

Vascade® Fibers

Submarine Applications

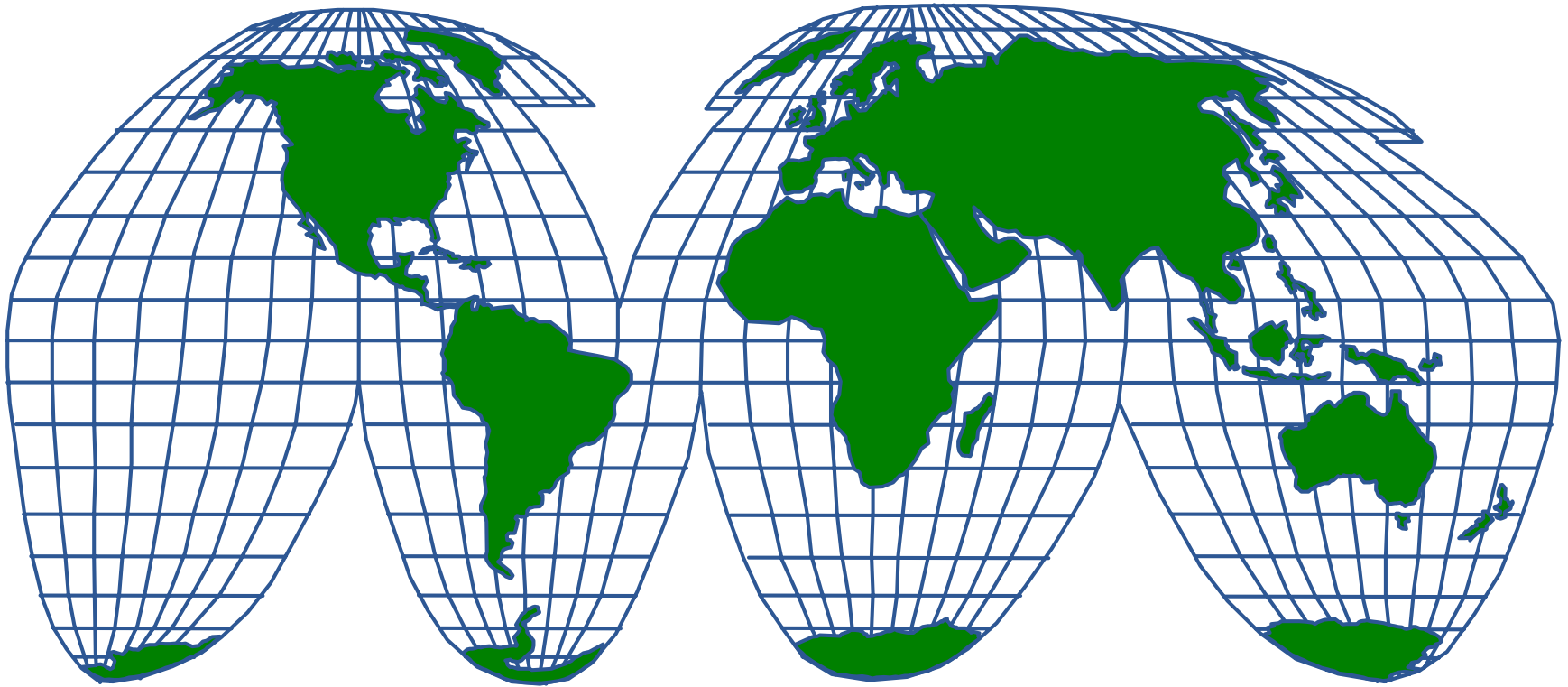


CORNING

Discovering Beyond Imagination

