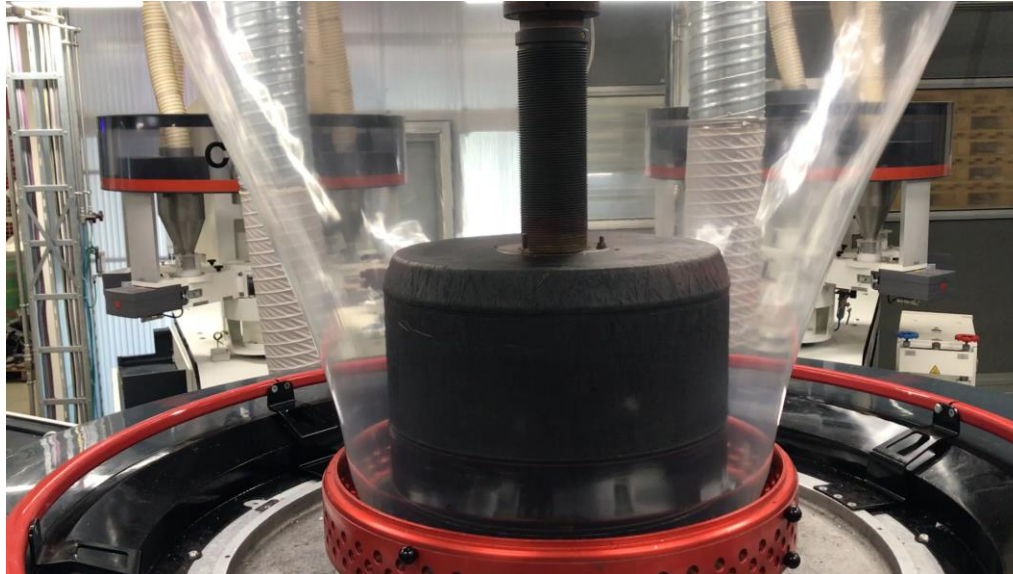
Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – film forming



Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – the die

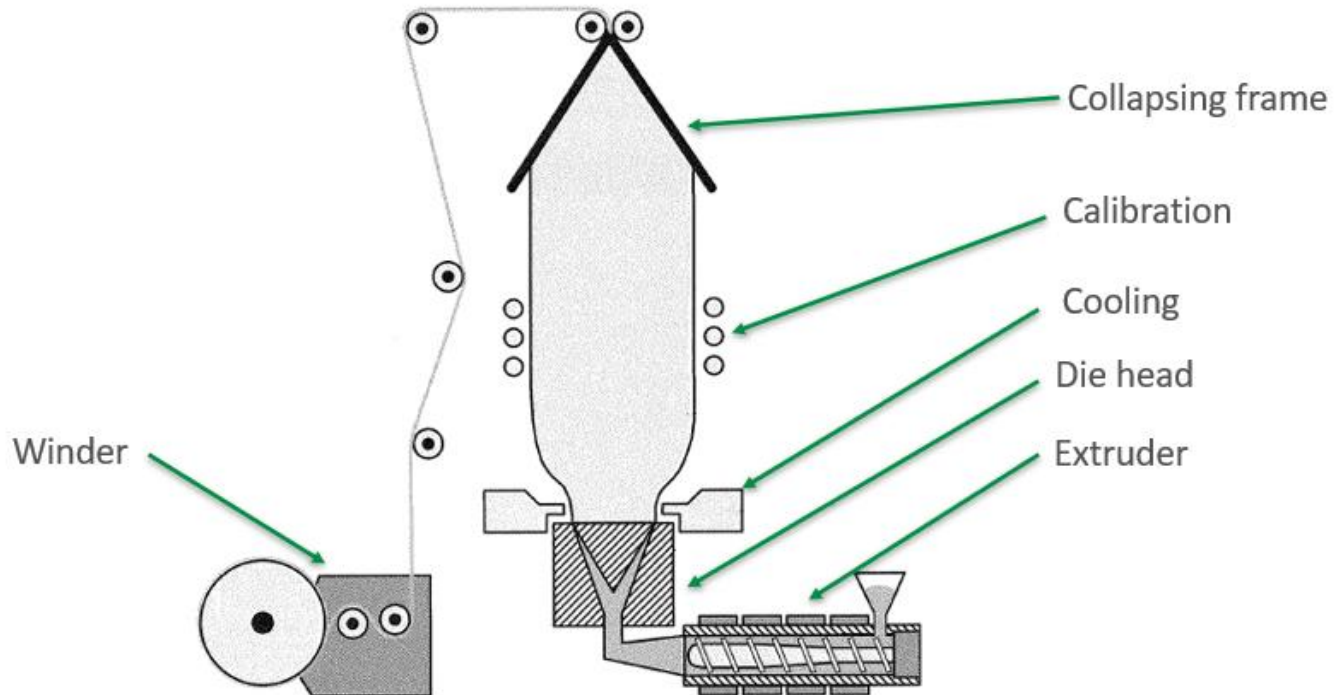


The die (blow head)

- Main function: Forming the film and cooling down the melt
- Distribution of the single layers & ensuring an excellent thickness profile over the circumference of the tube

Inner tubular film for pipe renovation application

Production with blownfilm extrusion technology – from film forming to winding



Inner tubular film for pipe renovation application

Portfolio inner tubular films – overview & main characteristics

Main characteristics

- Extremely durable and sturdy
- High chemical resistance and barrier function due to direct contact with epoxy resins
- Excellent consistent product quality without any deviations which may lead to weak points

Product range

- Standard thicknesses: 120 μ m // 150 μ m // 170 μ m
- Huge range of width depending on the pipe & liner dimensions
- Main components are polyamide & polyethylene



Thank you very much for your attention!

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