



WE KNOW BLACK.

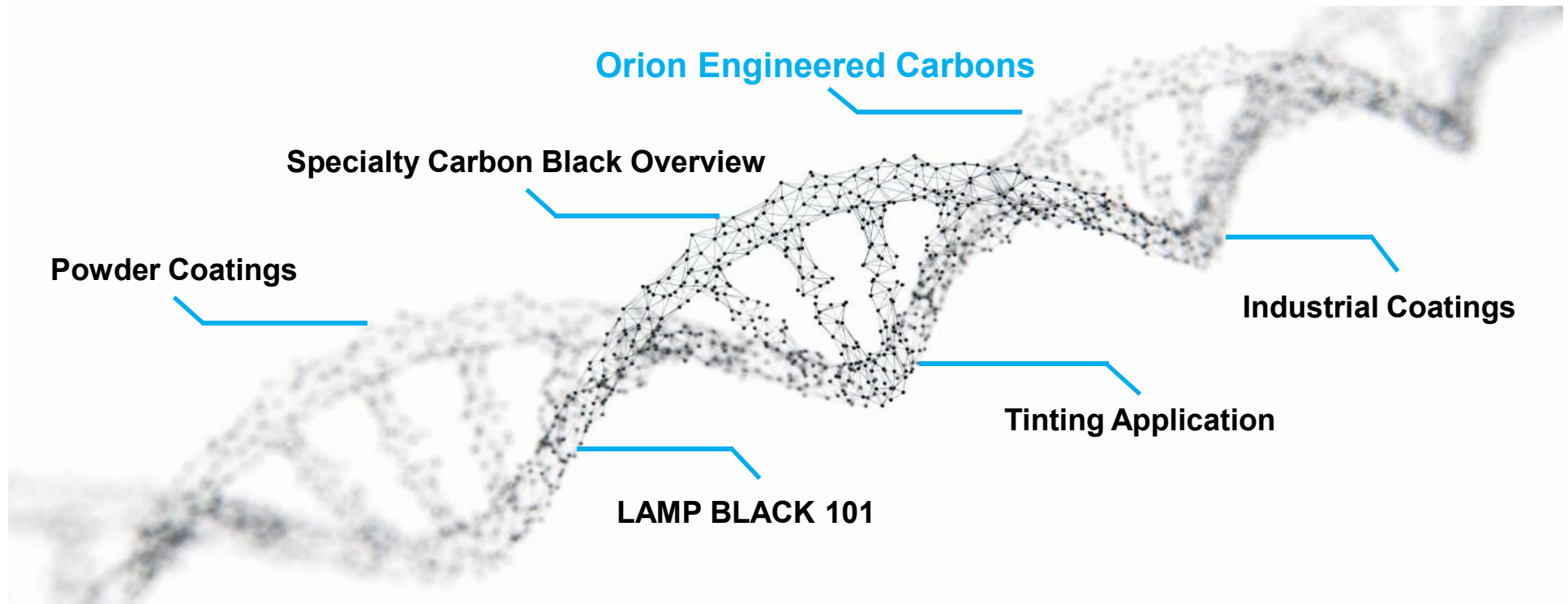
orion ENGINEERED
CARBONS

WE KNOW BLACK.