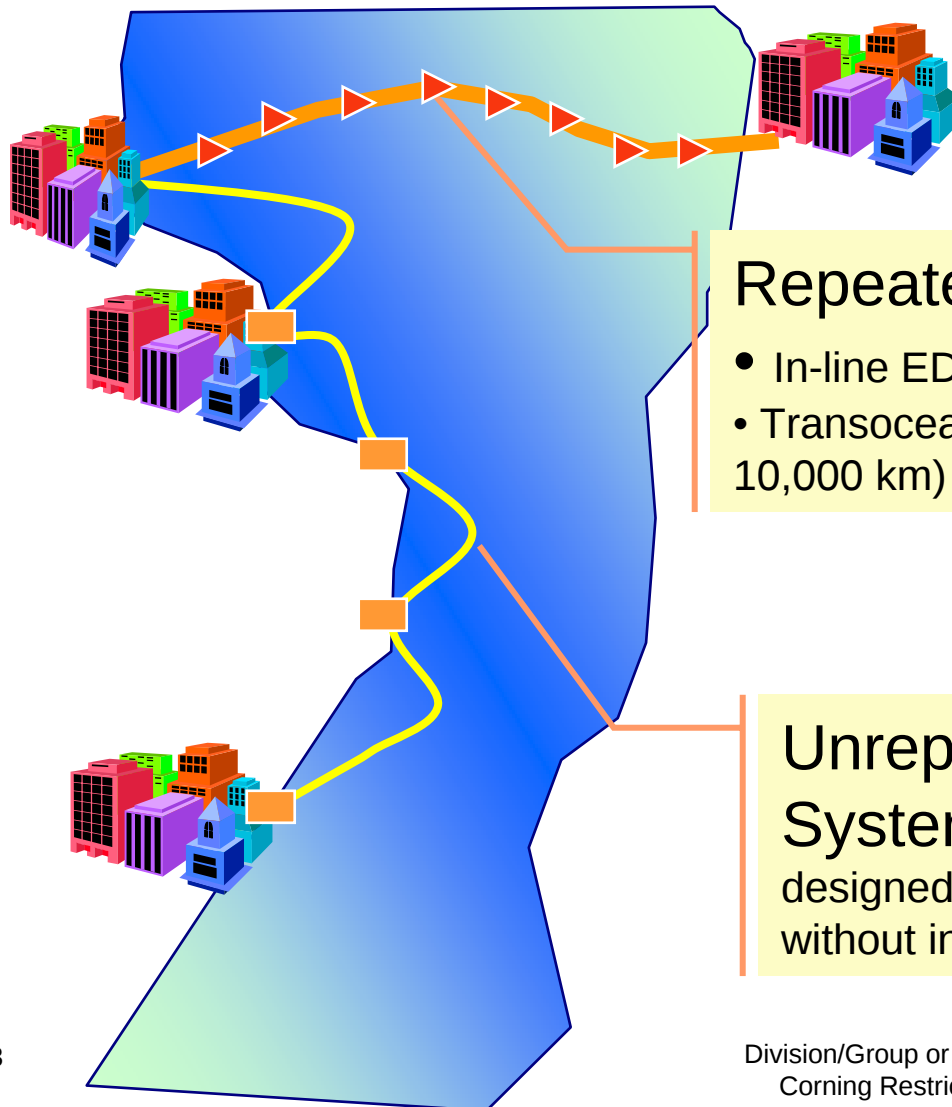
Over 1 Million Kms of Corning Submarine Fiber Sold and Installed Globally

