

# WATER SOLUTIONS BY OKE



MAKE A DIFFERENCE.  
BE PART OF THE SOLUTION.



# INTRO- DUCING OKE

OKE HEADQUARTERS  
IN GERMANY



In Paarl, close to Cape Town, South Africa, we have built a new home for our irrigation system. Here, we develop and produce pipes and micro sprinklers for a more responsible use of water in the agricultural industry and gardening. Please do not hesitate to contact us, if you have any comments, wishes or improvements. We are always looking forward for the next good idea!



OKE IN CAPE TOWN. HERE WE MANUFACTURE PARTS FOR DIFFERENT INDUSTRIES SUCH AS AUTOMOTIVE. WE ARE HERE SINCE 1996.



OKE IN PAARL, OUR MAIN PRODUCTION PLANT FOR WATER SOLUTIONS!





# OKE WATER SOLUTIONS



**PLANNING AND DELIVERIES**  
Kabous takes care of your orders. She is our expert for the planning of production and deliveries.



**QUALITY AND ASSEMBLY**  
These ladies have an eye for our sprinklers.



**DEVELOPMENT**  
Patrick is certified CAD-Designer and developer of the sprinklers.



# FACTS

1.400   
EMPLOYEES

14   
INDIVIDUAL  
COMPANIES

140   
EXTRUSION  
LINES

3x   
OWN TOOL  
MAKING

 12  
LOCATIONS  
WORLDWIDE

 160  
MIO €  
TURNOVER

 150  
INJECTION MOULDING  
MACHINES

 MANY AWARDS FOR  
PRODUCTS, PROCESSES  
AND A MODERN WORKING  
ENVIRONMENT

# WORLD- WIDE



## GERMANY

- **OKE GROUP**  
**OKE AUTOMOTIVE**  
**OKE SPRITZGUSSTECHNIK**  
**HANS VON DER HEYDE**  
(Hörstel)
- **OKE KUNSTSTOFFTECHNIK**  
(Ummerstadt)
- **KKF FELS**  
(Goslar)
- **OKE WERKZEUGTECHNIK**  
(Tornesch)
- **ALHORN**  
(Lübbecke)

## WORLDWIDE

- **OKE PLASTIC SLOVAKIA**
- **OKE TILLNER PERFIS** (Portugal)
- **OKE SOUTH AFRICA** (Cape Town, Paarl)
- **OKE DO BRASIL**
- **OKE SOUTH KOREA**
- **OKE PLASTIC CHINA**

# WHY CHOOSE OKE IRRIGATION?

## GENERAL PRODUCT BENEFITS

- All products are made of the highest quality, engineering grade, material and are resistant to agrochemicals and adverse weather conditions
- Colour coded combinations for easy selection
- Simple modular parts for easy replacing
- Patented bayonet type fittings for positive locking of individual components, securing them in place
- Best results achieved with low pressures (75-125kPa) to reduce power consumption by pumps compared to sprinklers that require high pressure (200-400 kPa) for effective operation



## LOGISTICS

- With our own nesting knowledge we reduce costs for logistics to the max, making fast deliveries without wasting space possible.
- OKE has plants in eleven countries around the world. Therefore, we can advise you on site and shall warrant a fast and reliable delivery.



## STRIVE FOR TOP QUALITY

- We continuously strive for top quality and have proven our standards time and time again by being both ISO9001 and TS16949 compliant. We are currently in the process of applying for SABS certification.
- Tooling imported from Germany, the equipment allows us to consistently and accurately adhere to specifications.
- At OKE we pride ourselves in dedication and team work. Our team is not only flexible, quick and efficient, but one that is passionate about what they do!



