

# mandals

since 1775

A Michelin Group Company

## World Class Lay-Flat Hoses

# Mining



[www.mandals.com](http://www.mandals.com)

Legacy Through Innovation



# Contents

<b>About Us</b> .....	<b>2</b>
<b>Why Mandals</b> .....	<b>3</b>
<b>Our Materials</b> .....	<b>3</b>
● Rubber	
● TPU	
<b>Our Mining Hoses</b> .....	<b>4</b>
<b>Advantages of Mandals Hoses</b> .....	<b>5</b>
<b>Quality</b> .....	<b>5</b>
<b>Looms &amp; Spares</b> .....	<b>6</b>
<b>Mining Lay-Flat Hoses</b> .....	<b>8</b>
<b>Superman HVT</b> .....	<b>9</b>
<b>Flexitex Extra</b> .....	<b>11</b>
<b>Ultraman HVT</b> .....	<b>13</b>
<b>Ultraman</b> .....	<b>15</b>
<b>Wellman 300</b> .....	<b>17</b>
<b>Boreman 300</b> .....	<b>19</b>
<b>Mantex HP</b> .....	<b>21</b>
<b>Mantex</b> .....	<b>23</b>
<b>Notes</b> .....	<b>26</b>



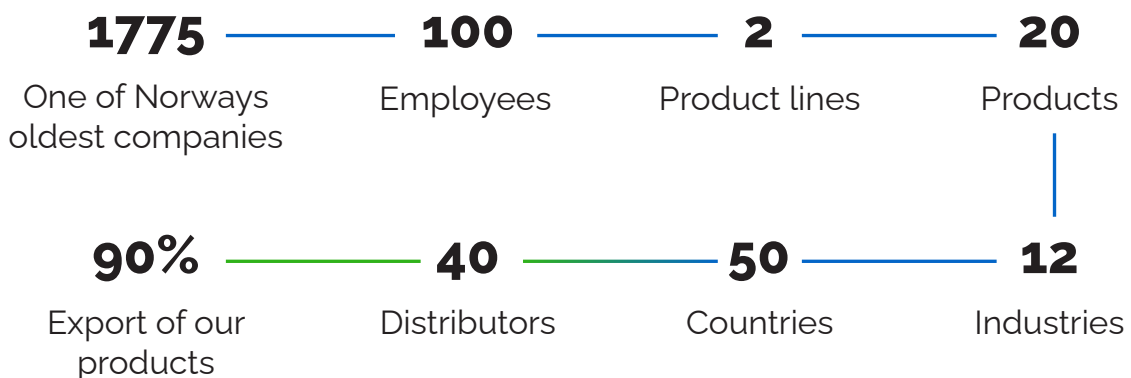
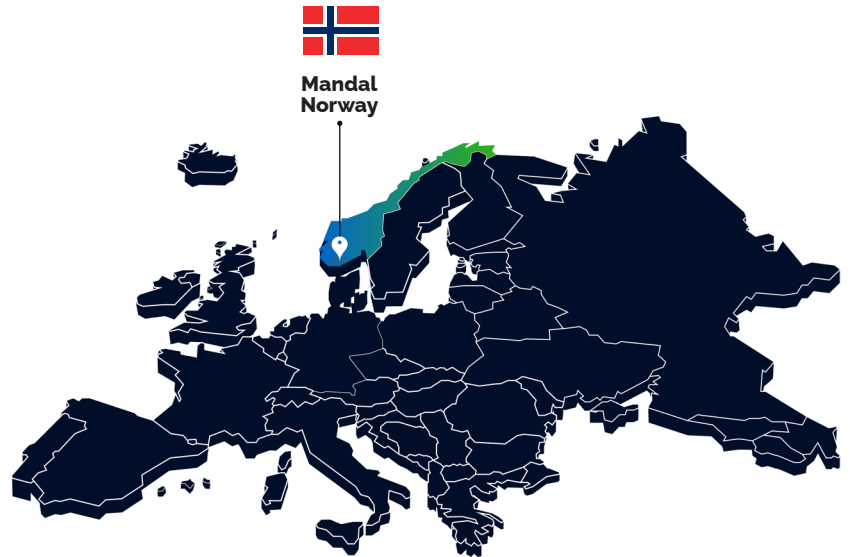
## Abbreviations

<b>HVT</b>	High Volume Transfer
<b>NBR</b>	Nitrile Rubber
<b>TPU</b>	Thermoplastic polyurethane

# About us

Mandals specializes in the manufacturing of high quality lay-flat hoses, liners, and circular shuttle looms. We are based in Mandal, on the southern coast of Norway and have been in business in the same location for nearly 250 years.

