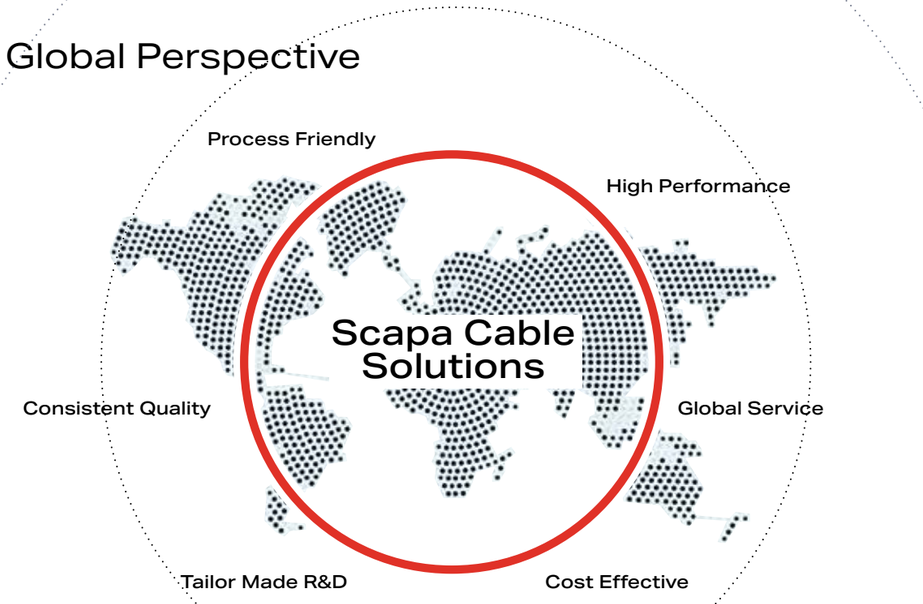
Scapa Industrial

a Mativ Brand

Connecting the World for a Brighter Future

Scapa Cable Protection Solutions Since 1912

Scapa Cable Solutions



Scapa Cable Protection Solutions

World-class manufacturers and engineers have been relying on Scapa cable tapes and jointing components for projects that have connected the world, transferred energy and helped generate power for over 110 years. With our unparallelled market expertise and knowledge, best in class research and development process and global manufacturing capabilities, Scapa can help you find the right solution for power, sub-sea, control, data and fibre optic cables.

Why use Scapa?

- Over 110 years of expertise
- Customer-first engineered solutions
- Application-driven R&D
- Wide range of diverse products for cable protection
- Global manufacturing network
- Excellent market knowledge
- Reliable customer service

Developed in conjunction with cable manufacturers and design engineers around the world, the Scapa range of tapes, yarns and components delivers proven protection across every cable application.

Every Application Covered

Water Blocking Tapes and Yarns:

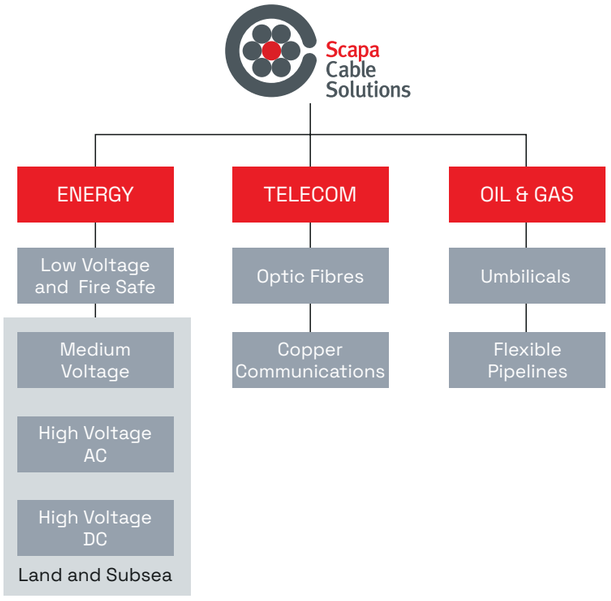
Water Blocking Tapes and Yarns prevent the progression of water deep into many types of critical cable designs. The technology rapidly absorbs liquid at the point of entry and swells to block any further ingress. This ensures any damage is minimal, fully contained and is easy to locate and repair. The use of superior, super-absorbent polymers by Scapa gives these tapes premium performance during the critical first minute of response to water.