**Specialty Carbon Blacks for
different coating applications**

Silvia Witt
Technical Market Manager Coating Systems

Agenda



History



2011

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2007

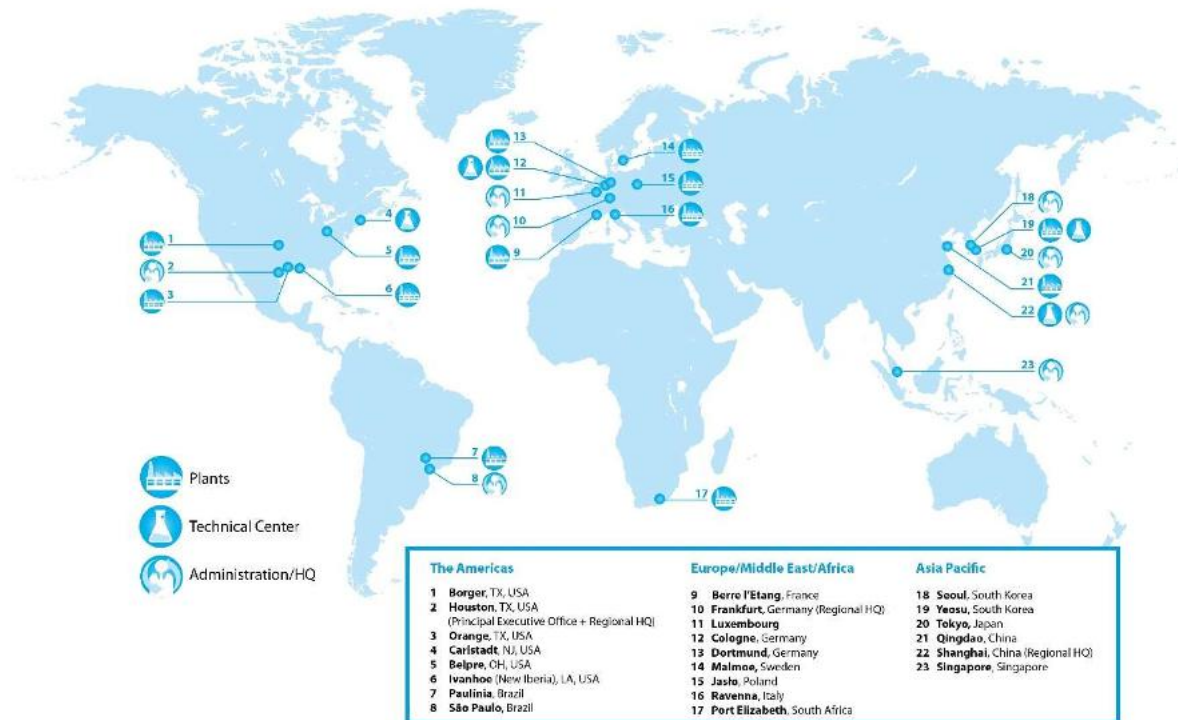
EVONIK
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2002