ONLY  
**2,5%**  
OF ALL WATER ON  
EARTH IS **FRESH**  
**WATER**



OF THAT,  
WE CAN  
ONLY USE  
**0,3%**



**70%** IS LOCKED  
IN ICE & SNOW  
PERMANENTLY

THAT'S ABOUT  
**ONE**  
TABLE SPOON



IN A  
**FIVE**  
LITER BUCKET

**783 000 000**  
**PEOPLE**  
DO NOT HAVE ACCESS  
TO SAFE FRESH WATER

**FRESH WATER  
USE BY SECTOR**



**70%**  
IRRIGATION



**22%**  
INDUSTRY



**8%**  
DOMESTIC



**40%**  
THEREOF  
ARE CONCENTRATED IN  
SUB-SAHARAN  
AFRICA



**YOU USE 198**  
LITRES WATER  
EVERY DAY

THAT'S ABOUT  
**FIFTY**  
TIMES MORE  
YOU NEED TO  
SURVIVE

**50%** OF DRINKING  
WATER IS LOST  
THROUGH LEAKS



IT TAKES  
**1200**  
LITRES  
OF FRESH  
WATER TO  
PRODUCE  
ONE PAIR  
OF JEANS



OKE HELPS YOU  
TO USE WATER  
RESPONSIBLY!







# MICRO SPRINKLERS

- Engineered to provide optimum distribution uniformity
- Manufactured from the highest quality engineering grade polymers
- Patented bayonet type fitting between nozzle and butterfly
- Simple modular parts for easy replacing
- Colour coded combinations for easy selection and identification
- Spike equipped with a clasp and positive lock to keep the tubing in place
- Eco-friendly, heavy metal free pvc flexible tubing with excellent UV and ozone resistant properties
- Teflon layer between the moving parts for long durability
- One full year manufacturers guarantee

## 1.1 VIKING SPRINKLERS

10 → OVERVIEW  
VIKING SPRINKLERS

12 → TECHNICAL DATA  
VIKING SPRINKLERS

13 → HEAD GUIDE  
VIKING SPRINKLERS

14 → FLOW RATE  
VIKING SPRINKLERS

14 → DESIGN ELEMENT GUIDE  
VIKING SPRINKLERS

## 1.2 RAIN-X

15 → NEXT GENERATION  
MICRO SPRINKLERS

# OVERVIEW VIKING SPRINKLERS

## BEARING

EQUIPPED WITH A BAYONET MECHANISM TO ALLOW AN EFFORT-LESS REPLACEMENT OF SWIVELS AND SPREADERS, CONTAINS A MOLYBDENUM ADDITIVE FOR INCREASED WEAR RESISTANCE AND EXTENDED LIFE SPAN



## BRIDGE

STRONG AND ROBUST DESIGN, SPECIALLY DESIGNED TO GIVE LESS WATER SHADE FOR EVEN DISTRIBUTION, CAN BE USED EITHER WITH SPREADER OR WITH BEARING, NOZZLE AND SWIVEL



## TUBING

FLEXIBLE, UV RESISTANT MATERIAL, VARIETY OF LENGTHS AVAILABLE ON REQUEST, AVAILABLE IN GREEN AND BLACK, BUTTERFLY WITH BARB FOR A FIRM CONNECTION



## SPIKE

PURPOSE-DESIGNED SPIKE EQUIPPED WITH A CLASP AND POSITIVE LOCK TO KEEP THE TUBING IN PLACE AND PREVENT HUMAN OR IMPLEMENT ACCIDENT, SERVES AS A TOOL AS THE TIP CAN BE USED TO DRILL HOLES INTO THE PIPING, AREA ON TOP CAN BE USED TO DRIVE SPIKE INTO THE GROUND WITH A RUBBER HAMMER, DEPTH MARK FOR EASY AND FAST INSTALLATION





## SPREADER

RADICAL STRIP SPREADER DESIGN, ESPECIALLY ROBUST WITH EXCEPTIONAL DISTRIBUTION PATTERN



## SWIVEL

BROAD RANGE OF DISTRIBUTION PATTERNS AND WETTED DIAMETERS, FOUR SWIVELS (SMALL, MEDIUM, LARGE AND EXTRA LARGE WETTED DIAMETERS) TO SUIT ANY CROP SPACING, THICKER STEM FOR MINIMIZING THE EFFECTS OF WEAR, TEFLON LAYER FOR WEAR RESISTANCE AND EXTENDED LIFE SPAN, SUPERIOR DISTRIBUTION UNIFORMITY, PRECISE WATER APPLICATION WITH VERY LITTLE MISTING, PRECIPITATION GRAPHS FOR ANY SPRINKLER COMBINATION AVAILABLE ON REQUEST, POPULAR COMBINATIONS PROVIDED



