The contractor is responsible for analyzing and eliminating any risks during installation (especially the use of personal protective equipment).

## 1) EQUIPMENT AND TOOLS REQUIRED

- •Gloves, protective mask and goggles
- •Brush, abrasive paper and cutter
- Paintbrushes, roller
- •Gas burner

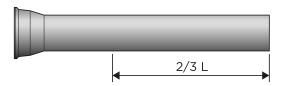
### 2 CHECK THE EXTERNAL DIAMETER

Before cutting, use a circometer to **check** that the OD measured is less than the OD + 1mm (see table below).

DN	<b>OD</b> mm	DN	<b>OD</b> mm	DN	<b>OD</b> mm	DN	<b>OD</b> mm
60	77	250	274	600	635	1200	1255
80	98	300	326	700	738	1400	1462
100	118	350	378	800	842	1500	1565
125	144	400	429	900	945	1600	1668
150	170	450	480	1000	1048	1800	1857
200	222	500	532	1100	1151	2000	2082

**DN** ≤ **300 mm**: preferably cut within 4m of the spigot.

 $DN \ge 350$  mm: preferably cut pipes that have been calibrated (to be specified when ordering). These pipes are marked with metallic gray paint on the socket face.

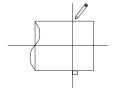




For Blutop and Topaz: DN/OD = outer diameter.

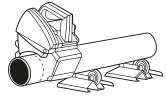
## 3 DRAW THE CUTTING LINE

**Draw** the cutting plane perpendicular to the pipe centerline.



## **4** CUTTING

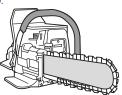
**DN 60 to 300**: cut the pipe with an electric, heat or manual pipe cutting machine.





DN 350 to 700: use a cut-off saw or chainsaw.





**DN** ≥ **700**: use a compressed air saw (e.g. FEIN) with a special attachment for chamfering the pipe.

CUTTING SPECIAL COATINGS





Irrespective of the cutting tool used, always fit a diamond disc.





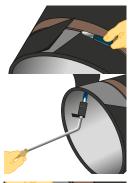
**Draw** the cutting marks (CPe) according to the following table:

DN	STANDARD TT pipe	UNIVERSAL TT pipe		
DN	mm	mm		
60 and 80	95	NK		
100	100	NK		
125 and 150	105	NK		
200 and 250	115	NK		
300	120	NK		
350 and 400	120	205		
450 and 500	125	225		
600 and 700	NK	NK		

**Cut** the PE/PUX coating with a cutter through to the iron, but without damaging the iron.

Make a lengthwise cut to strip off the PE.

**Preheat** the area to be cut from the inside. Max 50°C.

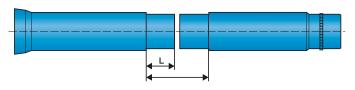


**Remove** the PE/PUX with a chisel. By heating the pipe, the adhesive remains on the PE/PUX.



#### **ZMU PIPES**

**Draw** the cutting marks (L) according to the following table:



	DN	80	100	125	150	200	250	300	350	400	500	600	700
TYT / STD / TYT-SIT PLUS/ STD VI	L	95	100	10	)5	110	115		120		130	145	225
UNIVERSAL	1	130	155	170	165	170	180	195	225	190	215	230	265

**Cut** away the cement without damaging the iron. You can use a special disc with a 5 mm shoulder (ref.**185104**).



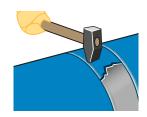
Preheat the area between the cuts in the cement coating. Max 50°C.

Create a lengthwise cut with a chisel



**Remove** the cement coating with a small hammer and chip off any cement traces with a chisel.





#### **ISOPAM PIPES**

**Draw** the cutting area according to the following table:

DN	Insulation to be removed A (mm)	DN	Insulation to be removed A (mm)
100	97	300	130
125	100	350	148
150	103	400	150
200	109	500	155
250	108	600	Contact us

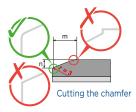
**Cut** the polyethylene coating and insulation (be careful not to cut into the iron). **Remove** the insulation and properly **clean** the spigot.