We have come a long way since our establishment in 1775, and today we are one of the world's most recognized manufacturers of lay-flat hoses and looms. 90% of our products are exported and are found across the globe thanks to our long-standing partners and distributors.



# Why Mandals

We strive to grow long-term, loyal partnerships. Our core values are People, Planet and Profit and we will always focus on people first. As a partner with Mandals we will do our best to put you first, aiming to offer you the best service in all aspects of the partnership. We expect active partners that will challenge, inspire, and help us grow and build business together.

We define ourselves as a trustworthy supplier with high focus on quality in the production process and products. All lay-flat hoses and looms are produced in-house, meaning that you can be assured we produce quality without compromise.

## Our Materials

### Rubber Hoses

Mandals rubber hoses are made from a blend of nitrile rubber and PVC, with an added UV barrier. The rubber is fully extruded through the circular woven fabric, ensuring excellent bonding between cover and lining to prevent delamination. Thanks to the interlocking between the warp yarns and the weft of the circular weave, the hose has a high lengthwise stability and a full diameter recovery after use. The abrasion and puncture resistance of Mandals rubber hose is by far superior to any regular uncovered textile hose.

### TPU Hoses

Our TPU hoses are among the most innovative lay-flat hoses in the world, which are made from extruded thermoplastic polyurethane (TPU) with excellent wear and tear properties. The TPU is extruded through the weave, which is made of high tenacity filament polyester yarns. This method gives a very strong bonding between cover and lining as well as firmly encapsulating the woven polyester yarn. The abrasion resistance of the Mandals TPU hoses is among the highest available, and our TPU hoses also have excellent resistance against the most commonly used chemicals, UV radiation, hydrolysis, and fungus degradation.

### Rubber Hoses



### Thermoplastic Polyurethane (TPU) Hoses



# Our Mining Hoses

## Mantex

A Rubber Compressed Air Hose



## Mantex HP series

A TPU Compressed High-Pressure Air Hose



## Wellman 300

A Potable TPU Well Hose



## Boreman 300

An Industrial TPU Well Hose



## Ultraman

A Multipurpose TPU Transfer Hose



## Ultraman HVT

A Multipurpose TPU Transfer Hose



## Flexitex Extra

A Multipurpose Rubber Transfer Hose



## Superman HVT

A Multipurpose TPU Transfer Hose



# Advantages of Mandals Hoses

Quick deployment and retrieval, combined with **excellent flow rates** and long lifetime, **reduces operation cost**

**High abrasion resistance** and tensile strength

**Excellent mechanical adhesion** between the layers provides the best quality hose with a long lifetime

**Highly flexible hoses** = Kink resistant and minimal pressure loss



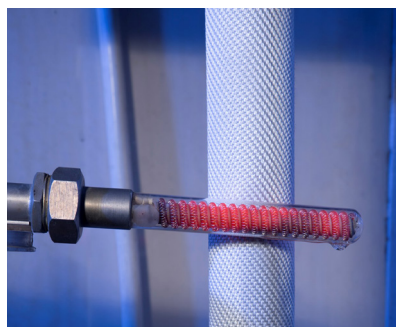
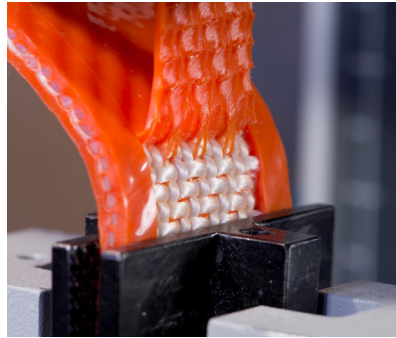
## Quality

One of the values we live by is **"Legacy Through Innovation"**, meaning that we will always work to further develop our products, our production processes and the way we do business with our partners. We are following the trends in the market and continuously working to develop new products and solutions for our customers' unique challenges.

**Raw materials and finished products are tested and documented according to international standards.**

### Examples:

- ISO4671 - Wall Thickness
- ISO1402 - Hydrostatic testing
- ISO8033 - Adhesion
- BS6391 - Abrasion
- BS6391 - heat resistance



Long lasting hoses for demanding use require **durability** and **wear resistance**



**Resistant to most industrial chemicals, ozone, and UV-rays**

Durable even in the **roughest environments**

**Small logistical footprint** required for transport and storage

**Unique weave design** that is specially developed for each hose

**Easy to handle** - less heavy lifting

## Looms & Spares

We pioneered the lay-flat hose a century ago and developed our first circular loom in 1935. Today you can find our machines in over 30 countries, some of which have been in service for over 50 years. Our machines continue to define the standard for quality and reliability in circular looms.



