

Term 术语	Definition 定义
Makedown 混合配料	Diluting and agitating a concentrated additive or powder so that it is ready to pump to the paper machine 【将高浓度的助剂或粉末稀释并搅拌均匀的过程，目的是将产物方便地泵送到纸机系统】
Micro-particle 微粒	Particulate additives used for retention and drainage promotion, characterized by having very high surface area and negative charge 【用于促进留着和滤水的微粒添加剂，其特征是具有很大的表面积和很高的负电荷】
Neutralization 电中和	The addition of just the right amount of material having an opposite charge to achieve a zero surface (or "colloidal") charge on suspended matter in an aqueous sample 【指往水性样品添加与其中悬浮物质电荷相反的物质，添加量正好使它们的表面电荷（或胶体电荷）为零】
Non-process elements 非过程元素	Materials dissolved in process water that tend to circulate around the system and not become part of the paper product 【溶解于过程水中的一些物质，它们趋向于在体系中不断循环，但并不成为纸产品的一部分】
Optical brightener 光学增亮剂	An informal term for "fluorescent whitening agent," a dye material that absorbs ultraviolet light and re-emits light in the blue region 【是“fluorescent whitening agent”即荧光增白剂的非正式叫法，通指吸收紫外光后能发出蓝色可见光的染料。】
Over-cationized 过度阳离子化的	A papermaking system to which so much cationic material has been added that the zeta potential is reversed to strongly positive 【指抄造体系中添加了过多的阳离子物质，以致体系的 zeta 电位反转为很强的正电性】
Polyaluminum chloride (PAC) 聚合氯化铝	A cationic coagulant solution formed by partial neutralization of aluminum chloride's acidity 【氯化铝的酸性被部分中和后形成的阳离子凝结剂溶液】
Polyacrylamide (PAM) 聚丙烯酰胺	Very-high mass copolymers of acrylamide and other monomers, used as retention aids 【丙烯酰胺与其他单体反应形成的分子量极高的共聚物，用作助留剂】
Paste rosin size 浆状松香胶	A sizing agent mixture of free rosin acid and saponified rosin, no longer in common use 【由游离松香酸和皂化松香组成的混合施胶剂，已经不常用】

<p>PCC 沉淀碳酸钙</p>	<p>Precipitated calcium carbonate, a bright filler having a variety of possible shapes and sizes 【一种白色填料，其形态和粒度可有多种不同的可能性】</p>
<p>Polyethylenimine (PEI)聚乙烯亚胺</p>	<p>A class of very highly charged cationic polymers, usually highly branched, useful for charge control and drainage promotion, especially under acidic to neutral conditions 【一类阳电荷密度很高的聚合物，通常高度支链化，用于调节电荷与促进滤水，尤其是酸性至中性条件下】</p>
<p>Polyethylene oxide (PEO) 聚氧化乙烯</p>	<p>A very-high-mass, non-ionic retention aid that usually requires sequential addition of a phenolic cofactor (or lignin) 【一种分子量很高的非离子型助留剂，通常需要酚类树脂或木素等辅助剂与之依次添加】</p>
<p>Permanent wet strength 永久性湿强度</p>	<p>Wet strength that does not depend on the time duration of immersion, once wetting is complete 【指纸张完全被水润湿后，其值不再受浸润时间的延长而降低的湿强度】</p>
<p>Pigment 颜料</p>	<p>Finely divided particulate matter that is mainly intended to affect optical properties of a product (see filler) 【主要用于改善产品光学特性的细小颗粒物（见填料）】</p>
<p>Pinholes 针孔</p>	<p>Small holes in paper, often caused by entrained air bubbles, where it is possible to see a narrow beam of light passing through the sheet 【纸张上的小孔，通常由夹带在纤维上的气泡产生，通过这些小孔可以看到很窄的光线透过纸张】</p>
<p>Pitch 树脂沉积物</p>	<p>Wood extractives, in the context of tacky deposits onto papermaking equipment or spots in the product 【以粘性沉积物的形式出现在造纸设备上或以斑点的形式出现在纸厂品中的木材抽出物】</p>
<p>Plate counts 平板计数</p>	<p>A common test to estimate the concentration of free-floating biological cells, by greatly diluting the sample and spreading the diluted sample on top of some growth medium, and later counting the colonies of cells 【一种常规测试方法，用于估算可自由浮动的生物细胞的浓度，首先将样品以较大的比例稀释，然后将稀释样品铺展到某种培养基上，培养一定时间后对细胞菌落进行计数】</p>
<p>Polyamine 聚胺</p>	<p>A highly charged cationic polymer, often used for charge control or as a pretreatment before certain retention aid treatments 【一种高电荷密度的阳离子聚合物，通常用于控制电荷或在助留剂使用前用作预处理剂】</p>