Non-Water Blocking Tapes:

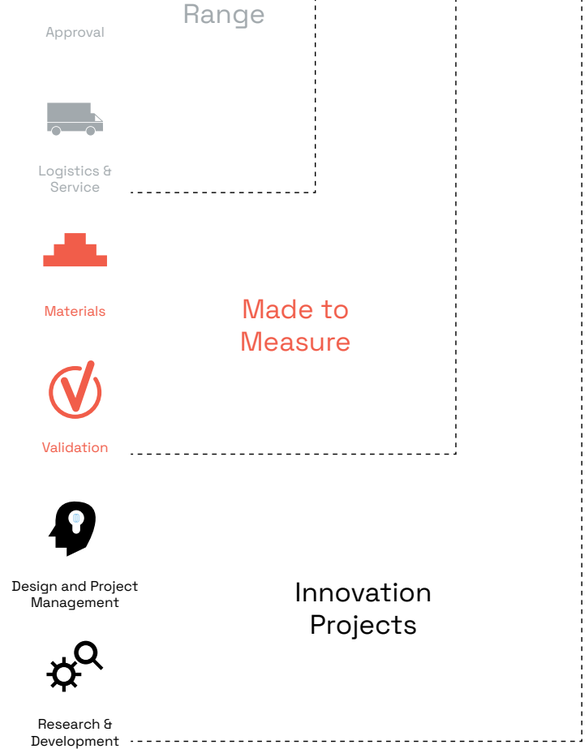
Our Non-Water Blocking Tape range has been developed in conjunction with cable engineers around the world and has been successfully used in numerous energy, telecommunication, data transmission and sub-sea cable projects globally. Products include insulative, semi-conductive, bitumenised and fire retardant tapes that ensure reliable and continuous performance throughout the life of cables.

Cable Components:

Developed in close partnership with the key market leaders in the cable components field, the Scapa product range includes self-amalgamating tapes, pvc tapes, sealing putties and resins along with oil impregnated paper tapes. These high quality components are used in the jointing, termination and repair of MV and HV power cables as well as certain telecommunications applications.



Three Ways to Buy Scapa Cable Tapes



Core Range

Choose one of our proven cable wrapping tapes from one of the most extensive ranges in the industry.

Made to Measure

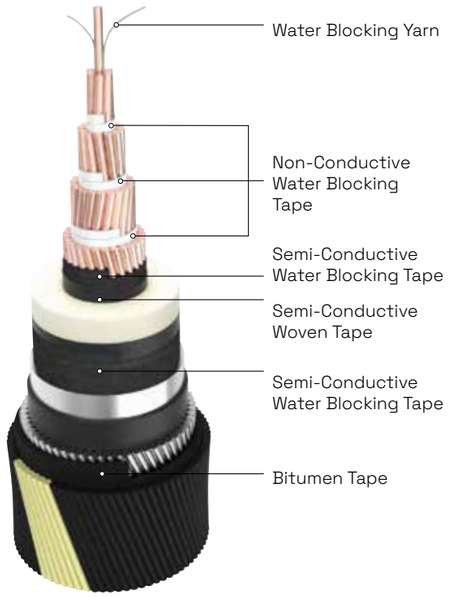
If one of our standard products doesn't match your application requirements, within our current portfolio of cloths, coatings, super-absorbent powder and processes, we can produce something that does.

Innovation Projects

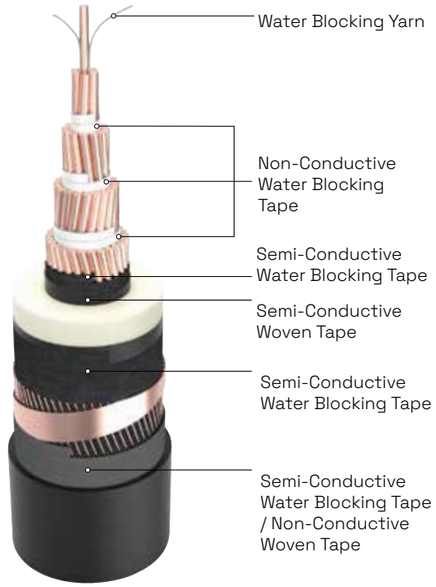
If a more advanced solution or a new way of doing things is needed for the next generation of cable protection, our engineers and R&D team can work in partnership to deliver the ideal solution.