Scan the QR code if you would like to know more about our looms



# Mining Lay-Flat Hoses





# Efficient Mine Dewatering

Mandals lay-flat hoses are an important part of an optimal water management system. Efficient mine dewatering and slope de-pressurization systems are important components of many surface and underground mining operations.

In high flow and deep well dewatering systems for mines, lay-flat hoses are used to deliver or remove the many thousand gallons of water needed per minute. In mines where pit slope de-pressurization is essential to maintain stable slopes, lay-flat hoses offer ease of handling, deployment and retrieval. If the mining operation is to be taken to a deeper level, bore hoses are used to remove ground water.

Lay-flat hoses are ideal for rapid large volume dewatering due to less pressure drop over large distances. Not to forget the rapid and flexible deployment compared to other types of rigid hoses or steel pipes.

Mine dewatering takes place in the harshest of environments. This requires extremely abrasion resistant hoses to withstand being deployed down steep, rocky mountain sides, lowered into deep wells and to carry the weight of a full set of submersible pumping equipment.



**Mantex**



**Mantex HP Series**



**Wellman 300**



**Boreman 300**



**Ultraman**



**Ultraman HVT**



**Flexitex Extra**



**Superman HVT**

# Dewatering

## Superman HVT

### TPU Hose

Temporary flexible pipelines  
Open pits dewatering

**Mandals Superman High Volume Transfer (HVT) is our market-leading all-purpose hose for fluid transfer. Not only is Superman HVT designed for higher working pressures when transporting fluids, the hose is also heavily reinforced with exceptional resistance to abrasion and cutting.**



High Diameter and  
Dimension Stability



Easy to Deploy  
and Store



Great Adhesion and  
Tensile Strength



High Abrasion and  
Kink Resistance



Minimal Snaking of  
Pressurized Hose



High Puncture  
Resistance



Long Lifetime and  
Low Maintenance



High Quality  
Materials

## Key Features

- Transfer at higher than normal working pressures.
- Lightweight and easy to deploy.
- Ultimate abrasion and puncture resistance.
- High diameter and extension stability.
- Minimum snaking of pressurized hose.
- Operating temperature from  $-50^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$  to  $+167^{\circ}\text{F}$ ) for pure water.

## Advantages

- Full diameter recovery after pressure release.
- Excellent hydrolysis and fungus resistance.
- Resistance to a wide range of chemicals.
- Excellent UV, Ozone and weathering resistance.
- Leak proof tested section lengths up to 200 mts.

Designed with premium thermoplastic polyether-based polyurethane (TPU) and is extruded with our state-of-the-art "through the weave" extrusion technology



The heavily reinforced and stabilized weave combined with great abrasion and puncture resistance makes for a hose you can rely on

Available in lengths up to 700 meters

### Superman HVT

Inner Diameter		Wall Thickness		Weight		Burst Pressure		Tensile Strength	
inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	X1000 lbs	X1000 kg
5	127 + 2.5	0.14	3.5	1.07	1.60	650	45	34.8	15.8
6	152 + 3.0	0.15	3.7	1.34	2.00	650	45	44.0	21.0
7	178 + 3.0	0.16	4.0	1.61	2.40	650	45	70.0	31.8
8	203 + 3.0	0.17	4.2	2.15	3.20	610	42	81.5	37.0
10	254 + 5.0	0.17	4.3	2.73	4.10	520	36	101.2	46.0
12	305 + 5.0	0.18	4.5	3.38	5.05	435	30	120.0	54.5



# Water Transfer

## Flexitex Extra

### Rubber Hose

Fluid Transfer

**Flexitex Extra is designed for more demanding water transfer, and is a general transfer hose for non-flammable liquids in mining. The design ensures minimum elongation and a very high pressure rating to wall thickness ratio.**

This Premium Lay-flat hose is made from a blend of nitrile rubber and PVC, with added UV barrier to prevent damage from UV radiation.