## NOZZLE

DIVERSE RANGE OF NOZZLES WITH NINE DIFFERENT FLOW RATES BETWEEN 20 AND 120L/H, DESIGNED WITH BAYONET COUPLINGS FOR EASY FIT AND TO PREVENT LEAKAGE, RESISTANT TO THE EFFECT OF FROSTS AND PRESSURE SURGES DUE TO THE PATENTED BAYONET COUPLING BETWEEN NOZZLE AND BUTTERFLY, THOROUGH NOZZLE DATA AVAILABLE (A&B FACTORS) FOR PROFESSIONAL IRRIGATION DESIGN PURPOSES

# TECHNICAL DATA VIKING SPRINKLERS

## #01 TECHNICAL DATA VIKING SPRINKLERS

Order code in green table cells. Example: A1 for 20 mm flowrate with 0.8 m radius. Swivels need a bearing!






		NOZZLES									
											
Order Code		A	B	C	D	E	F	G	H	I	
Ø hole in mm		0.85	1	1.10	1.15	1.25	1.4	1.5	1.7	1.9	
nominal flowrate (l/hr) @100 kPa		20 l/hr	30 l/hr	35 l/hr	40 l/hr	50 l/hr	60 l/hr	70 l/hr	90 l/hr	120 l/hr	

		SWIVELS									
											
1	Radius (m)*	0.8	1	1.1	1	1.15					
2	Radius (m)*	0.95	1.25	1.3	1.45	1.6	1.7				
3	Radius (m)*		1.5	1.5	1.6	1.9	2	2			
4	Radius (m)*		2.2	2.1	2.3	2.3	2.5	2.7	2.7	2.8	





		SPREADERS									
											
5	Radius (m)*	0.4	0.4	0.4	0.4	0.5					
6	Radius (m)*	1.4	1.4	1.4	1.45	1.5	1.6	1.7	1.75		
	Width	1	1	1.1	1.1	1.2	1.3	1.3	1.4		

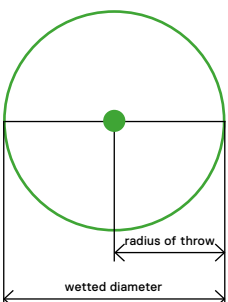
OTHERS				
Bearing	Butterfly	Bridge	Spike	Tubing
				
one size	one size	one size	370 mm	600 mm 1,000 mm 1,500 mm





\*radius in m for use at 280 mm above ground

## #02 RECOMMENDED VIKING SPRINKLER HEAD GUIDE

Due to the shortcomings of filters, it is recommended that a sprinkler head that delivers no less than 30l/h be selected. To achieve optimum results, only the drip area of the plant should be irrigated. Should plant spacing be greater than three meters, we recommend that two sprinklers are used to irrigate each plant to eliminate water wastage due to unnecessary wide spray areas when trying to cover the drip area with one sprinkler.

	RECOMMENDED SPRINKLER HEAD AND SWIVEL (L/HR)			PLANT SPACING IN M	PLANT DRIP AREA IN M <sup>2</sup>	REQUIRED FLOWRATE @ 4 MM/HR (L/HR)
	20	30		1	0.79	3
	20	30		1.5	1.77	7
	20	30	30	1.75	2.41	10
	20	30	30	2	3.14	13
	30	40		2.25	3.98	16
	30	40	2x30	2.5	4.91	20
	40	50	2x30	3	7.07	28
	40	50	2x30	3.5	9.63	39
	50	60	2x30	4	12.57	50
	70	70	2x40	4.5	15.91	64
	70	70	2x40	5	19.64	79
	90	120	2x50	5.5	23.77	95
	120	120	2x60	6	28.29	113