Choose Scapa Cable Protection

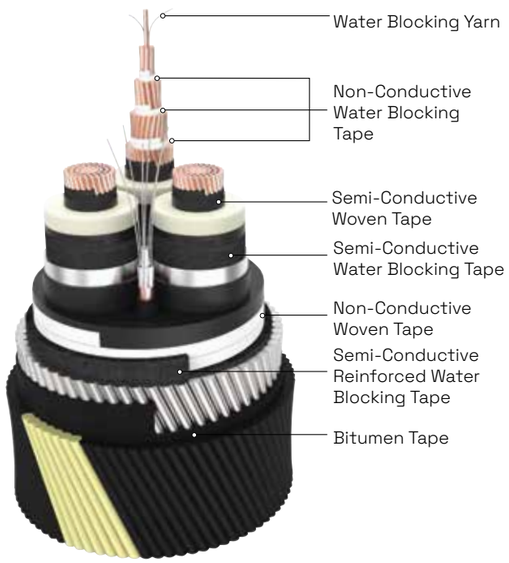
Subsea Power Cable



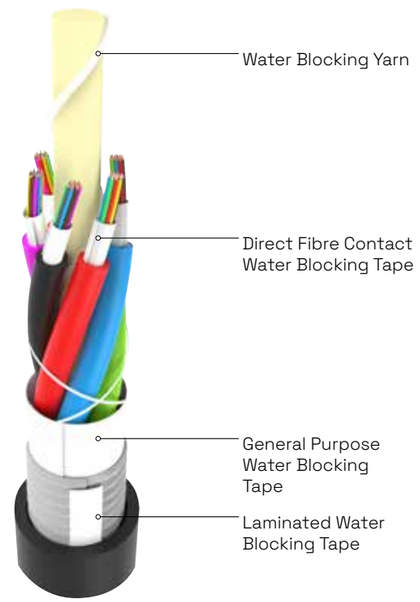
Land Cable

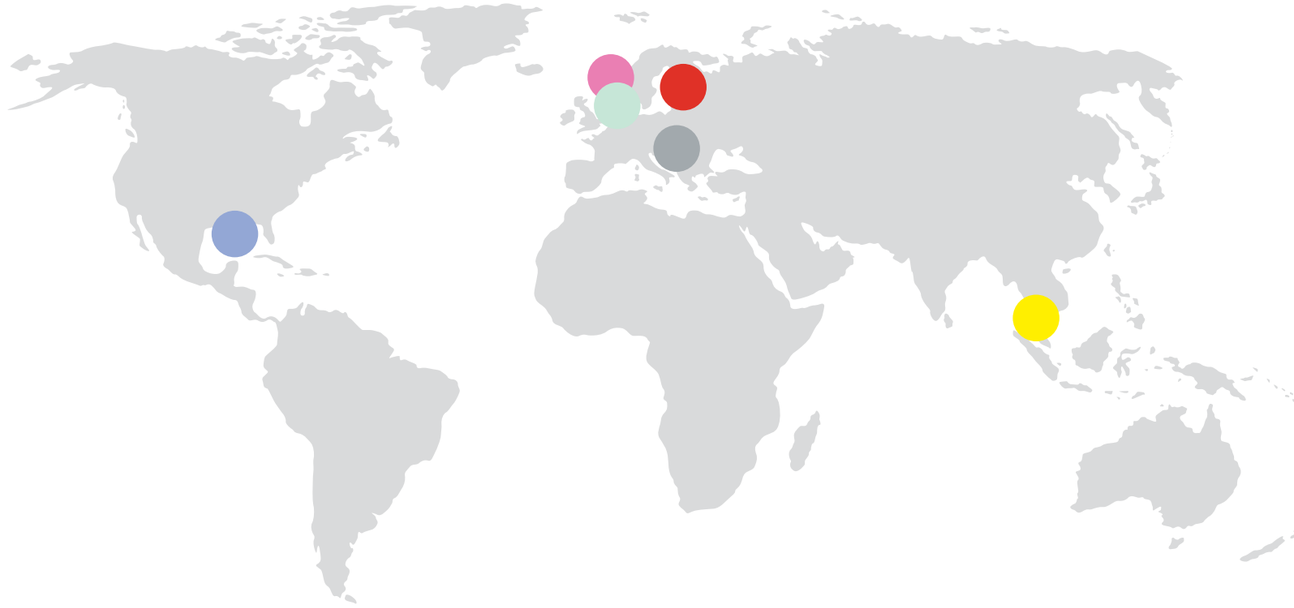


3-Core Cable



Communication Cable





Scapa Tapes in Global Projects

Thunder Horse

Scapa tapes are utilised in the umbilical cables supplying the Thunder Horse oilfield. One of the largest oilfields discovered in the Gulf of Mexico, 120km of these umbilicals were installed in a maximum water depth of 1,890m.