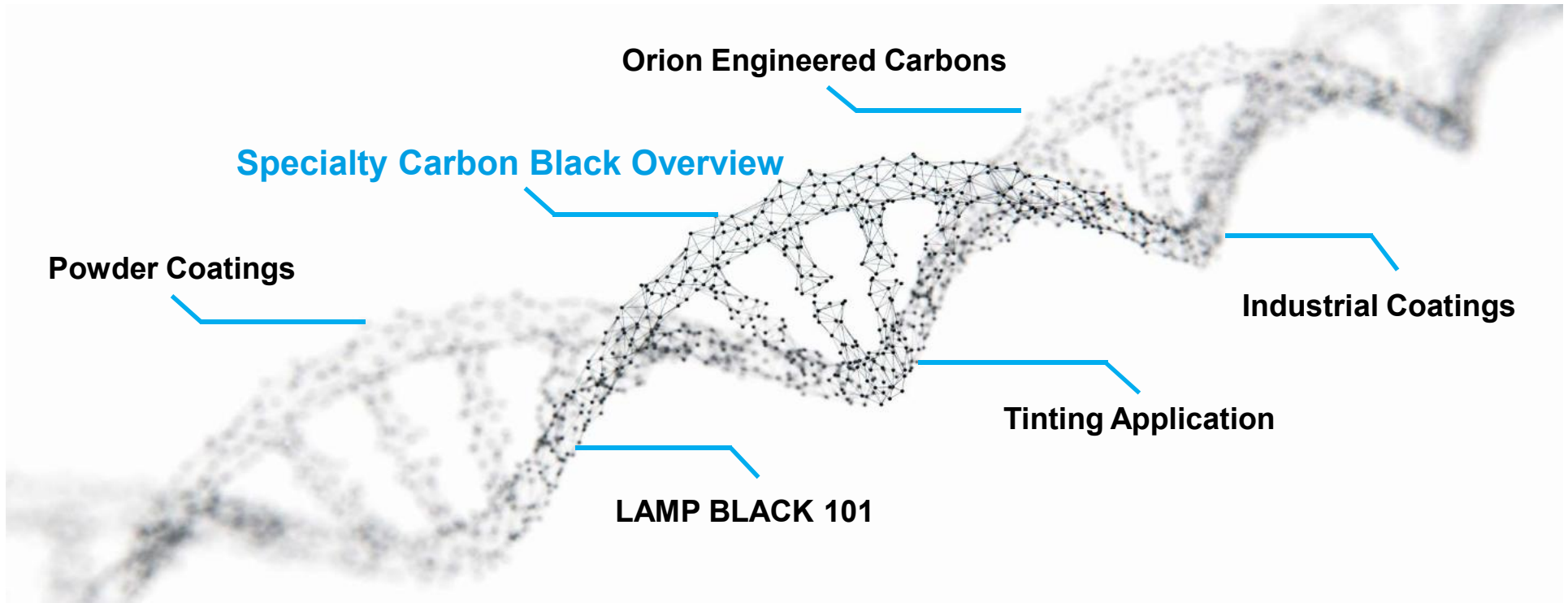
degussa.
creating essentials

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OEC global production and applied technology network



Agenda



Specialty Carbon Black

AROSPERSER[®]

COLOUR BLACK

HIBLACK[®]

LAMP BLACK

NEROX[®]

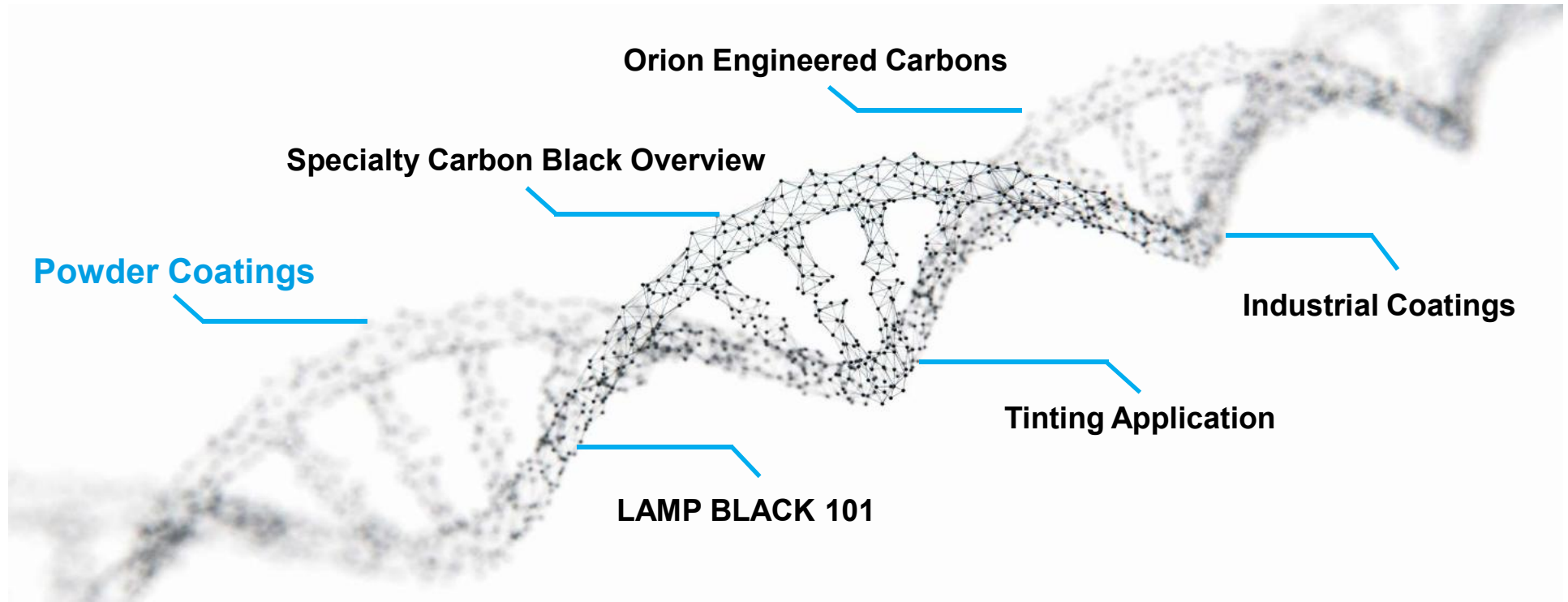
PANTHER[®]