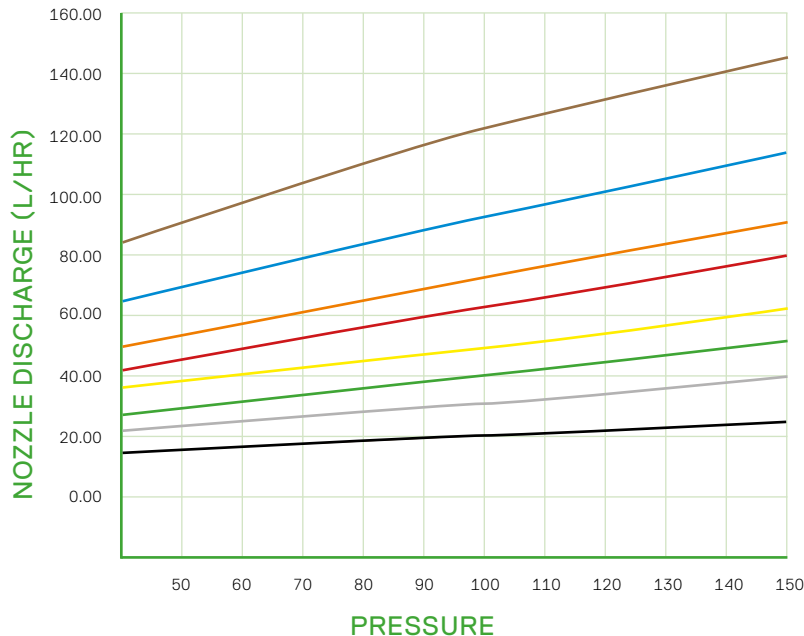


												
sprinkler head flowrate @100kPa	spray radius in m	irrigated area in m <sup>2</sup>	gross applic. rate in mm/h	spray radius in m	irrigated area in m <sup>2</sup>	gross applic. rate in mm/h	spray radius in m	irrigated area in m <sup>2</sup>	gross applic. rate in mm/h	spray radius in m	irrigated area in m <sup>2</sup>	gross applic. rate in mm/h
20	0,8	2,01	9,95	0,95	2,84	7,05						
30	1	3,14	9,55	1,25	4,91	6,11	1,5	7,07	4,24	2,2	15,21	1,97
40	1	3,14	12,73	1,45	6,61	6,06	1,6	8,04	4,97	2,3	16,62	2,41
50	1,15	4,15	12,03	1,6	8,04	6,22	1,9	11,34	4,41	2,3	15,62	3,01
60				1,7	9,08	6,61	2	12,57	4,77	2,5	19,63	3,06
70							2	12,57	5,57	2,7	22,9	3,06
90										2,7	22,9	3,93
120										2,8	24,63	4,87

## #03 FLOW RATE AND DESIGN ELEMENT GUIDE VIKING SPRINKLERS

NOMINAL FLOWRATE													DESIGN ELEMENTS	
50kPa	60kPa	70kPa	75kPa	80kPa	90kPa	100kPa	110kPa	120kPa	125kPa	130kPa	14kPa	150kPa	a	b
13.62	15.15	17.44	17.69	17.93	19.52	20.21	21.01	21.98	22.56	23.21	24.25	24.72	5.8599	0.535
20.94	23.35	26.94	27.25	27.56	28.95	30.98	32.51	34.07	34.83	35.82	37.28	41.91	7.9935	0.598
25.16	30.13	34.72	35.16	35.59	37.31	39.78	41.81	43.81	44.88	45.88	48.04	49.45	9.9433	0.599
34.02	37.72	43.4	43.94	44.48	46.82	50.39	52.99	55.67	56.73	57.95	60.97	62.7	14.236	0.549
41.44	45.82	52.76	53.42	54.07	56.83	60.46	68.51	66.64	67.98	69.77	73.13	75.18	17.8437	0.532
47.86	52.82	61.01	61.75	62.49	65.64	69.82	73.26	76.97	78.47	81.39	84.16	86.62	20.691	0.53
62.23	68.77	79.49	80.56	81.63	85.58	91.2	95.95	100.78	102.59	104.96	110.06	113.22	26.709	0.535
81.46	89.76	103.39	104.69	105.99	111.28	118.3	124.63	130.33	132.82	135.97	142.4	146.33	35.554	0.524