Ko Samui Project

Our tapes are used in the 123kV power cable link between Ko Samui and Kha Nom in Thailand. 24km of 169mm cable was laid undersea to a depth of 2.4km.

North Sea Link

A 720 kilometre subsea interconnector linking the electricity systems of the UK and Norway.

The 1400 megawatt interconnector stretches from Blyth in the UK, across the North Sea, to Kvilldal in Norway.

Hornsea II

This windfarm project covers 462 Sq/km and is located approximately 89km off the Yorkshire coast in the UK. When complete it's 165 turbines will be able to meet the electricity needs of up to 1.3 million homes per year, and bring low carbon power to the UK and the opportunity for economic growth in the Humber region.

Ostwind II

This project to connect the Baltic Sea wind farms Arcadis Ost 1 and Baltic Eagle to the German extra-high voltage transmission grid. Together, the two wind farms will generate an output of approximately 725 megawatts (MW). Three 220kV AC submarine cable systems will deliver this power.

SuedOstLink

This project will transport environmentally friendly electricity from the wind farms of northern Germany to the homes and industries of the South. High-voltage direct current transmission enables low-loss transport of up to two gigawatts over more than 500 kilometres aided by Scapa semi-conducting cable tapes.

Water-Blocking Tapes - Non Conductive

Types of application: Power and fibre optic cable, general waterblocking, migration barrier, cut through prevention, direct
fibre contact, alternatives to flooding compounds, reduction of micro-bending loss

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Swell speed mm (time)	Swell height mm (time)	Moisture content (%)	Material	Comments
CBT151	48	0.21	30	10	2.5 (1 min)	3 (2 mins)	5	Polyester	Conductor water blocking
CBT152	62	0.23	30	10	6 (1 min)	8 (2 mins)	5	Polyester	Conductor water blocking
CBT153	85	0.3	30	10	10 (1 min)	12 (2 mins)	5	Polyester	Conductor water blocking
WSD242	65	0.28	30	15	10 (1 min)	11 (10 mins)	5	Polyester	General purpose
WSD244	85	0.4	25	15	20 (1 min)	21 (10mins)	5	PET	Excellent swell performance
WSD245	80	0.3	35	10	20 (1 min)	_	5	Polyester	General purpose, asymmetric swelling
WSD250F	59	0.23	30	15	4 (30 secs)	_	5	Polyester	Direct fibre contact
WSD250T	80	0.27	40	15	9 (1 min)	_	5	Polyester	Direct fibre contact
WSD252	60	0.25	25	15	10 (1 min)	11 (10 mins)	5	Polyester	General purpose
WSD264	100	0.4	100	15	10 (1 min)	12 (3 mins)	5	Polyester	Scrim reinforced
WSD342S	95	0.3	30	15	9 (1 min)	14 (5 mins)	2	Polyester	General power cable waterblocking
WSD351	49	0.25	25	15	5 (1 min)	6 (10 mins)	5	Polyester	Designed for fibre optic cables
WSD361	69.5	0.31	30	16	5 (1 min)	_	4	Polyester	Resistant to the heat of extrusion
WSD362	75	0.36	30	16	8 (1 min)	_	<5	Polyester	For longitudinal application
WSFM100	100	1.6	25	15	12 (1 min)	_	5	Open Cell Foam	Cushioning applications
WSL2250	65	0.26	25	15	3 (1 min)	5 (10 mins)	5	PET laminate/ polyester	High cut through resistance
WSL250	80	0.3	40	18	9 (1 min)	_	<5	Polyester	Direct fibre contact

Water Blocking Tapes - Semi-Conductive

Types of application: Power cables, general water blocking, bedding and binding, fast swell, low resistance