**Long lifetime with proper usage and storage**



**High burst pressure**



**High Quality Materials**



**High degree of nitrile rubber.**

## Key Features

- Used as feeder hose for transfer or any type of water transfer application.
- General purpose, water discharge rubber hose.
- Adapts well to the terrain and can be routed around obstacles.
- The hose is also used as a light weight wash down or transfer hose for water based and non polar liquids in construction and general industry.
- Operating temperature from -50°C to +75 °C (-58°F to +167°F) for pure water.

## Advantages

- Resistance to a wide range of chemicals.
- Excellent UV, ozone and weathering resistance.
- The Flexitex Extra can also be delivered with further improved heat and UV resistance upon request.
- Excellent adhesion between cover/lining and the weave.
- Some diameters can be produced in lengths above 200 meters.

The rubber blend is extruded through a circular woven reinforcement made from filament polyester yarn



Made from a blend of nitrile rubber and PVC, with added UV barrier to prevent damage from UV radiation

Excellent bonding between cover and lining as well as firmly encapsulating the reinforcing polyester

### Flexitex Extra

Inner Diameter		Wall Thickness		Weight		Burst Pressure		Tensile Strength	
inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	X1000 lbs	X1000 kg
3	76 + 2.0	0.12	3.1	0.64	0.95	720	50	20.1	9.1
3 1/2	90 + 2.5	0.13	3.3	0.79	1.18	640	44	22.3	10.1
4	102 + 2.5	0.13	3.2	0.80	1.20	610	42	25.1	11.4
4 1/2	114 + 3.0	0.13	3.2	0.96	1.43	510	35	27.6	12.5
5	127 + 4.0	0.13	3.4	1.13	1.68	440	30	30.2	13.7
6	151 + 4.0	0.15	3.8	1.41	2.10	610	42	37.5	17.0



# Water Transfer

## Ultraman HVT

### TPU Hose

Lightweight flexible pipeline for horizontal pumping

**Ultraman high volume transfer (HVT) is a lightweight multipurpose hose, extruded "through the weave" by a polyether-based, high-quality thermoplastic polyurethane (TPU). Its high operational pressure combined with lightweight and compact storage makes it ideal for use within several industries.**

Ultraman HVT has properties and dimensions similar to Mandals Superman HVT, but with a reduced thickness on the protective coating.



**High Diameter and Dimension stability**



**Easy to Deploy and Store**



**Great Adhesion and Tensile Strength**



**High Abrasion and Kink Resistance**



**As Light as a NBR Hose - Best In Class**



**High Puncture Resistance**



**Long Lifetime and Low Maintenance**



**High Quality TPU**

## Key Features

- Low weight combined with high pressure ratings.
- High strength, added UV barrier, high quality materials and excellent adhesion between weave and outer rubber layer gives a hose with a long life expectancy.
- Operating temperature from -30°C to +75°C (-22°F to +167°F). Intermittent use up to +80°C (+176°F).

## Advantages

- Field proven hose with a long track record.
- Lengths up to 200 meters.
- Made from a blend of nitrile rubber with added UV barrier to prevent damage from UV radiation.

State of the art "through the weave" extrusion technology



Excellent adhesion between cover/lining and the weave

Excellent adhesion between cover/lining and the weave

### Ultraman HVT

Inner Diameter		Wall Thickness		Weight		Burst Pressure		Tensile Strength	
inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	X1000 lbs	X1000 kg
8	203 + 3.0	0.16	3.9	1.82	2.7	610	42	81.5	37.0
10	254 + 5.0	0.16	4.0	2.35	3.5	520	36	101.0	46.0
12	305 + 5.0	0.17	4.2	2.83	4.2	435	30	120.0	54.5



# Water Transfer

## Ultraman

### TPU Hose

Durable and Lightweight All-Round Hose

**Ultraman is designed as a lightweight transfer hose, meant for all-around use in mining, energy, and agriculture. Easy handling and a long service life make it very cost-effective.**

**Ultraman differs from our other high-volume transfer hoses in that it is a lighter construction and comes only in dimensions up to 7".**



**High Diameter and Dimension stability**



**Easy to Deploy and Store**



**Great Adhesion and Tensile Strength**



**High Abrasion and Kink Resistance**



**Minimal Snaking of Pressurized Hose**



**High Puncture Resistance**



**Long Lifetime and Low Maintenance**



**Light Weight**

## Key Features

- Low weight combined with high pressure ratings.
- High strength, added UV barrier, high quality materials and excellent adhesion between weave and outer rubber layer gives a hose with a long life expectancy.
- Operating temperature from -30°C to +75°C ( -22°F to +167°F). Intermittent use up to +80°C (+176°F).