## #04 NOZZLE DISCHARGE CHART VIKING SPRINKLERS







# RAIN-X: NEXT GENERATION MICRO SPRINKLERS

- Smallest one on the market
- Engineered to provide optimum distribution uniformity
- Manufactured from the highest quality engineering grade polymers
- Patented bayonet type fitting between nozzle and butterfly
- Simple modular parts for easy replacing
- Colour coded combinations for easy selection
- Spike designed to protect above-ground flexible tubing against elements
- Eco-friendly heavy metal free pvc flexible tubing with excellent UV and ozone resistant properties
- One full year manufacturers guarantee

MORE TO COME SOON!



## KEEP IT SIMPLE

The Rain-X is a simple and small sprinkler. As our Viking Sprinkler it is modular, but with a limited choice of nozzles and swivels.



RAIN-X



VIKING SPRINKLER



# TECHNO- PIPE

Technopipe is manufactured using a selected blend of the finest materials in order to achieve this first class product. It comes with a 5-10 years above ground warranty, depending on your choice of blend. Our pipes are made of LDPE, HDPE and PVC, depending on area of use.

- Our premium masterbatch enables our pipe to deflect most UV rays making it more resistant
- Available for different water pressures
- Due to its smooth interior, hydraulic efficiencies are improved, which also reduces algae build-up

- All pipes are meticulously coiled to ensure easy nesting and storage
- Coils come in standard 100 m lengths, but can be produced to custom longer lengths
- Technopipe can be identified by means of laser etching, ensuring durable lasting print
- All pipes can be identified by date as well as size and class, ensuring 100 percent traceability
- Technopipe is suitable for both internal and external fittings (SABS 533 spec available)

