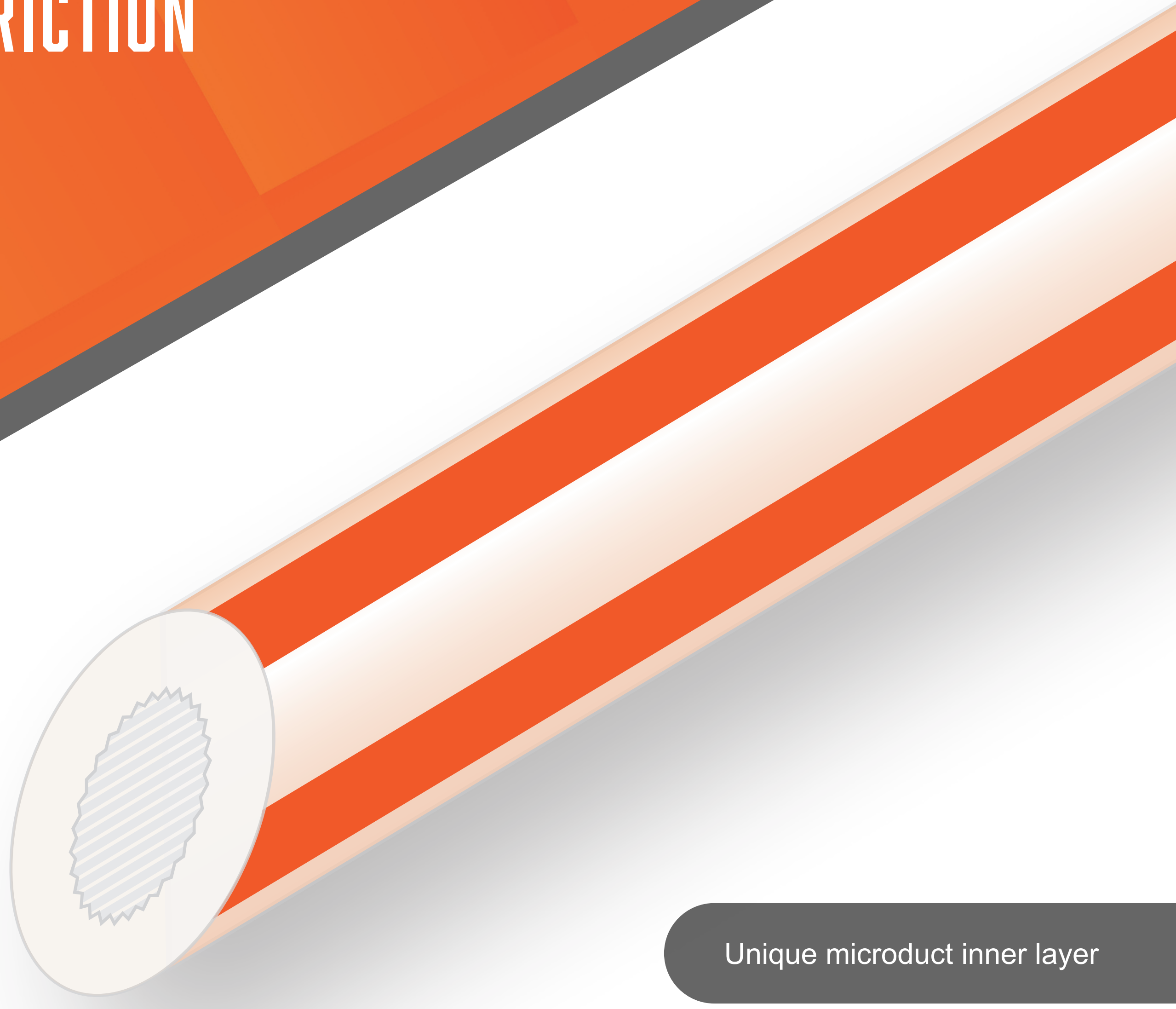
EMTELLE

EM-LINER

LOW FRICTION LINER



- Unique microduct inner layer
- Reduced friction and costs
- Up to 50% better blowing results

