

## StreamAqua<sup>TM</sup> for Sprinklers

ArcelorMittal Europe – Tubular Products

# Sprinkler tubes in fire protection

### Fire protection systems can be mainly passive or active

Passive systems, like intumescent painting or fire resistant doors, provide only a reduction or delay of the risk by a physical barrier. In contrast, active systems like sprinklers are those that 'get into action' when a fire is detected. Sprinklers are probably the most used active systems, with more than 70 million heads installed



worldwide each year. They consist in a water supply system, providing adequate pressure and flowrate to a water distribution piping circuit, onto which fire sprinklers are connected. This network of distribution pipes is the essential component of a sprinkler system.

### ArcelorMittal Tubular Products Europe

ArcelorMittal StreamAqua <sup>™</sup> is the line of tubes designed and specifically painted for sprinkler applications. Available in socketed and threaded or with Victaulic grooving, StreamAqua <sup>™</sup> is the best choice for irrigation system.

StreamAqua<sup>™</sup> encompasses a wide range of processes and finishings for sprinkler piping

- Welded pipes
- Cold formed or Hot formed (Hot Stretch Reduced)
- Black or Galvanized
- Bare or Coated
- Water based, Epoxi or Melamine coated
- Pipes for pressure purposes EN 10216 or EN 10217 encompassed in the PED
- Pipes for construction applications EN 10255 encompassed in the CPR

### One optimum product for each application

	Cold-formed pipes					HSR pipes						
Standard	EN 10255			EN 10217			EN 10255			EN 10217		
Product	W-B	Р	М	W-B	Р	М	W-B	Р	M	W-B	Р	М
General piping no pressure	*****	****	****	***	***	***	*****	****	****	***	***	***
General piping under pressure	***	***	**	*****	****	****	***	***	**	*****	****	****
Piping no pressure hard environment	***	*****	****	**	***	***	***	****	*****	**	***	***
Piping under pressure hard environment	**	***	***	***	****	****	**	***	***	***	****	****
Pipe machining after coating	Х	*	****	Х	*	****	Х	**	*****	Х	**	*****

W-B: Water-based coating

P: Powder-coating M: Melamine coating \* to \*\*\*\*: adequacy to the application X: not recommended

### Whatever the needs you might have, StreamAqua™ is a solution for you!

StreamAqua™ answers many needs from standard service conditions, from straight bare and plainending pipes.



## StreamAqua<sup>™</sup> finished varnished pipes based on Melamine

ArcelorMittal StreamAqua<sup>™</sup> is proposed with many coating possibilities, of which Melamine, to answer any customer need.

The fact of counting on different coating technologies allow us to propose different solutions for many diverse requirements adjusting our offer to specific technical and aesthetic needs.

The Melamine-based varnishes are resistant to many aggressive conditions both at low and high temperatures:

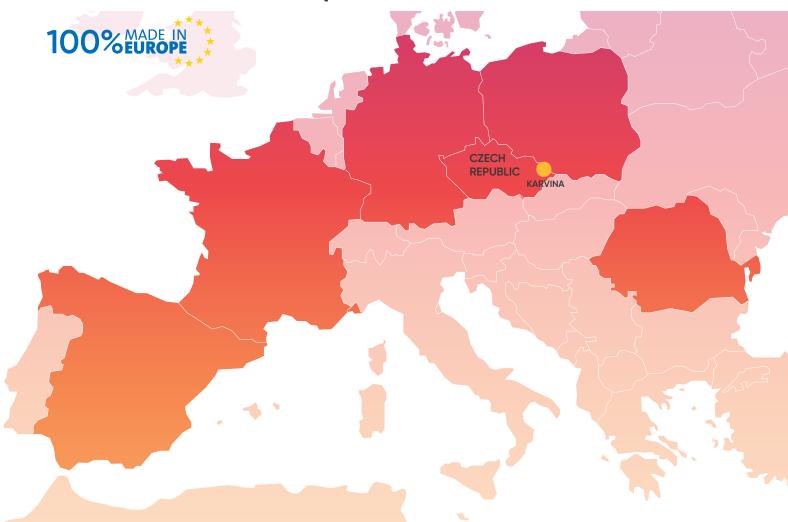


 $\Im$  Mechanical damage

Ohemical damage

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#### Our Manufacturing Facility Karvina - Czech Republic





### StreamAqua<sup>™</sup> with Melamine coating

#### Melamine coating

This coating presents an outstanding permanent plasticity and resistance against mechanical damage. The color is even able to withstand grooving of ends (after painting the pipe). Layer thickness ranges from  $25\mu m$  to  $40\mu m$  ( $50\mu m$  is possible upon request). It is the most versatile solution, specially if bending or ends finishing are going to be executed on the coated tube.

### StreamAqua<sup>™</sup> with Melamine coating at length

### When environmental conditions are rougher, StreamAqua<sup>™</sup> with Melamine coating is the most efficient solution!

Why? Because it provides an outstanding permanent plasticity and resistance against mechanical damage, including grooving.

StreamAquaTM with Melamine coating ensures a comprehensive process control and enhanced quality of painting. It encompasses pre-coating treatments of the tube surface in order to remove contaminants and improve the coating adhesion as well as post-coating treatments to avoid any risk of surface contamination, by burning any residue, moisture or dust. The coating processes themselves are carefully adjusted and monitored in order to better control key parameters such as paint flow, nozzle opening width, air and steel surface temperature, etc.

ArcelorMital Tubular Products Europe offers a careful storage of color-coating pipes, taking all the measures to preserve the high surface quality obtained at the end of the coating process. It is the most versatile solution, especially if bending or ends finishing are going to be processed on the coated tube.

In ArcelorMittal Tubular Products Europe plants, processes are environmental-friendly as they do not contain formaldehyde, heavy metals or other hazardous substances. Moreover, coatings contain very low or negligible VOC's (Volatile Organic Compounds) paints.



## StreamAqua<sup>™</sup> Portfolio

		Melamine					
Standards		EN 10255, EN 10217 Plain-ended, threaded (with sockets, plastic cups), Victaulic grooved, Viega (Megapress)					
Type of connectio	ns						
Lengths		3000 ÷ 7000 mm					
Dimensiona		OD	17,2 ÷ 219,1 mm				
Dimensions		Th	1,5 ÷ 6,3 mm				
NCS S3060 Y80R AM Red	RAL 3011 Brown Red	RAL 3000 Flame Red					
RAL 5005 Signal Blue	RAL 7012 Basalt Grey	RAL 1018 Yellow					

Other colour alternatives are upon your request like water based and powder colour.

### A green deal

Sprinklers can increase the sustainability and life expectancy of buildings, by limiting fire

development and by significantly reducing the amount of smoke, CO2 and other pollutants. To extinguish a fire, sprinklers use much less water than fire brigade hoses, thus ensuring much less damage caused by it

As already mentioned, ArcelorMittal Tubular Products Europe Melamine coating processes

- Do not contain formaldehyde, heavy metals or other hazardous substances
- Contain very low or negligible VOC's (Volatile Organic Compounds) paints



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