## Advantages

- Field proven hose with a long track record.
- Lengths up to 200 meters.
- Made from a blend of nitrile rubber with added UV barrier to prevent damage from UV radiation.



State of the art  
"through the weave"  
extrusion technology



Excellent adhesion between  
cover/lining and the weave

Excellent adhesion  
between cover/  
lining and the  
weave

### Ultraman

Inner Diameter		Wall Thickness		Weight		Burst Pressure		Tensile Strength	
inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	X1000 lbs	X1000 kg
<b>2 1/2</b>	65.0 + 2.0	0.11	2.8	0.44	0.66	810	56	14.3	6.5
<b>3</b>	76.0 + 2.0	0.11	2.8	0.54	0.84	780	54	17.4	7.9
<b>3 1/2</b>	90.0 + 2.0	0.11	2.9	0.66	0.98	620	43	20.0	9.1
<b>4</b>	102.0 + 2.5	0.13	3.2	0.80	1.20	610	42	22.2	10.1
<b>4 1/2</b>	114.0 + 2.5	0.13	3.2	0.93	1.39	535	37	23.8	10.8
<b>5</b>	127.0 + 2.5	0.13	3.2	1.02	1.52	505	35	26.4	12.0
<b>6</b>	152.0 + 3.0	0.13	3.2	1.16	1.73	435	30	32.8	14.9
<b>7</b>	178.0 + 3.0	0.13	3.2	1.37	2.05	390	27	37.6	17.1



# Flexible Rising Main

## Wellman 300

### TPU Hose

Wellman 300 flexible rising main is designed as a permanent alternative to traditional materials such as steel, fiberglass, UPVC and polyethylene in water wells with electric submersible pumps. The Wellman riser has been in international markets for over 30 years and operating in numerous industrial locations.

The Wellman 300 is comparable to Boreman 300, but with potable water approvals and designed for potable applications.



**Cost Efficient**



**Easy to Deploy and Store**



**Great Adhesion and Tensile Strength**



**Less Impact on the environment**



**Drinking Water Approved**



**High Working Pressure**



**Long Lifetime and Low Maintenance**



**High Quality Materials**

### Primary Uses & Applications

- Groundwater extraction – potable and brackish
- Water supply wells in RO desalination
- Food processing
- Irrigation & agriculture
- Mine de-watering
- Land stabilization
- Solar power systems
- Offshore rig firewater and service pumps
- Environmental monitoring

### Features

- Superior hydraulic performance.
- Allows rapid installation and retrieval of the submersible pump.
- Small storage footprint compared to rigid pipe, allowing transportation by smaller vehicles, and requiring less manpower.
- Light weight and easy to deploy.
- Low longitudinal elongation.
- Low maintenance and no corrosion.
- Torque on pump start-up is accommodated without damage to the riser.

### Properties

- Lengths up to 300 meters.
- Color options: Blue (standard).
- Couplings BSPT (standard) and NPT (optional).
- The textile reinforcement is designed to support the weight of the submersible pump, the column of water, the power cable, and the riser itself, with a minimum 2:1 safety factor.
- NSF/ANSI/CAN61, WRAS6920-1, KTW-BWGL, AS/NZS 4020 and DVGW W270 drinking water certified.

### Construction

- A high tensile polyester reinforcement jacket enveloped by a high-grade polyurethane lining and cover material resistant to hydrocarbon fuels, many chemicals, ozone, UV, abrasion, and microbial attacks. The one-piece composite gives an excellent stability and removes any risk of delamination.
- The textile reinforcement is designed to swell under operating conditions up to 15%, reducing scale build-up. This feature gives a nominal increase in riser diameter, reducing friction loss, and improving hydraulic performance.

Supplied in a single length to the required pump setting



All synthetic materials of construction mean that there is zero corrosion and no scale build up

The textile reinforcement is designed to swell under operating conditions up to 15%

