

HMS 30/65 Mastic Heat Shrinkable Sleeve 2-layer Girth Weld Field Joint Coating

- **GUARDIAN H30/65** Mastic Heat Shrinkable Sleeve 2-layer system is engineered for ready-to-fit assembly for the corrosion protection of field girth weld joints in water supply or gas distribution and transmission networks, especially for use in low & middle shear or low stress environments in moderate climates.
- **MS GUARDIAN HMS 30/65** is compatible for use with standard pipe coatings and can be used for coating bare replacement pipe sections and large radius bends.
- **GUARDIAN HMS 30/65 system** is designed to be applied with minimum preheating and is ideal for large diameter water pipe in normal conditions. Note: For pipe diameters of DN750 (30") or larger, in high shear and high stress environments, the use of **the GUARDIAN HCS 65 or HSS 60/80** is recommended).

CONFIGURATION

- **GUARDIAN HMS 30** consists of a Low preheat viscoelastic mastic sealant.
- **GUARDIAN HMS 65** is a Low Preheat Middle Shear Strength Half-Rigid Mastic Sealant.
- **GUARDIAN HMS 30/65** Heat Shrinkable Sleeves are extruded onto a Radiation cross-linked, high density polyethylene backing with TIP (Temperature Indicator Pattern).

BENEFITS

- **Adhesion Properties:** Excellent Mastic Adhesive allows for Lower Installation Pre-Heat Temperature while still attaining Significant Adhesion onto Steel and Parent Pipe Coating, and offering Resistance to Shear Forces induced by Soil and Thermal Movements.
- **Fast and Easy Application:** User friendly with cost benefits.
- **Heat Temperature Indicator:** Sleeve Backing Pattern is an Indicator for the Heat Requirement during Application.
- **Operating Conditions:** Covers Operating Temperatures from -25°C to 65°C, for nearly every application.
- **Service Life:** 30+ years

PACKAGING

Part No.	Width	Length
FG001228	450mm	30m
FG001234	600mm	30m

SHELF LIFE

2 years, under correct storage conditions in a dry, well ventilated area, in original sealed cartons between -20°C and 40°C

APPLICATION GUIDE

	HMS 30	HMS 65
Performance	EN 12068 Class C30 ISO21809-3	EN 12068 Class C50 ISO21809-3
Compatible line coatings	PE, FBE, Coal Tar, AE	PE, FBE, Coal Tar, AE
Soil stress restriction	None	None
Max operating temperature	30°C (86°F)	65°C (149°F)
Min preheat temperature	50°C (122°F)	50°C (140°F)
Recommended pipe preparation	St. 2.0 – St. 3.0	St. 2.0 – St. 3.0

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PRODUCT THICKNESS

Pipeline diameter (inch)	Mastic Sealant (mm)	Total Thickness as supplied (mm)
3-10	0.8	1.8
12-30	1.2	2.2

Above pipe diameter DN750 (30") in high shear and high stress environments, the use of HCS 65, HSS 60/80 is recommended

STANDARD ORDERING OPTIONS

Cut Piece		*Roll form (Closure patches to be ordered separately)	
Example	HMS30-12X18/1.8	Example	HMS 65-20X100f/2.2-RL
30	Operating temperature 30°C	65	Operating temperature 65°C
12	Outside pipe diameter in inch	100f	Roll length in feet
18	Sleeve width in inch	20	Roll width in inch
/1.8	Sleeve thickness in mm	2.2	Roll thickness in mm
		-RL	Supplied in rolls

PROPERTIES

Property	Test Method	Typical Value HMS 30	Typical Value HMS 65
Backing			
Tensile Strength	ASTM D-638	22MPa	22MPa
Elongation	ASTM D-638	550%	550%
Thermal Ageing 150°C 21 d elongation	ASTM D-638	460%	460%
Hardness, Shore D	ASTM D-2240	54	54
Shrink Force	ASTM D-638, 150°C	43psi	43psi
Dielectric Voltage Breakdown	ASTM D-149	30KV/mm	30KV/mm
Moisture Absorption	ASTM D-570	0.05%	0.05%
Adhesive			
Softening Point	ASTM E-28	95%	115%
Lap Shear @23°C	ASTM D-1002	0.3/mm ²	0.3/mm ²
@Tmax		0.1/mm ²	0.05/mm ²
Sleeve			
Peel Strength	ASTM D-1000		
To steel @23°C		75N/cm	90N/cm
To PE @23°C		75N/cm	90N/cm
Cathodic Disbondment	EN12068 30 days	8mm @23°C	8mm @25°C
Hot Water Immersion	ASTM D-870, 120 days	No delamination, no blisters, or water ingress	No delamination, no blisters, or water ingress
Low Temperature Flexibility	ASTM D-2671-C	-25°C	-25°C
Impact Resistance	EN 12068, Class C	15J no holiday	15J no holiday
Penetration Resistance	EN 12068, Class C	No holidays @10KV >0.6mm	No holidays @10KV >0.6mm

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