


USER MANUAL FOR SUBSEA MARKER

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IKM TECHNOLOGY AS ref. : *P7015*
Customer ref. : *Subsea Tool*




IKM Technology AS

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1 GENERAL INFORMATION

This manual is a user manual for the Subsea Marker.

The Subsea Marker is designed to be used and operated by an ROV under water. It can be used to mark various objects under water and the marker has good adhesion to any surface. The marker can be used with three different colors; blue, green and red.


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1.1 Abbreviations

HPU	Hydraulic Power Unit
ROV	Remotely Operated Vehicle
kg	Kilo gram
mm	Milli meter
BSP	British standard pipe
JIC	Joint industry council
t	Tonn
C	celsius


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1.2 References

Doc nr	Description	Rev.	Issued	Can be found
7015-002 rev-01	Drawing of Subsea Marker	01	04.04.13	Appendix A

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2 TECHNICAL SPESIFICATION

The Subsea Marker consists mainly of an ROV handle, a spring loaded pen holder (pen housing) and pen.

Weight:

In air: 1,85 kg.

In water: 1,39 kg.

Maximum dimensions:

Width: 112 mm (Fishtale handle), pen holder is: Ø70 mm.

Length: 400 mm w/ Fishtale handle.


Marker content:

Paraffin and hydrocarbon waxes.

Boiling point: 80°C.

No pollution hazard.

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SAFETY

2.1 General – Operations

Only authorised people and qualified personnel should work on the system, and take suitable precautions to prevent any potential injuries. Always adhere to authorised working practices, and use the correct tools for the job. To facilitate this, make sure that these are available before commencing the test.

Ensure that the working area is kept clear and uncluttered.

2.2 General – Mechanical

Beware of and keep clear of all moving components. Do not work on the system whilst power is applied, or if there is any potential for components to move.


Ensure that all load bearing components are adequately and regularly inspected. If damage is found the component must be repaired/replaced as necessary. Do not allow damaged components to remain in service.

Always ensure that items are correctly and adequately supported before removal, and that authorised lifting equipment and procedures are used.

Note: trying to lift heavy components in an awkward position by hand without the assistance of correct lifting equipment, or lifting any component without adopting the correct stance, can lead to serious injury.

Ensure that when working within or underneath the machine that your presence is known to your supervisor. If working underneath the machine, always ensure that there are no loose or unsupported assemblies, components or tools above.

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3 OPERATIONAL DESCRIPTION

The following description is a generic description of preparation and use of the Subsea Marker.

- Unpack all parts and check for transport damages
- Verify that all parts on equipment list is present
- Unscrew the pen holder and fill it with desired color pen/stick. Put the pen holder back together.
- Make sure that it is enough marking material outside of the pen holder.
- The Subsea Marker is now ready to be used. Be aware that an unused marker pen should have a plastic cap on top to protect the marking material. This cap must be removed before use.

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4 MAINTENANCE


- Dismantle the tool and check for damages.
- Put marker pen in a suitable place.
- Clean the tool with fresh water and apply a light layer of WD40 or similar.

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5 SPARE PART LIST

- Handle.
- Marker pens.
- Pen holder.
- Spring.

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6 REVISION CHANGES


Revision	Procedure change	Author
01	<i>Original version</i>	KF

7 CONTACT INFORMATION

All enquiries relating to the tooling should be addressed to:

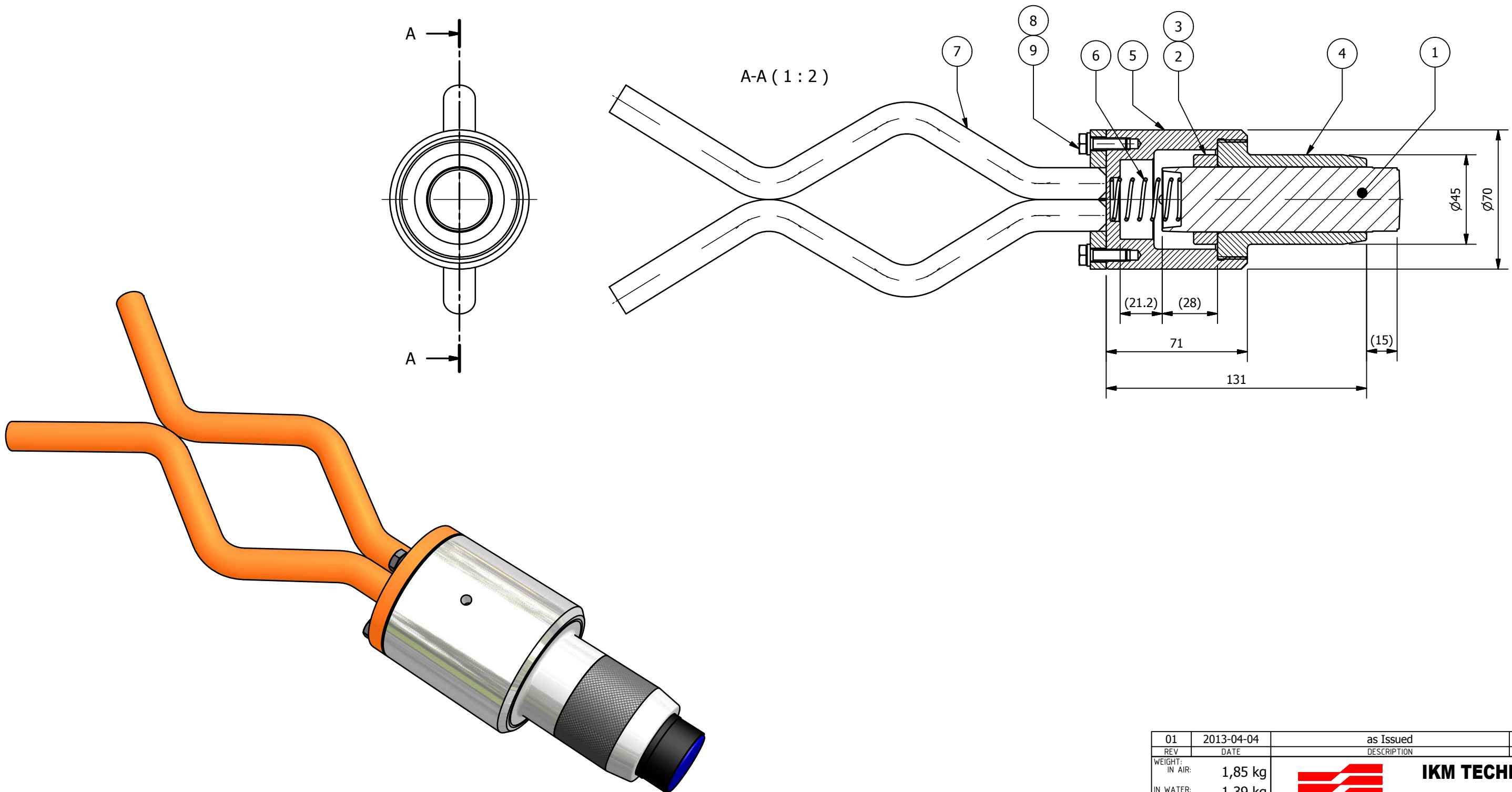
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8 APPENDIX

	Doc number	Description	Rev
<i>Appendix A</i>	<i>7015-002 rev-1</i>	<i>Drawing of Subsea Marker</i>	01
<i>Appendix B</i>			
<i>Appendix C</i>			



PARTS LIST					
ITEM	QTY	PART NUMBER	MATERIAL	MASS	DESCRIPTION
1	1	7015-001	Blue, Green, Red	0.13 kg	Marker
2	1	7015-102	Aluminium, 6082-T6	0.02 kg	Clamp
3	2	ISO 4762 - M3 x 16	Stainless Steel, 440C	0 kg	Screw
4	1	7015-103	Aluminium, 6082-T6	0.2 kg	Guidance
5	1	7015-106	Aluminium, 6082-T6	0.39 kg	House
6	1	7015-105	Stainless Spring Steel, EN 10270-3-1.4310	0.01 kg	Coil spring
7	1	FT250-100		1.07 kg	FISH TALE 250mm LONG
8	4	ISO 7092 - ST 6 - 140 HV	Stainless Steel	0 kg	Washer
9	4	ISO 4017 - M6 x 20	Stainless Steel, 440C	0.01 kg	Screw

01	2013-04-04	as Issued	POD	EN	POD
REV	DATE	DESCRIPTION	BY	CHKD	APPD
WEIGHT:					
IN AIR:		1,85 kg			
IN WATER:		1,39 kg			
UNLESS OTHERWISE SPECIFIED:					
ALL DIMENSIONS ARE IN MILLIMETRES					
TOLERANCES:					
LINEAR: ISO 2768-1					
ANGULAR: ISO 2768-1					
EDGES: ISO 2768-1					
REMOVE ALL BURRS					
BREAK ALL SHARP EDGES					
FIRST ANGLE PROJECTION					
SHEET SIZE: A3		SHEET NO.: 1 OF 1		SCALE:	
DRAWING NO.: 7015-002				LATEST REV.: 01	

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