APPLICATION SUMMARY:

Low-calorie sweeteners and other sugar substitutes are now an integral part of many food and beverage formulations. Acesulfame potassium, aspartame, saccharin, sucralose, sugar alcohols (sorbitol, xylitol, mannitol, erythritol), neotame and rebaudioside A (stevia) are just some of the most commonly used sweeteners today.

Proper blender selection is a key consideration in the production of high-quality sugar substitutes, especially as the practice of blending two or more sweeteners has become more popular. Used in diet soft drinks, candies, chewing gum, flavored waters, juices, canned goods and frozen desserts, sweetener blends usually offer several advantages including improved taste, better stability and lower cost compared to any stand-alone sweetener.

RECOMMENDED BLENDING EQUIPMENT FOR Sweeteners

Ross Ribbon Blenders

Ross Ribbon Blenders are well-proven equipment used in the manufacture of sweeteners, sugars and sugar substitutes. Dry ingredients are loaded into the blender’s U-shaped trough and mixed by a horizontal agitator consisting of inner and outer helical ribbons. The position and precise pitch of each ribbon produce a well-balanced axial and radial flow pattern which promotes fast and thorough mixing of free-flowing powders. The ribbons turn at tip speeds up to 300 ft/min but with variable speed control, the blending action, as well as the discharge rate, can be fine-tuned to suit the flow characteristics of a particular recipe.
Advantages of Ross Ribbon Blenders:

- Direct drive design is standard on all Ross Ribbon Blenders. Unlike older belt-driven blenders which are noisy and prone to slippage, direct-driven Ribbon Blenders are more reliable and require less maintenance. These utilize compact gearmotors (one-piece motor reducers) and inverters, providing electronic speed control, soft-start capability and overload protection.
- Different duty models are available for accurate sizing according to bulk density. Standard working capacities range from ½ to 1,000 cu.ft.
- The outer ribbon and trough surfaces are built to very close tolerances in order to eliminate “dead zones” where product can collect. Interior stainless steel surfaces are well-polished and each weld is “radiused” to further prevent material buildup.
- Ross Ribbon Blenders can be customized to include pneumatically-operated covers, bag dump stations, special ports and discharge valves, heating/cooling jacket, liquid spray bar, load cells, PLC recipe systems and many other options. An interchangeable paddle agitator can also be supplied for lower impact blending of delicate and friable ingredients.

For more information on Ross Ribbon Blenders

Visit www.ribbonblenders.com or click here to download a brochure.