Strength. Performance. Passion.

Materials under scope of Naming convention

Filter Bags

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Version	Description / Changes	Person	Date
Ver 2.2a	First official version	Javier Conde / Htl	22.09.2014
Ver 2.2b	Max temperature mandatory for VW	Htl	12.01.2016

1. Filter Bags

Filter Bags are part of the PCS 040701. This PCS is under the Naming convention for Virtual Warehouse.

The list of characteristics defined for the classification of the Filter Bags is according to the Naming Convention Project, and will be explained below.

A material can be either in VW or in normal stock. It depends on the different mandatory and optional characteristics. Mandatory characteristics have to be completed in both cases.

040701_vw

Characteristic Name	Commodity	Length [MM]	Diameter Ø (width) [MM]	Type of felt (material)	Weight [g/m²]	CONSTRUCTION	Treatment 1	Treatment 2	Design top
Characteristic Technical Name	ZNC_COMMODITY	ZNC_BAG_LENGTH	ZNC_BAG_DIAMETER	ZNC_TYPE_OF_FELT	ZNC_BAG_WEIGHT	ZNC_BAG_CONSTR	ZNC_BAG_TREATMNT1	ZNC_BAG_TREATMNT2	ZNC_BAG_DESIGNTOP
040701	M	M	M	M	M	O	O	O	O
040701_vw	M	M	M	M	M	M	M	M	M
Data type	CHAR	NUM	NUM	CHAR	NUM	CHAR	CHAR	CHAR	CHAR
Number of Charts	10	4	3	20	3	4	20	20	30
Decimal places	0	0	0	0	0	0	0	0	0
Unit		mm	mm		g/m²				

Design middle	Design bottom	Ring Material	Diameter of hole in plenum [mm]	Operat. Temp. [°C]	Maximum Temp. [°C]	Design (fabric joint)	Air permeability [l/dm2/sec]	Brand	Original filter (equipment) supplier	Warehouse Type
ZNC_BAG_DESIGNMID	ZNC_BAG_DESIGNBOT	ZNC_BAG_RING_MAT	ZNC_BAG_DIAMETERHOLE	ZNC_BAG_TEMP	ZNC_BAG_MAX TEMP	ZNC_BAG_DESIGN	ZNC_BAG_AIR	ZNC_BRANDNAME	ZNC_PRODUCER	ZNC_WAREHOUSE
O	O	O	O	O	O	O	O	O	O	M
M	M	M	M	M	M	M	O	O	O	M
CHAR	CHAR	CHAR	NUM	NUM	NUM	CHAR	NUM	CHAR	CHAR	Char
30	30	20	5	3	3	30	3	30	30	2
0	0	0	1	0	0	0	0	0	0	0
			mm	°C	°C		l/dm²/s			

2. Key characteristics to consider a Filter Bag part of the VW

Initially in the VW project the shape and diameter were the major characteristics to determine if a bag shall be considered in the VW

Diameter Ø (width) [MM]
ZNC_BAG_DIAMETER
< 200 mm

"Diameter" smaller than 200mm

Design top
ZNC_BAG_DESIGNTOP
Rounded shape. Not squared

"Design Top" circular

3. Characteristics

- **Commodity – Fixed Value**

The commodity will be always “Filter Bag”

- **Length – Mandatory**

Length of the bags is measured in mm. According to the study of the currently used bags, a list of possible “standard” measurements has been defined. If necessary, this list can be reviewed and adjusted, following the process to enhance predefined values.

1010	1600	2460	3050	4305
1100	1800	2650	3220	4500
1125	2000	2800	3375	5000
1200	2250	3000	3600	5625
1500	2400	3040	4000	6000

- **Diameter – Mandatory**

Diameter of the bag in mm. For VW, the diameter of the Filter Bag should be less than 200mm. Only circular bags are taken onto consideration for VW.

100	150
118	152
125	160
127	165
140	495
145	

* Note: 495 was already in VW in EE

- **Type of felt/fabrics – Mandatory**

Kind of material that composes the filter bag. For VW a list of possible values has been defined with the corresponding abbreviations:

Type of felt (material)	Abbrev
Polyester	PES
Homopolimer Acrylic / Polyacrylonitrile Homopolymer	PAC
Polyester+Polyacrylonitrile Homopolymer	PES-PAC
M Aramid, NOMEX	M ARAMID
Polyimide	P84
Polyimide amide	POLYIMIDE
PTFE	PTFE
PPS	PPS
Polypropilene	POLYPROP
Fiberglass	FGLASS
Fiberglass + Polyimide	FGLASS+P84
Fiberglass + PTFE membrane	FGLASS+PTFE

Additional characteristics can be added after approvalby from Virtual Warehouse team.

- **Weight – Mandatory**

Indication of the weight of the fabric in g/m^2

500
520
550
600
620
650
750

- **Construction – Mandatory only in VW**

This field makes reference to construction of the bag. Options are PLAI or PLTD.

Construction	Abbrev
Plain	PLAI
Plated	PLTD

- **Treatment 1 and Treatment 2 – Mandatory only in VW**

Chemical treatments applied to the Filter Bag to give specific properties to the material. It has to be ensured that the correct treatment is put in option 1 and in option 2 to avoid duplicities. A list for both fields has been defined, it can be enhanced with new treatments, but always respecting a clear definition of the material.