### Wellman 300



AS/NZS 4020

KTW-BWGL



Article Number	-	WMS051	WMS076	WMS102	WMS127	WMS152
Inner Diameter	mm	51 mm	76 mm	102 mm	127 mm	152 mm
	inch	2"	3"	4"	5"	6"
Wall Thickness	mm	3.3	3.4	4.0	4.4	4.6
	inch	0.13	0.13	0.16	0.17	0.18
Default Number of Straps	-	1	1	2	2	2
Maximum Pump Setting	m	300	300	300	300	300
	ft	1000	1000	1000	1000	1000
Burst pressure	bar	62	62	62	58	58
	psi	900	900	900	840	840
Maximum Operating Pressure	bar	31	31	31	29	29
	psi	450	450	450	420	420
Effective Tensile Strength	kg	4600	8000	14000	20000	23000
	lb	10150	17650	31000	44100	50700
Maximum Continuous End Load	kg	2300	4000	7000	10000	11500
	lb	5070	8820	15430	22040	25350
Weight (hose only)	kg/m	0.7	1.0	1.6	2.0	2.5
	lb/ft	0.5	0.7	1.1	1.3	1.7
Weight (standard coupling)	kg	1.4	3.4	6.3	11.3	15.6
	lb	3.1	7.5	13.9	25.0	34.4
Mandals Coupling Outer Diameter	mm	80	115	145	177	200
	in	3.1	4.5	5.7	7.0	8.0
Maximum Extension under Load Conditions	%	+ 2				
Maximum Diameter Swell	%	+ 15				
Maximum Diameter Temperature	°C	- 40 to + 50 (with intermittent use up to 80)				
	°F	- 40 to + 120 (with intermittent use up to 176)				
Water Quality	pH	4 - 9 (Below 30 °C / 86 °F)				
		5 - 9 (Above 30 °C / 86 °F)				
Velocity at maximum flow	m/s	2.4	3.0	3.0	4.2	4.5
	f/s	8	10	10	14	15
Velocity Flow Rate a Maximum Pump Setting	L/s	8	18	41	78	105
	gpm	127	285	650	1238	1665



Note: Minimum safety factor burst to maximum working pressure is 2:1 for non-hazardous/non-flammable liquids.

# Flexible Rising Main

## Boreman 300

### TPU Hose

**Boreman 300 flexible rising main is designed as a permanent alternative to traditional materials such as steel, fiberglass, UPVC and polyethylene in water wells with electric submersible pumps. Based on our Wellman riser, which has been in international markets for over 30 years and operating in numerous industrial locations, Boreman 300 has been developed specifically for the mining and desalination industries.**

The Boreman 300 is comparable to Wellman 300, but without potable water approvals and designed for specific applications.



**Cost Efficient**



**Easy to Deploy and Store**



**Great Adhesion and Tensile Strength**



**Less Impact on the environment**



**Long Lifetime and Low Maintenance**



**High Working Pressure**



**High Quality Materials**

### Primary Uses & Applications

- Mine dewatering
- Land stabilization in open cut mines
- Beach well supply to reverse osmosis desalination plants
- Environmental monitoring
- Onshore oil and gas field water supply

### Features

- Superior hydraulic performance.
- Allows rapid installation and retrieval of the submersible pump.
- Small storage footprint compared to rigid pipe, allowing transportation by smaller vehicles, and requiring less manpower.
- Light weight and easy to deploy.
- Low longitudinal elongation.
- Low maintenance and no corrosion.
- Torque on pump start-up is accommodated without damage to the riser.

### Properties

- Lengths up to 300 meters.
- Color options: Black (standard).
- Couplings BSPT (standard) and NPT (optional).
- The textile reinforcement is designed to support the weight of the submersible pump, the column of water, the power cable, and the riser itself, with a minimum 2:1 safety factor.

### Construction

- A high tensile polyester reinforcement jacket enveloped by a high-grade polyurethane lining and cover material resistant to hydrocarbon fuels, many chemicals, ozone, UV, abrasion, and microbial attacks. The one-piece composite gives an excellent stability and removes any risk of delamination.
- The textile reinforcement is designed to swell under operating conditions up to 15%, reducing scale build-up. This feature gives a nominal increase in riser diameter, reducing friction loss, and improving hydraulic performance.