Nautilus Apollo Atlantica Extension Flag Asia TGN Atlantic



360 Americas EAC 1 EAC 2 APCN 2 TAT's Japan-US

Submarine Applications



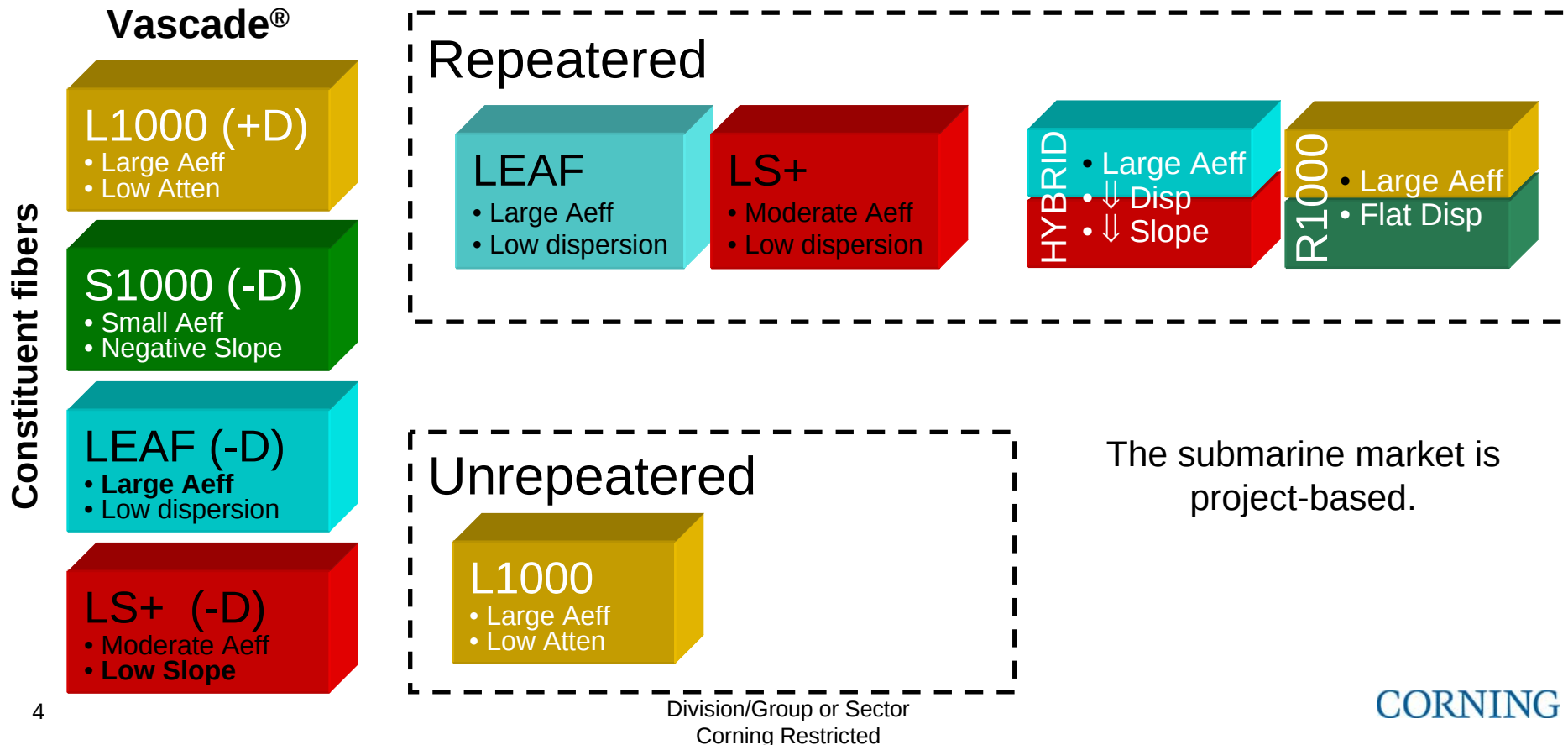
Repeated Submarine System

- In-line EDFA amplification
- Transoceanic networks with long distances (up to 10,000 km)

Unrepeated Submarine System - Short-haul undersea networks designed for distances up to 400 kilometers without in-line amplification

Submarine Fiber Portfolio

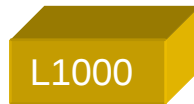
Corning developed the Vascade line of optical fibers to meet the demanding needs of submarine networks. The portfolio has unique optical and mechanical properties allowing customized, project specific optical properties, while maintaining the individual constituent fiber specifications. In many cases, these solutions are specifically engineered to meet customer requirements.



Corning Submarine Fiber Parameters

Customer Specifications Are Project Specific

Typical Fiber parameters
at 1550 nm



	Vascade L1000 Fiber	Vascade LS+ Fiber	Vascade LEAF Fiber	Vascade S1000 Fiber
Attenuation (dB/km)	0.187	0.20	0.21	0.24
Dispersion (ps/nm/km)	+18.5	-3.05	-4.27	-37
Dispersion slope (ps/nm ² /km)	+0.06	+0.05	+0.12	-0.12
Effective area (μm ²)	101	50	70	27
PMD (ps/√km)	≤ 0.06	≤ 0.06	≤ 0.06	≤ 0.06

Each project, depending on system design, requires slightly different optical attributes. From these constituent fibers, engineered solutions are created to deliver an optimized solution.