## **6** DEBURRING AND CHAMFERING

**For mechanical joints** (EXPRESS, COLLARS, etc.), **deburr** the cut edge with a grinder.

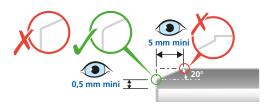


For push-in joints (STANDARD, STANDARD Vi, ViLok, UNIVERSAL Vi and UNIVERSAL Ve):



DN	m (mm)	<b>n</b> (mm)		
60 to 600	9	3		
700 to 1200	15	5		
1400 to 1600	20	7		
1800 to 2000	23	8		

For Blutop, Blutop Vi, Topaz and Topaz Vijoints:





For Blutop and Topaz pipes, remember to use the bluCut machine, which is capable of cutting and chamfering the pipe at the same time.





**Repair** the protective coating on the exposed face and chamfer.



**Brush** to remove any dirt or loose particles.

**Dry** the surfaces to be coated (in case of low temperatures or high humidity, use a gas burner).

**Apply** high-zinc anticorrosion primer NATZINC (ref. **251222**) with a paintbrush. **Allow to dry** for a few minutes.

**Apply** the appropriate paint for the pipe coating:

Type of coating	Repair product	
Natural / Blutop	AQUACOAT 0.75 kg dose, ref. <b>240991</b>	
Integral	EUROKOTE 4820 Red Brown 1 kg dose, ref. <b>184653</b>	
TAG 32	ISOLARM 671-50 ref. <b>179099</b>	
Classic / Standard TT / Standard TT PUX / Isopam / ZMU	ENDOLAC 245-30 FGC 1 kg dose, ref. <b>158134</b>	

Also refer to the "Repair products" guide.

#### **PH1 AND TOPAZ PIPES**

Ask for Topaz repair kit ref. 250714.

Clean the surface to be coated.

Brush or rub with abrasive paper.

Remove any dust with a cloth.

**Clean** the inside of the pipe: after cutting, ensure that there are no filings inside the pipe.

**Preheat** the surface with successive sweeps across the entire surface with a brazing torch (2 min). Maximum temperature: 50°C.

**Apply an initial coat** of EUROKOTE 4820 paint ref. **184653** (1 kg dose) or **220817** (kit of five 50 ml syringes).

**Gently heat** the surface for three minutes after application to accelerate the drying time.

As soon as the first coat is tacky to the touch, **apply** the second coat of EUROKOTE 4820 paint.

**Heat** the surface for five minutes after applying the paint to dry it completely (the coat is dry to the touch without leaving any prints).

Thickness after two coats: 250 µm

#### Check with a circometer (Topaz):

DN	Max. OD after repair	Max. OD before cutting			
DN	mm	mm			
75	75.9	75.5			
90	90.9	90.5			
110	111.0	110.6			
125	126.1	125.7			
140	141.2	140.8			
160	161.3	160.9			

## **3** REPAIRING SPECIAL COATINGS

#### **ITT PE PIPES**

Clean the surface to be coated.

Brush or rub with abrasive paper.

Remove any dust with a cloth.

Apply a coat of paint (refer to the "Repair products" guide).

Allow to dry.

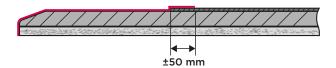
#### **ITT PUX PIPES**

Clean the surface to be coated.

**Brush** or **rub** with abrasive paper.

Remove any dust with a cloth.

Apply an initial coat of paint with a paintbrush (refer to the "Repair products" guide) by covering the end of the spigot and beyond the chamfer by overlapping the cement.



**Gently** heat the surface for three minutes after application to accelerate the drying time.

As soon as the first coat is tacky to the touch, **apply** the second coat of paint.

#### **IISOPAM PIPES**

After assembling the junction, **cover** the exposed area with a foam spacer. **Joint** the renovated part and the pipe coating using Impermastic sealing tape. **Cover** the entire surface with a protective sleeve.

### **PUR PIPES**

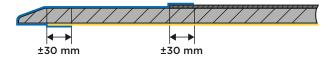
Thoroughly water the pipe while cutting.

Clean the surface to be coated.

**Brush** or **rub** with abrasive paper.

Remove any dust with a cloth.

**Apply** an initial coat of paint with a paintbrush or spatula in case of a small surface area (**refer to the "Repair products" guide**) by covering the end of the spigot and beyond the chamfer by overlapping the interior polyurethane.



**Gently** heat the surface for three minutes after application to accelerate the drying time.