Supplied in a single length to the required pump setting

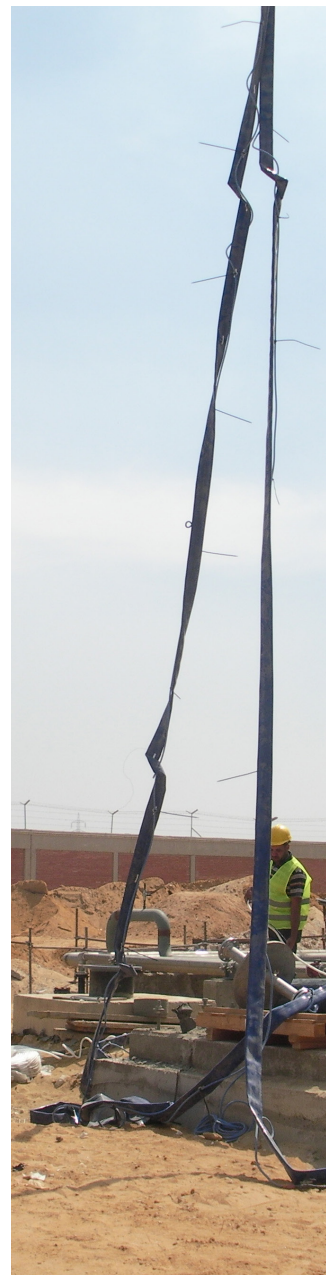


All synthetic materials of construction mean that there is zero corrosion and no scale build up

The textile reinforcement is designed to swell under operating conditions up to 15%

### Boreman 300

Article Number	-	BMS051	BMS076	BMS102	BMS127	BMS152
Inner Diameter	mm	51 mm	76 mm	102 mm	127 mm	152 mm
	inch	2"	3"	4"	5"	6"
Wall Thickness	mm	3.3	3.4	4.0	4.4	4.6
	inch	0.13	0.13	0.16	0.17	0.18
Default Number of Straps	-	1	1	2	2	2
Maximum Pump Setting	m	300	300	300	300	300
	ft	1000	1000	1000	1000	1000
Burst pressure	bar	62	62	62	58	58
	psi	900	900	900	840	840
Maximum Operating Pressure	bar	31	31	31	29	29
	psi	450	450	450	420	420
Effective Tensile Strength	kg	4600	8000	14000	20000	23000
	lb	10150	17650	31000	44100	50700
Maximum Continuous End Load	kg	2300	4000	7000	10000	11500
	lb	5070	8820	15430	22040	25350
Weight (hose only)	kg/m	0.7	1.0	1.6	2.0	2.5
	lb/ft	0.5	0.7	1.1	1.3	1.7
Weight (standard coupling)	kg	1.4	3.4	6.3	11.3	15.6
	lb	3.1	7.5	13.9	25.0	34.4
Mandals Coupling Outer Diameter	mm	80	115	145	177	200
	in	3.1	4.5	5.7	7.0	8.0
Maximum Extension under Load Conditions	%	+ 2				
Maximum Diameter Swell	%	+ 15				
Maximum Diameter Temperature	°C	- 40 to + 50 (with intermittent use up to 80)				
	°F	- 40 to + 120 (with intermittent use up to 176)				
Water Quality	pH	4 - 9 (Below 30 °C / 86 °F)				
		5 - 9 (Above 30 °C / 86 °F)				
Velocity at maximum flow	m/s	2.4	3.0	3.0	4.2	4.5
	f/s	8	10	10	14	15
Velocity Flow Rate a Maximum Pump Setting	L/s	8	18	41	78	105
	gpm	127	285	650	1238	1665



**Note:** Minimum safety factor burst to maximum working pressure is 2:1 for non-hazardous/non-flammable liquids.



# Compressed Air

## Mantex HP

### TPU Hose

The Mantex family is designed to be a flexible and lightweight hose for compressed air. It adapts to the terrain, making it possible to easily operate in difficult areas. For your convenience, the hose has been designed to be easy to coil for storage and transportation.

Mandals has two compressed air hose series, Mantex in rubber and Mantex HP in thermoplastic polyurethane (TPU). Mantex HP is a popular hose due to its lightweight, flexibility and high-pressure rating. Mantex HP is preferred for high burst pressure and abrasion demanding applications, while Mantex is preferred where flexibility and low weight is desirable.



High Burst Pressure



Easy to Deploy and Store



Great Adhesion and Tensile Strength



Safety First



Light Weight and Flexible



High Puncture Resistance



Long Lifetime and Low Maintenance



High Quality Materials

### Primary Uses & Applications

- Compressed air for power tools and compressors.
- Borehole drilling.

### Features

- Light, yet rugged and hard-wearing hose.
- Low weight combined with a high-pressure rating.
- Excellent puncture resistance.
- The hose does not stretch when pulled and has a very high-pressure rating versus wall thickness.
- Field proven design with long track record.
- Dual reinforcement ensures safety against failure.

### Features

- Operating temperature up to +110°C (+230°F).
- Lengths up to 40 meters.
- Color options: Orange (standard).
- Different coupling options available.

### Construction

- Double high tensile polyester jacket hose solution.
- High tensile polyester weaves covered with an abrasion resistant TPU and lined with an oil resistant TPU.