PRINTEX[®]

SPECIAL BLACK

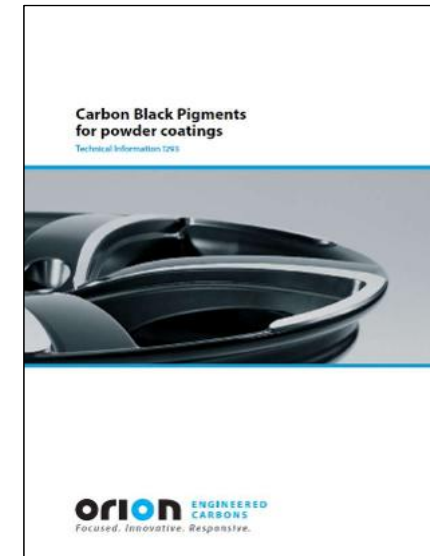
- Full range from tinting blacks to high jetness
- For water- and solvent-borne systems
- After-treated and non-after-treated products
- For powder and UV-coatings
- Excellent weather stability
- Single Manufacturer of Furnace, Gas, Lamp, Thermal and Acetylene Black Technology

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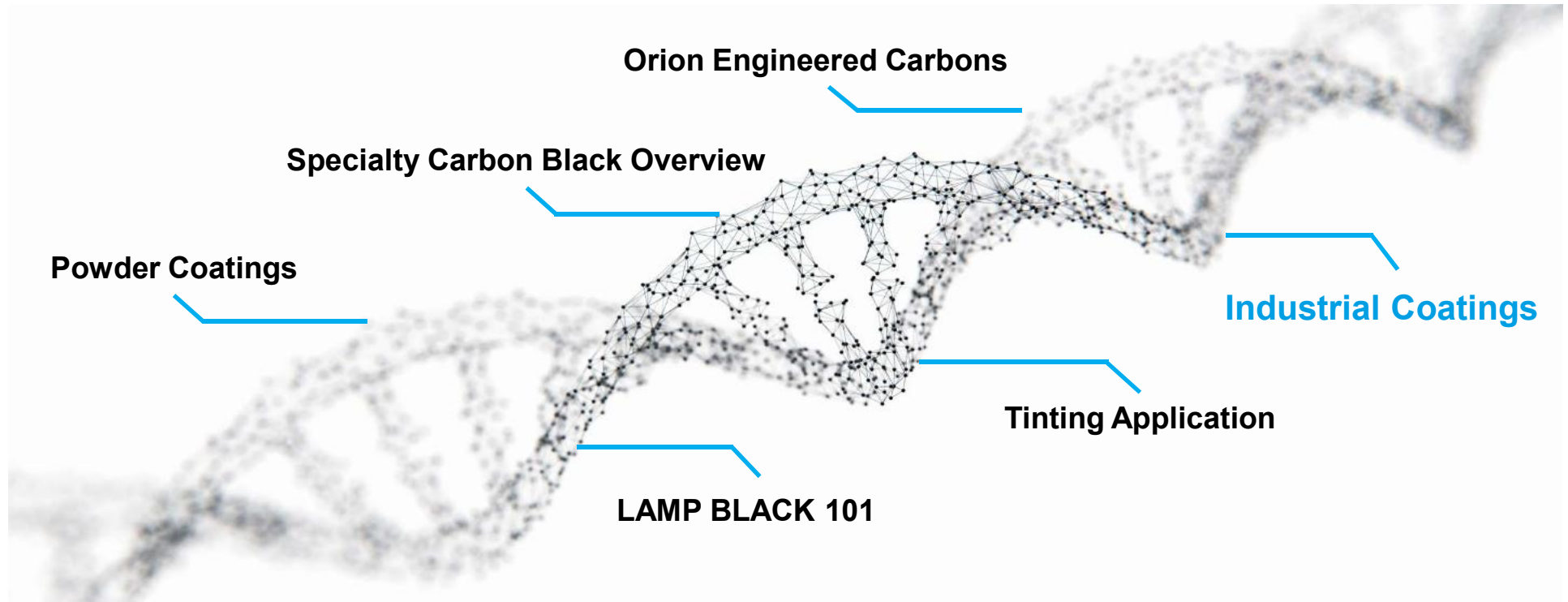