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Swell speed mm (time)	Swell height mm (time)	Moisture content (%)	Volume resistivity
WSC242	90	0.26	40	18	10 (1 min)	11 (10 mins)	3	0.5
WSC244	100	0.3	40	18	21 (1 min)	22 (10 mins)	3	0.5
WSC254	115	0.35	50	15	15 (1 min)	16 (10 mins)	3	0.5
WSC401	115	0.4	55	15	4 (1 min)	5 (10 mins)	<5	0..5

Marine Water Blocking Tapes - Semi Conductive

Types of application: Subsea power cables, export cables, array cables and umbilicals

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Swell speed mm (time)	Swell height mm (time)	Moisture content (%)	Volume resistivity (˝Ω.cm)
WSCM100	220	0.44	55	15	2.5 (1 min)	3.5 (10 mins)15	3	0.5
WSCM150	181	0.45	45	15	3 (10 mins)	_	3	0.5
WSCM200	390	0.6	100	15	5 (3 mins)	_	3	0.5

Marine Water Blocking Tapes - Non-Conductive

Types of application: Subsea power cables, export cables, array cables and umbilicals

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Swell speed mm (time)	Swell height mm (time)	Moisture content (%)	Volume resistivity (˝Ω.cm)
WSM102	92	0.3	30	15	1.3 (1 min)	1.5 (10 mins)	5	_
WSM102HS	105	0.3	30	10	1.4 (1 min)	1.6 (10 mins)	5	_
WSM103	100	0.33	30	15	1.6 (1 min)	2.2 (10 mins)	5	_
WSM104	200	0.37	35	15	3 (1 min)	4 (3 mins)	5	_
WSM106	215	0.45	60	20	2.5 (1 min)	3.0 (10 mins)	5	_

Water Blocking Yarns

Types of application: General purpose water blocking in power or fibre optic cables.

Product	Yarn count (TEX)	Yield (m/Kg)	Breaking strength (N)	Moisture content (%)	Elongation at break (%)	Water absorbency (ml/g) (1 min)	Water absorbency (ml/g) (5 min)
CFY050	50	20000	10	9	15	35	35
CFY100	100	10000	30	10	15	25	35
CFY165	165	6000	60	10	15	35	42
CFY220	220	4000	80	10	15	40	50
CFY330	330	3000	110	10	15	45	50
CFY500	500	2000	150	10	15	50	60
CFY1000	1000	1000	300	10	15	50	60
CFY2000	2000	500	150	10	18	50	55

Non Water-Blocking Tapes - Semi-Conductive

Types of application: Bedding, binding, separating, conductor wrapping

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength longitudinal (N/cm)	Tensile strength transverse (N/cm)	Elongation at break (%)	Volume resistivity (Ohm.m)	Through resistance (Ohmn)	Material
2315S	76	0.11	135	90	25	12	30	Polyester
SC101/80	65	0.09	105	60	25	10	10	Polyester
SC24/200	135	0.2	225	120	45	7	15	Nylon
SC36/65	66	0.1	125	60	35	5	10	Nylon
SC36/68	66	0.12	125	60	22	5	10	Nylon
SC37/65	75	0.11	125	60	35	12	20	Nylon
SC37/90	84	0.13	120	110	20	10	25	Nylon
SC37/98	90	0.13	120	110	20	10	25	Nylon
SC37/120	85	0.1	135	90	25	15	30	Polyester
SC39/70	200	0.3	500	200	15	6	30	Polyester

Non Water Blocking Tapes - Non-Conductive

Types of application: Bedding, binding, separating & cushioning

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength longitudinal (N/cm)	Tensile strength transverse (N/cm)	Elongation at break (%)	Material
CT05/70	165	0.28	690	220	38	Polyester
CT50/113	130	0.17	105	95	20	Nylon/Polyester
CT23/113	85	0.14	105	95	20	Nylon/Polyester
CT272	18	0.13	15	_	10	Polyester
CT274	36	0.13	25	_	10	Polyester
CT276	50	0.135	35	_	20	Polyester
CT22/65	80	0.1	100	60	20	Nylon
CT23/70	190	0.29	690	220	38	Polyester
CT84/80	64	0.11	100	60	18	Polyester
CT50/160	130	0.22	160	135	15	Polyester
CT55/120	90	0.11	120	90	15	Polyester
CT90/80	80	0.1	160	60	18	Polyester