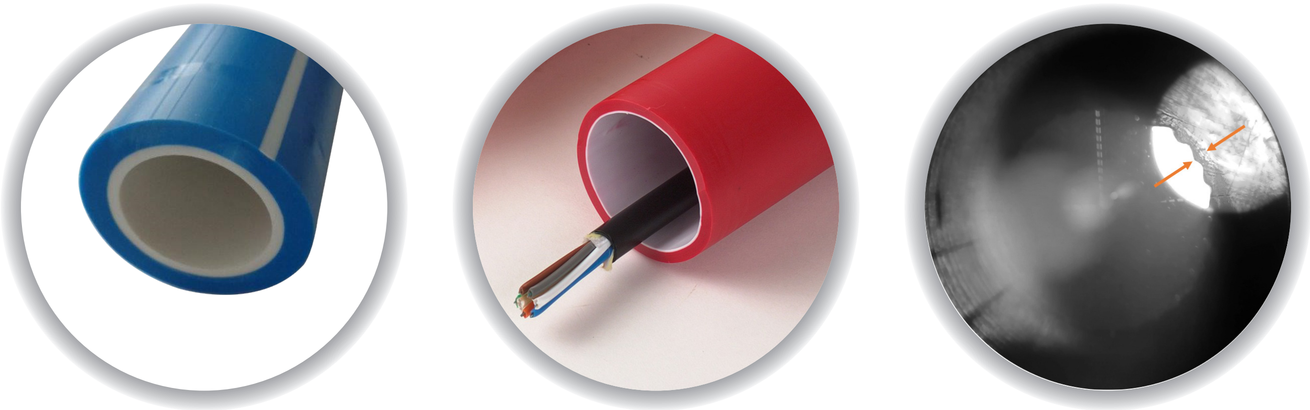
LOW FRICTION BLOWING BY EXCELLENCE

EM-LINER

One of the most important factors of blowing a fiber cable into a microduct successfully is an optimized air stream and a low friction coefficient μ.

With demand for broadband services rising and government targets concentrating more on full-fiber, operators are looking for the most cost-effective way to get fiber deeper into their networks.

For best blowing results Emtelle developed a unique and invisible inner liner based on PE-material which is getting co-extruded into the microduct during manufacturing process. Our "EM-Liner" reduces friction between cable and microduct and improves the blowing speed and distance up to 50%.



EM-Liner made visual

The efficiency of the EM-Liner is a result of the physical composition and the FiberFlow microducts, which can have a smooth or ribbed inner layer to improve ease of cable deployment in long torturous or adverse locations plus improved installation speeds on all routes. This unique characteristic is something that has always been integral to Emtelle's unique duct composition and comes as standard on all microducts manufactured by Emtelle.

EM-LINER BENEFITS

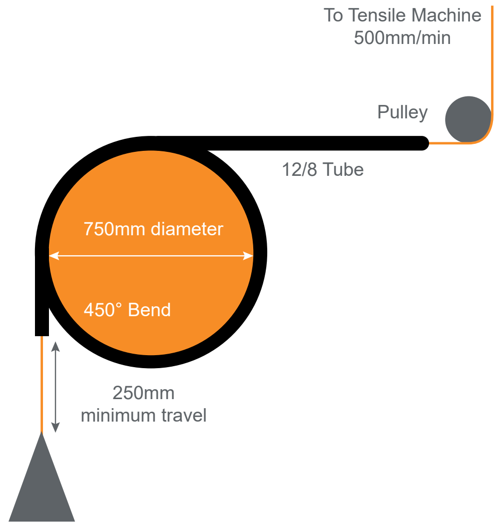
- Better blowing results up to 50 %
- Up to 5-times less friction coefficient μ
- No extra lubricant needed
- Reduced cable installation time without any damage and cable wear
- No extra access chambers needed
- Reduced cable fleeting / coiling
- Reduced installation costs for the whole network