## 2.1 TECHNOPIPE

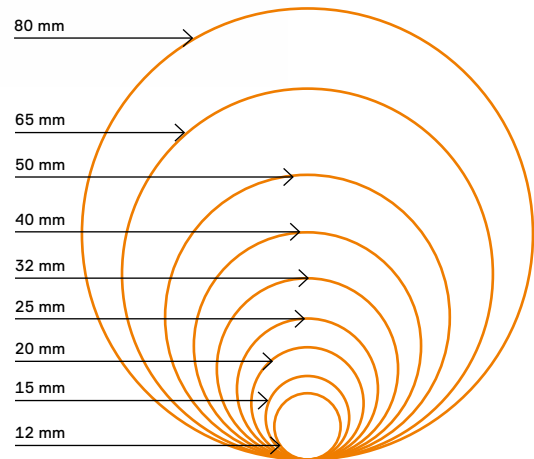
18 → MATERIALS AND DIMENSIONS

19 → CUSTOMIZING OPTIONS

# MATERIALS AND DIMENSIONS



## #01 LDPE DIAMETERS



## #02 THE PIPES

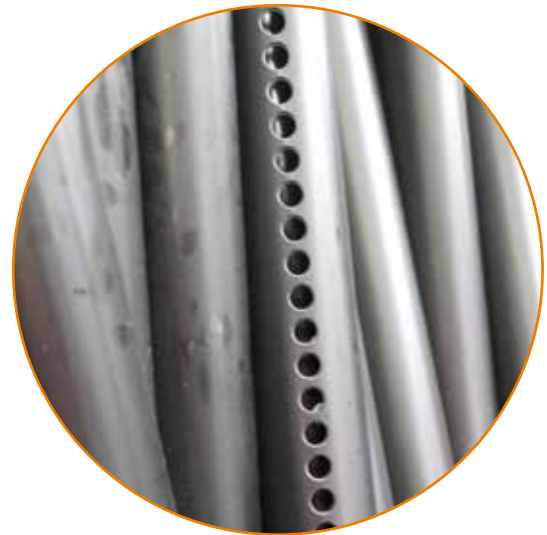
	VIRGIN 1A LDPE	VIRGIN 1B LDPE	A-GRADE LDPE	DUTY LDPE	VIRGIN HDPE	PVC
WARRANTY YEARS ABOVE GROUND USE	10	7	5	5		
WARRANTY YEARS UNDER GROUND USE	10	7	5	5		
100% REPLACEMENT YEARS	3	2	1	1		
INTERNATIONAL WARRANTY	X	X				
MATERIAL	Virgin	Virgin	Blend	Recycled		
SIZE MM	12-80	12-80	12-80	12-80		
LASER ETCHING	X	X	X	X		
LONG LASTING PRINT	X	X	X	X		
ENHANCED UV PROTECTION	X	X	X	X		
REDUCED SEDIMENT BUILD-UP	X	X				
REDUCED ALGAE BUILD-UP	X	X				
AVAILABLE IN CLASS 3	X	X	X	X		
AVAILABLE IN CLASS 6	X	X	X	X		
AVAILABLE IN 533 SPEC	X	X	X	X		



# TECHNOPIPE CUSTOMIZING OPTIONS



**LENGTH**  
Technopipe is available in any length  
from 25 to 400 m.  
(standard 100 m / Ø 65 mm = 50 coil)



**PUNCHINGS**  
Technopipe can be customized to your needs  
by pre-punching holes at the exact dimen-  
sions and intervals as you require.



**IDENTIFICATION**  
Technopipe is identified by means of laser etching, en-  
suring long lasting print. All pipes are identified by date as  
well as size and class, ensuring 100 percent traceability.  
Have your own name, logo or instructions laser etched  
onto your Technopipe!







# ACCESSOIRES

At OKE you have the opportunity to get a holistic solution. Our product portfolio offers some helpful accessoires in stores as well as on the farms.

Please contact us should you require one of our products or if you have ideas that might be handy, too!

## 3.0 ACCESSOIRES

22 → DRAAI  
HOMS

22 → FIELD  
DECOILER

22 → INSTORE  
DECOILER


## DRAAI HOMS

Developed for the fastening of dripper lines to existing wire structures in vineyards and other pipes. They are a smart and effective fixation of the dripper lines and quick and easy to install. The Draai Homs are available in various lengths and in the widths 15 and 20 mm.

**DRAAI HOMS**  
Quickly and easily fasten pipes to existing wire structures in vineyards and other places. Available in various lengths.



## #01 PIG TAILS/DRAAI HOMS

	DRAAI HOMS						
	Ø in mm	15	15	15	15	20	20
	art. no.	DH15-40	DH15-70	DH15-120	DH15-150	DH20-40	DH20-50
	length in mm	40	70	120	150	40	50

## FIELD DECOILER

Uncoil your pipes in the field without any kinks or hassles. It is compact, light-weight and only requires one person to operate. Easy handling!

### FIELD DECOILER

Quick and easy uncoiling with no more kinks, thanks to the collapsible and light Field Decoiler. Easy handling for single person operation out in the field.



## IN-STORE DECOILER

Use this neat and space saving display to quickly and easily dispense any length of pipe your customer may require!

### IN-STORE DECOILER

Smart, effective pipe sales through single person operated custom length dispenser. Advertising board customizable!







**OKE South Africa (PTY) Ltd.**  
22 Zandwyk Industrial Park / 7646 Southern Paarl / South Africa

**OKE South Africa (PTY) Ltd.**  
10 Dawn Street / Montague Gardens / 7441 Cape Town / South Africa

T +27 21 551 2464  
F +27 21 551 2488  
info@oke.co.za

**OKE-IRRIGATION.COM**