Specialty Carbon Blacks for Powder Coatings

- Most decisive factor: particle size
 - the smaller, the higher the jetness and tinting strength
- After-treatment typically does not provide a benefit in coloristic performance
 - non-after-treated grades give better cost / performance ratio
- After-treatment might improve flow behavior and processability
- To avoid dust and separation of carbon black from other ingredients during feeding the extruder, normally beaded carbon blacks are preferred. But carbon black powder can be used as well, like practice for most pigments.



Agenda



Specialty Carbon Blacks mainly used in Industrial Coatings

Mass tone



SPECIAL BLACK 4

SPECIAL BLACK 40

PRINTEX® U, PRINTEX® V

SPECIAL BLACK 6

COLOUR BLACK FW 1

COLOUR BLACK FW 200

COLOUR BLACK FW 255

COLOUR BLACK FW 310



Tinting



PRINTEX® G


SPECIAL BLACK 100

LAMP BLACK 101

especially used
in Teltronics


Available Technical Information

Specialty Carbon Blacks for Industrial Coatings
Technical Information 1458



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**SPECIAL BLACK 40 -
A new Specialty Carbon Black for solvent-
and water-borne Industrial Coatings**
Technical Information 1475



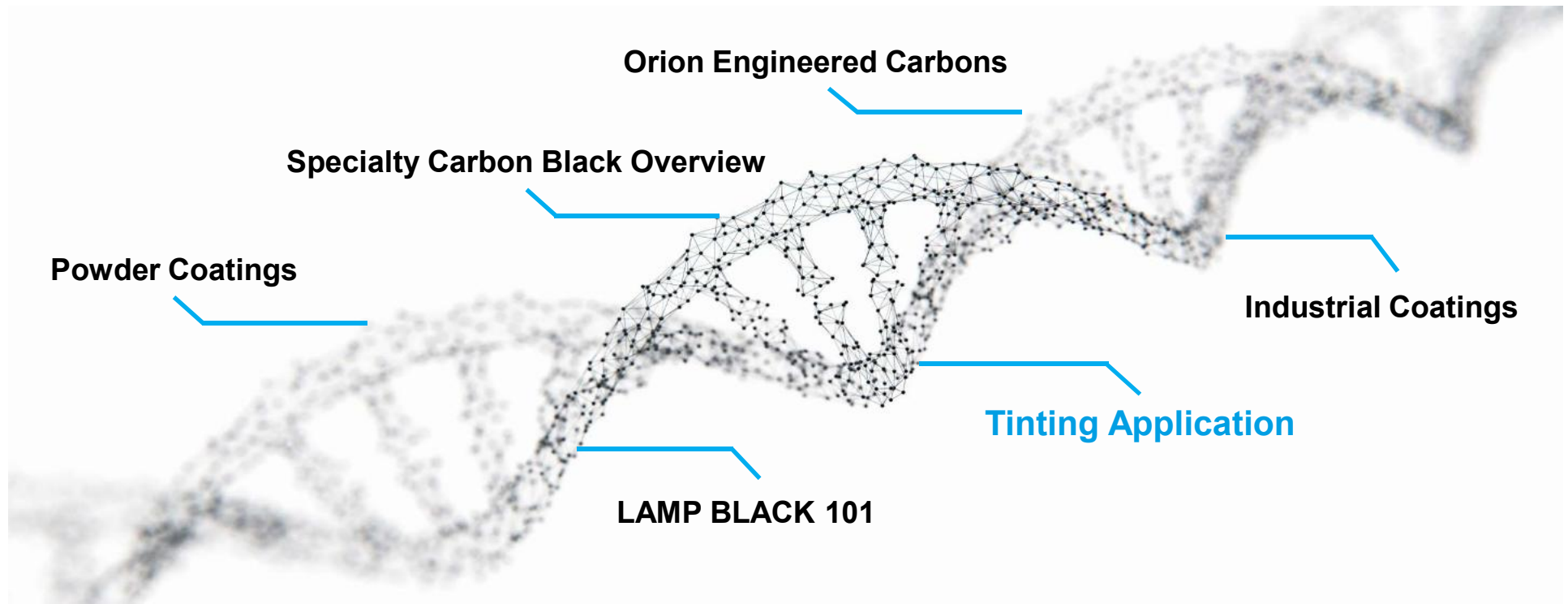
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Specialty Carbon Blacks for Tinting Applications
Technical Information 1459