Fire Retardant Tapes

Types of Application: Fire barrier and binding in power or fibre optic cables

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Limiting Oxygen Index (%)	Temperature Index (°C)	Burn time (secs)	Material/ Comments
FR14/103	140	0.1	200	8	90	>400	54	Woven glass/ halogen free
FR22/103	140	0.11	200	8	90	>400	54	Woven glass/ halogen free
FR22/109	240	0.2	300	8	90	>400	60	Woven glass/ halogen free
SFR10/103	130	0.12	200	8	>50	>400	>300	Woven glass/ halogen free
XFR50/103	130	0.12	230	8	>90	800	>1800	Woven glass, inorganic binder/halogen free
XFR50/109	230	0.21	300	8	>90	800	>1800	Woven glass, inorganic binder/halogen free

Fire Retardant Tapes - Semi-Conductive

Product code	Weight (g/m2)	Thickness (mm)	Tensile strength (N/cm)	Elongation at break (%)	Limiting Oxygen Index (%)	Temperature Index (°C)	Burn time (secs)	Volume resistivity (˝Ω.cm)	Comments
FR62/103	125	0.11	200	3	>40	>400	54	100	Woven glass

Cable Components

Product type	Product code	Thickness (mm)	Tensile strength (Mpa)	Elongation at break (%)	Volume resistivity (Ohm.m)	Dielectric strength (kV/mm)	Service temperature (°C)	Material
Self-Amalgamating Insulating Tapes	75	0.5	5	350	1×10^{12}	16	-45 to 200	Silicone rubber
	2552			550	1×10^{13}	-	-40 to 90	PIB rubber
	2501		2	900	1.5×10^{13}	42	-40 to 90	
	2504	0.75			1×10^{13}			
	2515	0.5	3	800	2×10^{13}		-40 to 100	EPR rubber
	2517	0.75		900	1×10^{13}			
	2547			> 550		44		
Semi-Conducting Tape	2525	0.75	1.5	800	1.3	-	-40 to 100	EPR rubber
Sealing Putties	30	3.2	0.1	-	1×10^{12}	23	-30 to 80	Butyl rubber
	31	2			1×10^{12}			
	34	3	0.04		1×10^{12}	25	-30 to 90	
	35				1×10^{12}		-30 to 80	
	36	1.2 or 3	-		1×10^{12}	15		
	2573	2	0.2		5×10^{12}	16		

Product type	Product code	Thickness (mm)	Tensile strength (Mpa)	Elongation at break (%)	Volume resistivity (Ohm.m)	Dielectric strength (kV/mm)	Service temperature (°C)	Dielectric constant	Dielectric loss angle	Material
Stress Control Products	85	1.2	-	-	-	4	-40 to 90	10	0.04	Putty
	2527	1	2	1000	5×10^{11}	-	-40 to 100		0.03	Putty
	2528	1.5	0.2	-	1×10^{11}	-	-40 to 90			Putty

Product type	Product code	Shore A hardness	Pot life (100g at 25°C Air)	Impact strength (kJ/m2)	Volume resistivity (Ohm.m)	Dielectric strength (kV/mm)	Material
Protective Resins	41	95	25 mins	-	$1x10^{12}$	25	Epoxide
	46	70		27		23	Polyurethane

Oil Impregnated Paper Tapes

Scapa is one of only a small number of European manufacturers of specialist impregnated paper tapes. These tapes are
used for the reconstitution of cable insulation or semi-conducting on MV joints and allow easy taping, even at low temperatures. Scapa is able to offer a wide range of impregnated paper tapes, specifically designed to meet the individual customer's needs.

These include:

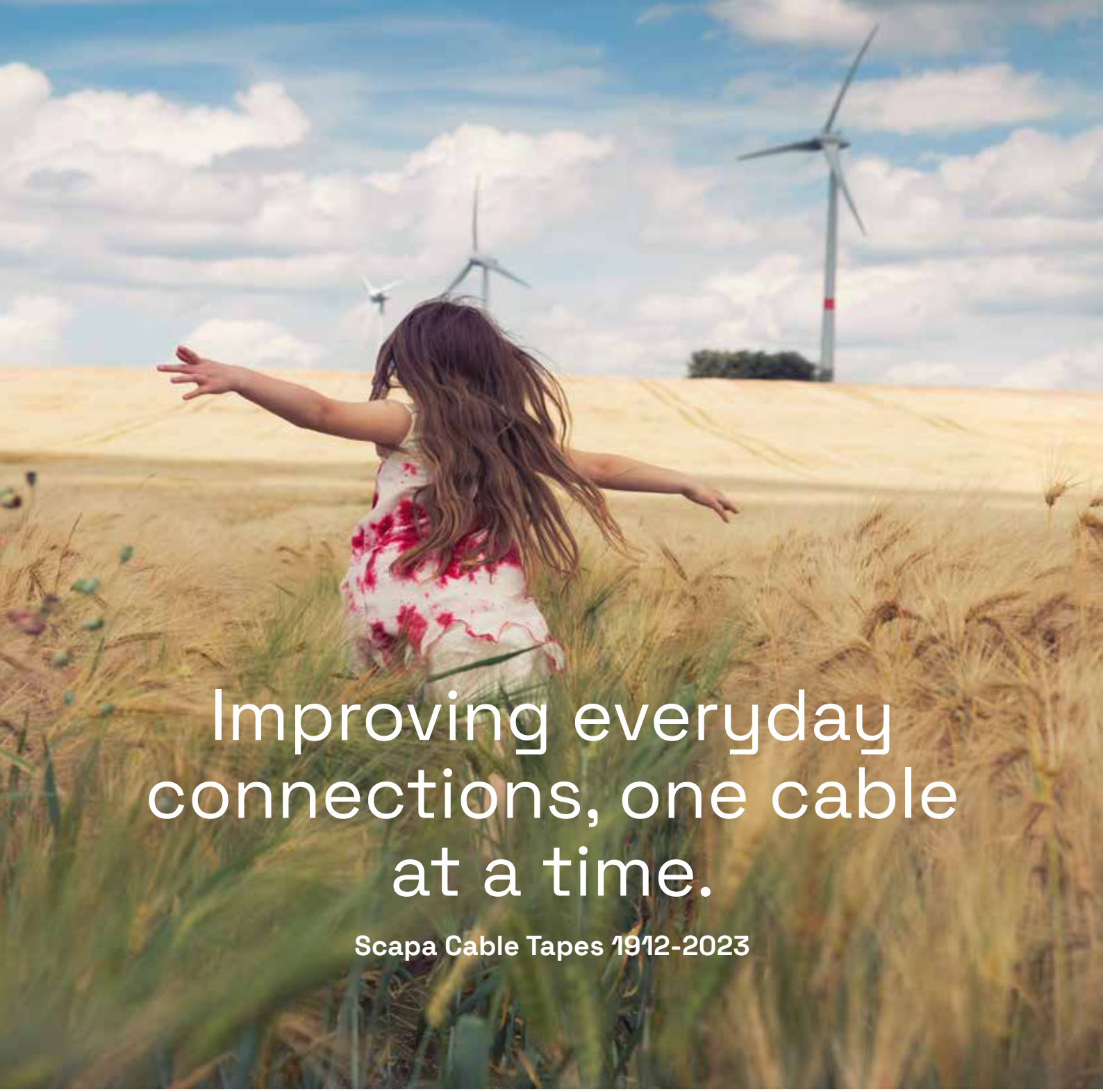
- Impregnated insulating crepe paper sets (J-SCR)
- Impregnated semi-conducting crepe paper (J-CR)
- Impregnated Kraft paper sets (J-KR)
- Stress cone assemblies
- Rosin oil sets
- Wide lapping papers

All products are available impregnated in polyisobutylene or hydrocarbon oil.
All products are also available dry (no oil).

Notes

Notes

Notes



Improving everyday connections, one cable at a time.

Scapa Cable Tapes 1912-2023

For additional information, please contact your Sales Manager or Scapa Customer Care

email: sales@scapaindustrial.com
www.scapaindustrial.com

Scapa Industrial

a Mativ Brand

Scapa North America
Tel: +1 860 688 8000

Scapa South America
Tel: +55 11 2589 6003

Scapa United Kingdom
Tel: +44 (0) 161 301 7400

Scapa China
Tel: +86 21 5046 4750

Scapa France
Tel: +33 (0) 475 44 80 00

Scapa India
Tel: +91 44 4351 1003

Scapa Italy
Tel: +39 0161 867 311

Scapa Malaysia
Tel: +60 3 5569 2529