Double Jacket hose with TPU in the outer layer / inner layer



Covered and lined with high-tenacity polyester weaves for maximum abrasion resistance

Lengths up to 40 meters

### Mantex HP

Article Number	Inner Diameter		Wall Thickness		Weight		Maximum Working Pressure		Burst Pressure		Nom. Tensile Strength	
	inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	psi	bar	X1000 lbs	X1000 kg
HPY051	2	51.0 + 2.0	0.17	4.4	0.55	0.82	600	41	2535	175	31.7	14.3
HPY076	3	75.0 + 2.0	0.18	4.5	0.83	1.24	435	30	1740	120	46.6	21.0

Note: Minimum safety factor burst to maximum working pressure is 4:1 for compressed air.

### Mantex HP Extra

Article Number	Inner Diameter		Wall Thickness		Weight		Maximum Working Pressure		Burst Pressure		Nom. Tensile Strength	
	inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	psi	bar	X1000 lbs	X1000 kg
HPZ076	3	75.0 + 2.0	0.22	5.5	1.05	1.55	600	41	2400	165	71.0	32.0

Note: Minimum safety factor burst to maximum working pressure is 4:1 for compressed air.



# Compressed Air

## Mantex

### Rubber Hose

**Mantex combines lightweight and flexibility. The hose is designed for high burst pressure compressed air applications and is highly resistant to abrasion and kinking. Nitrile rubber and PVC are blended together to create a high-quality hose with a UV barrier to prevent UV damage.**

Mantex is designed to be your ideal rubber hose for compressed air applications, but the hose can also be used for other applications such as transporting liquids. For your convenience, the hose has been designed to be easy to coil for storage and transportation, storage and transportation.



**High Burst Pressure**



**Easy to Deploy and Store**



**Great Adhesion and Tensile Strength**



**Safety First**



**Light Weight and Flexible**



**High Puncture Resistance**



**Long Lifetime and Low Maintenance**



**High Quality Materials**

## Key Features

- Low weight combined with high pressure ratings.
- High strength, added UV barrier, high quality materials and excellent adhesion between weave and outer rubber layer gives a hose with a long life expectancy.
- Operating temperature from  $-30^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+167^{\circ}\text{F}$ ). Intermittent use up to  $+80^{\circ}\text{C}$  ( $+176^{\circ}\text{F}$ ).

## Advantages

- Field proven hose with a long track record.
- Lengths up to 200 meters.
- Made from a blend of nitrile rubber with added UV barrier to prevent damage from UV radiation.



The weave is fully embedded in the nitrile rubber, giving the product its strength



Made from a blend of Nitrile rubber with added UV barrier to prevent damage from UV radiation

Low weight combined with high pressure ratings

### Mantex

Inner Diameter		Wall Thickness		Weight		Burst Pressure		Nom. Tensile Strength	
inch	mm	inch	mm	lbs / ft	kg / m	psi	bar	X1000 lbs	X1000 kg
<b>3/4</b>	20.0 + 1.6	0.09	2.3	0.14	0.21	1450	100	4.2	1.9
<b>1</b>	25.4 + 1.6	0.10	2.5	0.18	0.27	1450	100	5.1	2.3
<b>1 1/2</b>	38.0 + 1.6	0.10	2.5	0.25	0.38	1235	85	7.7	3.5
<b>2</b>	51.0 + 2.0	0.10	2.5	0.35	0.53	870	60	10.4	4.7
<b>2 1/2</b>	65.0 + 2.0	0.11	2.9	0.45	0.68	725	50	14.8	6.7
<b>3</b>	76.0 + 2.0	0.12	3.1	0.63	0.95	725	50	17.9	8.1



# Functional Water Management Systems

Our lay-flat hoses are used in a variety of industrial applications like high flow and deep well dewatering systems when delivering or removing water in mines. Lay-flat hoses have the advantage of quick and comfortable use, while also offering better performance with their flexibility and lightweight compared to other traditional dewatering methods.





# mandals

since 1775

A Michelin Group Company

World-Class Lay-Flat Hoses

# Mining

## Let us contact you

By scanning the QR code below, you will be able to fill in your information and choose the products you would like to learn more about. One of our sales managers will get in touch with you shortly to help you with your challenges and suggest appropriate solutions for your needs.



**NO (+47) 38 27 24 00**



**sales@mandals.com**



**Mandals AS  
Nordre Banegate 26  
4515 Mandal , Norway**



**www.mandals.com**