<p>PolyDADMAC 聚二烯丙基二甲 基氯化铵</p>	<p>Poly-diallyldimethylammonium chloride, a fully-charged, cationic polymer often used as the standard for cationic demand titrations 【一种阳离子度为 100%的阳离子聚合物，经常作为标准物用于滴定阳离子需求量】</p>
<p>Polymer 聚合物</p>	<p>A very large molecule comprised of one or more types of repeating units 【由一种或多种结构单元重复而成的大分子化合物】</p>
<p>Primary fines 原生细小纤维</p>	<p>Fines derived from structures present in wood and released after kraft pulping, before refining 【硫酸盐制浆过程中从木质纤维释放，打浆前即已存在的细小纤维】</p>
<p>Protection 保护机制</p>	<p>A hypothetical mechanism to explain wet-strength effects as due to the chemical blocking of access to inter-fiber hydrogen bonds 【用来解释湿强效果而假设的一种机制，认为纸张湿强度的产生是由于湿强剂促生了一种能保护纤维间氢键结合的化学阻断】</p>
<p>PVSK 聚乙烯基硫酸钾</p>	<p>The potassium salt of polyvinyl sulfate, a highly charged, negative linear polymer often used in charge titrations 【聚乙烯硫酸的钾盐，高度负电性的线性聚合物，常用于电荷滴定】</p>
<p>Reactive size 反应型施胶剂</p>	<p>A sizing agent such as ASA or AKD that undergoes a covalent reaction when heated in the presence of fibers 【受热时能和纤维发生共价键结合反应的施胶剂，如 ASA 和 AKD】</p>
<p>Reinforcement 增强机制</p>	<p>A hypothetical mechanism to explain wet-strength effects as due to formation of covalent bonds, adding to the effects of hydrogen bonds 【用来解释湿强效果而假设的一种机制，认为湿强度的形成是由于共价键的形成增加了氢键作用的效果。】</p>
<p>Resin acids 树脂酸</p>	<p>Component of softwood pitch having a ring structure; also used to make rosin size 【针叶木树脂的成分，具有环状结构，也被用于制造松香胶】</p>
<p>Restabilization 再稳定作用</p>	<p>The result of adding too much low-mass cationic additive to furnish, such that all the surfaces become positive and repel each other 【指纸料中添加了过量的低分子量阳离子助剂而导致所有固体表面都变正电性，粒子间互相排斥，致使体系重新获得稳定的现象】</p>
<p>Retention 留着（率）</p>	<p>The efficiency with which small particles (or additives) remain in the paper during its formation rather than staying with the white water 【纸页成形过程中小粒子（或添加剂）被保留在纸页中而不是残留在白水之中的效率】</p>

<p>Retention aids 助留剂</p>	<p>Chemical additives, especially high-mass copolymers of acrylamide, designed to increase the retention efficiency of fine materials during paper formation 【被设计用来提高纸张成形过程中细小组分留着效果的化学添加剂，一般特指高分子量的丙烯酰胺共聚物】</p>
<p>Rosin acid 松香酸</p>	<p>A mixture of water-insoluble carboxylic acids from conifers, mostly in the form of multi-ring compounds, in their protonated form 【一种来源于针叶木且在水中不溶的羧酸混合物，主要以质子化的多环化合物的形式存在】</p>
<p>Rosin size 松香胶</p>	<p>Various products, derived from certain wood extractives, that can be added at the wet end in the presence of aluminum species to make paper resist water penetration after it has been dried 【一种施胶剂，来源于木材抽出物，具有多种产品形式，在纸机湿部与铝化合物一起添加，使纸页干燥后具有抗水渗透的性能】</p>
<p>Salts 盐类物质</p>	<p>Inorganic substances that dissociate into ions, raising the electrical conductivity of solution but do not make the solution acidic or alkaline 【溶于水中能电离出离子从而使溶液的电导率提高但并不使其呈现酸性或碱性的无机物】</p>
<p>Saponifiable 可皂化的</p>	<p>Capable of being formed into a carboxylic acid soap upon addition of base (e.g. esters, and the protonated form of carboxylic acids) 【指某些物质中加入碱后可形成羧酸皂，这些物质包括酯以及质子化状态的羧酸】</p>
<p>Scale 水垢，垢物</p>	<p>Hard deposits on wetted papermaking equipment, usually comprised of inorganic compounds such as barium sulfate 【潮湿的造纸设备表面形成的坚硬沉积物，通常由诸如硫酸钡之类的无机化合物组成】</p>
<p>Secondary fines 二次细小纤维</p>	<p>Fines torn from fiber surfaces or resulting from fiber breakage during refining 【打浆过程中被从纤维表面撕裂下来或由纤维断裂而产生的细小纤维】</p>
<p>Shear 剪切</p>	<p>A change in velocity with respect to distance perpendicular to the direction of flow 垂直于水流方向上流速随距离的变化</p>