In treatment 1 we can also find combinations to show that the Filter Bag has been processed with two of the treatments, it is specified in the next table:

	Treatment 1	Abbrev
T1.1	ANTI Static	A-STATIC
T1.2	Water Repellent	W REP
T1.3	Oil Repellent	O REP
T1.4	Oil and Water Repellent	W+O REP
T1.5	Antiadhesive	ANTIADHESIVE
T1.6	Resistance at Occasional Spark flow	SPARK RESIST
T1.7	Filter Medium for ultra fine dust	U-F FILT
T1.8	Protection against for high abrasive dust	A-ABRASIVE
T1.9	Treatment improving chemical resistance	CHEM RESIST
	Combination of above but always following the order	T1.1, T1.2, T1.3, T1.4, T1.5, T1.6, T1.7, T1.8, T1.9

OTREAT1
A-STATIC
W REP
O REP
W+O REP
ANTIADHESIVE
SPARK RESIST
U-F FILT
A-ABRASIVE
CHEM RESIST
A-STATIC, W REP
A-STATIC, W+O REP
W REP, CHEM RESIST
W+O REP, ANTIADHESIVE
W+O REP, CHEM RESIST
W+O REP, SPARK RESIST
A-ABRASIVE, CHEM RESIST

	Treatment 2	Abbrev
T2.1	Triple Finish	SGT
T2.2	Teflon Finish	TEFLON
T2.3	Acid Resistant Finish	ACID
T2.4	Singeing	SINGED
T2.5	Calendared	CALENDARED
T2.6	Glaze	GLAZE
T2.7	Heat Set	HEAT S
T2.8	Polyurethane Foam Coating	FOAM PU
T2.9	Acrylic Foam Coating	FOAM AC
	Combination of above but alaways following the order	T2.1, T2.2, T2.3, T2.4, T2.5, T2.6, T2.7, T2.8, T2.9 (see example)

For treatment 2 the available options are:

NOTREAT2
SGT
TEFLON
ACID
SINGED
CALENDARED
GLAZE
HEAT S
FOAM PU
FOAM AC
SINGED, HEAT S

- **Design top – Mandatory only in VW**

This field refers the top of the bag. This is a key characteristic to include the material into the virtual warehouse.

The top of a filter bag involves a variety of possible configurations and depends on the type of fixing and cleaning process.

- **Design middle – Mandatory only in VW**

This field refers to the characteristics of the bag along its length. Is based on the possibility having rings.

- **Design bottom – Mandatory only in VW**

This characteristic refers to the bottom end of the bags.

Attached you can find a table with possible values for each of the three designs.

DESIGN		
TOP	**MIDDLE**	**BOTTOM**
RING	2 RINGS	CUFF
ROPE HANGING	3 RINGS	SIMPLE
SNAP ON	4 RINGS	SIMPLE+REINFORCEMENT
FELT GASKET	5 RINGS	DOUBLE+REINFORCEMENT
CARTRIDGE	6 RINGS	
CUT	NONE	
CUFF		

- **Ring material – Mandatory only in VW**

Material used to manufacture the ring at the top.

MATERIAL OF RING	
Brass	BRASS
Bronze	BRONZE
Ordinary steel	CARB_STEEL
Galvanized steel	GALV_STEEL
Stainless steel	STNL_STEEL
Silicone	SILICONE

- **Diameter of hole in plenum – Mandatory only in VW**

This characteristic is specific to “Snap Ring” systems.

Specifically, the diameter of hole in plenum assures that the bag remains in position and guarantees a correct sealing.

This characteristic is an “open” value measured in mm.

- **Operating temperature – Mandatory only in VW**

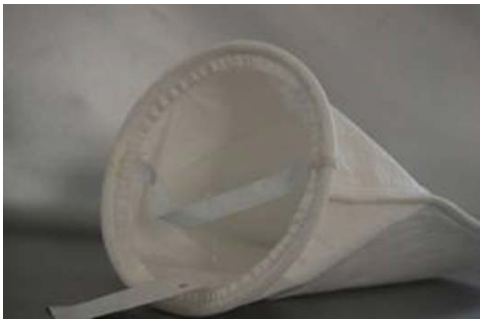
Temperature at which the device usually operates in normal conditions. If the operating temperature exceeds the value, the bag may fail. This feature is most important for kiln and cooler filter.

- **Maximum temperature – Mandatory only in VW**

Maximum temperature at which the bag can operate. Above this temperature there is a high risk that the bag fails.

- **Design – Mandatory only in VW**

This field makes reference to how the fabric is joined. We have two options in this field, welded and sewed.



Sewed

Welded

- **Air permeability – Optional**

The unit for air permeability is m3/m2/s and indicates for which quantity of medium the bag is designed.

- **Brand – Optional**

Commercial brand of the filter bag

- **Original filter supplier– Optional**

Manufacturer of the filter

4. Naming convention in material description

A specific language in SAP was developed to generate the material descriptions of the materials with Naming Convention, this language is called “Z2”. When a material is created, a standard description in Z2 language is generated automatically, based on the different characteristics.

The fields that complete the “Short description” and “Long description” in the Filter Bag are as follows:

Short Description:

<Commodity>;<length in mm> <diameter> <felt type> <weight>

Long Description:

<Commodity>;<length in mm>;<diameter>;<felt type>; <weight>;<construction>;<treatment 1>;<treatment 2>; <design top%>;<design middle>; <design bottom>; <ring material>;<diameter of hole in plenum>;<operating temperature>; <design>

Short Description:

FILTER BAG 3375 MM 160 MM PES 550 GM2

Long Description:

FILTER BAG 3375 MM 160 MM PES 550 GM2 PLAI NOTREAT1 SINGED, CALENDARED RING NONE DOUBLE+REINFORCEMENT CARB_STEEL 140 GC SEWED 150 G