PERFORMANCE PROVED BY FRICTION TEST

EMTELLE

Test Setup

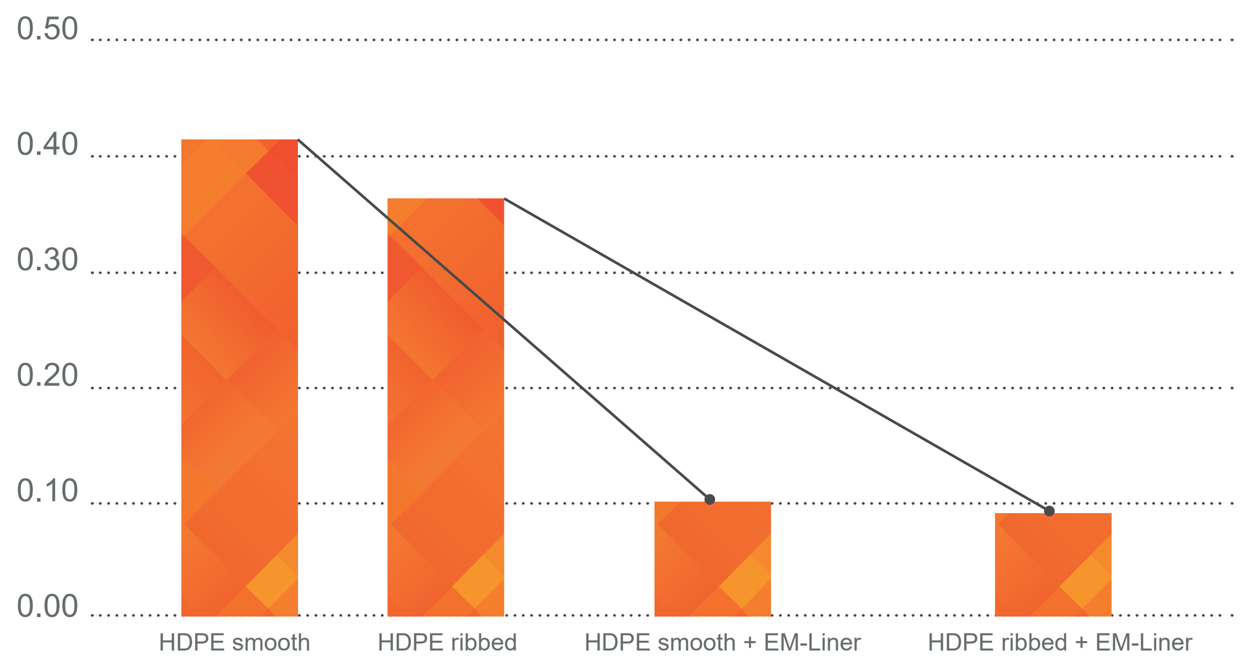
Microduct: 12/8mm HDPE
Pulling Element: Emtelle 72f Minicable, HDPE Sheath, 5.8mm
Pulling Angle: 90 degrees, Orientation: Vertical
Lift Mass: 2kg
Speed: 500mm/min
Duration: 150mm
Equipment: Test capstan and Lloyds tensile machine



Result
- Up to 5-times less friction coefficient with EM-Liner (0.09 μ for 12/8 ribbed + EM-Liner)
- Significant success factor for Low Friction is not the ribbed inner surface → it is the EM-Liner

Coefficient of Friction (Capstan Test)

12/8 Microduct, 90deg 500mm/min T1=2kg, Mean value from 3 tests



GLOBAL MANUFACTURER OF PRE-CONNECTORISED, BLOWN FIBRE CABLE & DUCTED NETWORK SOLUTIONS

PERFORMANCE PROVED BY BLOWING TEST

During different field trials on our test tracks which compared an Emtelle duct with an EM-Liner to a duct without, the results showed that when using the duct with the EM-Liner, double the distance could be blown. Where a duct with a low friction EM-Liner easily achieved blowing distances of 2,000m and more, one without struggled to reach 1.000m.

Test Setup

Equipment used:	Blowing machine GS150 + M31 compressor 15 bar with aftercooler unit	
Microduct:	14/10mm HDPE + EM-Liner	16/12mm HDPE + EM-Liner
Cable:	Ø 7.9mm, 288 Fibers	Ø 7.9mm, 288 Fibers

Result

Blowing time:	00:32:45 min	00:27:05 min
Max. pressure:	14 bar	6,4 bar
Max. speed:	72,6 m/min	93 m/min
Blowing distance:	**2,000 m**	**2,000 m**

TESTED & APPROVED

BLOWING DISTANCE
N x 100 = 2000m

CONTACT US

Emtelle Group
Allan House, Floor
4 25 Bothwell Street
Glasgow. G2 6NL
United Kingdom

+44 (0) 1450 364 000
info@emtelle.com

Emtelle UK
Haughhead
Hawick
TD9 8LF
United Kingdom

+44 (0) 1450 364 000
info@emtelle.com

Emtelle Scandinavia
Vardevej 140
7280 Sønder Felding
Denmark

+45 86 28 84 88
salg@emtelle.com

Emtelle GmbH
An der Flurscheide 20
99098 Erfurt
Germany

+49 (0) 361 654 330
info-de@emtelle.com

Emtelle UAE
Plot KHIA8-126, 127, 128
Taweelah
Abu Dhabi
UAE

+971 4 883 1608
info@emtelle.com

Emtelle USA
101 Mills Gap Rd
Unit A, Fletcher
NC 28732
USA

+1 (828) 7079970
info@emtelle.com

WWW.EMTELLE.COM