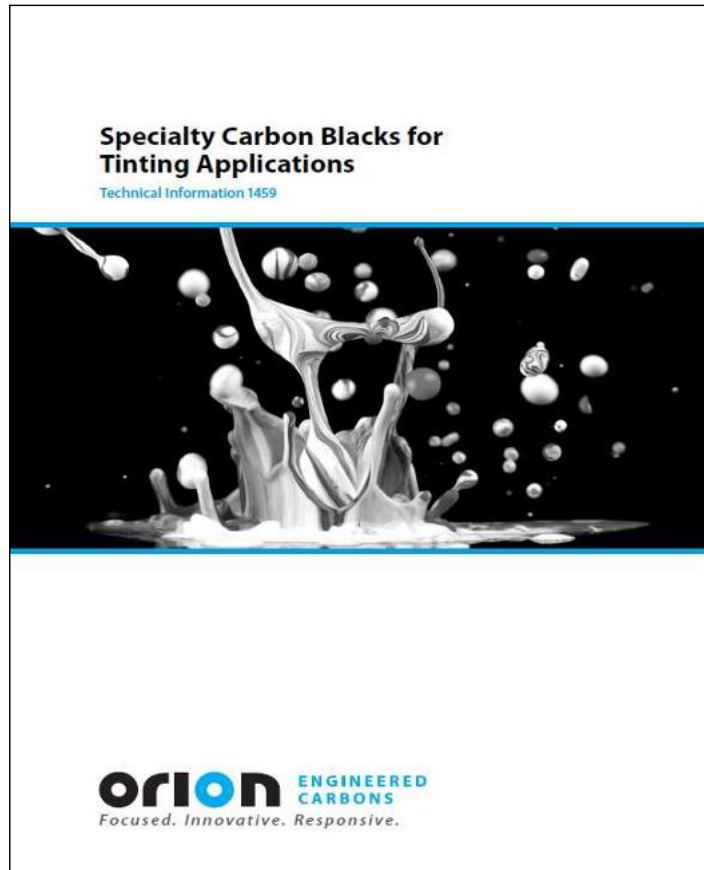


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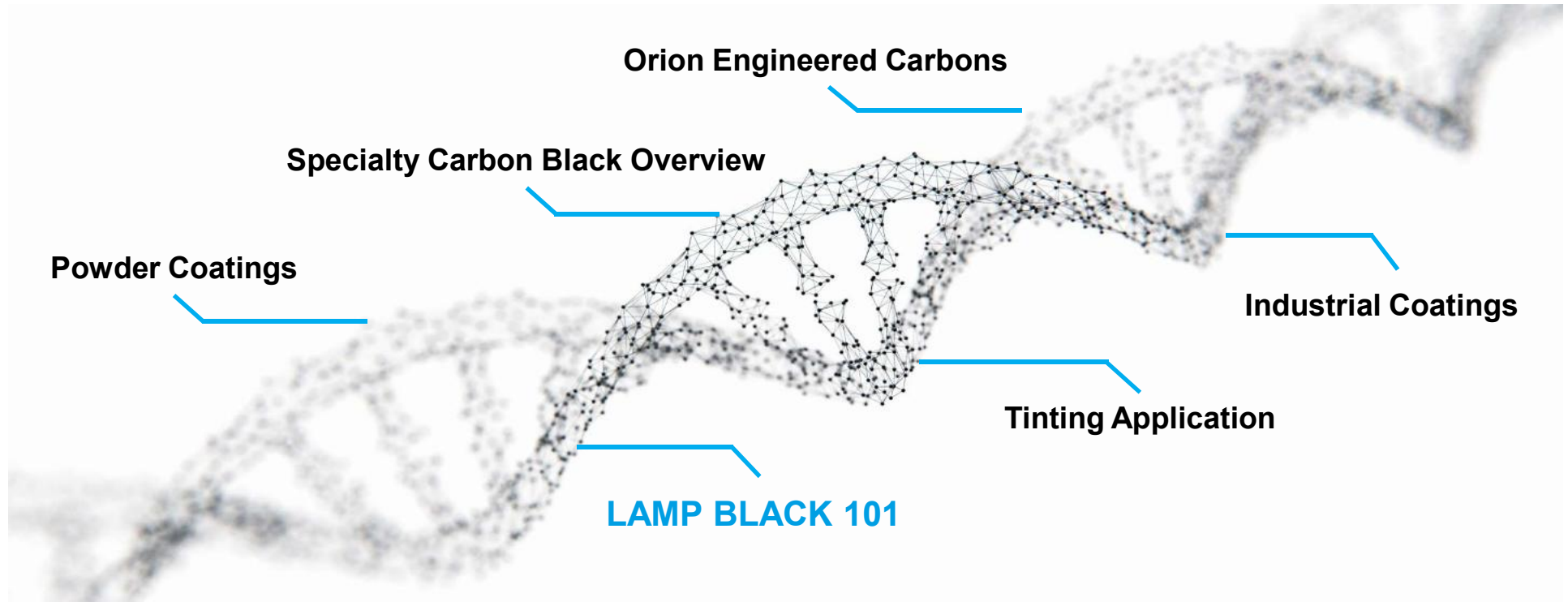
Agenda



Specialty Carbon Blacks for tinting applications

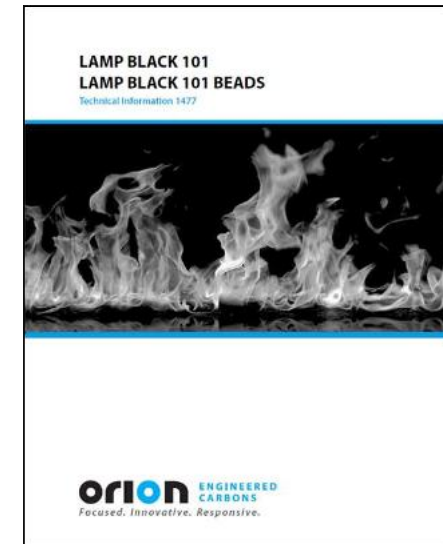


Agenda



LAMP BLACK 101 as an alternative to iron oxide black

- Coarse primary particle size, broad primary particle size distribution and high structure
 - allow an easier dispersibility in coatings compared to finer Specialty Carbon Blacks
- Mainly used for tinting in liquid or powder coatings
- Typically provides a bluish undertone in grey coatings
- Low tinting strength results in relatively minor metering errors
- In mass tones low jetness with typically brownish undertone
- Offers excellent light fastness, chemical resistance and thermal conductivity



**Thank you very much for your
attention.**

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